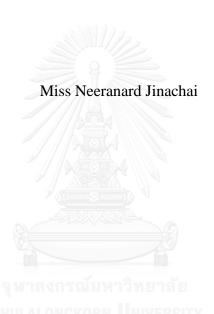
AN EVALUATION OF ASEAN HARMONIZED COSMETIC REGULATORY SCHEME IMPLEMENTATION IN THAILAND



บทคัดย่อและแฟ้มข้อมูลฉบับเต็มของวิทยานิพนธ์ตั้งแต่ปีการศึกษา 2554 ที่ให้บริการในคลังปัญญาจุฬาฯ (CUIR) เป็นแฟ้มข้อมูลของนิสิตเจ้าของวิทยานิพนธ์ ที่ส่งผ่านทางบัณฑิตวิทยาลัย

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การประเมินการใช้ข้อตกลงเขตการค้าเสรือาเซียนว่าด้วยการกำกับดูแลเครื่องสำอางในประเทศไทย

นางสาวนี้รนารถ จิณะใชย

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาวิทยาศาสตรคุษฎีบัณฑิต สาขาวิชาเภสัชศาสตร์สังคมและบริหาร ภาควิชาเภสัชศาสตร์สังคมและบริหาร คณะเภสัชศาสตร์ จุฬาลงกรณ์มหาวิทยาลัย ปีการศึกษา 2557 ลิขสิทธิ์ของจุฬาลงกรณ์มหาวิทยาลัย

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AN EVALUATION OF ASEAN

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นีรนารถ จิณะไชย : การประเมินการใช้ข้อตกลงเขตการค้าเสรือาเซียนว่าด้วยการกำกับดูแลเครื่องสำอางในประเทศ ใ n ย (AN EVALUATION OF ASEAN HARMONIZED COSMETIC REGULATORY SCHEME IMPLEMENTATION IN THAILAND) อ.ที่ปรึกษาวิทยานิพนธ์หลัก: ผศ. ภญ. ดร. ร.ต.ท.หญิงภูรี อนันตโชติ, 167 หน้า.

การรวมตัวกันของประเทศอาเซียนมีเป้าประสงค์หลักร่วมกัน 3 ประการ คือ เพื่อเสถียรภาพทางการเมือง เพื่อพัฒนา เศรษฐกิจ และเพื่อพัฒนาสังคมและวัฒนธรรม เครื่องสำอางเป็นในกลุ่มผลิตภัณฑ์ค้านสุขภาพสำคับแรกที่ประกาศการใช้ข้อตกลง อาเซียนอย่างเต็มรูปแบบในปี ค.ศ. 2008 โดยให้ประเทศสมาชิกมีระยะเวลาปรับตัว 3 ปี การศึกษาครั้งนี้ได้เปรียบเทียบกฎระเบียบ เครื่องสำอางในประเทศไทยกับบทบัญญัติเครื่องสำอางอาเซียน (ASEAN Cosmetic Directive) ในปี ค.ศ. 2008 และ 2013 โดยใช้ ข้อมูลจากการสืบค้นและการสัมภาษณ์เชิงลึก ผลการศึกษาพบว่าประเทศไทยมีกฎระเบียบที่สอดคล้องกับบทบัญญัติเครื่องสำอาง อาเซียนเป็นส่วนใหญ่โดยไม่ต้องปรับกฎหมายของประเทศในทันทีในหัวข้อ (i) คำจำกัดความและขอบข่ายเครื่องสำอาง (ii) การ แสดงสรรพคุณและการโฆษณา (iii) หลักเกณฑ์และมาตรฐานในการผลิตที่ดี มีบางรายการที่ประเทศไทยได้ปรับแก้กฎหมายเพื่อให้ สอดคล้องกับอาเซียนได้แก่ในหัวข้อ (iv) รายการสารที่ใช้เป็นส่วนประกอบในเครื่องสำอาง (v) ฉลากเครื่องสำอาง ทั้งนี้การนำ บทบัญญัติเครื่องสำอางอาเซียนมาใช้ในประเทศไทยไม่สามารถคัดลอกมาได้ทั้งหมดในรูปแบบและเนื้อหา หากแต่มีความ จำเป็นต้องปรับให้สอดคล้องกับกฎหมายหลักเดิมที่มีอยู่ คือพระราชบัญญัติเครื่องสำอาง พ.ศ. 2535 และบริบทของประเทศไทย โดย การพิจารฉาจากคณะกรรมการเครื่องสำอางแห่งชาติทำให้เนื้อหา รูปแบบและเงื่องไทยามทำตามข้อตกลงของอาเซียนและ เป็นไปตามรูปแบบการปฏิบัติทั่วไปของอาเซียน (ASEAN Way)

การศึกษาครั้งนี้ยังได้ทำการประเมินศักขภาพการแข่งขันของไทยด้านเครื่องสำอางเทียบกับประเทศผู้นำด้านเศรษฐกิจ ในอาเซียนอื่นได้แก่ สิงคโปร์ อินโดนีเซีย มาเลเซีย ฟิลลิปปินส์ และเวียดนามโดยใช้ข้อมูลจาก International Trade Center (ITC) มา ทำการประเมินโดยใช้ค่าความได้เปรียบโดยเปรียบเทียบ (Revealed Comparative Advantage (RCA)) และส่วนแบ่งตลาด (Market Share (MS)) ของเครื่องสำอางตามฮาโมไนซ์โดด 5 กลุ่ม (HS 3303-HS 3307) ในระยะเวลา 7 ปีตั้งแต่ ค.ศ. 2007 ถึง ค.ศ. 2013 ผล ปรากฏว่าประเทศไทยมีศักยภาพการแข่งขันโดยสมบูรณ์ (RCA มากกว่า 1 และ มีส่วนแบ่งตลาดที่มากกว่าประเทศไทยได้สูญเสียศักยภาพการแข่งขัน (RCA น้อยกว่า 1)ในกลุ่มผลิตภัณฑ์ที่ใช้ในช่องปาก (HS 3306) ในขณะเดียวกันประเทศไทยได้สูญเสียศักยภาพการแข่งขัน (RCA น้อยกว่า 1)ในกลุ่มผลิตภัณฑ์ดูแลและตกแต่งผิว (HS 3304) กลุ่มน้ำหอม (HS 3303) และกลุ่มผลิตภัณฑ์โกน หนวดและระงับกลิ่นกาย (HS 3307) และได้คัดเลือก HS 3304 และ HS 3305 เพื่อศึกษาเชิงลึกถึงปัจจัยที่มีผลต่อศักยภาพการแข่งขัน เนื่องจากเป็นกลุ่มผลิตภัณฑ์ที่มีผลต่อภาพรวมทางเศรษฐกิจของประเทศด้านเครื่องสำอางโดยใช้โมเดลทางเศรษฐสาสตร์ Diamond Model และวิเคราะห์ข้อมูลที่ได้จากการสัมภาษณ์เชิงลึกโดยวิธี SWOT analysis พบว่าปัจจัยหลักที่มีผลต่อการแข่งขันด้าน เครื่องสำอางของประเทศ ได้แก่ ปัจจัยการผลิตและปัจจัยจากภาครัฐ และจุดแข็งของประเทศ คือเครื่องสำอางไทยเป็นที่ขอมรับของ ประเทศเพื่อมรักจานโดยให้ และมีธุรกิจที่เอ็อประโยชน์ต่อธุรกิจด้านเครื่องสำอางอันเป็นที่รู้จักทั่วโลก ได้แก่ ธุรกิจด้านบริการ และด้าน การแพทย์ ดังนั้นเพื่อที่จะรักษาศักขภาพการแข่งขันโดยสมบูรณ์ของ HS 3305 และพัฒนาศักขภาพการแข่งขันของ HS 3304 จึงต้อง อาศัยความร่วมมืออย่างดีจากทั้งทางภาครัฐและภาคเอกชนที่เกี่ยวข้องเพื่อปรับนโยบายและกลยุทธ์ของประเทศให้เหมาะสมต่อไป

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สาขาวิชา	เภสัชศาสตร์สังคมและบริหาร
าีไการศึกษา	2557

ลายมือชื่อนิสิต	
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KEYWORDS: ASEAN HARMONIZATION / COSMETICS / COMPLIANCE / DIRECTIVE / COMPETITIVENESS / THAILAND

NEERANARD JINACHAI: AN EVALUATION OF ASEAN HARMONIZED COSMETIC REGULATORY SCHEME IMPLEMENTATION IN THAILAND. ADVISOR: ASST. PROF. PUREE ANANTACHOTI, Ph.D., 167 pp.

The ASEAN Harmonization was aimed to stabilize politics, and improve economic, social, and cultural aspects of the region. In the healthcare sector, cosmetics was the first to be harmonized and committed to implement the ASEAN Harmonized Cosmetics Regulatory Scheme (AHCRS) in January 2008, with full implementation expected in January 2011. This study was conducted to determine whether Thailand has complied with ASEAN Cosmetic Directive (ACD) in 2013 after 6 years of implementation, and to evaluate the competitiveness of Thai cosmetic industry after the ASEAN harmonization before entering the ASEAN Economic Community (AEC) in 2015. The Thai cosmetics Act B.E. 2535 and ACD were compared in 2008, and in 2013. Content analysis and in-depth interview were performed. The study revealed that Thailand has highly complied with ACD in all regulated areas; (i) definition and scope of cosmetics products (ii) ingredients' listing (iii) labeling (iv) product claims and (v) good manufacturing practice. To officially implement ACD, the Thai regulator has to transpose the directive into local laws. During the legal process, one might notice discrepancy between these two laws. Although the country regulator intended to fully harmonize, some minor issues, such as the ingredients' listing and labeling, cannot be implemented all at once. In summary, it can be concluded that the main objectives of AHCRS have been achieved. Harmonization in Thailand happened in an ASEAN way.

The study was also conducted to evaluate the competitiveness of the Thai cosmetic industry. The import and export data from the International Trade Center (ITC) were gathered for the analysis. The Reveal Competitiveness Advantage (RCA) and Market Share (MS) of 6 leading countries in ASEAN; Singapore, Thailand, Indonesia, Malaysia, Philippines, and Vietnam were evaluated for 5 cosmetic categories of harmonized codes 3303-3307 in 7 years during 2007-2013. The study found that Thailand had absolute competitiveness in hair preparations (HS 3305) and oral care preparations (HS 3306) with reveal competitiveness more than 1 and market share more than 50% intra ASEAN market. However, Thailand had less competitiveness (RCA less than 1) in skin care and make up preparations (HS 3304) which is the biggest market, perfumes (HS 3303), and pre-, after shave, and deodorant preparations (HS 3307). The HS 3304 and HS 3305 were selected for in-depth study because of the huge contribution to the country's cosmetic industry. The Diamond Model and SWOT analysis were applied used for the in-depth study. It was found that the key players for the cosmetic business of Thailand were multi-national companies. The key factors which mainly impacted the country competitiveness were conditions and government factors. The strengths are Thai cosmetic products were trusted by neighboring countries. Thailand has opportunities from herbal and natural sources of cosmetic ingredients and the well-known related and supporting business i.e. services and medical businesses. In order to maintain the absolute competitiveness of HS 3305 and to improve the competitiveness of HS 3304, the good coordination between government and industry should be considered. A huge effort and support from all relevant parties are required.

Department:	Social and Administrative Pharmacy	Student's Signature
Field of Study:	Social and Administrative Pharmacy	Advisor's Signature

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LIST OF ABBREVIATIONS

ACA ASEAN Cosmetic Association ACC ASEAN Cosmetic Committee

ACCSQ ASEAN Consultative on Standard and Quality

ACD ASEAN Cosmetic Directive

ACSB ASEAN Cosmetic Scientific Body
AEC ASEAN Economic Community
AEM ASEAN Economic Minister
AFTA ASEAN Free Trade Area

AHCRS ASEAN Harmonized Cosmetic Regulatory Scheme

ASEAN Association of South East Asian Nations

BRU Brunei Darussalam CAM Cambodia

CEPT Common Effective Preferable Tariff

CFS Certificate of Free Sales
CIF Cost Insurance and Freight

CLMV Cambodia Lao Myanmar Vietnam

COA Certificate of Analysis

COLIPA The European Cosmetics Association

ECC European Consumer Centre
EEC European Economic Committee

EU European Union

FAO Food and Agriculture Organization of the United

Nations

FDA Food and Drug Administration
FDI Foreign Direct Investment
FOB Freight (or Free) on Board

FTA Free Trade Area

GMP Good Manufacturing Practice

GR Growth Rate

HSA Health Sciences Authority (of Singapore Government)

IMD Institute for Management Department

IND Indonesia

ISO International Standard Operation

ITC International Trade Center

LAO PDR The Lao People's Democratic Republic

MM Myanmar

MNCs Multi-National Companies
MOC Ministry of Commerce

MOI Ministry of Industrial MOPH Ministry of Public Health

MRA Mutual Recognition Arrangement

MS Market Share

MSD Medical Science Department
MTMs Non-Tariff Measurements

MY Malaysia

NAFTA North America Free Trade Agreement

NGO Non-Government Organization

NTBs Non-Tariff Trade Barriers
OTOP One Tumbon One Product

PHIL Philippines

PICS Pharmaceutical Inspection Convention and

Pharmaceutical Inspection Co-operation Scheme

PIF Product Information File
PMS Post Marketing Surveillance

RCA Revealed Comparative Advantage SEOM Senior Economic Officials Meeting

SG Singapore

SMEs Small and Medium Enterprises

SWOT Strength Weakness Opportunity Threat

TB Trade Balance

TBT Technical Barriers to Trade

TH Thailand

TRAINS Trade Analysis and Information System

UN United Nations

UNCTAD United Nations Conference on Trade and Development

UNSD United Nations Statistics Division

VN Vietnam

WHO World Health Organization

WITS World Integrated Trade Solution

WTO World Trade Organization

CHAPTER I

INTRODUCTION

The Association of Southeast Asian Nations (ASEAN) is becoming an important economic region in the global trade with population more than 600 million people. The ASEAN established by Bangkok Declaration on 8 August 1967 (B.E. 2510) is composed of 10 Member Countries which are Brunei Darussalam, Cambodia, Indonesia, Malaysia, Myanmar, Lao PDR, Philippines, Singapore, Thailand and Vietnam. The purpose of the ASEAN establishment was initially for the stability of politics and economic, social and cultural improvements. When the global trades became more competitive, the region tried hard to build a strong economic alliance to meet its key goals of economic integration in the region. It was noted that market integration is not just about removing tariffs on trade, but ensuring that nontariff barriers including technical barriers created by standards, technical regulations and conformity assessment have also been removed with no impact on safety quality and efficacy to its population. ASEAN has recognized the need to put in place the mutual recognition arrangements, harmonize standards and technical regulations in order to facilitating trade and protect consumers as one community, one standard. (ASEAN Economic Community Blueprint, 2008).

There are some healthcare product categories which were considered by ASEAN to be harmonized in order to overcome trade barriers from standards and technical regulations. Examples of healthcare product categories are pharmaceutical products, traditional medicines and health supplements, medical devices and cosmetics. A cosmetic is the first category which was harmonized in the region ("South-east Asia Cosmetics Industry Starts Harmonization Process,").

In 1997, the ASEAN Cosmetic Association (ACA) raised the issue related to barriers to trade to the ASEAN Secretariat requesting for removal of barriers regarding technical regulations among ASEAN countries. From the good collaboration between the government and the industry sector of all member countries, the Agreement on the ASEAN Harmonized Cosmetics Regulatory Scheme (AHCRS) was then signed on the 2nd September 2003. The standard and technical requirements established by AHCRS were first implemented in all ASEAN member countries on 1st January 2008 with 3 years grace period. The grace period timeline ended on 1st January 2011. Although, all member states had committed to fully implement the AHCRS by 2011, some countries could not fully implement the AHCRS because of their country context. The differences of country specific laws and ASEAN Cosmetic Directive (ACD) are important for all relevant stakeholders to understand and adjust appropriately in order to plan their organization to implement those remaining areas as committed in AHCRS as well as to make the ASEAN harmonization on cosmetics beneficial for regulators, consumers and industry and in particular to improve each country's economy and consumer protection. There were

two main objectives (*ASEAN Cosmetic Document* 2007) of AHCRS; (i) to enhance cooperation amongst member states in ensuring the safety quality and claimed benefits of all cosmetic products marketed in ASEAN, and (ii) to eliminate restriction to trade of cosmetic products amongst member States through harmonization of technical requirements, mutual recognition of product registration approval and adoption of the ACD. The expectation of the harmonization on cosmetic regulations was to provide benefits to all stakeholders. Consumers will get more variety of choices of safe cosmetic products. The regulatory authority will have a simple regulatory system to protect consumers.

As mentioned, the ASEAN harmonization on cosmetics was mainly for economic purpose. The cosmetic industry has a harmonized regulation ready to be a single market, single production base, and a single community to deal with global trade. Thailand is one of the leading ASEAN countries which should have opportunities to expand the cosmetics business either intra ASEAN region or extra ASEAN markets. This study would also provide the status of Thailand cosmetic industry competitiveness for the policy maker who can then plan for readily moving forward to be a part of the ASEAN community in 2015.

Objectives of the study

- 1. To study the compliance of Thai FDA on ASEAN Cosmetic Directive (ACD) which has been fully implemented since January, 2008
- 2. To evaluate the "competitiveness" of Thailand Cosmetic Industry

Expected benefits

Results from the study should help to empower both Thai FDA and cosmetic industries to better prepare for full AHCRS implementation. Moreover, evidence from an evaluation on competitiveness of the Thai cosmetic industry could also provide information to management from both regulators and industry sectors to set up an appropriate plan to improve Thailand competitiveness within the intra and extra region of ASEAN as well as to increase or at least protect its market share in the cosmetics sector in the competitive market.

CHAPTER II

LITERATURE REVIEW

The literature review of this research study was conducted to gather all necessary information for content analysis which was combined and used with the methodology of each particular part mentioned in the next chapter. The study was separated into 3 parts; the first part was the compliance study between Thai cosmetic regulation and ASEAN cosmetic directive which reflected Thailand's status on ASEAN harmonization in cosmetic regulatory aspects. The second part was conducted to evaluate the cosmetic industry competitiveness comparing among the 6 leading ASEAN countries which are Thailand, Singapore, Indonesia, Malaysia, Philippines, and Vietnam by using the economical tool to compare via the market share and reveal comparative advantage (RCA). The third part was conducted to study the factors which influenced Thai cosmetic competitiveness via the Diamond Model.

The literature reviews were conducted from all sources i.e. internet, text books, journals, government reports, news, etcetera. The main purposes were to gather all necessary information of Thailand and other ASEAN member states which reflected both the current regulatory aspect and competiveness aspect in order to use such information to forecast for the future trend. The study on the Evaluation of ASEAN Harmonized Cosmetic Regulatory Scheme (AHCRS) and the competitiveness of cosmetic industry after implementation was conducted by starting with the secondary data gathering for the full implementation period since the first week of January 2008. Library and internet searches were conducted as well as ASEAN documents and Thailand standards and regulations on cosmetic products were reviewed based on 3 parts as follows.

Part I ASEAN Harmonization Overview

Part II ASEAN Harmonized Cosmetic Regulatory Scheme (AHCRS) and

Compliance of ASEAN Member Countries

Part III Industry Competitiveness and Diamond Model

Part I ASEAN Harmonization Overview

Harmonization:

Harmonization is similar to Standardization but "not" exactly the same. However, both harmonization and standardization can help improve the process performance, lower the cost of the process maintenance and help senior management to get more control over the operation. Standardization creates uniform process across various divisions or locations. The expected results are consistent processes, well-defined practice and help reduce the risk of failure.

Harmonization helps to prevent and eliminate the differences in the technical content of the standards. The process of harmonization is to look at the differences of the process standard and set boundaries to the degree of their variations. Harmonization defines the extent of standards and how they could fit together, but does not make different standards uniform. Harmonization normally helps avoid a one-size-fits-all approach which is too rigid. It could work well for both too many and too few standards and also helps avoid inconsistencies between standards ("Harmonization Handbook: Accountable Governance in the Era of Globalization: the WTO, NAFTA, and International Harmonization of Standards," 2000)

ASEAN Harmonization:

The Association of Southeast Asia Nations (ASEAN) has been established for more than 40 years agreed by 10 Member States. The ASEAN seems to be an international organization by its appearance, but the reality is not acting like a truly international organization since there are still some limitations of ASEAN to be at that level in particular the perception, languages and, cultures which are quite different among member countries. There is also no ASEAN law for any enforcement and/or punishment. However, it has tried to bring the appearance and reality closer together with the adoption by treaty of the ASEAN Charter in 2007 which is an important document of establishing an institutional framework and direction for member countries in the association.

ASEAN was founded on 8 August 1967 by founding Member States which were Indonesia, Philippines, Malaysia, Singapore and Thailand. The Association was then first enlarged on 7 Jan 1984 after Brunei was admitted. Then Vietnam became an ASEAN member on 28 July 1995. Laos and Myanmar were admitted to be Member States on 23 July 1997. Cambodia was the last country to join the association on 30 April 1999. The association philosophy was consensus, consultation and compromise which is so called the "ASEAN Way" which is known and characterized by an informal, personal working style. Policymakers and politicians have had habits of compromise, consensus and consultation. Consensus does not necessarily need to be unanimity. A decision is not necessary for consensus if one or more ASEAN members felt the decision was against their national interests. Other international or regional organizations such as the UN and European Union (EU) also operate on the basis of consensus. The difference from ASEAN is that those organizations have formal voting or procedural mechanisms to break the impasse, if consensus fails. Context is important. ASEAN is a set of countries noted more for its ethnic, religious and political heterogeneity rather than its homogeneity.

ASEAN has gained experience from the EU that the full harmonization would take time. The mutual recognition on standards is not practical because it is difficult to agree that the standard of the trading partners are equivalent and acceptable. The Mutual Recognition Arrangement (MRA) of standards and regulations are more focused on the minimum essential criteria. The unnecessary requirements on standards, testing and certification procedure were removed. There is the need to move toward international standards and to remove unnecessary technical regulations

by focusing on post-market surveillance and monitoring of compliance. This kind of movement can help reduce technical and trade barriers, strengthen private sector competitiveness and improve product quality of import and export products.

There are three pillars of ASEAN harmonization agreed by the ASEAN Summit which are (i) ASEAN Security Community (ii) ASEAN Social Community (iii) ASEAN Economic Community (AEC). The AEC was started from the 8th ASEAN Summit held in Cambodia on 4-5 November 2002. The AEC was established which had a model from the European Economic Community (EEC). The AEC is expected to happen by 2020. The goal of the AEC is to be a single market and single production base with the free flow of goods, services, investment, capital and skilled labor. Consumers have more choices of selection for quality of goods.

The ASEAN member states agreed to set up a roadmap for integration of 11 priority sectors which are as follows:

- 1. Agro-based products
- 2. Fisheries
- 3. Wood-based products
- 4. Rubber-based products
- 5. Textiles/Apparels
- 6. Automotive
- 7. Electronics
- 8. e- ASEAN
- 9. Healthcare
- 10. Tourism
- 11. Air Travel

The Healthcare Sector composes of pharmaceutical products, traditional medicines and health supplements, cosmetics, medical devices and healthcare services. These priority sectors have been accelerated through ASEAN harmonization towards the ASEAN Economic Community (AEC) in 2015. The objectives of the Roadmap on Healthcare Sector are to support the strength of ASEAN by a free trade area and support for member states on trades, services and investments.

The Association of Southeast Asian Nations has been expected to become an "ASEAN Economic Community" by 2015. The expected timeline has concerned stakeholders and observers to wonder whether the harmonization could be completed on time. The term "ASEAN Economic Community" was first officially used in the declaration of ASEAN Concord II, which the ASEAN Summit adopted in October 2003 as one of the three "pillars" of the ASEAN Community. Actually, in the ASEAN Vision 2020 issued in 1997, the ASEAN leaders projected the ASEAN Community to become a reality in 2020. However, in August 2006, the ASEAN Economic Ministers realized the challenge of China and India, so they recommended accelerating ASEAN economic integration from 2020 to 2015. The ASEAN Summit of January 2007 accepted this recommendation of AEM and declared the ASEAN's

strong commitment towards accelerating the establishment of an ASEAN Community by 2015 (Severino, 2010).

It was noticed that the 21st Century trade issues are mostly about the standards and rules in areas of safety, health or consumer protection. The attention to non-tariffs is considered to impede market access. One of the most important non-tariff measures are regulations and standards of health care products which could not be compromised in terms of the safety quality and efficacy of products. The technicalities and regulations seem to be considered as a 'trade issue' since they could determine market access (Haddad, 2008).

In East Asia, there are different levels of standard infrastructure depending on each country's level of development. It was found that the use of technical regulations among East Asian countries is varied and sometimes does not seem to be necessary. In ASEAN, Thailand, Indonesia, and the Philippines could be mentioned as those countries which have technical regulations tighter than other member countries when compared to their overall non-tariff measures as notified to the WTO by their governments and compiled in the UNCTAD TRAINS database. China has the highest number of technical regulations which is about 60% of its total non-tariff measures. Technical regulations in ASEAN countries are mostly for agriculture and food products, followed by pharmaceutical products (Haddad, 2008).

For the ASEAN Approach, in 1995 through the Bangkok Summit declaration, the alignment of national standards with international standards and the development of mutual recognition agreements were requested to establish for the region. Following this Summit Declaration, the Senior Economic Officials Meeting (SEOM) then established the ASEAN Consultative Committee on Standards and Quality (ACCSQ) to review for harmonizing national standards with international standards and negotiating mutual recognition arrangements to achieve the ASEAN goal of "One Standard, One Test, and Accepted Everywhere". In order to achieve these objectives, ACCSQ has to strengthen the technical infrastructure in member countries and enhance the exchange of information on standards and technical regulations of each member country. In 1998, ACCSQ set up working groups to work with five key priority sectors which included electrical and electronic equipment, telecommunications equipment, cosmetics, pharmaceuticals and processed food.

From the reviews, it was concluded that the main purpose of ASEAN Harmonization in all aspects were to mainly focus on trades' promotion as well as to promote consumer protection. One of the very important issues concerned was the technical barriers to trades which are standards, rules, laws and regulations agreed by the leaders of each ASEAN member's country to eliminate all those technical barriers to trades, while still not compromising in terms of safety quality and efficacy aspects. However, the technical harmonization was performed under the "ASEAN Way" and we cannot deny that the country specific requirements still exist.

Part II ASEAN Harmonized Cosmetic Regulatory Scheme (AHCRS) and Compliance of ASEAN Member Countries

Principle of ASEAN Harmonization on Cosmetics:

In terms of Cosmetic Regulatory Scheme, the cosmetic definition is accepted by all ASEAN member countries specifying the area of application as well as the function performed. The product responsibility regarding safety, quality, and claimed benefits belongs to the manufacturers, importers, wholesalers and retailers who are responsible for the safety, quality, and claimed benefits including adverse reactions associated with cosmetic products. The authorities have a clear mandate and authority to inspect and examine the finished goods at the manufacturer or anywhere in market places. The authorities inspect manufacturers using ASEAN guidelines on cosmetic GMP. Technical regulations and conformity assessments are consistent with FTA and consumer safety. The correct product information file (PIF) must be readily accessible by authorities. The cosmetic consumers are provided with substantial information to enable them make an informed choice and the proper use of cosmetic products. The authority of each member country should declare the clear responsibilities of the manufacturers, importers and wholesales and mandatory rules, laws and regulations. The ASEAN member countries must have a common list of restricted and nonpermissible cosmetic ingredients and substances. The ASEAN accepts the international nomenclature of cosmetic ingredients and substances.

Agreement on the ASEAN Harmonized Cosmetic Regulatory Scheme (AHCRS):

In 1992 the ASEAN heads of Government declared that an ASEAN Free Trade Area should be established in the region and in 1998 they agreed to accelerate its implementation to the year 2002. The Agreement on the Common Effective Preferential Tariff (CEPT) Scheme for the ASEAN Free Trade Area (AFTA) was signed on 28 January 1992 and the Protocol to amend the above Agreement was signed on 15 December 1995, which provided for border and non-border areas of cooperation to supplement and complement the liberalization of trade among other member countries including the harmonization of standards, reciprocal recognition of tests and certification of products.

The commitment to the Agreement on Technical barriers to Trade (TBT) of the World Trade Organization (WTO) was adopted in ASEAN by member countries which entered into negotiations for the conclusion of this agreement for the mutual recognition of results of each other's conformity assessment and mandates, and among others, the elimination of unnecessary obstacles to trade, regarding technical regulations. The private sector of the cosmetic industry i.e. ASEAN Cosmetics Associations (ACA), has also participated in the development of the ASEAN Harmonized Cosmetic Regulatory Scheme (members, 2007). The cooperation among member countries is encouraged in the field of technological development considering the different levels of infrastructure and economic development of ASEAN Member States. The ASEAN Framework Agreement on Mutual Recognition Arrangements was signed on 16 December 1998 to provide a basis for development of sectoral

MRAs to facilitate the realization of AFTA. The cooperation on cosmetics was deepened and broadened to contribute to the realization of AFTA.

Seven (7) Areas of Harmonized Technical Documents for Cosmetics

- 1. ASEAN Definition of Cosmetics and Illustrative List by Category of Cosmetic Products
- 2. ASEAN Cosmetic Ingredient Listing and ASEAN Handbook of Cosmetic Ingredients
- 3. ASEAN Cosmetics Labeling Requirements
- 4. ASEAN Cosmetics Claims Guidelines
- 5. ASEAN Cosmetics Product Registration Requirements
- 6. ASEAN Cosmetics Import/Export Requirements
- 7. ASEAN Guidelines for Cosmetics Good Manufacturing Practice

An ASEAN Cosmetic Committee (ACC) was established which should be responsible for effective functioning of this Agreement. The ACC consists of one official representative from each member state's regulatory authority responsible for cosmetics. The representative may be accompanied by their delegation at meetings of the ACC. The ASEAN Cosmetic Industry, such as ACA is invited to meetings of the ACC and shall be consulted on all matters concerning the cosmetics industry.

The ACC takes its decision by consensus and is responsible for, but not limited to coordinating, reviewing and monitoring of the implementation of this Agreement, including the ASEAN Mutual Recognition Arrangement of Product Registration Approvals for Cosmetics and the ASEAN Cosmetics Directive, and reviewing and updating the technical documents. The ACC may establish or consult anybody or bodies which is so called ASEAN Cosmetic Scientific Body (ACSB) for giving advice on any matter of a scientific or technical nature in the field of cosmetic products and is able to adopt its own rules of procedures. The ASEAN Consultative Committee for Standards and Quality (ACCSQ) and the ASEAN Secretariat shall also provide support in coordinating and monitoring the implementation of this Agreement, including the ASEAN Mutual Recognition Arrangement of Product Registration Approvals for Cosmetics and the ASEAN Cosmetics Directive and assist the ACC in all relevant matters.

It should be noted that the major purpose of the ASEAN harmonization on cosmetic products is to eliminate technical barriers to trade for unnecessary requirements considered as non-tariff barriers. There were about 21 official meetings arranged by the ASEAN Cosmetic Committee and ASEAN Cosmetic Scientific Body from 1998 until 2014. The ACD implementation in each member state as well as country specific requirements were also requested by the ASEAN Secretariat to be reported.

As we all noted that AHCRS is a part of economic integration in the area of cosmetics which was committed to meet the goal of AEC in 2015. The "competitiveness" of Thailand cosmetic industry is a part of economic integration

encouraged by the seven (7) technical areas of harmonization as adopted from the ASEAN Cosmetic Directive. The level of ACD implementation could impact on competitiveness during the creation of ASEAN single market. The AHCRS implementation should promote "competitiveness" of Thailand cosmetic industry to penetrate intra-ASEAN trade and allow for economics of scale of production. It should also encourage domestic, intra-ASEAN market and help promote foreign investment in the country. AHCRS is one of the trade integrations which is the trade facilitation initiative affecting trade between ASEAN member states.

Tariff Barriers to intra-ASEAN trade have been declining. The cosmetic tariff issue has been solved. It was decreased for cosmetics business sector to be zero since 2008. Some less developed member countries have concerns about the pace of ASEAN economic integration. While agreeing in principle, they are concerned that if they open up their markets to intra-ASEAN competition too quickly, their domestic producers will be faced with strong competition from more developed member countries, without the compensation of expanding their own intra-ASEAN exports (or to other exports). An additional concern for less developed member countries is that their customs revenue is usually a higher proportion of government income than it is for wealthier countries and alternative income needs to be identified before tariffs can be reduced.

While tariff levels are coming down, the non-tariff trade barriers (NTBs) have increased to protect domestic producers. This has potential to undermine integration. These are about technical, administrative and other regulations which can be exploited for protectionist purposes. Safety regulations, health regulations, requirements for hygienic production and packaging of imported food products, and labeling requirements are forms of NTBs. Government procurement policies restricted to or favoring domestic procedures are also barriers to trade. The use of minimum standards can also be seen as a form of NTB. Custom procedures and the lack of harmonization of custom rules and procedures can also add to transaction costs and impede integration.

AHCRS implementation barriers and integration in ASEAN member countries and Compliance of ASEAN members

It was said that the "Good plans, programs and projects will not deliver their promises if they are not carried out and implemented properly. Targets and objectives will remain as targets and objectives if they are not translated into concrete measures and steps" (Demers, 2004). If implementation is weak and inconsistent then the barriers to integration still remain. Weak commitment can also be reflected in the level of representation to negotiations and meetings. The level of representation from some ASEAN countries has frequently been such that a delegate is not authorized by his/her country to make decisions on matters to be addressed at working groups and other meetings.

To be more smooth and effective implementation of AHCRS, it has been noted that the changes in the chairmanship of some of the committees and groups

have undermined the continuity of the work. At the same time, changes in the focus of the coordinators have had the same effect. The slowness of implementation and decision taken is also due to the need to consider the national interests of all parties concerned. Consultations within the country are necessary and will take time. Where there are conflicts between ASEAN commitments and the national interest, these will have to be resolved.

In some cases, the delays in implementations are due to the lack of appropriate and sufficient technical capacity to implement the decisions. Some aspects can be technical in nature and will require training. A poor or weak awareness of the benefits of liberalization can slow down the speed of implementation. This gap may be due to the genuine lack of knowledge and insufficient evidence regarding the benefits of liberalization in the context of ASEAN.

For AHCRS implementation among 10 ASEAN member states, the situation and status could be concluded below:

- 1. The ASEAN Harmonized Cosmetic Regulatory Scheme has covered 2 options
 - A. The ASEAN Mutual Recognition of Product Registration Approval for Cosmetics Appearing as Schedule A of the agreement.
 - B. The ASEAN Cosmetic Directive (ACD) appearing as Schedule B of the agreement.

It was noted that the Schedule A of ASEAN Mutual Recognition Arrangement of Product Registration Approval for Cosmetics is no longer applicable. All 10 member states agreed on implementation of the ACD (Schedule B).

2. The ACD implementation status as of 2013 reported by the ASEAN Cosmetic Committee in 2013 of other 9 ASEAN members has been summarized in Table 1:

Table 1 ACD Implementation Status in ASEAN Countries in 2013

Country	Definition	Ingredient	Labeling	Claims	GMP
		Listing			
Brunei Darussalam	Same as ACD	Same as ACD	Same as ACD, English and Bahasa language are accepted.	Follow ASEAN guideline but a justification and decision is subjected	Follow ASEAN GMP guideline or equivalent standards
				to country	

Table 1 ACD Implementation Status in ASEAN Countries in 2013 (Cont.)

Country	Definition	Ingredient Listing	Labeling	Claims	GMP
Cambodia	Same as ACD	Same as ACD	Same as ACD, local language is required.	Follow ASEAN guideline but a justification and decision is subjected to country	Follow ASEAN GMP guideline or equivalent standards
Indonesia	Same as ACD	Country Specific for some category i.e. Hair dye	Same as ACD, local language (Bahasa) is required.	Follow ASEAN guideline but a justification and decision is subjected to country	Follow ASEAN GMP guideline or equivalent standards. The GMP certificate is required during notification.
Lao PDR	Same as ACD	Same as ACD	Same as ACD, Thai labeling is accepted.	Follow ASEAN guideline but a justification and decision is subjected to country	Follow ASEAN GMP guideline or equivalent standards
Malaysia	Same as ACD	Same as ACD	Same as ACD, English and local language (Bahasa) are accepted.	Follow ASEAN guideline but a justification and decision is subjected to country	Follow ASEAN GMP guideline or equivalent standards. The GMP certificate is required during notification.

Table 1 ACD Implementation Status in ASEAN Countries in 2013 (Cont.)

Country	Definition	Ingredient Listing	Labeling	Claims	GMP
Myanmar	Same as ACD	Same as ACD	Same as ACD	Follow ASEAN guideline but a justification and decision is subjected to country	Follow ASEAN GMP guideline or equivalent standards
Philippines	Same as ACD	Same as ACD	Same as ACD	Follow ASEAN guideline but a justification and decision is subjected to country	Follow ASEAN GMP guideline or equivalent standards
Singapore	Same as ACD	Same as ACD	Same as ACD	Follow ASEAN guideline but a justification and decision is subjected to country	Follow ASEAN GMP guideline or equivalent standards
Thailand	Country Specific	Country Specific for some ingredients i.e. Fluoride allowance of 1100 ppm in Cosmetics, Lead acetate in hair dye.	Country Specific, notification number	Follow ASEAN guideline but a justification and decision is subjected to country	Follow ASEAN GMP guideline or equivalent standards. But, GMP is not mandatory by law.

Country	Definition	Ingredient Listing	Labeling	Claims	GMP
Vietnam	Same as ACD	Same as ACD	Same as ACD	Pre- Approval required by authority. Follow ASEAN guideline but a justification and decision is subjected	Follow ASEAN GMP guideline or equivalent standards. The GMP certificate is required during notification.

Table 1 ACD Implementation Status in ASEAN Countries in 2013 (Cont.)

Source: Inputs provided by Regulatory Affairs people who work in the areas of cosmetics for ASEAN member states in 2013.

- 3. There were three phases of implementation: 1st Phase: Framework agreement was signed. 2nd Phase: Countries adopted ACD and agreed to transpose the adopted ACD into local legislation and regulations. 3rd Phase: Countries have implemented legislation and regulations. This was the final set of process indicators on the way to harmonization. The time elapse between the commitment to harmonization and implementation of legislation and regulations have always happened. The development of closer economic cooperation and expediting process needed to be emphasized.
- 4. The ASEAN has had meetings of ASEAN Cosmetics Committee (ACC) which composed of delegates from 10 member countries including the representative from industry sector which is ASEAN Cosmetic Association (ACA). The meetings have been arranged 2 times per year in order to discuss and share the status, problems, and issues concerned with the ACD implementation in each particular country. The ACC meeting composed of 2 technical meetings of the ASEAN Cosmetics Scientific Body (ACSB), and ASEAN Cosmetics Testing Laboratory Networks (ACTLN) which were arranged prior the ACC meeting.
- 5. The ACD adopted the technical content from the EU directive/EU regulation. Therefore, the updated ACD implementation in this region will follow the EU regulation. ASEAN implemented the ACD referenced by EU directive since the initial phase. However, the EU completely implemented the EU regulation in July 2013. This means the ASEAN may consider its direction on updating the ACD to comply with the EU regulation in the future. The ASEAN

Cosmetic Committee invited the EU Commission to share the experience on the EU regulation implementation process. There is a good cooperation between the ASEAN regulators and the EU commission for future updated ACD.

- 6. The head delegates from each member country met and shared the country specific requirements and concerns. The country specific requirements and issues on implementation were supported by the ASEAN Regional Integration Support by EU (ARISE) project. The highlight topics were the GMP guideline implementation for the local manufacturers, and the concerns of GMP of the manufacturers sourced from extra-ASEAN countries. Malaysia agreed to take a lead on this subject by working closely with the EU on its implementation in the EU region of GMP for local manufacturers.
- 7. The latest status on ACD implementation and product notification of each member state was presented by the country head of delegates under the country report in the ASEAN Cosmetic Committee meeting in 2013. The product notification status of each ASEAN member state:

7.1 Brunei Darussalam:

- 1) The ACD has been fully implemented since June 2008 by transposing to the medicine regulation 2007 under the cosmetics sector.
- 2) There were 192 importers, and "no" local manufacturers in 2012. There were 29,285 products notified to the authorities.
- 3) The notification approval renewal was changed from every 2 years to every 3 years.
- 4) The industry must pay for the notification fees.
- 5) The industry can appeal the notification submission to the authority in case of application rejection.
- 6) The notification application was manual submission. There was no online system available.

7.2 Cambodia:

- There is a cosmetic sub-degree from pharmaceutical laws. The ACD was announced in the cosmetic sub-degree in 28 August 2008. The product notification process has been completely implemented since 1st May 2010.
- 2) There were 3,502 cosmetic products which were notified to the authority. Also there were a lot of products in markets which had not yet been notified.

3) The notification application is manual submission. There was no online notification system available. The ASEAN template was used for submission. The notification timeline was 5 working day. The notification was valid for 2 years. The notified cosmetic products would be published in the website of the FDA; www.ddfcambodia.com

7.3 Indonesia:

- 1) There were 609 local manufacturers, and 346 importers.
- 2) There were 32, 119 cosmetic products notified to the authority.
- 3) The notification is online system via the www.pom.go.id, and www

7.4 Lao PDR:

There were 172 cosmetic products notified to the authority. The notification was manual submission. There was no online notification system available.

7.5 Malaysia:

- 1) There were 123,700 cosmetic products notified to the authority.
- 2) The product notification was an online submission which was the smart system. The smart system could help filter the prohibited ingredients as well as to help check the restricted ingredients
- 3) The cosmetic products which have already been notified are available on the website; www.bpfk.gov.my

7.6 Philippines:

- 1) There were 73,671 notification submissions, but only 36,768 applications were approved.
- 2) The notification applications were manually submitted and reviewed by the authorized officers.
- 3) The online submission system was being developed. This was put in the 5 year plan to be enforced via the RA 9711(FDA Strengthening Act 2009).
- 4) The notified cosmetic products which were notified to the authorities since Jan 2010 were available in the FDA website; http://www.fda.gov.ph

7.7 Singapore:

- 1) There were 136,000 cosmetic products notified with the HSA.
- 2) The notification process was online submission via the HSA website http://www.hsa.gov.sg/publish/hsaportal/en/services.html

- 3) The notified cosmetic products were published via the information search on HAS website of:
 - http://www.hsa.gov.sg/publish/hsaportal/en/services/0.html
- 4) There was a new regulation regarding the anionic surface active agents which is the 2nd Schedule of the Environmental Protection & Management Act. The formulation should contain the anionic surface active agents less than 5 %. For the formulation which contained the surface active agents more than 5%, it should be proven that the 90% of the formulation could be destroyable.

7.8 Thailand:

- Thailand started the notification procedure since October 2008. There were 293,220 notification applications during Oct 2008-May 2012.
 There were 184,876 applications approved, 99,287 applications rejected, 9,016 applications cancelled, and 41 applications were removed.
- 2) In 2012, there were 2,671 local manufactures, and 1,582 importers.
- 3) The notification submission could be performed via either the online system or hard copy submission at the one stop service.
- 4) The product notification could be performed at the provincial office. In 2012, there were 70 provincial offices which could perform cosmetics notification. There were 7 provinces in which there were no cases of notification submission.
- 5) The review and/or consideration by authorized officers were necessary because the resources of post marketing control were limited.

7.9 Vietnam:

- 1) There were 60,000 cosmetic products notified with the authority.
- 2) The online submission was being developed, tentatively to be lived in 2013. The notification submission was manual.
- 3) The documents used for notification were (i) notification file which composed of the full ingredient listing and the percentage of the restricted ingredients as in the ACD annexes. (ii) the business license of the applicant or the market authorization license holder. (iii) letter of authorization from the product owner or the manufacturer (iv) the certificate of free sale (CFS). The reasons for requesting such documents during the notification were as follows:
 - To prevent the counterfeit products
 - To protect and promote the safety of consumers
 - To prevent the right of product owners

The ACD implementation status of each ASEAN country must be reported to the ACC meeting. Countries which have not met their obligations on time were identified and published. It is so called "name and shame approach"

Remark:

Myanmar was the only country in ASEAN which did not update the status of ACD implementation to the ACC meeting.

Previous Related Studies:

There has been "no" official study conducted on the comparison of Thailand cosmetic regulation with the ACD. There were some previous studies related to policy implementation evaluation which could be summarized below.

Regarding the harmonization, there was a related study on the Tax Competition and Harmonization in South East Asia (Berlianto, 2009). The objective was to examine the tax policy in Southeast Asian Countries and identify issues regarding tax competition and harmonization during the period of 1996-2006. Both qualitative and qualitative measures were used in the study. It was concluded that the progress of tax harmonization between countries has tended to be difficult to achieve because of differences among the countries in terms of the tax structures and level of economies. The study relied on both primary and secondary source of literature. The major sources of primary and secondary data were websites of government departments and the websites with up-to-date statistical data and information related to the tax policy of the countries being studied. There were two problems identified during this kind of study; (i) not all the countries had official websites, and (ii) not all official websites provided the necessary data. Data coverage was not complete and this might affect the reporting and analysis of data. Preliminary analysis was carried out during the data collection in order to identify any trend and this helped in deciding which areas should be examined in more detail. More detailed analysis was then made after all the data had been collected. In the Southeast Asian region, the empirical evidence seemed to indicate that tax incentives have little effect on FDI flows.

There was also a related policy study on impact of free trade area and Thai Services ("A Study on the Impacts of Thailand-U.S. Free Trade Agreement," 2003). The principal of the study was to develop trades with policies to promote Thai industry by supporting the big companies which are well adapted and also to support and help small and medium businesses at the same time. The Thai services sector has a long history of capacity to build product differentiation into the market. The area of service sector relies on people much more than other sectors. It intended to build the systemic competency of Thai services. The focus on human resource development of all small, medium and big businesses would help build industrial clusters faster with low risk. The objectives of this study were (i) to study information related to trades in services in which Thailand had more ability or had more advantage in terms of category, business pattern/design and the method for market penetration. The Thai industry had a limitation to move forward according to FTA. This is particular to compete with the business giants like USA, Japan and China. The service business

was different from other business because it required specific skills. Therefore, the fair trade is a challenge for Thailand and other countries. The weakness of Thailand was sometimes coming from a wrong belief in the "country" or "mother's land", because the Thai always believed that the country must be protected for its own sovereignty and local-local business. The spread of such wrong belief happened from a long time ago which then could foster the carelessness of its people to be not be strong and fight to strengthen their business in the competitive market environment of FTA. The way that the industry sectors always used in many countries was to gather together the same concerned industry sectors who get the same benefits in order to build a strong negotiation or bring the political and social issues to be involved for the benefits for the very short term, but worse in the long term to consumers. This may cause the consumers to consume the higher priced products with the same quality and also decrease the motivation of industry on business competition. The global business and bilateral trade business regulation trend is to be "Global Sourcing". When the business trend is global sourcing, this kind of business practice will lead to the competitive environment. The information perceived is different among various types of businesses. The Thai government spent a lot of money to build the competitive ability of its industry sectors through the professional, associations, government agencies and academic agencies, but they are at the initial stage of a good development process. The development process is still slower than the global trade environment of both trades in goods and trades in services.

Since there was "no" official study conducted on the comparison between Thailand cosmetics regulation and the ACD, this study was then performed. The comparison between the two laws was conducted by using data from primary and secondary data. The primary data was gathered by the in-depth interview via the semi structure questionnaires. The purposive samples were selected from both regulator and industry sectors.

Part III National Competitiveness and Diamond Model

National Competitiveness

The national competitiveness is the national ability and industry outcome on the improvement and/or maintenance of the proper business environments. The evaluation of the national competitiveness would help to understand the strong point or weak point of the country by comparing with others during the same period of time. The evaluation result could be used to improve the competitiveness of the country.

The Institute for Management Development (IMD), the private organization based in Switzerland mentioned that the national competitiveness composed of 4 areas which were (i) economic performance (ii) government efficiency (iii) business efficiency and (iv) infrastructures.

However, there was an economic model which has been widely used to evaluate the national industry competitiveness which is so called "Diamond Model"

which has proven its validity to evaluate a country's competitiveness. The details on Diamond Model and its elements have also been presented in this chapter.

Import/Export Data from International Trade Center (ITC)

The import and export data during 2007-2013 at the Thai custom department did not cover other ASEAN countries. It was available for Thailand import and export only. The custom data management was not available in some countries i.e. Cambodia, Laos PDR, Myanmar, and Vietnam, Cambodia. However, for other ASEAN members, the data from the country was not validated. With the limitation of data availability as such, this researcher then used the data from the International Trade Center (ITC) which was validated by UN before being published on their website. The data in the ITC has not been completed for all countries, all categories, and all years. For example, there was no data for Vietnam, Lao PDR, and Myanmar available in 2013. However, the ITC was confirmed by the economists that it is trustworthy and reliable information.

Import Data is the cosmetics imported in monetary terms of CIF Value (US\$) of the initial country from ASEAN and/or non-ASEAN members. CIF value means Cost, Insurance and Freight (CIF) is a common term in a sales contract that may be encountered in international trading when ocean transport is used. It must always indicate the port of destination, i.e. "CIF Shanghai." When a price is quoted CIF, it means that the selling price includes the cost of the goods, the freight or transport costs and also the cost of marine insurance. CIF is an international commercial term.

Export Data is the cosmetics exported in monetary terms of FOB Value (in Thai baht and US\$) of Thailand to other ASEAN members. FOB is Freight (or Free) On Board, meaning that the buyer pays for transportation of the goods. Specific terms of the agreement can vary widely, in particular which party (buyer or seller) pays for which shipment and loading costs, and/or where responsibility for the goods is transferred.

Growth Rate means the rate change from one period to another which is calculated from the formula:

 $G=\underline{X_n}-X_{n-1}$

 X_{n-1}

G= Growth rate

 X_n = the export value of the current year

 X_{n-1} = the export value of the previous year

Trade Balance (TB) means the exportation value is compared with the importation value in terms of trade values at the specific time. If the exportation value is more than the importation value at any specific time, that means the country has a positive trade balance in that specified market and time. However, if the exportation value is less than the importation value, the initial country loses its trade balance to the end market, so the trade balance in this particular case is negative.

The trade balance from one period to another is calculated from the formula:

TB=Ex-Im

TB= Trade Balance

Ex= the export value of the current year

Im= the import value of the previous year

Relative Comparative Advantage (RCA) is an index used in international economics for calculating the relative advantage or disadvantage of a certain country in a certain class of goods or services as evidenced by trade flows. It most commonly refers to an index introduced by Belassa (Balassa, 2008):

$$\begin{aligned} RCA &= \underbrace{X_{ij} / X_{nj}}_{X_{it} / X_{nt}} \end{aligned}$$

X: Export Value, i: the interested country, j: cosmetics products, t: total cosmetics (3303-3307), n: the ASEAN region

 X_{ij} : Export value of cosmetic category i by country j to ASEAN market

 \mathbf{X}_{nj} : Total Export value of category j from the world market to intra ASEAN market

Xit: Export value of total cosmetic categories (3303-3307) by country j to intra ASEAN market

X_{nt}: Total cosmetics export values from the world market to intra ASEAN.

Example 1: RCA of 3303: perfumes and toilet waters category of Thailand industry compared to other countries in ASEAN intra ASEAN market:

$\mathbf{RCA} = \underline{\mathbf{X}_{ij}/\mathbf{X}_{nj}}$

Xit/Xnt

X_{ij}: Export value of HS 3303 of Thailand to ASEAN market

X_{nj}: Total export value of HS 3303 from the world market to intra ASEAN market

Y:: Export Value of all cosmetics (HS3303 HS3307) of Theiland to intra ASEAN

X_{it}: Export Value of all cosmetics (HS3303-HS3307) of Thailand to intra ASEAN market

X_A: Total export value of all cosmetics (HS3303-HS3307) from the world market to intra ASEAN market

If the RCA value is higher than "1", it could be explained that Thailand has more advantage or competitiveness than the others. The much higher than 1 of RCA means the much higher competitiveness of such particular category of that country. The change and trend of RCA of each particular product category by yearly basis compared among the five leading countries could also reflect the competitiveness and trend of such product category in the ASEAN market in the future.

The RCA comparison between the bilateral countries

The calculated RCA values could reflect the advantage and disadvantage from the exported data. Also, in this study this researcher would like to compare the advantage of Thailand with other member states in the intra ASEAN market. As an example, step 2 of the RCA analysis would use the equation below for Thailand and Indonesia:

RCA TH, IND= RCATH/RCAIND= $(Xi_{TH}/\sum X_{TH})/(Xi_{IND}/\sum X_{ID})$

 $RCA_{TH} = RCA$ of Thailand

 $RCA_{IND} = RCA$ of Indonesia

Xi_{TH} = Export value of cosmetic category i by Thailand to ASEAN market

 $\sum X_{TH}$ = Export value of total cosmetics by Thailand to ASEAN market

Xi_{IND} = Export value of cosmetic category i by Indonesia to ASEAN market

 $\sum X_{ID}$ = Export value of total cosmetics by Indonesia to ASEAN market

If the RCA is more than 1, it could be interpreted that the product I from Thailand had more comparative advantage than the product i produced from Indonesia, even though both of the products from Thailand and Indonesia might have the competitive advantage for the RCA calculation if the RCA values of both countries were more than 1).

Market Share (MS) is the proportion or percentage of a sales value of a specified category of Thailand with the total sales value of that cosmetic category (defined in terms of revenue in this study) which accounted for the intra ASEAN market. Market share is closely monitored for signs of change in the competitive landscape, and it frequently drives strategic or tactical action.

$$MSi_{J-A} = \underbrace{Xi}_{Xi}_{W-A}$$

MSi _{J-A} = Market share of product i of country i in ASEAN market

Xi _{J-A} = Export Value of product i of country j to ASEAN market

Xi w-A = Export Value of product i from world market to ASEAN market

If the Market share is in high value, it means the country has high competitiveness. The high competitiveness may come from many factors i.e. price, product quality, variety of products for consumers selected choices, time for product procurement and distribution, the accuracy of procurement and distribution time, etcetera. Another factor to gain more market share would be the opportunity to get the lower production cost from such country. It could be said that the higher market share could represent the "absolute advantage". Therefore, the market share would reflect the absolute advantage not revealed comparative advantage (Suriya, 2001).

Diamond Model by Michael E. Porter

In 1990, Porter wrote a book named "Competitive Advantage of Nations" focusing on macroeconomics at the level of cluster in which he presented the hypothesis why some countries are successful in a particular business faster than the others. For example, why people would like to buy the electrical equipment from

Japan, but they do not buy chocolate from Japan. Or why do people buy watches from Switzerland.

Porter and his team conducted research and found that the competitiveness or advantage of each particular country could be learned and understood via the microeconomics from the conditions and environment of such businesses in such particular country which is so called "Diamond Model".

Diamond Model is then considered as an appropriate evaluation tool to know the factors which will impact the country competitiveness at the macroeconomic level which is different from the 5 force Model (Alexander Eickelpasch, 2010) which focuses at the organization level.

Diamond Model Components:

1. Factor Condition:

Factor condition is factors which will impact to the production or service of such business i.e. production skill, natural resource, budget.

2. Demand Condition:

The demand condition is the consumers demand intra country which will stimulate the targeted consumers, business size and market share.

3. Company Strategy, Structure, and Rivalry:

It is a company strategy and its competitors as well as other factors in business i.e. investment capital, management committees, company strategy, competitor

4. Quality of Related and Supporting:

It is related business sectors, continuousness of business and supporting businesses i.e. R&D labs, Scientists Team.

5. Role of Government:

The roles of governments impact or have been impacted by the above four elements. Some are positive impact, but some are negative impact.

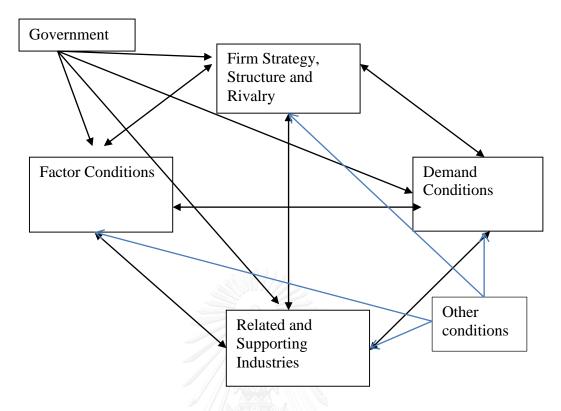


Figure 1 Diamond Model

Porter's research has inspired many countries to evaluate its own competitiveness. Porter was invited to be a consultant in Ecuador, Nicaragua, Peru, Singapore, Taiwan and Thailand. After a research of Thailand's Competitiveness by Porter, he did suggest to Thailand government on the development of the business community development which is so called "Cluster". (Ketels, 2013).

Diamond Model Application:

The competitiveness of a region can be measured in different ways (Vytautas Snieška, 2009). Every method has its advantages and disadvantages. There are several kinds of competitiveness models: National Diamond, Double Diamond, Nine Factors, Regional Competitive Hat, Pyramid Model of Regional Competitiveness, and Regional Competitiveness Tree Modes. It has been proved that the "Diamond Model" is appropriate for methodological arrangement of factors of competitiveness. It was found that the closed cooperation among industry sectors, science and authorities were main factors of the regional clusters development in Lithuania.

Porter's Diamond Model shows the four factors that affect competitiveness of a nation and its industries (Basu, 2013).

- 1) Demand Condition: Local demand for a company products/services
- 2) Factor Conditions: Country resources i.e. labor, national resources
- 3) Presence of supply industries
- 4) Company Strategies

The study on 'location and international sources of firm competitive advantages' by applying Porter's Diamond Model at the firm level (Alexander Eickelpasch, 2010) was conducted. (Figure 1)

- 1) Factor Conditions: Input factors (such as highly skilled human resource or scientific and technological infrastructure) lead to competitive advantage in knowledge intensive industries.
- 2) Demand Conditions: 3 mechanisms:
 - a) Particular market segment is larger and more important at home than elsewhere
 - b) Sophisticated, demanding buyers in the home base pressure firms to meet high standards, to innovate and to upgrade into more advanced market segments.
 - c) The demand of domestic buyers should anticipate the needs of customers from other countries.

Porter mentioned that a large home market that meets all above three conditions will be highly supportive of international competitiveness. (Alexander Eickelpasch, 2010)

- 3) Related and Supporting Industries: Relationship between firms and suppliers play a decisive role in the value chain that is crucial for innovative improvement. Closed collaboration among local suppliers, assists firms in establishing new methods, technologies and productivity enhancement.
- 4) Firm Strategy and Rivalry: geographically proximate, strong rivals results in a constant pressure on each firm to offer competitive products, quality improvements and strategic differences.
- 5) Governmental and chance (i.e. unpredictable discontinuities, wars and other chances events) are factors influencing the functioning of these environmental antecedents.

There is criticism of Porter's model that it is a high level of abstraction and ambiguity of the manifestation of proposed relations that is Porter's shift in explaining the competitive advantage or competitiveness at a variety of conceptual scale; the nation, the industry, the individual firm or the regional and location levels. (Alexander Eickelpasch, 2010)

Porter's claims that all aspects in the Diamond Model interact and reinforce each other, but in fact, the model does not explicitly include independent variables, thus each variable is dependent. These mutual relationships between the environmental antecedents permits a wide range of casual relationships and interpretations and therefore these are quite problematic. It was concluded that the Diamond Model has not yet been operationalized for empirical testing at the microlevel. (Alexander Eickelpasch, 2010)

- 1) Factor Condition: there were 7 location factors
 - Supply of the skilled labor
 - Supply of additional education
 - Supra regional transportation links
 - Intra-regional transportation links
 - Proximity to universities
 - Proximity to research institutes
 - Support of local financial institutions

These variables are measured on a six-point Likert scale ranging from unimportant (0), important and very bad quality (1) to important and very good quality (5).

- 2) Local Demand: there are two indicators
 - Local turnover share in total firm turnover as a percentage
 - Firm assessment of proximity to customers measured on a six-point Likert scale ranging from unimportant (0), important and very bad quality (1) to important and very good quality (5).
- 3) Related and Supported Industries: measured by the frequency of cooperation with research facilities and other firms in the following areas; basic research, product development, process development and equipment usage.

 The five point Likert (1-5) scale was used ranging from "we do not cooperate (1), "we cooperate sometimes" (3), to we often cooperate (5).
- 4) Company Strategy and Rivalry: measured by three indicators
 - A dummy variable from major competitor's headquarters being located within a 3 km radius from the company location
 - Firm assessment of main competitor size
 - Firm assessment of number of competitors

Those above 3 factors are measured on three point Likert scale; small (1), medium (2) and large (3)

- 5) Government: measured by 4 location factors
 - Support of job centers
 - Support from local authorities
 - Support from business development corporations
 - Scale of government support

The 4 governmental factors are measured on a six point Likert scale ranging from unimportant (0), important and very bad quality (1) to important and very good quality (5)

Vladimir conducted the study in Porter's Diamond Model of Osijek Baranja Country Industry (Vladimir Cini, 2009): the goal of the study was to detect all possible opportunities and convert them to strengths, and also to include possible environment threats into long term industry development strategy. This model was used for creating implication of all factors in SWOT terminology. The main role of the government was not to create rivals, but to create conditions in which the industrial companies would alone become competitive. SWOT analysis enabled the evaluation of every items of Porter's Diamond Model which could refer to individual product, individual company, industry branch, individual sector and the whole nation. It enabled the linking of opportunities and threats in the surroundings with the strengths and weaknesses. Porter's Model for this study:

- 1) Factor condition is basic factors i.e:
 - Natural resource wealth
 - Outstanding human potential
 - Lower work costs as a result of lower salaries
 - Advanced factors i.e.
 - Availability of the airport
 - Good telecommunication and information technology
 - Growth trend in awareness about the importance of investing into scientific research
 - Insufficient awareness about the need to invest in human factors

2) Demand Condition:

- Domestic Demand
 - Continuous growth of demand for products and services
 - ❖ Bigger share of poor population, smaller local demand
 - Growth trend of demand for similar products
- International demand
 - Trend of growth demand on the world market
 - Demand of quality and cheap products
 - Demand of extreme and expensive product
 - Company's strategy, structure and rivalry

3) Structure, Strategy, and Rivalry

Structure:

- There were 309 country industrial companies
- Country industries employed 37% of the employed
- Country industries made 30% of the total profit
- Processing industries made 86% of export and whole industries 92%

Strategy:

Reduce working costs and very often low quality

- Small investments into product innovation
- Small investment into marketing activities and making brand recognition
- Trend of increasing imported products

Rivalry:

- Very strong competition on domestic market and strong competition on foreign market
- Relative overload for existing industrial production of the country and slowness in orientation towards "new industries"
- 4) Associated and Supported Industries; existing situation i.e.
 - Offer of industrial products, raw materials and equipment
 - Educational institutions
 - Institutional for entrepreneur supports

Dagmar conducted the study on Porter's Diamond Model Determining Factors of National Advantage ("Porter's Diamond-Determining Factors of National Advantage," 2001). The study helped explain each of Model element used:

- 1) Factor Conditions: The situation in a country regarding production factors i.e. skilled labor and infrastructure which are relevant for competition in particular industries i.e.
 - Human resources (qualification level, cost of labor, commitment, etcetera.)
 - Material resource (natural resource, vegetation, space, etcetera)
 - Knowledge resource
 - Capital resource
 - Infrastructure
 - Other factors i.e. quality of research in universities, deregulation of labor markets, liquidity of national stock markets
 - Each country has its own particular set of factor conditions hence each country will develop those industries to which the particular set of factor conditions are optimal.
- 2) Demand Condition: three major characteristics
 - The mechanism that transmits domestic preference to foreign market
 - Scope and growth rate
 - The mixture of customer needs and wants
- 3) Related and Supporting Industries

• The existence and non-existence of international, competitive supporting industrial and supporting industrial industries

One internationally successful industry may lead to advantage in other related or supporting industries. A typical example is the shoes and leather industry in Italy. Italy is not only successful with shoes and leather, but with related products and services such as leatherwork's machinery and design, etcetera. On a national level, government can (and should) consider the policies that they should follow or establish national advantages which enable industries in the country to develop a strong competitive position globally. According to Porter, governments can support such advantages by ensuring high expectations of product performance, safety or environment standards or encouraging cooperation between suppliers and buyers on a domestic level.

The study on the competitiveness of the industries based on the Porter's Diamond Model was conducted by Isamail ("Porter's Diamond-Determining Factors of National Advantage," 2001). The model consisted of four national determinants of competitive advantage. The purpose of the study was to find out main factors which affect the competitiveness of the sectors. The competitiveness of basic industries in the city of Kakramanmaras were investigated. The methodology used was to gather information of both 1st and 2nd data collection. The prepared questionnaire was applied in the main section. The collected data was analyzed and evaluated according to the Diamond Model. This means the current situation was evaluated according to factors in the model and to detect areas which facilitated the competition of the sectors (Ismail Bakan, 2012).

To convert threats to opportunities and to survive is the primary objective of companies. Porter's economics book has explained about the competitive advantage of nations ("Porter's Diamond-Determining Factors of National Advantage," 2001). Porter developed the Diamond Model to identify factors of competitive advantage of countries and sectors and to create analyses. Questionnaire are an important tool to gather fast, realistic and systemic data. Parts of questionnaire were derived from related literature and questions or items asked in the questionnaires were designed and structured questions, semi structured questions and unstructured questions. Structure questions were prepared in the light of basic factors and sub-variables of Diamond Model. A Likert scale was applied as a measured scale of choice. Respondents were asked to evaluate their expectations on a five point scale ranging between degrees of strong disadvantage and strong advantage with a neutral point in the middle. Questionnaires were applied to the upper, middle and lower level of managers and owners of companies. The research methodology and hypothesis was aimed to identify the relationship between the competitiveness variables of Porter's Diamond Model. Sample characteristics were analyzed along with descriptive statistics. The result of the study showed that the factor condition, demand factor, related industry and government are significant variables affecting the competitiveness of industries. It was observed that the "condition of demand" affected the sectors competitiveness more than other factors in Diamond Model. The important ranged factors related to

competitiveness were (i) demand factor (ii) government (iii) related industries and (iv) factors condition.

The assessment of the power of Porter's Diamond Model in the automobile industries in Mexico after ten years of NAFTA was also conducted (Barragan, 2005), 2005. The study of national competitiveness was complex but Porter (1990) proposed the Diamond Model to assess the source of competitive advantage of an entire industry in a particular country. "Clustering" phenomenon of cooperation and competition among related industries in a country has also been a source of international competitiveness. The period of study was 1993-2003 providing an appraisal of ten years after NAFTA.

Critiques of Porter's Model: It provides insights across levels of analysis. Porter has built a bridge between strategic management and international economics. Since macroeconomics usually studies a country as a whole with macroeconomic indicators such as GDP while strategic management or international management scholars study firms, managers and national cultures. The competitiveness advantage of a nation focuses on clusters or industries as the unit of analysis, but at the end of these, industries are the actors that promote the country's competitiveness.

Application of Porter's Model in the automobile industry in Mexico during 1993-2003:

- 1) Factor Conditions
 - Cheap raw materials and labor
 - Skilled workers with weaker union than U.S.
 - Less stringent environmental regulations and market access to the U.S. and Latin America
 - Total FDI in the period of 1994-2004, 49% went to manufacturing industry, 9% going to automobile industry.

2) Demand Condition

- Before NAFTA, production focused old models with low level of quality. After NAFTA, the model has been updated. The factory has been transformed with more sophisticated production process in order to comply with the high quality requirement of US market.
- 3) Firm Strategy, Structure, Rivalry
 - Improve manufacturing facility
 - Location of primary automobile clusters
 - After NAFTA, to remove prices and offer better quality even in small and medium segment.
 - Related and Supported Industries
 - Supply chain structure adjusted.

4) Role of Government

• It has been clear that government rules, policies and free trade agreements have contributed in large part to the country's situation.

Conclusion for the Study Framework on Cosmetics Industry Competitiveness:

From the literature review, it has been noted that there were a number of studies on Diamond Model of Michael E. Porter and its application. It was proven that the model is valid to use for the evaluation of the competitiveness of a nation.

For the evaluation on cosmetics industry of Thailand, the primary and secondary data will be used in this study. Both quantitative and qualitative approaches were selected. The quantitative study on competitiveness of cosmetics industry was conducted from the secondary data gathering from the International Trade Center (ITC). The general trade overviews were evaluated by showing the import, export, trade balance, and growth rate of 5 cosmetics categories during 2007-2013. Also, the country competitiveness was then studied by using measurement tools of the Reveal Comparative Advantage (RCA) and Market Share (MS).

After completion of the quantitative study, the Diamond Model was then used for the qualitative approach to analyze the competitiveness of the country. The Diamond Model evaluation was concluded by SWOT before the strategic plan and its priority were provided and proposed to the policy makers of the country.

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CHAPTER III

METHODOLOGY

The study was separated in 3 parts; the first part was the compliance study between Thai cosmetic regulation and ASEAN cosmetic directive which will reflect Thailand's status on ASEAN harmonization in cosmetic regulatory aspects. The second part was conducted to evaluate the cosmetic industry competitiveness of the 6 ASEAN leading countries which are Thailand, Singapore Indonesia, Malaysia, Philippines, and Vietnam by using the economical tool to compare via the market share and reveal comparative advantage (RCA). Also, the third part was conducted to study the key factors which influenced Thai cosmetic competitiveness via the Diamond Model.

Part I: The Compliance with ASEAN Cosmetic Directive

For the first part, the study aimed to evaluate the compliance of the Thai FDA to the ASEAN Cosmetics Directive (ACD) which has been fully implemented in Thailand since January, 2008. The compliance in this study means the degree to which Thai cosmetics rules, laws and regulations have complied with the ACD. The comparative study was conducted to learn how Thai cosmetics regulation complied with ACD at 2 points; at baseline and after 6 years of ACD implementation in Thailand. The baseline timeline was 2008 which was the year of ACD implementation in the country. The study was then conducted to compare Thai cosmetics regulation after 6 years of ACD implementation in 2013. Compliance in this study was defined as whether Thai cosmetics regulation conformed to ACD. The gaps between the ASEAN directive and Thai regulation were identified by content analysis and confirmed by in-depth interviews which were organised among 14 key informants from both regulator and industry sectors who used to participate in ASEAN Cosmetic Scientific Body (ACSB) meetings and/or ASEAN Cosmetic Committee (ACC) meetings. The 14 key informants (9 from regulators, 5 from industry sectors) were members of the ASEAN working group of Thailand. The 9 Thai FDA regulators were representatives from Cosmetics Standard Setting Department, Pre-Marketing Cosmetic Control Department, Post-Marketing Control Department, and Cosmetics Development and Planning Department. The 4 key informants from industry were from a variety of types and sizes of business, but all of them must understand well both Thai cosmetic regulation and ACD.

Similarities and discrepancies between ACD and Thai regulation at 2013 were explored based on five technical harmonised aspects according to the harmonized areas finalized in the AHCRS which were:

1. Definition and Scope of Cosmetic Products.

This was to compare how Thai cosmetics Act and ACD define scope of and identify cosmetic products.

2. Ingredients' listing.

The cosmetics ingredients were a part of the harmonised areas because they impact directly on the safety of consumers. The issues to compare were category of ingredient list and ingredients within each category.

3. Labelling.

The 2 guidelines of Thai cosmetics regulation and ACD were compared in terms of required subject heading, and content.

4. Product Claims.

This study was to compare Thai cosmetics regulation and ACD on the factors of concept of claims justification and scope of cosmetics claims.

5. Cosmetics Good Manufacturing Practice (GMP).

This study intended to compare the Thai GMP and ASEAN GMP in 2 aspects; references for GMP development, and level of implementation.

Measurement was semi-structured questionnaires composed of open-ended questions in 5 technical areas. For each area, the following sequential questions were asked:

1. In the areas of ("definition and scope of cosmetic products", or "ingredients"
listing", or "labelling", or "product claims", or "GMP"), is Thailand cosmetics
regulation "similar" or "different" from the ACD?
☐ Similar (2.) Please explain.
☐ Different (3.) Please explain.
2. If "Similar",
2.1 Was it similar at the first?
□ Yes
□ No (2.2)
2.2 If it was not similar at first, when was the Thai regulation updated to
comply with ACD?
3. If "Different",
3.1 What is the difference?
3.2 Why is it different?
3.3 Does Thailand have any plan to comply with ACD?
☐ Yes (3.4)
□ No (3.5)

- 3.4 How does Thailand prepare to comply with ACD? Also, how long will it take to prepare to comply with ACD?
- 3.5 Will Thailand bring the issue to ASEAN meetings to update ACD to be similar to Thai country specific requirements? What are the plans and evidence?

The data analysis was done by identifying, categorising, and summarising the collected information in five areas. The findings were then documented and reported. Data was quantitatively analyzed to find out whether the 2 laws were similarly interpreted, and whether the two laws, when implemented, produced the same outcome. The study protocol was approved in April 2013 by the Ethics Committee of the Faculty of Pharmaceutical Sciences, Chulalongkorn University.

The result of Thailand compliance with the ACD was then compared with the compliance of other ASEAN leading countries which were gathered from literature reviews in CHAPTER II. The final outcomes from this part have been shown with the following aspects.

- 1. The status of Thai cosmetic regulation comparing with the ACD after an official full implementation announcement in 2008.
- 2. The status of technical trade barriers of Thailand comparing with other ASEAN leading countries; Singapore, Indonesia, Malaysia, Philippines, and Vietnam.
- 3. The "Take Home Message" which would recommend policy makers regarding the non-tariff measurements (NTMs) under the competitive environment.

Part II: The Competitiveness of Thai Cosmetic Industry

The study in Part II was conducted via the quantitative approach by analysing the data gathered from the International Trade Centre (ITC) ("International Trade Centre," 2013) via the competitiveness measurement tools which are Revealed Comparative Advantage (RCA) and Market Share (MS).

In generally, there were many sources of the statistics database which are as follows.

- 1. UN Comtrade
- 2. Eurostat
- 3. World Trade At last
- 4. United States International Trade Commission
- 5. Integrated Trade Intelligence Portal
- 6. FAO stat
- 7. World Bank (WITS)

For this study, the ITC was selected for the source of the secondary data collecting. This is because the ITC has been the trusted trade statistics source, and

mostly used by researchers. It was also free access. The details of global trade data and the trade statistics were provided for the export development of 220 countries, worldwide and 5,300 harmonized codes. Regarding the source of data for the TradeMap, the yearly data were mainly based on the UN Comtrade, the world's largest database of trade statistics maintained by the United Nations Statistics Division (UNSD). The data was complimented by national sources when the information was not available in the UN Comtrade (National and Regional Sources). Data were also available for those countries which did not report their national trade statistics to the UN Comtrade. The trade data of those countries were re-constructed on the basis of data which were reported by their partner countries. These data are so called "Mirror Data". The ITC database is the trusted statistics data source, because it is the joint agency with the WTO and UN. All the data available in the ITC database has been validated by the UN, so it is reliable information.

The reasons why this study did not use the statistics data from the national customs is because of the following.

- 1. There was no database available from some national customs i.e. Laos, Cambodia, and Myanmar.
- 2. Some national trade statistics data were not validated.
- 3. There were some limitations of data availability.

In this study, all of the finished cosmetic products which comprised the 5 cosmetic categories were selected for this study based on cosmetics harmonized codes (HS) of 3303 (Perfumes and toilet waters), 3304 (Beauty or make-up preparations and preparations for the care of the skin (other than medicaments), including sunscreen or sun tan preparations, manicure or pedicure preparations.) 3305 (Preparations for use on the hair) 3306 (Preparations for oral or dental hygiene, including denture fixative pastes and powders; yarn used to clean between the teeth (dental floss), in individual retail packages.) and 3307 (Pre-shave, shaving or after-shave preparations, personal deodorants, bath preparations, depilatories and other perfumery, cosmetic or toilet preparations, and not elsewhere disinfectant preparations). These 5 categories covered the whole range of finished cosmetic products excluding raw materials and/or substances which are used for cosmetic product compositions.

The competitiveness in this study was evaluated by the 7 years time sequence of 2007 to 2013. The RCA and MS were conducted by comparing among the 6 leading countries in ASEAN which are Thailand, Singapore, Indonesia, Malaysia, Philippines and Vietnam. For Vietnam, since the data for 2013 was not available in the ITC database, the 2013 import and export data of Vietnam were converted from export and import bilateral data of other countries with Vietnam in 2013.

For Thailand general trades overview of import, export, and trade balance, the study was also conducted by comparing data of Thailand in 7 years of 2007-2013 in 3 markets which were intra ASEAN, extra ASEAN, and in the world market.

The study result from Part II study was then analysed with data from the literature reviews in CHAPTER II, and the final outcomes of this part were expected as follows. (Figure 2)

- 1. The overview on import, export, and trade balance of each particular category (HS 3303 to HS 3307) of Thailand in all markets of intra ASEAN, extra ASEAN, and world markets during the 7 years of 2007-2013.
- 2. The current and trend of competitiveness of Thai cosmetic industry compared with other ASEAN leading countries
- 3. The "Take Home Message" which would recommend the potential future markets and the actual rivalries of the selected potential cosmetic categories which Thailand should pay an effort to and support on competitiveness improvement or maintenance.



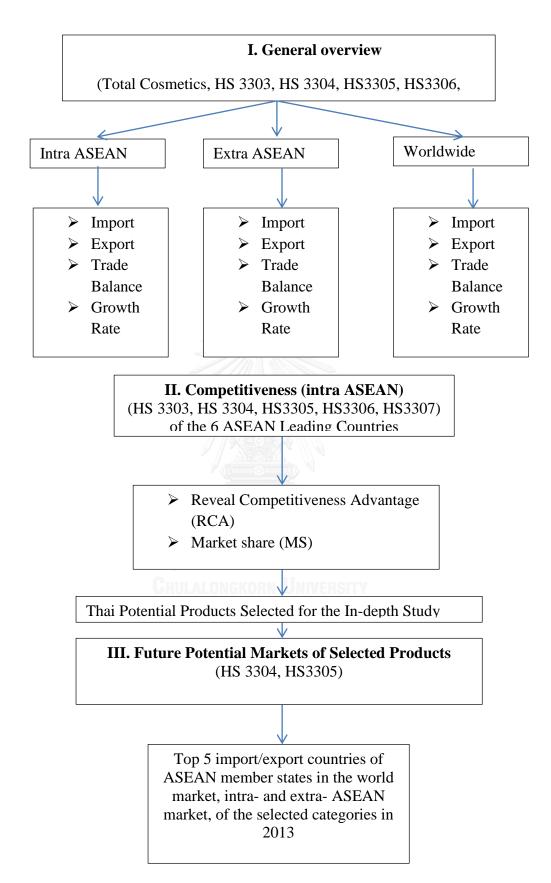


Figure 2 The report structure of competitiveness study:

The study in this part was quantitative approach. The definition of each data and/or factor selected for use in the study has been explained in pages 18-21.

Part III: Competiveness Study via Diamond Model and SWOT analysis

For the study results from Part 2, the product categories which would be selected for the further in-depth study in Part 3 should meet the criterion of; (i) the products must have majority impact to the country's economy. (ii) the products required improvement and/or maintain their competitiveness

The in-depth study for the selected categories was conducted to investigate the factors which mainly impacted to the country's competitiveness. The Diamond Model was derived to develop the semi structure questionnaires for an in-depth interviews. The study was a qualitative approach. The SWOT analysis was then applied for use in the study.

The primary data of this part was consolidated by in-depth interviews of the directly experienced people from the industry sector. The main purpose of in-depth interviews was to fully understand Thailand cosmetic business situation and to assess the attitude of the cosmetics industry on the competitiveness of the selected product categories. The purposive samples were mostly executive level of all types and sizes of business who fully understood Thailand cosmetic business situation and could be able to forecast the cosmetic industry competitiveness trend in the future. (Sakulbumrungsil, 2008). Those key informants could also provide the emphasis on competitiveness evaluation at the company level and overall country. The saturated information was a signal that the information obtained was adequate. There was no specific patterns because it depends on the interviewees experiences and attitudes. However, the probe questions were prepared corresponding to each particular variable. The Definition of Diamond Model Elements and the probe questions for the in-depth interviews of this part have been shown in APPENDIX B.

Table 2 the characteristics of interviewees

Type/Size	S	M	L
MNC	-	-	\checkmark
SME			$\sqrt{}$

I. Government Factor in this study means governmental policies and strategies. The governmental policies/strategies which may have "positive" or "negative" impact to competitiveness.

This could be the government policy or strategy which could be the strength or weakness of the country for cosmetic industry competitiveness. This could be separated into 3 areas.

- 1.1 The local policy and/or strategy
- 1.2 The ASEAN agreements

1.3 Bilateral trade agreements

The above policy could be implemented in Thailand for trade facilitation, or trade barriers, or protection policy of the country.

Questions: What are the government policies or strategies related to cosmetic industry competitiveness?

- 1) Are these policies/strategies trade barriers or supports? How?
- 2) What are the weaknesses and threats of such policies/strategies?
- 3) What are the strengths and opportunities of such policies/strategies?

II. Firm Strategy, Structure, and Rivalry: This is the competition situation of cosmetic industry. This is to analysis the firm structure of Thai cosmetic industry. This also includes the analysis of the internal trades. The key competitors were intra-, and extra ASEAN markets as well as the major players of each cosmetics category. (The quantitative study result from Part II were used as inputs)

Ouestions:

- 1) Do you agree with the study result from Part II?
- 2) Who are your actual rivalries? What strengths do they have?
- 3) What is the strategy of your firm and others in this economic environment? Also, what should be the country strategy?
- 4) What are the strengths and opportunities of your business in this economic environment?
- 5) What are the weaknesses and threats of your business in this economic environment?

III. Factor Conditions are input factors which related to human resources, physical resources, information resources and financial resources.

This factor condition shall also mean the current status of cosmetics productivity, the employment, and the trade of the industry. This is to specify the strengths and weaknesses of the internal factors of the industry

Questions:

- 1) What are the key factors which mainly impact to the cost of production?
- 2) Does your organization have competitive R&D and technology? How?
- 3) Does your organization have concern on GMP?
- 4) What are the strengths and opportunities of Thailand on cosmetics industry competitiveness at the present moment in terms of input factors?
- 5) What are the weakness and threats of Thailand on cosmetics industry competitiveness at the present moment in terms of input factors?
- **IV. Demand Conditions** are the needs of consumers for cosmetic products which is related to competitiveness of the country. The demand of each particular cosmetic

category was reflected by market size as shown in the result of Part II. This could also reflect the opportunity for Thai cosmetics industry.

Questions:

- 1) Do you agree with the quantitative input from Part II?
- 2) When asking about the demand for cosmetic products according to quality, efficacy, safety, and prices, what do you think about the Thai cosmetic products? Why?
- 3) What are the strength and opportunities of Thai cosmetic industry on demand factors?
- 4) What are the weaknesses and threats of Thai cosmetic industry on demand factors?

V. Related and Supporting Industries are the facility and capacity of the related and supporting industries which help enhance the cosmetic industry competitiveness.

This is also to focus on the business linkages which would help increase the demand for cosmetic products from Thailand i.e. the tourism and spa industries including the hotels and airways, and travel agencies which may require cosmetic products for their services. This would include the supply chain which may create the opportunities or threats for Thailand to expand the cosmetic business intra ASEAN market.

Ouestions:

- 1) What are your related and supporting industries and future possibilities?
- 2) What are the strengths and opportunities of Thai cosmetic industry regarding those related and supporting industries?
- 3) What are the weaknesses or threats of Thai cosmetic industry regarding the related and supporting industries?

Purposive Samples for this in-depth interview were the representatives from cosmetic industry sector who understand well on the business of the selected categories. The purposive samples should also understand the ASEAN environment and could provide his/her comments via country perspective. The following subjects were then selected.

- 1. Two representatives from SME (one from Small Enterprise, and one from medium Enterprise)
- 2. One representative from local large company
- 3. One representative from the local manufacturer for the niche market
- 3. One representative from multinational manufacturer (MNC).
- 4. The president of Thai Cosmetic Manufacturing Association representing all types and sizes of business

The In-depth Interview Method was as follows.

- 8. The purposive samples were selected from the Thai cosmetic industry with the above mentioned criteria.
- 9. The official invitation letters explaining the research summary and methodology were issued and signed by the head of the study program and were submitted to all purposive samples.
- 10. The researcher (interviewer) made appointments with the interviewees (purposive samples).
- 11. The probe questions were summarized and provided to the interviewees 1-2 days before the interview date to prepare.
- 12. The interviewer documented information provided by the interviewees during the in-depth interview by hand writing.
- 13. The information from the in-depth interviews was then gathered and grouped via the Diamond Model Element Codes in the Excel format in the computer.

The date gathered from the in-depth interviews was then analyzed by **SWOT** analysis. The **SWOT** matrix from the combinations of country "Strengths", "Weaknesses", "Opportunities", and "Threats" were then conducted to propose the strategies to the decision makers from either regulators or industry sectors. The priority strategy from each particular matrix was the 100% interviewees' confirmation (consensus) to be recommended to the policy makers of both regulator and industry sectors in order to prepare the country ready to be a cosmetics leader of AEC in 2015.

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CHAPTER IV

RESULTS AND DISCUSSION

The study results could be separated into 3 parts; (i) the evaluation of the compliance of Thailand cosmetic regulation compared with ACD (ii) the country competitiveness evaluation via the reveal comparative advantage and the market share (iii) the country competitiveness evaluation and potential markets via the Diamond model and SWOT analysis

Part I. The evaluation of the compliance of Thailand cosmetic regulation compared with ACD

The comparative study was conducted to learn how Thai cosmetics regulation complied with ACD at 2 points, at baseline and after 6 years of ACD implementation in Thailand. The baseline timeline was 2008 which was the year of ACD implementation in the country. The study was then conducted to compare Thai cosmetics regulation after 6 years ACD implementation in 2013. Compliance in this study was defined as whether Thai cosmetics regulation conformed to ACD. The gap between the ASEAN directive and Thai regulation were identified by content analysis and confirmed by an in-depth interview. Similarities and discrepancies between ACD and Thai regulation at 2013 were explored based on five technical harmonised aspects. The key findings are below in Table 3.

Table 3 Key Findings from Compliance Study on Thai Cosmetic Regulation Compared with the ASEAN Cosmetic Directive

Key Findings: This part of study was conducted to determine whether Thailand has complied with ASEAN Cosmetic Directive (ACD) after 6 years of implementation in 2013. Thai cosmetics Act B.E. 2535 and ACD were compared in 2008, and in 2013. Content analysis and in-depth interviews were performed. The study revealed that Thailand has highly complied with ACD in all regulated areas; (i) definition and scope of cosmetics products (ii) ingredients' listing (iii) labelling (iv) product claims and (v) good manufacturing practice. To officially implement ACD, the Thai regulator had to transpose the directive into local law. During the legal process, one might notice discrepancy between these two laws. Although the country regulator intended to fully harmonize, some minor issues such as the ingredients' listing and labelling, could not be implemented all at once. In summary, it can be concluded that the main objectives of AHCRS have been achieved. Harmonization in Thailand happened in an ASEAN way.

Thai cosmetics regulations and ACD were compared at 2 points, base line in 2008 and after ACD full implementation in 2013. The comparison was performed on 5 technical areas which were "definition and scope of cosmetics", "ingredients' listing", "labelling", "product claims", and "GMP" to find the discrepancy between both standard requirements. The results have been shown below.

1.1 Definition and scope of cosmetics

The comparison of ACD and Thai cosmetics Act on the definition and scope of cosmetics has been shown in Table 4 below.

Table 4 Comparison between ACD and Thai cosmetics regulation on definition and scope of cosmetics

ACD	Thai Cosmetics Regulation
Cosmetics Definition and Scope of ACD: Any substance or preparation intended to be placed in contact with the external parts of the human body or with the teeth and the mucous membranes of the oral cavity with a view exclusively or mainly for cleaning them, perfuming them, changing their appearance, and/or correcting body odours and/or protecting them in a good condition.	Cosmetics Definition and Scope of Thai Cosmetics Regulation (Cosmetics Act B.E. 2535): "Cosmetics": means: (1) A substance used by applying, rubbing, massaging, sprinkling, spraying, dropping, putting on, treating with smoke, or taking any action to any part of a human body for cleanliness, beauty, or support for the beauty including all skin nourishing products, but excluding ornaments and clothing. (2) A substance specially used for an ingredient of cosmetics production, or (3) Other substances specified by the ministerial regulations as cosmetics.

At baseline, the main concepts of cosmetics definition and scope of the Thai Cosmetics Act were highly similar to ACD. There was no updated law and regulation in this part. Even though, the ACD and the Thai cosmetics definition and scope were written differently, the products which were classified as cosmetics by ACD framework were also classified as cosmetic products under Thai regulation framework.

Minor differences between the scope of Thai Cosmetics Act and ACD have been notified. The cosmetics scope of Thailand is a bit wider than ACD regarding the inclusion of the "substances specifically used in cosmetics production" and "substances which were announced by the Ministry of Public Health". The definition impacted some

products which in other countries were classified as general consumer products, but were classified as cosmetics products in Thailand. Sanitary pad, cool towel, and cool paper are some examples. These specific products are cosmetics in Thailand and have been controlled by the Thai FDA because of microorganism concern in such products.

In general, ACD and Thai cosmetic regulations are similar, with minor differences on the scope of function and purpose of use. For Thai regulation, the main purposes of cosmetics are for "cleaning", "beautifying", and "correcting body odor". Although the ACD had the same main focus, it was not limited to these 3 purposes. The cosmetics scope would definitely be linked to the area of claims. In Thailand, cosmetics claims are restricted only to "cleaning, beautifying, and correcting body odor". Indications other than specified cannot be claimed. Products such as moisturizer with whitening agent can only be claimed for "skin moisturising" or "skin nourishing", but cannot be claimed for "whitening". Key informants from industry sector criticised that these discrepancies were considered technical trade barriers to the Thai market.

1.2 Ingredients' listing

Thailand actually had the cosmetic ingredients' listing before ACD implementation in 2008. At baseline, both Thai cosmetics regulation and ACD had 5 ingredients' listing categories. The comparison between both laws has been shown in

Table 5 Comparison between ACD and Thai cosmetics regulation on ingredients' listing

Baseline in 2008			2013		.3	
A	CD	Th	ai Regulation	A	CD	Thai Regulation
1.	Prohibited ingredients (1,243 items)	Ch.	Prohibited ingredients (41 items)	1	Prohibited ingredients (1,373 items)	1. Prohibited ingredients (1,372 items)
2.	Restricted ingredients (101 items)	2.	Special control ingredients (27 items)	2	. Restricted ingredients (278 items)	2. Restricted ingredients (279 items)
3.	Colouring agents (155 items)	3.	Colouring agents (147 items)	3	. Colouring agents (185 items)	3. Colouring agents (185 items)

Table 5 Comparison between ACD and Thai cosmetics regulation on ingredients' listing (Cont.)

Basel	ine in 2008	2013	
ACD	Thai Regulation	ACD	Thai Regulation
4. Preservatives	4. Substances	4. Preservatives	4. Preservatives
(57 items)	which may be used in cosmetics productions (13 items)	(57 items)	(57 items)
5. UV filters (32	5. UV filters (19	5. UV filters (30	5. UV filters (30
items)	items)	items)	items)

Note: The number, content and details of controlled ingredients in each particular listing might be different and updated from time to time. The ACD listing was aligned with the EU directive and its updates, while the Thai ingredients listing was aligned with ACD and its updated listing.

At baseline, category 1, 3 and 5 of both laws used exactly the same category names, but categories 2 and 4 were called differently. Each of the 5 categories in ACD and in Thai cosmetics regulation had exactly the same meaning, but one can note that the numbers of ingredients in each category were unequal.

The reason behind the difference is that Thailand also had other relevant laws to control such ingredients. For examples, antibiotics or other pharmaceutically active ingredients classified in ACD as prohibited ingredients were not listed in the Thai cosmetics prohibited ingredient list. These cosmetic prohibited ingredients were already controlled by the Drug Act B.E. 2510. This kind of control reflected why Thailand had smaller number of prohibited ingredients when compared with ACD at the baseline timeline.

Thailand started to update the ingredients' listing by transposing ACD into its laws and regulation since 2008. After 5 years implementation in 2013, Thailand has complied with the ACD in all 5 categories of "prohibited ingredients", "restricted ingredients", "colouring agents", "preservatives", and "UV filters" even though the numbers and details of each particular category listing were different. This was because Thailand has a specific legal process in which the law content must be reviewed and approved by national cosmetics committees. The process usually takes 6-12 months before an official announcement in the Royal Gazette.

There were 2 examples of discrepancy in ingredients' listing of ACD and Thai cosmetics regulation in 2013. The first example was "lead acetate". It was classified as a prohibited ingredient for cosmetics in ACD, but was classified as a restricted ingredient in Thailand. The Thai National Cosmetic Committee, with supporting

historical usage evidence in the country, allowed lead acetate at concentration not exceeding 0.6% to be used in hair dye products. The other example is "fluoride". Fluoride is a restricted ingredient in ACD with the maximum concentration allowance of 1,500 ppm. However, in Thailand it is classified as a cosmetic restricted ingredient with the lower maximum concentration allowance of 1,100 ppm. In Thailand, fluoride has been added in the water supply system. Thus, the maximum limit was set at lower concentration for cosmetics products to prevent excess fluoride intake. These country specific requirements were already raised and have been acknowledged in the ACSB and ACC meetings. The ingredients' listing of each category in ACD has to be updated from time to time based on the EU directive. The ACD adopted the cosmetics ingredients listings of the EU Cosmetics Directive 76/768/EEC. However, future amendments to the listings of the EU Cosmetics Directive will be considered and discussed by the ASEAN Cosmetics Committee before adopting by member countries.

For ASEAN, the ingredients' listing is updated twice a year according to the ASEAN Cosmetics Scientific Body (ACSB) meeting and ASEAN Cosmetics Committee (ACC) meeting. The updated ASEAN ingredients' listing is normally aligned with the updated EU ingredients' listing.

After the ACD ingredients' listing was updated, the ASEAN member countries including Thailand had to update their local ingredients' listing to comply with ACD. The updated ingredients' listing of ACD was referred to the updated listing of the EU Directive. Normally, the implementation timeline was always given to ASEAN member countries by ACC to update the local laws and regulations. In Thailand, the ingredients' listing has been intentionally and continuously updated following the updated ACD listings. However, Thailand has a complicated legal process in which the updated cosmetics ingredients' listing must be reviewed and considered by national cosmetics committees before transposing into Thai laws. In general, the updated ingredients' listing of Thailand was 6 to 12 months behind the updated ACD listing.

For this part, it could be concluded that Thailand has complied with ACD after its full implementation in the country in 2013. There are still gaps in the number of ingredients in each ingredient category between Thailand and ACD because of the timeline of local law process on transposing those updated ingredients' listings into local laws. The Thai FDA has adopted and implemented the ingredients' listing in ACD by transposing updated ACD ingredients' listings into Thai laws from time to time. The updated ingredients' listings could not be completely transposed in one time period. It must be based on the updated ingredients' listing in the EU directive which is reflected to the updated ingredients' listings of ACD which currently uses the EU directive as a reference. This means the number of items and details of each ingredient's listing could not be fixed at any specific time period. It could be changed any time based on safety assessment and expert's opinions. The ingredients in the list could also be shifted from one to another. For example, one ingredient which used to

be classified as "restricted ingredients" could be moved to "prohibited list of ingredients" depending on the safety assessment and experts' opinion. The ingredients' listing is directly related to consumers and products safety, so the Thai regulator has tried very hard to comply with the updated ingredients' listings of ACD as quickly as possible. The incompliance and/or time lag for implementation on updated ingredients' listing would definitely impact to either the consumers' safety or become a technical barrier to trade for the industry sector.

This compliance of Thailand to ACD also reflected the control of the finished products in the country which were finally shifted from "product registration" to "product notification". The three levels of cosmetic products of Thailand comprised (1) special controlled cosmetics (2) controlled cosmetics, and (3) general cosmetics before ACD implementation were finally removed in 2008. All finished cosmetic products of Thailand are currently classified as one product category which is "controlled cosmetics" which require only "product notification" before placing them in the market. The compliance of Thailand in this area has a huge positive effect to industry because it truly eliminates technical trade barriers. The industry could save cost and time which occurrs during the pre-marketing process. It could be said the country compliance in this area resulted in Thailand achieving the AHCRS objectives.

1.3 Labeling

Cosmetics product labelling means information written or printed or image on the outer packaging and any form of leaflet. Table 6 shows the comparison of labelling requirements of ACD and Thai cosmetics regulation at the baseline and after 5 years ACD implementation in 2013.

Table 6 Comparison between ACD and Thai cosmetics regulation on product labelling

Labelling	ACD Thai cosmetic regulation			
Components	(2008-2013)	Baseline (2008)	2013	
1. Product name	Required	Required	Required	
2. Instructions for use	Required	Required	Required	
3. Composition declaration	Full ingredients listing required in descending order	Name and quantity of active ingredient required	Full ingredients listing required in descending order	
4. Product origin	Country of manufacturer required	Manufacturer name and country	Manufacturer name and country	

Table 6 Comparison between ACD and Thai cosmetics regulation on product labelling (Cont.)

Labelling		ACD	Thai cosmeti	Thai cosmetic regulation		
C	omponents	(2008-2013)	Baseline (2008)	2013		
	Product iability	Responsible person for placing product on the local market (distributor, manufacturer, and importer)	Importer name and address for imported product, manufacturer name and address for locally made products	Importer name and address for imported product, manufacturer name and address for locally made products		
6. N	Net contents	Required	Required	Required		
7. I	Batch number	Required	Required	Required		
Ċ	Manufacturing date or Expiry date	Manufacturing date or Expiry date	Manufacturing date	Manufacturing date is required for all cosmetics products. Expiry date is mandated only on products with shelf-life less than 30 months)		
	Special precaution	Required (if any)	Required (if any)	Required (if any)		
10. F	Product type	Voluntary	Required	Required		
i	Category dentification of finish product	Not required	1.Special controlled cosmetics2. Controlled cosmetics	Not required		
i	Product dentification number	Not required	Registration number required for "Special controlled cosmetics"	Notification number required for all cosmetic products		

Note: For small packaging, "product name" and "batch number" were mandated for ACD. For Thailand, label less than 20 cm², "product name", "instruction of use", and "notification number" were mandated.

ACD labeling requirements mentioned that ASEAN member states shall take all necessary measures to ensure that cosmetic products must be marketed only by product labels which are in full compliance with the ASEAN Cosmetic labeling requirements. The ACD also specified that the labeling elements should appear in English and/or national language and/or language understood by the consumer where the product is marketed.

At baseline, it was found that 6 of 12 items of Thai labelling elements were different from ACD labelling requirements. The differences at baseline were the subjects of "composition declaration", "product origin", "product liability", "manufacturing date or expiry date", "product type", "category identification" and "product identification number".

After ACD implementation, Thailand updated its labelling requirements to comply with ACD on the subject of "category identification" because Thailand reclassified the "special controlled cosmetics", "controlled cosmetics", and "general cosmetics" at the baseline timeline to only one category of "controlled cosmetics" since 2008. The Thai labelling requirements were then adopted and implemented as one standard for all cosmetics types in the country after ACD implementation. After ACD full implementation in Thailand in 2013, the differences were decreased to 5 of 12 items of Thai labelling requirements different from ACD labelling requirements which were "product origin", "product liability", "manufacturing date or expiry date", "product type", and "product identification number". The requirements which could be considered as major differences between the Thai regulation and ACD are "product origin", "product liability" and "product notification number".

For "product origin", Thailand requires "manufacturer name and country" while ACD requires only "country of manufacturer". It was confirmed by Thai regulators that both manufacturer's name and country are more useful for product traceability purposes.

For "product liability", Thailand specifies that the product responsibility should belong to the manufacturers for domestic products and importers for imported products, respectively. ACD product liability is the responsible person who places the product in the market. Thai regulators said that there were a lot of cases happened in the country that the responsible person who placed the products in the markets could not be traced when there were illegal cases found during post marketing surveillance. This is the reason why the Thai FDA insists to enforce the manufacturers and importers to be legal entities for product responsibilities.

For the country specific requirement on "product notification number" of Thailand, the reason for the Thai country specific requirements on "product notification number" given by key informants from Thai authority was that this number on packaging was used as a traceability tool for Post Marketing Surveillance (PMS) purposes. However, for industry perspective, the "difference" of Thai labeling requirements from ACD was considered as technical trade barriers, because the

industry had to prepare a new label every time the notification number changed. Also there was "no" rule for variation or amendment process. This meant that every time there was any change made to a product i.e. formulation, product name or trade name or manufacturer, a company had to re-submit notification to the Thai FDA and the new notification number would be created. The old labels with previous notification number must be destroyed. This requirement created difficulty to product launch plans. It impacted business management relating to costs, time and resources. The country specific requirements on labeling also impacted products with the multilanguages labeling supplying worldwide, because the final packaging artwork could not be finalized until the Thai notification number was available. Also some countries did not understand or were confused on the 10 digits of the Thai notification number shown on packaging.

The labelling mandatory elements are required to be presented in Thai language except the ingredients names which were allowed to be in English. This was to ensure that Thai consumers understood product information well before selection and use.

1.4 Product claims

At baseline and in 2013, Thailand did not have specific laws or regulations to control cosmetic claims. Like other consumer products, the claims and advertisements were controlled by the Consumer Protection Act B.E. 2522 and Cosmetics Act B.E. 2535. Similarly to ACD, cosmetics claims in Thailand did not require pre-approval before allowing to be published. However, the product claims and advertisement must comply with statements in the Consumer Protection Act B.E. 2522 and Cosmetics Act B.E. 2535, when there were post marketing surveillance on claims conducted by regulators. The suspected or problematic claims were judged by Thai cosmetics regulation with the similar outcome as when the same claims were judged by ASEAN claims guideline in ACD. It was then considered that the outcome on claims allowance justification was similar between Thai regulation and ACD. In 2013, Thailand still exercised the same regulation. There were no updated laws and regulation related to product claims in Thailand after ACD implementation. Please see the comparison between ACD and Thai cosmetics regulation on product claims in Table 7 below.

Table 7 Comparison between ACD and Thai cosmetics regulation on product claims

ACD Thai Cosmetics Regulation Member Countries shall Thailand does not have specific laws or regulation on ensure that product cosmetics claims. Claims related to composition and claims of cosmetic functions were scoped by definition in the cosmetics act. products comply with Other cosmetics claims and advertisements have been the ASEAN Cosmetic controlled by the consumer protection act B.E. 2522 Claims Guideline. In which is a general law for all consumer goods and general, product claims services. The Thai FDA was authorized by the consumer shall be subjected to protection board to fully control cosmetics products on national control. As a claims and advertisements. Generally, cosmetics advertisements must not contain a statement which was general rule, claimed benefits of a cosmetic unfair to consumers including; (1) statement which must product shall be justified not be false or exaggerated, (2) statement must not cause by substantial evidence misunderstanding, (3) statement must not be unlawful or and/or by the cosmetic immoral act, or have negative impact to national culture, (4) statement must not cause disunity or adversely affects formulation or preparation itself. The the unity among the public, and (5) other statements as prescribed in the ministerial regulation. A statement used responsible company or person for placing a in the advertisement which an ordinary person knows product in the market that it is not possible to be true is not prohibited for use will be allowed to use in the advertisement. The claimed benefits of a cosmetic their own scientifically product must be justified by substantial evidence and/or proven data or clinical by the cosmetic formulation or preparation itself. The data provided for claims importer or local manufacturers were allowed to use their justification. own scientifically proven data or clinical data provided for claims justification.

It was also specified in the AHCRS that product claims shall be subjected to national control. For Thailand, there might be some different interpretations on claims allowance related to cosmetics function and purpose. This might be caused by the definition and scope of cosmetics purposes of ACD which were wider than the Thai regulation as specified earlier in the section of "scope and definition". For example, the claim of "whitening efficacy" may be allowed to be used in other ASEAN member states based on definition of cosmetics in ACD, but it has not been allowed in Thailand because it is considered out of cosmetic scope according to cosmetic definition in Thai cosmetics act. The translation of "whitening" into Thai is allowed to be only "brightening" and "lightening" or other Thai words with similar concept.

It was truly difficult to harmonize claims because differences of language; religion and culture have always existed. That was why AHCRS has allowed the cosmetic claims to be subjected to national control. With this technical constraint on

claims harmonisation, there was an impact to companies who made claims concept for a whole region. The claims concept possibly might need to be changed after translation to local language, because the claims might need to be modified or adjusted to comply with local regulation. The international claims which were allowed to use worldwide were not able to be directly translated to exact Thai words such as "whitening", and "anti-hair fall", etcetera. For consumer impact, they might have limitation to access to the product innovations or information which were blocked and filtered by regulators. Consumers might sometimes have lost chances to get real information about their selected products or to access new innovations. Consumers might also misunderstand about the product facts. The claims relied on interpretation. The wording in claims might be interpreted differently among experts, industry and consumers. These were also based on attitude, experiences and educational background.

In conclusion, it was considered by key informants that Thailand has complied with this technical area of ACD. Both laws do not require pre-approval for cosmetic claims and advertisements. The justification criteria on cosmetic claims are similar. The minor differences on the scope of claims which related to different cosmetic definitions of both laws, have been discussed and are planned to be adjusted in the future. It was also agreed in AHCRS that cosmetic claims are subjected to national control because of different language, situation, culture and religion. Therefore, the specific wordings for prohibited claims or allowed claims could not be harmonised.

1.5 GMP

Thailand had a national GMP guideline which was equivalent to ACD. This GMP guideline has complied in both content and objectives since the baseline in 2008. Both guidelines used the same references which were WHO (GMP for pharmaceutical products), TGA (Australian Code of GMP for therapeutic goods sunscreen products), COLIPA (Cosmetics GMP). The ACD GMP guideline also used the additional references of Good Storage Practice of Malaysia and Guidelines on GMP for traditional medicines of Malaysia. In Thailand, a cosmetics GMP is voluntary. Although, it is not mandated, the Thai FDA has promoted and empowered domestic manufacturers through trainings and/or workshops. Both Thai cosmetics regulation and ACD have provided the same direction on GMP guidelines since the baseline. Thailand has not updated its laws and regulation on cosmetics GMP since then. Please see a comparison between ACD and Thai cosmetics regulation on GMP in Table 8 below.

Table 8 Comparison between ACD and Thai cosmetics regulation on GMP

ACD Thai Cosmetics Regulation Cosmetics ASEAN GMP guidelines in Cosmetics GMP of Thailand ACD: ASEAN Guidelines for cosmetics regulation: Thailand had Cosmetic Good Manufacturing national Cosmetics GMP guidelines. Practice (GMP) were established to The GMP audit was performed by offer assistance to the cosmetics post-marketing control of the Thai FDA upon request by manufacturers industry in compliance with the provisions of the ASEAN Cosmetics on a voluntary basis. The GMP Directive. The objective of GMP certificate of 2 years or 1 year validity guidelines was to ensure that products would then be granted by the Thai were consistently produced and FDA for a manufacturer who passed controlled to the specified quality. It the audit with high score and low was concerned with all aspects of score, respectively. production and quality control. The examples of equivalent approved standards are WHO, PICs, COLIPA, and ISO.

As noted, ASEAN cosmetics GMP was developed to offer assistance to the cosmetics industry in compliance with the provision of the ACD. The ASEAN GMP guidelines are only general guidelines for the manufacturer to develop its own internal quality management system and procedures. The important objective is the final products must meet the quality standards appropriate to their use to assure consumer's health and benefit. However, to comply with a full ASEAN GMP guidelines, the manufacturers may have to invest in either budgets and/or resources. Thailand has various types and sizes of manufacturers with different facilities and capacities. It was discussed among key informants from regulator and industry sectors that if the country implemented the full ASEAN GMP immediately, only big companies could survive while small and/or medium companies would no longer exist in such a regulatory environment. This was a big challenge for the government sector to implement ASEAN cosmetics GMP at the local level. The government has decided to develop the primary GMP guidelines on the basis of manufacturing standard to help improve the cosmetics industry in Thailand and encourage, step by step, the small and medium enterprises to meet the ASEAN GMP in the future. The primary GMP enforcement was drafted and circulated for public hearing in 2013. The authority has provided training to all sizes of industry sector on this subject. In order to improve the capacity and facility of small and medium enterprises, the budget and resources were the most needs during the development and improvement process.

In conclusion, the Thai cosmetic GMP guidelines are similar to the ASEAN cosmetics GMP. These national guidelines had been used in Thailand before ACD implementation in 2008. There is no plan to update these to full guidelines. However, to support the small and medium size businesses to better prepare themselves for AEC

in 2015, the Thai government has established the primary GMP guidelines which are planned to be implemented within 2014.

Overall, the Thai cosmetics regulation is highly compliant with ACD. Some technical areas were similar at baseline or before ACD adoption. The areas of "definition and scope", "product claims" and "GMP" were similar at baseline. The "ingredients' listing" of Thailand was a bit different from ACD at baseline, but it was finally updated to comply with ACD ingredients' listing including finished product control after full implementation in 2013. The content or details of ingredients in each particular category are still different because the ingredients' listing in ACD has been updated from time to time based on the EU updated list. Moreover, the Thai legal process to transpose the adopted updated list may take 6-12 months. For "labelling requirements", Thailand had an intention to update the country law and regulation to comply with ACD. The necessary requirements in ACD have already been covered by Thai labelling regulation. However, there are still some country specific requirements which still exist, because of country context and previous experiences.

The ASEAN Harmonisation in technical areas of cosmetics could not be completely done with the exact ACD format for the member countries with existing laws i.e. Thailand, Indonesia, and Malaysia. The adopted content in ACD must be aligned with the existing laws and other relevant laws which is a truly technically difficult process. Each country still had its own needs and limitations which must be respected by the others. It could be noticed that the countries which have their own laws might have difficulty to "copy and paste" from the ACD. Also, they might have their own country specific requirements which are finally so called NTBs i.e. Indonesia, Thailand, Malaysia, and Vietnam. However, for the countries in which there are no existing cosmetic laws, the implementation of the full ACD would not be too difficult. (Table 9) The gap between Thai regulation and ACD and its impacts will be raised to decision makers of both regulator and industry sectors to consider for future improvement. The main objectives of AHCRS on consumer protection and trade barriers elimination could be achieved in some areas, but not all at this initial stage. As previously stated about ASEAN regulatory environment, it could be said, from this study, that Harmonization has happened, even though it is not complete as expected. It has happened in the ASEAN way.

Table 9 Compliance to ACD of the ASEAN member States

Countries	ACD Compliance	NTBs
BRU	+++	-
CAM	+++	-
IND	+	CFS, COA, HALAL, Country Specific Label
MM	+++	-
LAO	+++	-
MY	++	HALAL
PHIL	+++	-
SG	+++	-
TH	++	Notification Number on Packaging
VN	++	CFS

Remark: +++: Compliance, ++: Mostly Compliance, + Almost ComplianceBRU: Brunei DarussalamCAM: CambodiaIND: IndonesiaMM: MyanmarLAO: LaosMY: MalaysiaPHIL: PhilippinesSG: SingaporeTH: Thailand

VN: Vietnam NTBs: Nontariff Trade Barriers CFS: Certificate of Free Sales COA: Certificate of Analysis

This study was mainly focused on the Thailand situation. Further study should be expanded to other ASEAN member countries to evaluate the level of ACD compliance. The compliance status of each particular country could be used to measure the success of ASEAN Harmonised Cosmetics Regulatory Scheme implementation in the region. It could also help to encourage regulator and industry sectors of each member state to focus on existing problems. More effort should be spent on how to achieve successful harmonisation or revising ACD. This is to better prepare the member states to be ready for a single ASEAN Economic Community in 2015.

Corresponding to the result from this part combining with literature review of the regulatory status of each other ASEAN member states shown in CHAPTER II, pages 9-16, it could be said that in terms of technical barriers to trades, Thailand had less comparing to another i.e. Indonesia. Also Thailand treated the foreign investors/importers equally as national owners because both domestic manufactured products and imported products have been controlled with the same standards. The only major technical barriers to trade which could be seen from Thailand would be the "notification number" which must be shown on all outer packaging of all cosmetic products sold in Thailand. With this less stringent requirement on pre-marketing control, there would be pro- and con- of the cosmetics industry in Thailand. The "pro" is there will be more products on market and then consumers may have more choices of selection. The consumers may get the benefits from the highly competitive market of high quality and low price products. However, the "con" would be the SMEs business which may have to make a huge effort to adjust and/or improve themselves because they will face a lot of competitors. There will then be the budget, and resources concerns, because there are variety of types and sizes of cosmetics businesses in Thailand.

The non-tariff measures (NTMs) in ASEAN member states

In the world context of eliminating tariff barriers in order to facilitate trades, the non-tariff measures (NTMs) have been raised by many countries which can be seen in CHAPTER II, pages 9-16. The country specific regulations of those countries could be implemented for the purposes of either country protectionist or consumer health protection based on country context.

In ASEAN Market, the tax of cosmetic products has been reduced to 0% since 2008. However, most Thai exporters were effected by burdensome regulations from Indonesia, Vietnam, and Cambodia. For the Indonesian market, the exporter must prepare the Certificate of Free Sale for each product notification, and the Certificate of Analysis for every shipment. Also the notification timeline in Indonesia takes around 6 months. For Vietnam market, the exporters must prepare the Certificate of Free Sale during the product notification process. In Cambodia, cosmetics are classified as luxury products, so all imported cosmetic products must be included 30% additional fee according to this country specific policy. This kind of specific regulation may lead the exporters to try to export their products through other channels, not pass through a regular process at the customs because of the tax issue as well as specific technical requirements. It was informed by the industry sector that there was a lot of border trades occurred between Thailand and Cambodia, Thailand-Lao PDR and Thailand-Myanmar borders which generated country incomes around 60,000 million baht (around 2,000 US\$).

The ASEAN leading countries which have less NTMs are Singapore, Malaysia, and Philippines. The cosmetics control has been mainly focused via the post market surveillance (PMS).

For Cambodia, Lao PDR and Myanmar (CLM countries) countries, the current tariff is still at 0-5%. According to an agreement among ASEAN members, all cosmetics tax will be become 0% which will be fully implemented in 2015. However, the NTMs have been considered less from CLM countries. For example, the product notification in Lao and Cambodia could be referenced by the Thai FDA notification approval.

In Thailand, it was informed that the country specific requirements were not implemented for the protectionist purpose. They have been implemented because of country context. For example, the "notification number" is required on packaging because of product traceability for consumers, because the "manufacturer and importer" are responsible persons by law which has already been specified in the main law since 1992. Also, Thailand has the local law implementation process which gets a lot of parties involved i.e. regulators, NGOs and academic sector, etcetera. The ACD which was adopted in 2008 was not be able to "copy" and "paste" because it must be reviewed and adjusted by the committees to align the main law, other relevant laws, and country context.

Take Home Message:

The results of the NTMs regarding the country specific requirements of Thailand from the study and of other ASEAN member states from the literature reviews highlight the potential for further improvements in the domestic trade environment, particularly at the procedural and operational levels in which very important trade impediments persist. The burdensome NTMs and the types of problems reported clearly demonstrate that Thailand has already undertaken efforts to comply with the ASEAN Cosmetic Directive and to facilitate trade which is the main objective of ASEAN harmonization.

The results from this study will also contribute all member states to optimize the existing policy and processes, in particular with the same goal to support the deeper regional integration within ASEAN. Therefore, the similar compliance studies conducted in other ASEAN member states are also recommended in particular in Indonesia, Vietnam, and Cambodia.

The protectionist policy could be the "pro" and the "con" for the country. For Thailand, the protectionist policy should be considered for some areas which could impact to consumer safety i.e. the penetration of illegal products' counterfeits, and low quality products from foreign countries, because the post marketing control of Thailand still has limitation on resources. However, the protectionist policy could sometimes interrupt the country competitiveness because it is the fact that the environment is highly competitive environment, with high improvement aspiration for the industry sector. If the government tries to protect the SMEs by preventing the competitive environment like a mother protects her son, then the weakness of her son could not be improved quickly. It could not be denied that the government sometimes underestimates the ability of the SMEs, and the SMEs themselves always get used to the protection made by the government based with the consequence that SMEs lack ability. This kind of strategy has sometime lead to less confidence of SMEs to invest or improve themselves properly.

The second and the third parts of the study were carried out in order to find out the real factors which required improvement for Thailand cosmetics industry.

Part II. The country competitiveness evaluation via the reveal comparative advantage and the market share

In this part, the general overview of Thailand cosmetics industry and the analysis of the reveal competiveness advantage of Thai cosmetics industry sector compared with other ASEAN member countries were conducted by using the secondary data from the International Trade Center (ITC) during the year of 2007-2013. The study was separated into 3 areas which are:

- 1) Thailand import, export and trade balance
- 2) Reveal competitiveness advantage (RCA) and market share (MS)
- 3) Potential markets of 3303-3307 in the future

The study was conducted for the whole cosmetic products which composed of 5 categories of HS 3303-HS3307 by comparing the situation of ASEAN as a region with the intra ASEAN market, extra ASEAN market, and in the world market during 2007-2013. Also, the study then analysed the Thailand trades as a country level with the intra ASEAN market, extra ASEAN market, and world market. Afterwards the study looked at the trade structure; import, export, and trade balance of the ASEAN region as well as Thailand. Then the Reveal Comparative Advantage (RCA) as well as the market share (MS) of the 6 leading countries; Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam were compared and analyzed. The key findings could be summarized in the table 10 and 11 below.

Table 10 Part 2 Key Findings of HS3303-HS 3305

Key Findings

HS 3303: The products produced from Thailand had no comparative advantage to be exported to all markets when compared to Singapore and Indonesia. Thailand MS of this category is less than 1%. Therefore, it is not worth to put effort into this category.

HS 3304: Currently, the products produced from Thailand had less comparative advantage to be exported to all markets when compared to Singapore and Philippines. However, Thailand MS of this category is closed to 10%, the 2nd ranking after Singapore. This means it is worth to put effort to improve the competitiveness of Thailand in this category. It needs to find out which elements needed to be focused on and supported. However, when compared to Vietnam, Thailand products of HS 3304 had more comparative advantage to be exported to ASEAN than products produced in Vietnam. This means, currently, there is only Vietnam that Thailand could compete with to export HS 3304.

HS 3305: Thailand has had an absolute comparative advantage in this category in all markets. The MS gained by Thailand were more than 50% during the 7 years of 2007-2009 and became more than 60% during 2010-2013. However, the MS tended to be decreased in 2013. Vietnam also had a chance to gain MS from Thailand because it also had comparative advantage more than once during the last 4 years of 2010-2013 even its market share was less than 5%. Thailand must make a huge effort to maintain the MS of this category, because this category is a big size of cosmetic business category and it will help keep Thailand as a leader of the cosmetic sector in the region.

Table 11 Part 2 Key Findings of HS3306-HS 3307

Key Findings:

HS 3306: Thailand also had an absolute comparative advantage of this category. Also the trend is better. Thailand MS was more than 30% during 2007-2012, and increased to more than 50% in 2013. However, this category is the smallest size of cosmetics business worldwide. It is worth to maintain the MS and try to increase the opportunity in the future, especially if look at the trend of Thailand business which has increased accordingly. Thailand is already doing quite well in this category. Thailand, Vietnam, and Indonesia had the comparative advantage to export their products to the region. However, it was interesting to know that products produced from Vietnam currently have more comparative advantage to be exported to the region than products produced from Thailand. This means Vietnam has a chance to gain more MS from Thailand in the future for this category. However, Vietnam had MS less than 5%, while Thailand's MS was more than 50% in 2013.

HS 3307: Thailand had less comparative advantage to export its products in this category compared to Philippines, Malaysia, and Vietnam. However, Thailand gained MS more than 10%, the 2nd ranking after Singapore in the region. When bilaterally compared with others, Thailand products of this category had more comparative advantage to be exported to the region than products produced from Indonesia and the Philippines. This means, Thailand's trend is to have more comparative advantage of this category in the future. Thailand can gain more market share from Philippines. In addition, the general overview of trades has shown that Thailand's potential markets of this category were extra-ASEAN market rather than intra-ASEAN market.

ASEAN Trade Overview

ASEAN is one of the big markets of the world with the population of more than 600 mil people. Within the region, ASEAN had gained positive trade balance during the year of 2007 to 2013. However, when compared the ASEAN region as a market unit with the extra ASEAN market, it was found that ASEAN gained the negative trade balance on total cosmetics during the year of 2007-2008 which was the period "before" the full harmonization implementation period. (Table 12) But, the trade balance of ASEAN region was finally gained back positive during 2009-2013. It could be said that this finding was the great proven on the successful of the ASEAN harmonization implementation in this region. Since, the objective of the harmonization was to eliminate the barriers to trade, and to facilitate the trades.

Table 12 The import/export/trade balance of total cosmetics of ASEAN region in the intra-, and extra-ASEAN markets

Year	Intra	ASEAN (mil	US\$)	Extra	ASEAN (mi	1 US\$)
i eai	Import	Export	Export TB		Export	TB
2007	590.14	939.04	348.90	1,838.02	1,835.54	(2.48)
2008	757.66	1 150 40	400.76	2 164 00	1 026 97	(227.12)
2008	/3/.00	1,158.42	400.76	2,164.00	1,936.87	(227.13)
2009	773.42	1,109.65	336.24	1,971.94	1,990.32	18.39
2010	905.01	1,433.97	528.96	2,522.66	2,968.54	445.88
2011	1,020.91	1,768.37	747.46	3,116.97	3,606.10	489.13
2012	1,015.27	1,838.64	823.37	3,369.96	3,762.99	393.03
2013	1,035.85	1,968.80	932.95	3,422.40	3,916.94	494.55

Remark: TB= Trade Balance

In the world market, the ASEAN region still had a positive trade balance of total cosmetic business during 2007-2013. (Table 13)

Table 13 The import/export/trade balance of total cosmetics of ASEAN region in the world markets

Year	World (mil US\$)						
1 cai	Import	Export	TB				
		GHULAL	ONGKORN				
2007	2,428.16	2,774.58	346.41				
2008	2,921.66	3,095.29	173.63				
2009	2,745.35	3,099.97	354.62				
2010	3,427.67	4,402.51	974.84				
2011	4,137.87	5,374.47	1,236.59				
2012	4,385.22	5,601.62	1,216.40				
2013	4,458.25	5,885.74	1,427.49				
Grand Total	24,504.19	30,234.18	5,729.99				

Remark: TB= Trade Balance

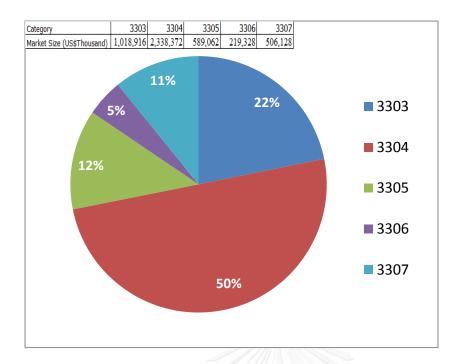


Figure 3 ASEAN market size by cosmetic category (data from ITC 2013)

In terms of market size by category, it was found that that the HS 3304 was the biggest market size of cosmetic products in ASEAN market sharing around 50% of the total cosmetics market. The HS 3303 and HS 3305 were the 2nd and 3rd ranking products by values, respectively. (Figure 3)

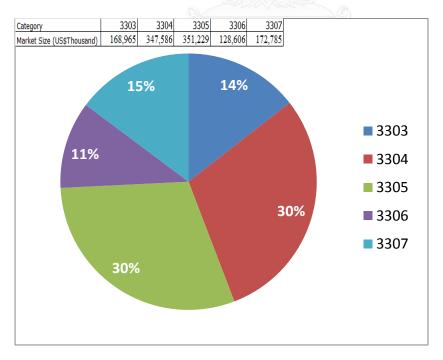


Figure 4 Cosmetic Products sourced from ASEAN market (data from ITC 2013)

In Intra ASEAN markets, the cosmetic products sourcing from ASEAN with the highest values were HS 3304 and HS 3305 which shared 30% for each particular category. The HS 3305 was a bit higher in terms of numeric values. It could be said that the highest contribution of the ASEAN region was the HS 3305. (Figure 4)

Thailand Trade Overview

Before starting the result of the study in this part, the important related information from the in-depth interviews should be remarked here. The data from this study will not include the numbers from border trades of Thailand which are estimated at 60,000 baht (around 2,000 US\$; 1US\$ = 31 baht). These numbers were not reported to the custom and ITC. The border trades were made through Thailand-Myanmar border and passed Mandalay to India market, Thailand-Cambodia border and passed though Vietnam for China market, etcetera. The reasons for border trades are mainly from the stringent constraints of NTMs and tax policies of trade partners as mentioned in Part I.

For Thailand cosmetics industry business, currently there are around 4,000 legal entities (based on Thai FDA database), but there are only 700-1000 entities which are considered true cosmetic manufacturers which have registered themselves with the Industrial Ministry, of which 3% are large size, 29% are medium size, and 68% are small size. From this number of registered manufacturing sites, only 132 entities obtained the cosmetics GMP certificate from Thai FDA.

Thailand has been considered as one of the leading countries in ASEAN region. In terms of cosmetic business, it was found that Thailand had positive trade balance on total cosmetics to all markets during the 7 years of 2007-2013. This means Thailand had potential in the cosmetic industry in all markets; intra-, extra-ASEAN, and the world market. (Tables 14-15)

Table 14 The import/export/trade balance of total cosmetics of Thailand Intra- and Extra ASEAN Markets

Year	Intra	ASEAN (mil	US\$)	Extra ASEAN (mil US\$)			
1 eai	Import	Export	TB	Import	Export	TB	
2007		200.00	224.55	22.4.2.4	101.05	2.47 <2	
2007	54.34	389.00	334.66	234.24	481.86	247.62	
2008	72.69	463.20	390.52	304.56	492.99	188.43	
2009	70.53	474.63	404.10	296.07	608.43	312.36	
2010	89.97	570.78	480.81	375.27	986.76	611.48	
2011	84.68	710.87	626.19	462.82	1,032.62	569.80	
2012	97.10	720.45	623.34	573.32	1,193.91	620.58	
2013	110.67	661.49	550.82	686.20	1,233.16	546.96	

Table 15 The import/export/trade balance of total cosmetics of Thailand in the world market

Year	World (mil US\$)						
1 cai	Import	Export	TB				
2007	288.58	870.86	582.28				
2008	377.25	956.19	578.94				
2009	366.60	1,083.06	716.45				
2010	465.24	1,557.53	1,092.29				
2011	547.51	1,743.50	1,195.99				
2012	670.43	1,914.35	1,243.93				
2013	796.87	1,894.65	1,097.78				

As one of ASEAN's leading countries, Thailand gained trade balance of total cosmetics intra-, extra-, and world markets during the 7 years of 2007-2013. The trend of import value of Thailand from intra ASEAN, extra ASEAN, and world markets were increased 103.66%, 192.95 %, and 176.13% respectively from 2007 to 2013. Also, the trend of export value from Thailand to intra ASEAN, extra ASEAN, and world markets were increased 70.04%, 155.92 %, and 117.56% respectively from 2007 to 2013. The trend of trade balance of Thailand intra ASEAN, extra ASEAN, and world markets were increased 64.59%, 120.87 %, and 88.53% respectively from 2007 to 2013. The data has shown the cosmetics industry has been growing. Thailand should promote and expand this business sector to all markets.

The study also has shown that the import values of Thailand from intra ASEAN sources were stable while the import values from extra ASEAN sources were significantly increased during 2007-2013. The export values of Thailand to both intra-and extra ASEAN markets were highly increased after 2009 which was one year after the ASEAN harmonization was fully implemented in 2008. It is noticeable that the size of the extra ASEAN market was about 2 times bigger than the intra-ASEAN market for Thailand exportation in 2013. This may help Thailand to consider that the future market to be focused on may be beyond ASEAN region. The cosmetics trades of the country should consider more on extra ASEAN region.

The study was conducted based on 5 cosmetic categories which were the HS 3303-HS 3307. In terms of competitiveness, it could not be denied that the import / export balance value has steadily improved overall. The study compared Thailand export values with the total export values of the ASEAN region to the world market, and the data has been shown in Tables 16-17.

The study has shown the percentage of Thailand exportation of cosmetic products to the world market compared with total export values of ASEAN exports to the world market. This reflects how strong the Thai cosmetics business is in terms of exportation to the ASEAN region as well as its potential to be the cosmetic production base in this region.

Table 16 the total exports of ASEAN to the world market (thousand US\$).

Category	2007	2008	2009	2010	2011	2012	2013
3303	596,880	694,488	510,961	677,208	813,665	830,274	936,364
3304	1,057,142	1,171,821	1,239,894	1,791,262	2,483,545	2,454,067	2,821,500
3305	554,058	569,537	682,297	1,124,999	1,113,646	1,269,691	1,136,518
			child d	1			
3306	150,730	201,692	225,211	287,485	341,398	400,895	371,387
		9					
3307	415,766	457,754	441,611	521,551	622,213	646,697	619,992

Table 17 the total export of Thailand to the world market (thousand US\$).

Category	2007	2008	2009	2010	2011	2012	2013
3303	5,509	6,959	6,457	5,939	8,065	8,288	5,817
3304	209,769	257,984	257,476	330,643	414,117	391,781	440,916
3305	434,100	431,865	541,233	897,837	895,303	1,039,160	960,157
3306	94,738	136,193	148,730	186,452	230,975	270,195	273,964
3307	126,742	123,191	129,161	136,661	195,037	204,928	213,814

Table 18 the total export of Thailand to the ASEAN market (thousand US\$).

Category	2007	2008	2009	2010	2011	2012	2013
3303	3,427	3,525	2,681	3,544	5,450	5,550	4,363
3304	103,122	131,535	119,904	139,065	181,969	171,301	160,071
3305	205,167	222,166	237,097	293,904	361,603	361,758	327,269
3306	52,797	72,568	77,691	93,608	111,024	125,880	112,791
3307	24,487	33,409	37,253	40,656	50,827	55,956	57,000

Table 19 the percentage of Thailand export value sharing from ASEAN export value to the world market.

Category	2007	2008	2009	2010	2011	2012	2013
3303	0.92	1.00	1.26	0.88	0.99	1.00	0.62
3304	19.84	22.02	20.77	18.46	16.67	15.96	15.63
3305	78.35	75.83	79.32	79.81	80.39	81.84	84.48
3306	62.85	67.52	66.04	64.85	67.66	67.40	73.77
3307	30.48	26.91	29.25	26.20	31.35	31.69	34.49

The data from the above table has shown that Thailand shared the high export values of ASEAN region in particular the HS 3305 and HS 3306 which were more than 50% sharing from the total export value of the region. However, the HS 3306 was the smallest cosmetic category when compared with the others. The potential cosmetic sector to be focused for Thailand is HS 3305. Also, the HS 3305 became the 2nd ranking of exported products of ASEAN region to world market from 2009 to 2013. The HS 3304 is the biggest cosmetic market size in the world but Thailand shared only 20% of HS 3304 export. This means Thailand still has a lot of room to grow in this business segment.

For cosmetics import, Thailand also imported a huge amount of HS3304 and HS 3303 from the world market. The trend of importation of HS 3304 and HS 3303 were continuously increased during 2010-2013. (Table 20)

Table 20 Thailand importation values from the world by category during 2007-2013

Category	2007	2008	2009	2010	2011	2012	2013
3303	36,127	46,982	40,075	48,461	56,992	77,786	86,018
		ลูพ เสนา	1 3 PPS 91 1 1	เทยาลย			
3304	174,840	228,656	228,193	280,037	328,048	410,911	507,205
3305	30,150	38,974	40,511	51,025	55,059	68,207	86,784
3306	17,338	24,939	23,683	33,569	38,271	41,231	41,383
3307	30,120	37,697	34,141	52,146	69,137	72,290	75,486

Table 21 the total export of Thailand to the ASEAN market (thousand US\$).

Category	2007	2008	2009	2010	2011	2012	2013
3303	3,427	3,525	2,681	3,544	5,450	5,550	4,363
3304	103,122	131,535	119,904	139,065	181,969	171,301	160,071
3305	205,167	222,166	237,097	293,904	361,603	361,758	327,269
3306	52,797	72,568	77,691	93,608	111,024	125,880	112,791
3307	24,487	33,409	37,253	40,656	50,827	55,956	57,000

From the study, it could be said that ASEAN region was the source of HS3305 for the world market. Also, Thailand was the biggest source of HS 3305 supplied products to intra ASEAN and world markets. (Table 17-18) The HS3304 was the biggest category which ASEAN and Thailand imported their products from the world market. This means the demand of HS3304 of both ASEAN region and Thailand were increased significantly.

In the latest year of study in 2013, it was found that Indonesia and Malaysia had negative trade balance while Singapore, Thailand, Philippines, and Vietnam's trade balance values were positive. The values of both imports and exports of Singapore were the highest compared to other leading countries. (Figure 5)

Singapore is the business hub in the region, but it is not the manufacturing base. Its business is mainly import for export. Thailand was the second ranked country for cosmetics exportation in the region. For the importation aspect, it was found that Singapore, Thailand, and Malaysia were the top 3 importing countries in the ASEAN region.

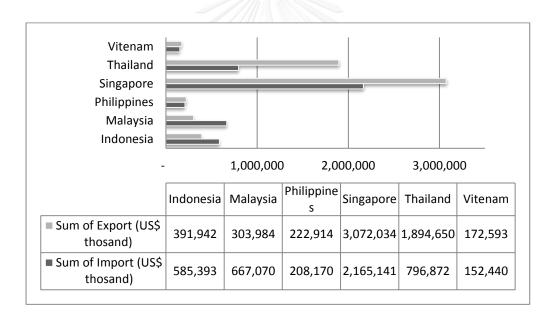


Figure 5 The 6 leading countries import/export values to the world market in 2013.

As mentioned earlier Singapore and Thailand were the top 2 countries in the region for cosmetics business of either import or export. Singapore imported its products mainly from France, Japan, USA, UK, and Italy while mostly exported its products to Hong Kong, Korea, China, Indonesia, and Japan respectively. For Thailand, it was considered as the 2nd ranking of ASEAN countries in terms of cosmetics trades. The top 5 countries which Thailand imported its cosmetics products from in 2013 were France, USA, Japan, China, and Indonesia. Also, Thailand mostly exported its products to the top 5 countries of Japan, Indonesia, Philippines, Malaysia, and Australia. It seems Thailand and Singapore had different markets for exportation.

The study result as such could be explained with the following reasons. In 2007, the ASEAN harmonization to reduce the trade barriers on either tariff or non-tariff barriers was not yet completed. However, after the year 2008, the implementation on ASEAN harmonization was announced and implemented officially. This could help support the exportation value to be increased continuously. The export values of Thailand cosmetics to intra ASEAN market dropped down in 2012-2013. (Table 21) This might be the impact from the country's political situation and the world economic crisis. However, the exportation of Thailand to extra ASEAN market was still increased during this period of time.

Thailand imported cosmetics from extra-ASEAN market more than products from intra-ASEAN market. Also, the trend of cosmetics import from extra-ASEAN market was higher. This could imply that Thai consumers have tended to use the imported cosmetics from non-ASEAN countries more than cosmetics imported from intra-ASEAN market.

The below figures 6 and 7 show the import/export values in 2013 of the 6 leading ASEAN countries intra- and extra-ASEAN markets.

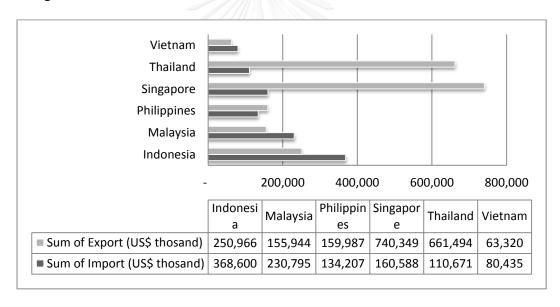


Figure 6 The import/export value in 2013 of the 6 ASEAN leading countries intra ASEAN market

Thailand and Singapore still lead the intra ASEAN market for the cosmetic business. Philippines shares the small trade volumes, but it is another country in the region which gained the trade balance in 2013 in cosmetic business intra ASEAN market. (Figure 6)

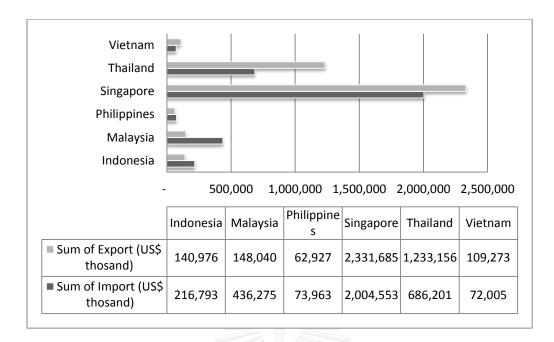


Figure 7 The import/export value in 2013 of the 6 ASEAN leading countries extra ASEAN market

For the extra ASEAN market (Figure 7), Singapore, Thailand, and Vietnam were the 3 countries which gained the positive trade balance in 2013. Excluding Singapore which is the distribution hub, Thailand was the leader in the ASEAN region for cosmetic business as a production base country.

Thailand Cosmetics Competitiveness comparing with 6 leading ASEAN members

Thailand Intra ASEAN Market

For the general overview of Thailand cosmetics business during 2007-2013, the structure of cosmetics import, export, and growth rate of total cosmetics intra ASEAN could be explained via the Figure 8 and Table 20.

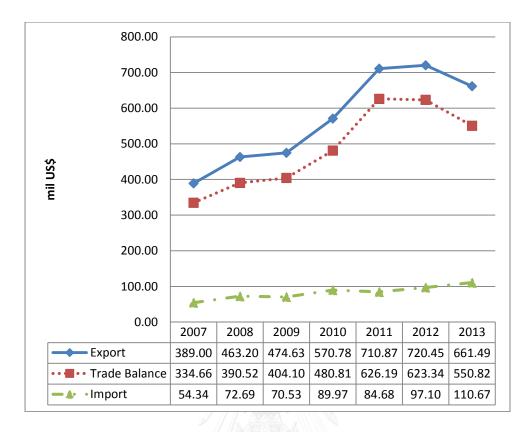


Figure 8 Total Cosmetic Trade balance of Thailand intra ASEAN market during 2007-2013

Table 22 The Growth Rate (% GR) of import and export intra ASEAN

Total	GR	GR	GR	GR	GR	GR
Cosmetics	2007-8	2008-9	2009-10	2010-11	2011-12	2012-13
Import	33.76	-2.96	27.56	-5.87	14.67	13.97
Export	19.08	2.47	20.26	24.54	1.35	-8.18

For the total cosmetics of Thailand intra ASEAN market, after 7 years study conducted during 2007-2013, the structure of Thailand import-export could be explained as follows:

- 1. Thailand cosmetics import values were almost stabilized during 2007-2013. The growth rate during the 2007-2008 was 33.76% which was the maximum growth rate. It was much higher than the import growth rate of 2012-2013 which was 13.97%. This means Thailand cosmetics importation trends may be decreased in the future.
- 2. For the cosmetics exportation of Thailand, the value has increased during 2007-2012, and dropped down a little in 2013. The maximum export growth rate was 24.54% which happened during 2010-2011. The export growth rate dropped to -8.18% during the last year of the study in 2012-2013. This means that Thailand cosmetics exportation trends may be decreased in the future.

3. Thailand also gained the trade balance every year continuously during 2007-2013. The export values were much higher than the import values during 2007-2013. From the study, it also showed that there were obvious changes in every 2 years. In 2007-2009, the export values increased slowly which caused the trade balance to start to be stabilized since then. However, the export values increased rapidly in 2009-2011, and became stabilized again during 2011-2012 and started to drop down in 2013.

The study results as such could be explained with the following reasons.

- i. In 2007, the ASEAN harmonization to reduce the trade barriers on either tariff or non-tariff barriers was not yet completed. After 2008, the implementation on ASEAN harmonization was announced officially, which could help support the exportation value to increase continuously.
- ii. The export values of Thailand cosmetics dropped down in 2012-2013. This could be because of the country's political situation and the world economic crisis at the same time.

Thailand Extra ASEAN Market

The structure of cosmetics import, export, trade balance, and growth rate of total cosmetics extra ASEAN could be explained via the Figure 9 and Table 23.

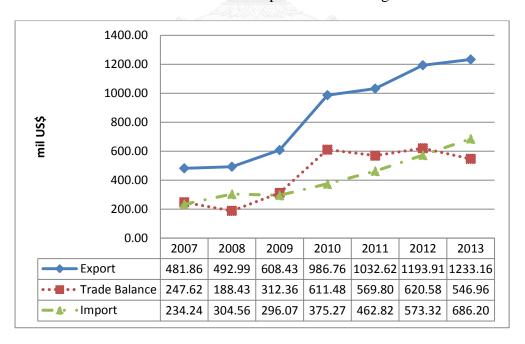


Figure 9 Total Cosmetic Trade balance of Thailand extra ASEAN market during 2007-2013

Table 23 Growth Rate	(%	GR) of	import and	l export extra ASEAN
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Total Cosmetics	GR 2007-8	GR 2008-9	GR 2009-10	GR 2010-11	GR 2011-12	GR 2012-13
Import	30.02	-2.79	26.75	23.33	23.87	19.69
Export	2.31	23.42	62.18	4.65	15.62	3.29

For the total cosmetics of Thailand extra ASEAN market, after 7 years study conducted during 2007-2013, the structure of Thailand import-export could be explained as follows:

- 1. Thailand cosmetics import values from extra-ASEAN market increased during 2007-2013. The maximum import growth rate happened in 2007-2008 which was 30.02%. It was much higher than the import growth rate of 2012-2013 which was 19.69%. This means Thailand cosmetics importation from extra ASEAN market trends may be decreased in the future.
- 2. For the cosmetics exportation of Thailand, the value increased continuously during 2007-2013. The maximum export growth rate was 62.18% which happened during 2009-2010. The export growth rate dropped to 3.29% during the last year of the study in 2012-2013. This means that Thailand cosmetics exportation trends may be decreased in the future.
- 3. Thailand also gained the trade balance every year continuously during 2007-2013. However, the trade balance was lower than the import value in 2008 and 2013. From the study, it also showed that in 2007-2009, the export values increased slowly which caused the trade balance to start to be stabilized. However, then the export values increased rapidly during 2009-2012.

The study results as such could be explained with the following reasons.

- i. Thailand imported cosmetics from extra-ASEAN market more than products from intra-ASEAN market. Also the trend of cosmetics import from extra-ASEAN market is higher. From this could be interpreted that the Thai consumers tend to use the cosmetics from non-ASEAN countries more than cosmetics imported from intra-ASEAN market.
- ii. Thailand also exported a lot of its products to the extra-ASEAN market which means that the future potential market of Thailand could be the extra-ASEAN countries.
- iii. In 2008, the exportation to extra-ASEAN countries dropped because the ASEAN harmonization was fully implemented, so the main focus of Thailand exportation was the ASEAN market in that year.

iv. In 2013, the exportation dropped for the whole industry because of the political situation as well as the world crisis economic.

Thailand in the World Market

The structure of cosmetics import, export, and trade balance of total cosmetics in the world market could be explained via Figure 10 and Table 24.

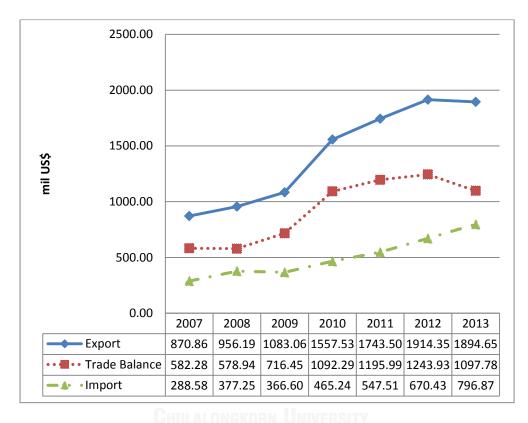


Figure 10 Total Cosmetic Trade Balance of Thailand in the World Market during 2007-2013

Table 24 Growth Rate (% GR) of imports and exports in the world market

Total	GR	GR	GR	GR	GR	GR
Cosmetics	2007-8	2008-9	2009-10	2010-11	2011-12	2012-13
Import	30.73	-2.82	26.91	17.68	22.45	18.86
Export	9.80	13.27	43.81	11.94	9.80	-1.03

For the total cosmetics of Thailand in the world market after 7 years study conducted during 2007-2013, the structure of Thailand import-export could be explained as follows:

- 1. Thailand cosmetics import values from the world market increased continuously during 2007-2013They increased slowly during 2007-2009, but rapidly increased during 2009-2013. The maximum import growth rate happened in 2007-2008 which was 30.73%. It was much higher than the import growth rate of 2012-2013 which was 18.86%. This means Thailand cosmetics importation from the world market trends may be decrease in the future.
- 2. For the cosmetics exportation of Thailand, the value increased continuously during 2007-2013. Similar to intra-ASEAN and extra- ASEAN markets, the exportation slowly increased during 2007-2009, and moved up rapidly after that period of time and slowly decreased during 2012-2013. The maximum export growth rate was 43.81% which happened during 2009-2010. The export growth rate dropped to -1.03% during the last year of the study in 2012-2013. This means that Thailand cosmetics exportation to the world market trends may be decreased in the future.
- 3. Thailand still continuously gained the trade balance in cosmetics sector every year during 2007-2013. However, the trade balances' trends may be stabilized and decreased in the future.
 - 4. The study results could be explained with the following reasons.
 - Thailand imported a lot of cosmetics products from the world market.
 Also, the trend of cosmetics import from the world market was higher.
 From this could be interpreted that Thai consumers tend to use the imported cosmetics products rather than the local made products.
 - Thailand also exported a lot of its products to the world market. However, the exportation tends to be decreased if there lacks appropriate support.

The Competitiveness Analysis of Cosmetics Industry by Category

1. HS 3303

ASEAN General Overview of HS 3303

For the category of HS 3303, the ASEAN region had negative trade balance to extra ASEAN market during the 7 years of 2007 to 2013. The import values from extra ASEAN market were increased significantly during 2010-2013, while the export values were likely stable. This has been shown in Table 25.

Table 25 the import/export/trade balance of HS 3003 of the ASEAN region intra-, and extra ASEAN markets

Year	Intra ASEAN (mil US\$)			Extra ASEAN (mil US\$)			
1 eai	Import	Export	TB	Import	Export	TB	
2007	19.34	123.48	104.14	530.63	473.40	(57.23)	
2008	27.06	172.24	145.18	593.58	522.24	(71.34)	
2009	23.48	140.41	116.92	472.53	370.56	(101.98)	
2010	32.90	235.21	202.31	651.19	442.00	(209.19)	
2011	30.57	315.38	284.81	769.00	498.29	(270.71)	
2012	28.78	313.41	284.63	827.62	516.87	(310.76)	
2013	167.01	343.13	176.12	844.82	593.23	(251.58)	

Table 26 the import/export/trade balance of HS 3003 of the ASEAN region in the world marke

Year	W	World (mil US\$)				
i eai	Import	Export	TB			
2007	549.97	596.88	46.91			
2008	620.65	694.49	73.84			
2009	496.02	510.96	14.95			
2010	684.08	677.21	(6.88)			
2011	799.56	813.67	14.10			
2012	856.41	830.27	(26.13)			
2013	1,011.83	936.36	(75.46)			

In the world market, the ASEAN region lost its market shares of HS 3303 during the year of 2012-2013. The HS 3303 exportation values decreased continuously during this 2 years period. (Table 26)

The growth rate (GR) of the ASEAN region import, export, and trade balance of HS 3303 during 2007-2013 has been shown in Table 27-28.

Table 27 Growth Rate (% GR) of imports and exports of HS 3303 of ASEAN in the world market

	Intra ASEAN (%GR)			Extra ASEAN (% GR))		
Year	Import	Export	ТВ	Import	Export	ТВ
2007	n/a	n/a	n/a	n/a	n/a	n/a
2008	39.92	39.49	39.41	11.86	10.32	24.65
2009	-13.23	-18.48	-19.47	-20.39	-29.04	42.95
2010	40.12	67.52	73.03	37.81	19.28	105.13
2011	-7.08	34.08	40.78	18.09	12.74	29.41
2012	-5.86	-0.62	-0.06	7.62	3.73	14.79
2013	480.30	9.48	-38.12	2.08	14.77	-19.04
6 Years GR of 2013 vs 2007	763.55	177.88	69.12	59.21	25.31	339.59

Table 28 Growth Rate (% GR) of imports and exports of HS 3303 of ASEAN in the world market

	World (% GR)			
Year	Import	Export	ТВ	
2007	n/a	n/a	n/a	
2008	12.85	16.35	57.41	
2009	-20.08	-26.43	-79.75	
2010	37.91	32.54	-146.02	
2011	16.88	20.15	-304.94	
2012	7.11	2.04	-285.32	
2013	18.15	12.78	188.79	
6 Years GR of 2013 vs 2007	83.98	56.88	-260.86	

As a region, ASEAN gained trade balance of HS 3303 intra ASEAN markets during the 7 years of 2007-2013. However, ASEAN lost its trade balance to the extra ASEAN market during that period and it seemed to be continuously lost which could be seen from the growth rate of the trade balance during that period. In the world market, ASEAN had a negative trade balance in 2010, 2012, and 2013. There was no growth of trade balance of this category in all markets in 2013.

For import, ASEAN region imported HS 3303 products from extra ASEAN market 20-30 times higher than products sourced from the intra ASEAN market. The trend of HS 3303 import value of ASEAN from intra ASEAN countries, extra ASEAN, and in the world markets increased 76.36%, 59.21 %, and 83.98% respectively compared between 2007 and 2013. This result showed that the ASEAN consumers still consumed a lot of HS 3303 products from extra ASEAN markets. In 2013, the import growth rates of ASEAN region from intra ASEAN market, extra

ASEAN market, and the world market were quite low which were 4.80%, 2.80%, and 18.15%, respectively. The trend of HS 3303 imports from extra ASEAN source was continuously high with the lower rate. This confirmed that ASEAN consumers required HS 3303 products from extra ASEAN market as a main source. (Table 27)

For export, ASEAN exported HS 3303 to extra ASEAN market on average of 2-4 times higher than to the intra ASEAN market. (Table 27)This meant the extra ASEAN is still the bigger market for HS 3303 for the ASEAN region. The trends of HS 3303 export value of ASEAN from intra ASEAN countries, extra ASEAN, and in the world markets were 177.88%, 25.31 %, and 56.88%, respectively compared between 2007 (before ASEAN harmonization) and 2013 (after 6 years ASEAN harmonization implementation). In 2013, when the exportation values of 2013 were compared with 2012, the export growth rates of HS 3303 of ASEAN region to intra ASEAN market, extra ASEAN market, and the world market were 9.46%, 14.77%, and 12.78%, respectively. (Table 28)

The study showed that ASEAN consumers demanded the imported HS 3303 from extra ASEAN markets. However, the trends also show that ASEAN products could possibly be increased export to extra ASEAN products in the future. It could be considered that the products used by ASEAN consumers were not the same as the products which w produced intra region.

Thailand General Overview of HS 3303

For Thailand, the HS 3303 of Thailand intra- and extra ASEAN markets during the 7 years of 2007-2013 has been shown below in Tables 29 and 30.

Table 29 Thailand HS 3303 import/export/trade balance intra-, and extra ASEAN markets

	Intra A	Intra ASEAN (mil US\$)			Extra ASEAN (mil US\$)		
Year	Import	Export	TB	Import	Export	TB	
2007	2.16	3.43	1.27	33.97	2.08	(31.89)	
2008	1.42	3.53	2.11	45.56	3.43	(42.13)	
2009	0.82	2.68	1.86	39.25	3.78	(35.48)	
2010	0.87	3.54	2.67	47.59	2.40	(45.19)	
2011	0.86	5.45	4.60	56.14	2.62	(53.52)	
2012	1.07	5.55	4.48	76.72	2.74	(73.98)	
2013	1.12	4.36	3.24	84.90	1.45	(83.44)	

Table 30 Thailand HS 3303 import/export/trade balance in the world market

Year	Wo	orld (mil U	S\$)
1 eai	Import	Export	TB
2007	36.13	5.51	(30.62)
2008	46.98	6.96	(40.02)
2009	40.08	6.46	(33.62)
2010	48.46	5.94	(42.52)
2011	56.99	8.07	(48.93)
		ilia -	11/12
2012	77.79	8.29	(69.50)
		- Little Line	, Y
2013	86.02	5.82	(80.20)

The growth rates of import, export, and trade balance of HS 3303 of Thailand intra-, extra-, and in the world market have been shown in Table 31.

Table 31 Growth Rates of Thailand HS 3303 import/export/trade balance

			- DIDY	IMGR-	EXGR-	TBGR-	IMGR-	EXGR-	TBGR-
Year	IMGR-A	EXGR-A	TBGR-A	NA	NA	NA	W	W	W
2007	n/a								
2008	-34.26	2.92	66.14	34.12	64.90	32.11	30.03	26.32	30.70
2009	-42.25	-24.08	-11.85	-13.85	10.20	-15.78	-14.69	-7.18	-15.99
2010	6.10	32.09	43.55	21.25	-36.51	27.37	20.91	-8.05	26.47
2011	-1.15	53.95	72.28	17.97	9.17	18.43	17.60	35.86	15.08
2012	24.42	1.83	-2.61	36.66	4.58	38.23	36.50	2.73	42.04
2013	4.67	-21.44	-27.68	10.66	-47.08	12.79	10.58	-29.79	15.40
6 years GR:2013 vs									
2007	-48.15	27.11	155.12	149.93	-30.29	161.65	138.08	5.63	161.92

Remark: IMGR: Growth Rate of Import, EXGR: Growth Rate of Export, TBGR: Growth Rate of Trade Balance, A: Intra ASEAN market, NA: Extra ASEAN Market, W: World Market

For Thailand, similarity to ASEAN region, it gained trade balance of HS 3303 intra ASEAN markets during the 7 years of 2007-2013. However, Thailand lost its trade balance during that period to both extra ASEAN market and the world markets.

For import, Thailand imported the HS 3303 products more than 90% from extra ASEAN market. This shows that the Thai consumers demanded a lot of imported products from extra ASEAN markets. The trend of HS 3303 import from intra ASEAN countries decreased with the rate of -48.15%, but the import growth rate from extra ASEAN, and in the world markets increased significantly 149.93% and 138.08%, respectively compared between 2007 and 2013. The result also shows that

the Thai consumers still consumed a lot of HS 3303 imported products. In 2013, the import growth rates of Thailand from intra ASEAN market, extra ASEAN market, and the world market were quite low which were 4.67%, 10.66%, and 10.58%, respectively. This also proved that Thai consumers liked HS 3303 products which were produced from extra ASEAN markets more than products sourced from intra ASEAN countries.

For export, Thailand produced products were not the main source of HS 3303 in the region. It supplied fewer HS 3303 products to all markets. Thailand might not be the proper production base for this category. The export value growth rate to extra ASEAN dropped to -30.29%, and the trend of HS 3303 export value of Thailand to intra ASEAN countries, and world market increased to 27.11%, and 5.63%, respectively, when compared between 2007 (before ASEAN harmonization) and in 2013 (after 6 years ASEAN harmonization implementation). In 2013, the export growth rates of HS 3303 of Thailand to intra-, extra ASEAN, and world markets were 21.44%, -47.08 %, and -29.79%, respectively. Thailand exportation to intra ASEAN markets has not grown and continuously decreased from 2012 to 2013.

The study showed that Thai consumers demanded the imported HS 3303 from extra ASEAN markets. Thailand and ASEAN member states may not be appropriate production bases for HS 3303 products.

Thailand had negative trade balance of the category of HS 3303 during 2007-2013 extra ASEAN market. However, Thailand still had a positive trade balance intra ASEAN during the 7 years of 2007-2013.

The top 2 leading ASEAN countries for the HS 3303 are Singapore and Indonesia, as may be noticed from Figure 11.

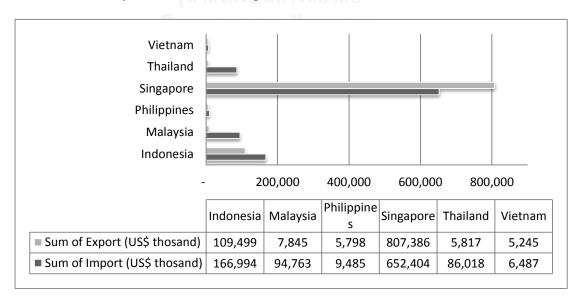


Figure 11 HS 3303 imports and exports of 6 ASEAN leading countries to the world market in 2013.

Thailand imported HS 3303 into the country 15 times more than its exportation in 2013. Singapore was the only country in the region which could have the positive trade balance of this category. This is because Singapore is the only country in ASEAN region which has the local manufacturers that produce HS 3303 for exportation. Indonesia was the second country which had high ranking trade value after Singapore, but its trade balance was still negative. The export value of Indonesia was also less than its import value during the 7 years of the study. The top 5 importing countries from Singapore were all western countries, while Indonesia's top 5 importing countries were mostly from Asia. Thailand was also in the top 5 countries which Indonesia imported its products from. Singapore exported the HS 3303 mainly to USA and Asia. The 2 ASEAN countries which were the top 5 exporting countries of Singapore were Indonesia and Malaysia. For Indonesia, the main export markets were mainly in ASEAN which were Singapore, Malaysia, Philippines, and Thailand. This result has been shown in the APPENDIX D.

For intra ASEAN market, Thailand still gained the trade balance in HS 3303 every year continuously during 2007-2013. However, after looking at the trend of exportation, it has stabilized and may decrease in the future. Thailand imported very few HS 3303 products from the intra- ASEAN market. From this could be interpreted that the ASEAN countries might not be the good source for HS 3303 for the Thai market. The top 5 countries which Thailand imported the HS 3303 from, in 2013, were France, USA, UK, Italy, and Switzerland, respectively. From this could be implied that the Thai consumers did not prefer the HS 3303 products produced from the ASEAN countries. Thailand also exported a small amount of HS 3303 to ASEAN market and it gained the trade balance in this category intra ASEAN market during the 7 years of 2007-2013. This also meant that Thailand might not be a good production base for this category for ASEAN market, but it still had a potential to improve and expand its market into ASEAN region for this business sector. The potential ASEAN markets for Thailand could be Indonesia, Malaysia, Philippines, and Singapore. The HS 3303 was not the major business of ASEAN and this may be because the HS 3303 was the only cosmetics category in which the tariff trade barriers were not harmonized. Also another reason was the cost of ingredients used for the production of HS3303 products. Most of the ingredients used in the formulations were imported from foreign countries. In terms of business, the products of this category were high production cost per unit of sales, but slow moving business. The industry might not be interested to invest in this sector comparing with the other sectors. In addition, perfume is the niche market for some specific group and level of consumers, not the general consumers.

The imports and exports of HS 3303 of the 6 leading countries to intra-, and extra- ASEAN market in 2013 have been shown in Figures 12-13.

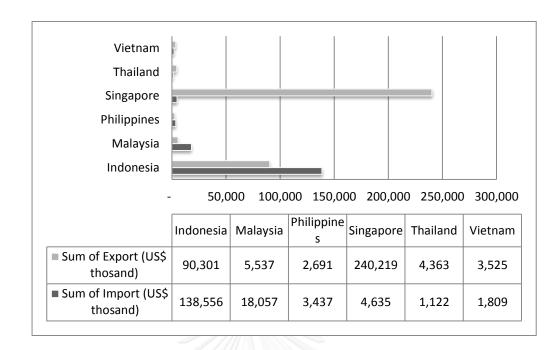


Figure 12 HS 3303 imports and exports of 6 leading ASEAN countries to the intra ASEAN market in 2013.

In the intra ASEAN market, there were only 3 countries which exported the HS 3303 products to the region more than imported the HS 3303 from the intra ASEAN market which were Singapore, Thailand, and Vietnam. Indonesia imported a huge amount of HS 3303 from the region compared to other ASEAN member states.

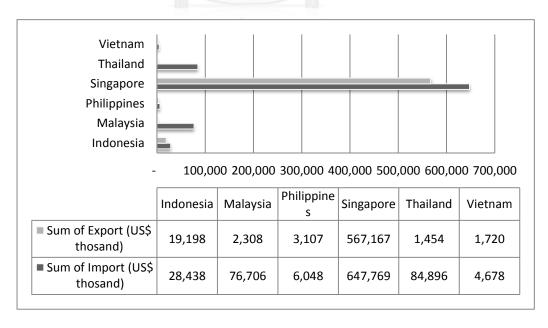


Figure 13 HS 3303 import and export of 6 leading ASEAN countries to the extra ASEAN market in 2013.

For extra ASEAN market, all ASEAN leading countries imported HS 3303 from extra ASEAN more than they exported the same category to this market. Singapore, Thailand, and Indonesia were the top 3 countries which imported a huge of HS 3303 from extra ASEAN market. The details of the sourcing of imported products of each leading country have been shown in APPENDIX D.

Reveal Competitiveness Advantage (RCA) and Market Share (MS) of HS 3303

RCA is the revealed comparative advantage is an <u>index</u> used in <u>international</u> <u>economics</u> for calculating the relative advantage or disadvantage of a certain country in a certain class of goods or services as evidenced by trade flows. It most commonly refers to an index introduced by Béla Balassa (Balassa, 2008):

$$\begin{aligned} RCA &= \underline{X_{ij}/X_{nj}} \\ X_{it}/X_{nt} \end{aligned}$$

X: Export Value, i: the interested country, j: cosmetics product s, t: total cosmetics (3303-3307), n: the ASEAN region

 X_{ij} : Export value of cosmetic category i by country j to ASEAN market

X_{nj}: Total Export value of category j from the world market to intra ASEAN market

Xit: Export value of total cosmetic categories (3303-3307) by country j to intra ASEAN market

X_{nt}: Total cosmetics export values from the world market to intra ASEAN.

Example 1: RCA of 3303: perfumes and toilet waters category of Thailand industry comparing to other countries in ASEAN intra ASEAN market:

 $\mathbf{RCA} = \underline{\mathbf{X_{ij}/X_{nj}}}$

Xit/Xnt

X_{ij}: Export value of HS 3303 of Thailand to ASEAN market

X_{nj}: Total export value of HS 3303 from the world to intra ASEAN market

X_{it}: Export Value of all cosmetics (HS3303-HS3307) of Thailand to intra ASEAN market

X_A: Total export value of all cosmetics (HS3303-HS3307) from the world intra ASEAN market

If the RCA value is higher than "1", it could be explained that Thailand has more advantage or competitiveness than the others. The much higher than 1 of RCA means much higher competitiveness of that particular category of that country. The change and trend of RCA of each particular product category by yearly basis compared among 5 leading ASEAN countries may also reflect the competitiveness and trend of that product category in the ASEAN market in the future.

From the study on trades' general overviews of the 10 ASEAN countries, it is clearly proven that the 6 leading ASEAN countries are Singapore, Thailand, Indonesia, Malaysia, Philippines, Thailand, and Vietnam. In APPENDIX D, it also shows that in terms of importation of HS 3303, Singapore, Thailand, Indonesia, Malaysia, and Vietnam were the top-down ranking importing countries of HS 3303.

Also, the top 6 leading ASEAN countries for export of HS 3303 intra ASEAN region were Singapore, Indonesia, Philippines, Malaysia, Vietnam, and Thailand. Thailand was the top for exportation to extra region compared with leading ASEAN leading countries in this category.

Countries	RCA of HS 3303								
Countries	2007	2008	2009	2010	2011	2012	2013		
Indonesia	0.47	0.36	0.29	0.94	1.73	1.95	2.06		
Malaysia	1.92	1.50	1.33	1.46	0.87	0.42	0.20		
Philippines	0.48	0.80	1.51	1.34	1.60	1.20	0.10		
Singapore	1.92	2.04	2.31	2.00	1.92	1.98	1.86		
Thailand	0.07	0.05	0.04	0.04	0.04	0.05	0.04		
Vietnam	0.73	0.56	0.72	0.59	0.50	0.33	0.40		

The RCA calculation results of HS 3303 of the 6 leading ASEAN countries have been shown in the above table. Singapore was the only country which the RCA values more than 1 during the 7 years of 2007-2013, but it may tend to be decreased in the future. In 2013, Indonesia had the RCA higher than Singapore. Thailand had very low RCA and less than 1 during the seven year of 2007-2013. And Thailand had no trend of increasing RCA during 7 years of 2007-2013.

This meant Thailand had low reveal competitiveness advantage on its exportation to the ASEAN region compared to Indonesia and Singapore.

Market Share of HS 3303 Intra ASEAN

Market share (MS) means the proportion or percentage of sales value of the specified category for Thailand, with the total sales value of all cosmetic categories (defined in terms of revenue in this study) which accounts for the intra ASEAN market. Market share is closely monitored for signs of change in the competitive landscape, and it frequently drives strategic or tactical action.

 $MSi_{J-A} = \underbrace{Xi}_{Xi_{W-A}}_{J-A}$

MSi _{J-A} = Market share of product i of country j in ASEAN market

Xi _{J-A} = Export Value of product i of country j to ASEAN market

Xi _{W-A} = Export Value of product i from world market to ASEAN market

If the market share is high in value which is generally over 0.1, it means the country has high competitiveness. The high competitiveness may come from many factors i.e. price, product quality, variety of products for consumers selected choices, time for product procurement and distribution, the accuracy of procurement and distribution time, etcetera. Another factor to gain more market share would be the opportunity to get lower production cost from a country. It could be said that the higher market share could represent the "absolute advantage". Therefore, the market share would reflect the absolute advantage not revealed comparative advantage.

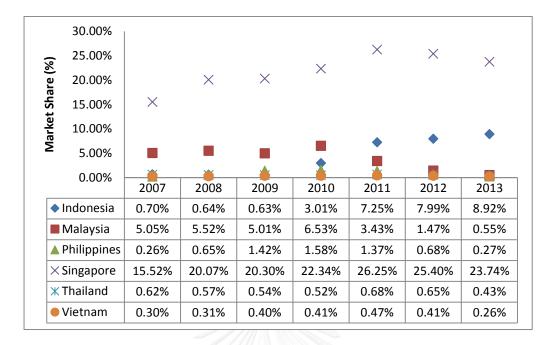


Figure 14 The market share of 3303 of 6 ASEAN leading countries intra ASEAN market during 2007-2013.

Regarding the market share of HS 3303, Figure 14, only Singapore had MS more than 10% during the 7 years during 2007-2013. Malaysia was the second country in the region which had MS more than 5% during 2007-2010, but it lost the MS in 2011-2013. Indonesia gained MS more than Malaysia during 2011-2013.

For Thailand, the MS was less than 1% during 2007-2013. The trend of MS gained was also stable. This meant Thailand had less competitiveness in selling the HS 3303 category in the region compared to Singapore and Indonesia.

RCA and MS interpretation

The RCA and market share were combined to explain the "competitiveness" as a table 33 below:

Table 33 Market Share and Reveal Comparative Advantage Interpretation (Suriya, 2001)

Market Share	RCA	Interpretation					
Share	Much More than 1	Has more market share with high competitiveness and has potential to gain more market share in the future.					
More	More than 1	Competitiveness is stabilized and has a little potential to increase in the future.					
	1	Competitiveness is stabilized.					
	Less than 1	Competitiveness will tend to be decreased in the future.					
	Much More than 1	Has less market share with high competitiveness, but it has potential to gain more market share in the future.					
Less	More than 1	Competitiveness is stabilized and has little potential to increase in the future.					
	1	Competitiveness is stabilized.					
	Less than 1	Competitiveness will tend to be decreased in the future.					

Source: Suriya, 2001

The much higher RCA value also meant there is potential to move the production base of that product category to that country. There is potential to transfer resources from other business to this one. The potential of market share to expanding higher.

For the HS 3303 of Thailand, the RCA was less than 1 and the MS was also less than 1% which could be interpreted that the competitiveness of Thailand cosmetics industry on the HS 3303 was very low and will tend to be decreased in the future.

2. HS 3304

ASEAN General Overview of HS 3304

ASEAN region had negative trade balance to extra ASEAN market in HS 3304 category except in 2011 and 2013 in which the trade balances were positive. Both import and export values were increased continuously during 2010-2013 while the export values were likely stable. This could be seen in Table 34-35

Table 34 The import/export/trade balance (TB) of HS 3304 of ASEAN intra- and extra ASEAN markets

Year	Intra ASEAN (mil US\$)			Intra ASEAN (mil US\$) Extra ASEAN (mil US\$)		1 US\$)
1 cai	Import	Export	TB	Import	Export	TB
2007	192.64	337.67	145.04	901.07	719.47	(181.60)
2008	259.98	411.09	151.11	1,137.41	760.73	(376.68)
2009	245.85	399.03	153.17	1,111.27	840.87	(270.40
2010	278.20	500.55	222.35	1,415.40	1,290.71	(124.69)
2011	311.18	600.69	289.51	1,791.61	1,882.85	91.24
2012	313.01	629.59	316.58	1,892.14	1,824.48	(67.66)
2013	309.63	832.94	523.31	1,951.52	1,988.56	37.04

Table 35 The import/export/trade balance of HS 3304 of ASEAN in the World market

		(10)				
Year	World (mil US\$)					
i eai	Import 9	Export	TB			
	Cuu	LALONCK	DM HAW			
2007	1,093.70	1,057.14	(36.56)			
2008	1,397.39	1,171.82	(225.57)			
2009	1,357.12	1,239.89	(117.23)			
2010	1,693.60	1,791.26	97.66			
2011	2,102.80	2,483.55	380.75			
2012	2,205.15	2,454.07	248.92			
2013	2,261.15	2,821.50	560.35			

The growth rate of HS 3304 of the ASEAN region of import, export and trade balance of intra-, extra ASEAN, and the world market has been shown in Table 36-37.

Table 36 Growth Rate (% GR) of ASEAN HS 3304 import/export/trade balance intraand extra- ASEAN markets

Year	Intra A	Intra ASEAN (% GR)			Extra ASEAN (% GR)		
i ear	Import	Export	ТВ	Import	Export	TB	
2007	n/a	n/a	n/a	n/a	n/a	n/a	
2008	34.96	21.74	4.19	26.23	5.73	107.42	
2009	-5.44	399.03	153.17	1111.27	840.87	(270.40	
2010	13.16	500.55	222.35	1415.40	1290.71	-124.69	
2011	11.85	600.69	289.51	1791.61	1882.85	91.24	
2012	0.59	629.59	316.58	1892.14	1824.48	-67.66	
2013	-1.08	832.94	523.31	1951.52	1988.56	37.04	
6 Years GR; 2013 vs 2007	60.73	146.67	260.80	116.58	176.39	-120.40	

Table 37 Growth Rate (% GR) of ASEAN HS 3304 import/export/trade balance in the world market

Year	World (% GR)				
i ear	Import	Export	TB		
2007	n/a	n/a	n/a		
2008	27.77	10.85	516.99		
2009	1357.12	1239.89	-117.23		
2010	1693.60	1791.26	97.66		
2011	2102.80	2483.55	380.75		
2012	2205.15	2454.07	248.92		
2013 GHULALO	2261.15	2821.50	560.35		
6 Years GR; 2013 vs 2007	106.74	166.90	-1632.69		

As a region, ASEAN lost trade balance to the extra ASEAN market in the HS 3304 in 2007-2010, and 2012. In the world market, ASEAN used to have negative trade balance during 2007-2009, but then it turned to positive trade balance during 2010-2013. The growth rate of trade balance intra ASEAN and in the world market was increased positively, but the trade balance was decreased due to negative growth extra ASEAN market. This shows that the ASEAN region still continuously lost its trade balance to extra ASEAN market.

For import, ASEAN region imported the HS 3304 products from extra ASEAN market 4-6 times higher than from the intra ASEAN market. The trend of HS 3304 import value of ASEAN from intra ASEAN countries, extra ASEAN countries, and in the world markets were increased 60.73%, 116.58 %, and 106.74% respectively compared between 2007 and 2013. This meant the growth rate of HS 3304 importation values from extra ASEAN market and in the world market were almost 2 times of the importation values from intra ASEAN market. This result shows

that the ASEAN consumers still consumed a lot of HS 3304 products from extra ASEAN markets. In 2013, the import growth rates of ASEAN region from intra ASEAN market, extra ASEAN market, and the world market were quite low which were -1.08%, 3.14%, and 2.54%, respectively. This also proved that ASEAN consumers required a HS 3304 product from extra ASEAN markets.

For export, ASEAN exported the HS 3304 to extra ASEAN market an average of 3 times higher than to the intra ASEAN market. This meant the extra ASEAN market is still the bigger market for HS 3304. The trend of HS 3304 export value of ASEAN from intra ASEAN countries, extra ASEAN, and in the world markets were 146.67%, 176.39 %, and 166.90% respectively compared between 2007 (before ASEAN harmonization) and in 2013 (after 6 years ASEAN harmonization implementation). This meant the ASEAN exported a lot of HS 3304 to all markets during the 6 years after ASEAN harmonization. In 2013, the export growth rates of HS 3304 of ASEAN region to intra ASEAN market, extra ASEAN market, and the world market were 32.30 %, 8.99%, and 14.97%, respectively. It was found that ASEAN exported its products to intra ASEAN with the highest growth rate of 32.3% in 2013 which was the highest growth during the 6 years. For the export growth rate to extra ASEAN and world markets, it used to be negative growth in 2012, but it was finally gained back in 2013.

For the trade balance (TB), the growth rate of the TB was high intra ASEAN market, but it was negative extra ASEAN market, and in the world market.

The study showed that ASEAN consumers demanded imported HS 3304 from extra ASEAN markets. However, the trends show that ASEAN products could possibly share the market from the extra ASEAN products in the future, because the imported products from intra ASEAN was the highest growth in 2013.

Thailand General Overview of HS 3304

For Thailand, the HS 3304 of Thailand intra- and extra ASEAN markets during the 7 years of 2007-2013 has been shown in Table 38.

Table 38 Thailand HS 3304 import/export/trade balance intra- and extra ASEAN Markets during 2007-2013

Year	Intra ASEAN (mil US\$)			Extra ASEAN (mil US\$)			
1 eai	Import	Export	TB	Import	Export	TB	
2007	22.60	103.12	80.53	152.24	106.65	(45.60)	
2008	34.51	131.54	97.03	194.15	126.45	(67.70)	
2009	34.08	119.90	85.82	194.11	137.57	(56.54)	
2010	38.36	139.07	100.71	241.68	191.58	(50.10)	

Table 38 Thailand HS 3304 import/export/trade balance intra- and extra ASEAN Markets during 2007-2013 (Cont.)

Year	Vacar Intra ASEAN (mil US\$)			Extra ASEAN (mil US\$)			
1 eai	Import	Export	TB	Import	Export	TB	
2011	36.23	181.97	145.74	291.82	232.15	(59.67)	
2012	42.87	171.30	128.43	368.04	220.48	(147.56)	
2013	59.18	160.07	100.89	448.02	280.85	(167.18)	

Table 39 Thailand HS 3304 import/export/trade balance in the world market during $2007\hbox{-}2013$

Year	W	orld (mil US	S\$)	
rear	Import	Export	TB	
2007	174.84	209.77	34.93	
2008	228.66	257.98	29.33	
2009	228.19	257.48	29.28	
2010	280.04	330.64	50.61	
2011	328.05	414.12	86.07	
2012	410.91	391.78	(19.13)	
2013	507.21	440.92	(66.29)	

The growth rate of HS 3304 for Thailand of import, export, trade balance of intra-, extra ASEAN, and the world markets has been shown in Table 40.

Table 40 Growth Rate of ASEAN HS 3304 import/export/trade balance

	IMGR-	EXGR-	TBGR-	IMGR-	EXGR-	TBGR-	IMGR-	EXGR-	TBGR-
Year	A	A	A	NA	NA	NA	W	W	W
2007	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2008	52.70	27.56	20.49	27.53	18.57	48.46	30.78	22.98	-16.03
2009	-1.25	-8.85	-11.55	-0.02	8.79	-16.48	-0.21	-0.19	-0.17
2010	12.56	15.99	17.35	24.51	39.26	-11.39	22.72	28.41	72.85
2011	-5.55	30.85	44.71	20.75	21.18	0.00	17.14	25.25	70.07
2012	18.33	-5.86	-11.88	26.12	-5.03	147.29	25.26	-5.39	-122.23
2013	38.05	-6.56	-21.44	21.73	27.38	13.30	23.44	12.54	246.52
2007- 2013 GR	161.86	55.23	25.28	194.29	163.34	266.62	190.10	110.19	-289.78

Remark: IMGR: Growth Rate of Import, EXGR: Growth Rate of Export, TBGR: Growth Rate of Trade Balance, A: Intra ASEAN market, NA: Extra ASEAN Market, W: World Market

For Thailand, it gained trade balance of HS 3304 intra ASEAN markets during the 7 years of 2007-2013. However, the trade balance extra ASEAN market was negative during that period. In the world market, Thailand used to have positive trade balance during 2007-2011, but it then turned to negative in 2012 and 2013.

For import, Thailand imported HS 3304 from extra ASEAN market around 6-8 times more than the products sourced from intra ASEAN markets. This showed that the Thai consumers demanded a lot of imported products from extra ASEAN markets. The trend of HS 3304 import value of Thailand from intra ASEAN countries, extra ASEAN, and in the world markets were increased 161.86%, 194.29 %, and 190.10% respectively compared between 2007 and 2013. This meant the growth rate of HS 3304 importation values from intra-, extra ASEAN, and world markets was quite high with more than 150% growth during the 6 years after ASEAN harmonization implementation. The result also showed that the Thai consumers still consumed a lot of HS 3304 imported products. In 2013, the import growth rates of Thailand from intra ASEAN market, extra ASEAN market, and the world market were quite low at 38.05%, 21.73%, and 23.44%, respectively. The growth rates of the importation of HS 3304 from all markets were higher. It showed that the growth rate for Thai imports from the intra ASEAN market was higher. The trend of product sourced from intra ASEAN market was also higher.

For export, Thailand exported the HS 3304 to intra ASEAN market similarly with the extra ASEAN market during 2007-2009, and then it exported to extra ASEAN market about 2 times higher than intra ASEAN market during 2010-2013. This meant that the potential market of HS 3304 for Thailand would still be extra ASEAN. The trends of HS 3304 export value of Thailand to intra ASEAN market, extra ASEAN, market and in the world markets were 55.23%, 163.34 %, and 110.19% respectively compared between 2007 (before ASEAN harmonization) and 2013 (after 6 years ASEAN harmonization implementation). This meant the ASEAN exported a lot of HS 3304 to all markets during the 6 years after ASEAN harmonization. In 2013, the export growth rates of HS 3304 of ASEAN region to intra ASEAN market dropped to -6.56%, but it increased to 27.38% in extra ASEAN market, and 12.54% in the world market. Thailand exportation to intra ASEAN markets has not experienced growth and continuously decreased from 2012 to 2013.

For the trade balance (TB), the data showed that Thailand gained the trade balance intra ASEAN market during 2007-2014 even though the growth rate dropped in 2012 and 2013. Thailand lost its trade balance extra ASEAN during 2007-2013, and lost it to the world market in 2012 and 2013 while the exportation growth rate was also higher.

The study showed that Thai consumers demanded the imported HS 3304 from extra ASEAN markets. Thai consumers do not prefer the HS 3304 produced in ASEAN countries.

Thailand had positive trade balance intra ASEAN market for this category, but it gained the negative trade balance extra ASEAN market during 2007-2013. The top two leading ASEAN countries for the HS 3304 were Singapore and Thailand, as shown in Figure 15.

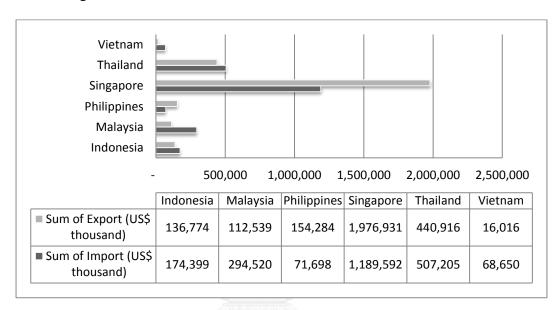


Figure 15 HS 3304 import and export of 6 ASEAN leading countries to the world market in 2013.

Singapore and Philippines were the only two countries in the region which could have the positive trade balance of this category in 2013. Also, Singapore trade values were much bigger than other countries in the region. The top 5 importing countries of HS 3304 of Singapore were from France, Japan, Germany, UK and China while the top 5 Thailand importing countries of this category were from France, USA, Japan, Indonesia, and UK. Singapore mainly exported its products to Korea, Hong Kong, China, Japan, and Thailand. For Thailand, the HS 3304 markets for exportation were UK, Indonesia, Cambodia, Malaysia, and Myanmar. Thailand and Singapore had different markets for their exported products.

For intra ASEAN market (Figure 16), Thailand still continuously gained the trade balance in HS 3304 every year during 2007-2013. However, after looking at the trend of exportation, it may be stabilized and decreased in the future. Thailand imported very small amount of HS 3304 products from the intra- ASEAN market compared with extra ASEAN market. From this could be implied that the Thai consumers did not prefer the HS 3304 products produced from the ASEAN countries. Thailand also exported its products to extra ASEAN market almost 2 times more than intra-ASEAN market in 2013 (Figures 17). This meant that Thailand had a potential to improve and expand its extra ASEAN market for this particular sector.

Since the HS 3304 is the biggest cosmetics sector, it is worth for Thailand to focus and try to expand its market for this category in order to maintain itself as the leading country of cosmetics sector in this region.

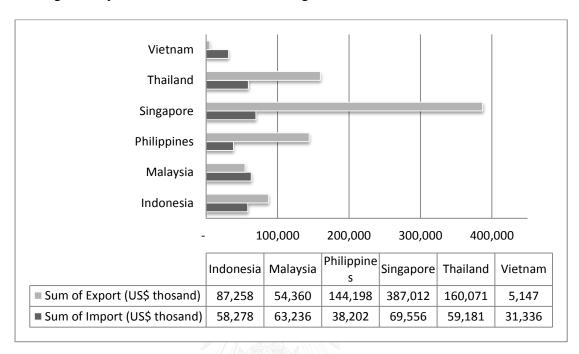


Figure 16 HS 3304 import and export of 6 ASEAN leading countries to intra ASEAN market in 2013

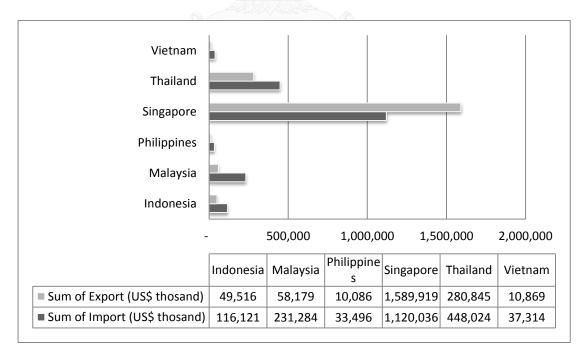


Figure 17 HS 3304 import and export of 6 ASEAN leading countries to extra ASEAN market in 2013

Reveal Competitiveness Advantage (RCA)

The RCA and MS of the HS 3304 were calculated by using the secondary data gathered from the International Trade Center. The results have been shown in Table 41

Table 41 RCA of HS 3304

Countries	RCA of HS 3304								
Countries	2007	2008	2009	2010	2011	2012	2013		
Indonesia	1.15	1.41	1.33	1.05	0.88	0.88	0.82		
Malaysia	0.76	0.82	0.89	0.84	0.94	0.90	0.82		
Philippines	1.12	1.13	1.16	1.18	1.16	1.09	2.13		
Singapore	1.38	1.25	1.39	1.45	1.38	1.48	1.24		
Thailand	0.74	0.80	0.70	0.70	0.75	0.69	0.57		
Vietnam	0.21	0.20	0.45	0.16	0.19	0.24	0.25		

Philippines and Singapore were the 2 countries which had their RCA values more than 1 during the 7 years of 2007-2013. In 2013, Philippines had the RCA 2 times higher than Singapore.

Thailand had low RCA less than 1 during the seven years of 2007-2013. Also, Thailand had no trend of increasing RCA during the seven years of 2007-2013. This meant Thailand had low reveal competitiveness advantage on its exportation to this ASEAN region compared with Philippines and Singapore.

Market Share (MS)

The market share intra ASEAN of the 6 leading countries during 2007-2013 has been shown in Figure 18.

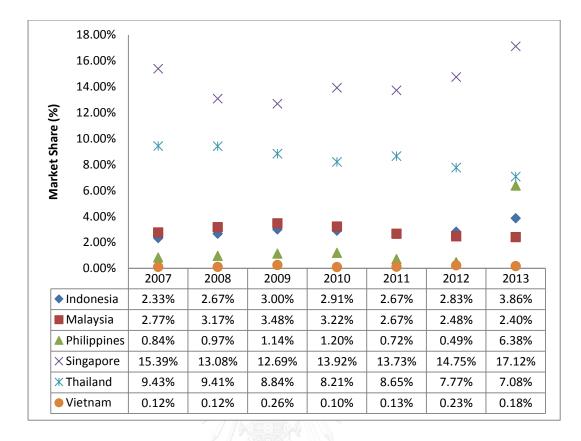


Figure 18 the market share of 3304 of 6 ASEAN leading countries intra ASEAN market during 2007-2013.

For the market share of HS 3304, only Singapore had MS more than 10% during the 7 years of 2007-2013. Thailand was the second country in the region which had MS more than 5% during 2007-2013. It is noticeable that Philippines gained MS more than 5% in 2013.

For Thailand, the trend of MS gained decreased. This means Thailand had less competitiveness on selling the HS 3304 category in the region compared to Singapore. Thailand may lose its market share to Philippines in the future if the business could not be maintained or improved. However, Thailand still had more competitiveness on selling the HS 3304 category intra ASEAN compared to other leading countries.

RCA and **MS** interpretation

For the HS 3304 of Thailand, the RCA was less than 1 and the MS was also less than 10%, but still higher than other leading countries except Singapore. From this could be interpreted that the competitiveness of Thailand cosmetics industry on the HS 3304 may tend to be decreased in the future. Philippines has a chance to gain more market share from Thailand in the future.

3. HS 3305

ASEAN General Overview of HS 3305

ASEAN region had positive trade balance to extra ASEAN market in HS 3305 category during the 7 years of 2007-2013. The export values were increased gradually during 2010-2013 while the import values were stable. This has been shown in Table 42-43.

Table 42 The import/export/trade balance of HS 3305 of the ASEAN intra- and extra ASEAN markets

Year	Intra A	SEAN (mil	SEAN (mil US\$)		Extra ASEAN (mil US\$)		
i ear	Import	Export	TB	Import	Export	TB	
2007	221.68	256.53	79.85	93.64	297.53	203.89	
2008	256.46	283.39	26.92	117.18	286.15	168.98	
2009	285.41	299.63	14.23	117.69	382.67	264.98	
2010	318.25	376.9	58.65	140.35	748.1	607.75	
2011	389.38	479.45	90.07	167.85	634.2	466.35	
2012	371.14	490.36	119.22	199.31	779.33	580.02	
2013	310.25	410.19	99.94	220.6	726.32	505.72	

Table 43 The import/export/trade balance of HS 3305 of the ASEAN in the World market

V	World (mil US\$)					
Year	Import	Export	TB			
2007	315.32	554.06	283.74			
2008	373.64	569.54	195.9			
2009	403.09	682.3	279.2			
2010	458.6	1,125.00	666.4			
2011	557.23	1,113.65	556.42			
2012	570.45	1,269.69	699.24			
2013	530.85	1,136.51	605.66			

Table 44 Growth Rate of HS 3305 of the ASEAN intra-, and extra ASEAN markets
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	Intra ASEAN (%GR)			Extra ASEAN (% GR)		
Year	Import	Export	ТВ	Import	Export	ТВ
2007	n/a	n/a	n/a	n/a	n/a	n/a
2008	15.69	10.47	-66.29	25.14	-3.82	-17.12
2009	11.29	5.73	-47.14	0.44	33.73	56.81
2010	11.51	25.79	312.16	19.25	95.49	129.36
2011	22.35	27.21	53.57	19.59	-15.23	-23.27
2012	-4.68	2.28	32.36	18.74	22.88	24.37
2013	-16.41	-16.35	-16.17	10.68	-6.80	-12.81
6 Years GR; 2013 vs 2007	39.95	59.90	25.16	135.58	144.12	148.04

Table 45 Growth Rate of HS 3305 of the ASEAN in the World market

V	W	World (% GR)				
Year	Import	Export	TB			
2007	n/a	n/a	n/a			
2008	18.50	2.79	-30.96			
2009	7.88	19.80	42.52			
2010	13.77	64.88	138.68	19		
2011	21.51	-1.01	-16.50	Š		
2012	2.37	14.01	25.67	À		
2013	-6.94	-10.49	-13.38	6		
6 Years GR; 2013 vs 2007	68.35	105.12	113.46	R		

As a region, ASEAN gained trade balance of HS 3305 intra-, extra ASEAN, and in the world markets during the 7 years of 2007-2013. However, the growth rate of the trade balance was decreased to negative rate in all markets in 2013. This means the HS 3305 trended to be imported more and more from the extra ASEAN market.

For import, ASEAN region imported the HS 3305 products from intra ASEAN market around 2 times higher than from the from extra ASEAN market. The trend of HS 3305 import value of ASEAN from intra ASEAN countries, extra ASEAN, and in the world markets increased significantly 39.95%, 135.58 %, and 68.35% respectively compared between 2007 and 2013. The growth rate of HS 3305 importation values from extra ASEAN market was almost 3 times of the importation from intra ASEAN market. The result showed that the ASEAN consumers still consumed a lot of HS 3305 products from intra ASEAN markets. In 2013, the import growth rates of ASEAN region from intra ASEAN market, extra ASEAN market, and the world

market were quite low which were -16.41%, 10.68%, and -6.94%, respectively. This means that there was still an increase of HS 3305 import from extra ASEAN market.

For export, ASEAN exported the HS 3305 to extra ASEAN market in the similar amount with the intra ASEAN market during 2007-2009. However, the exportation to extra ASEAN market increased significantly almost 2 times higher than intra ASEAN market from 2011 to 2013. This means the extra ASEAN was still considered the bigger potential market for HS 3305 for the ASEAN region. The trend of HS 3305 export value of ASEAN from intra ASEAN countries, extra ASEAN, and in the world markets were 59.90%, 144.12 %, and 105.12%, respectively compared between 2007 (before ASEAN harmonization) and in 2013 (after 6 years ASEAN harmonization implementation). This means that ASEAN exported a lot of HS 3305 to all markets during the 6 years after ASEAN harmonization. In 2013, the export growth rates of HS 3305 of ASEAN region to intra ASEAN market, extra ASEAN market, and the world market were -16.35 %, -6.80%, and -10.49%, respectively. It was found the trend of the exportation of HS 3305 of ASEAN region decreased in all markets.

The study showed that the ASEAN import values of products HS 3305 sourced from ASEAN were higher than products sourced from extra ASEAN markets. From this it could be interpreted that the ASEAN consumers demanded the HS 3305 from intra ASEAN market more than the products sourced from the extra ASEAN market.

However, the trends show that ASEAN consumers may also like the products sourced from extra ASEAN, because the growth rate of the importation of this category sourced from extra ASEAN was positively high in 2013.

Thailand General Overview of HS 3305

For Thailand, the trade overview of HS 3305 during the years 2007 to 2013 has been shown in Table 46.

Table 46 Thailand HS 3305 import/export/trade balance intra-, and extra ASEAN markets during 2007-2013

Year	Intra A	ASEAN (mi	1 US\$)	Extra ASEAN (mil US\$)		
1 cai	Import	Export	TB	Import	Export	TB
2007	8.56	205.17	196.60	21.58	228.93	207.35
2008	9.58	222.17	212.59	29.40	209.70	180.30
2009	11.16	237.10	225.94	29.35	304.14	274.79
2010	17.55	293.90	276.35	33.47	603.93	570.46

Table 46 Thailand HS 3305 import/export/trade balance intra-, and extra ASEAN markets during 2007-2013 (Cont.)

Year	Intra ASEAN (mil US\$)			Extra ASEAN (mil US\$)		
1 cal	Import	Export	TB	Import	Export	TB
2011	15.18	361.60	346.42	39.88	533.70	493.82
2012	16.42	361.76	345.34	51.79	677.40	625.61
2013	20.81	327.27	306.46	65.97	632.88	566.91

Table 47 Thailand HS 3305 import/export/trade balance in the world market during 2007-2013

Year	W	World (mil US\$)				
1 ear	Import		TB			
2007	30.15	434. 10	403.95			
2008	38.97	431.87	392.89			
2009	40.51	541.23	500.72			
2010	51.03	897.84	846.81			
2011	55.06	895.30	840.24			
2012	68.21	1,039.16	970.95			
2013	86.78	960.15	873.37			

The Growth Rate (GR) of HS 3305 of Thailand has been shown in Table 48.

Table 48 Growth Rate of HS 3305 of Thailand

	IMGR-	EXGR-	TBGR-	IMGR-	EXGR-	TBGR-	IMGR-	EXGR-	TBGR-
Year	A	A	A	NA	NA	NA	W	W	W
2007	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2008	11.92	8.29	8.13	36.24	-8.40	-13.05	29.25	0.00	-2.74
2009	16.49	6.72	6.28	-0.17	45.04	52.41	3.95	25.32	27.45
2010	57.26	23.96	22.31	14.04	98.57	107.60	25.97	65.89	69.12
2011	-13.50	23.04	25.36	19.15	-11.63	-13.43	7.90	-0.28	-0.78
2012	8.17	0.04	-0.31	29.86	26.93	26.69	23.88	16.07	15.56
2013	26.74	-9.53	-11.26	27.38	-6.57	-9.38	27.22	-7.60	-10.05
2013 vs 2007 GR	143.11	59.51	55.88	205.70	176.45	173.41	187.83	121.18	116.21

For Thailand, it gained trade balance of HS 3305 in all markets during the 7 years of 2007-2013. However, the trade balance growth rate negatively decreased in

all markets in 2013. This means the trend of HS 3305 trading balance of Thailand with all markets stabilized and could possibly be decreased in the future.

For import, Thailand imported the HS 3305 from extra ASEAN market around 2-3 times of the products sourced from intra ASEAN markets. This showed that the Thai consumers demanded imported products from extra ASEAN markets rather than products sourced from ASEAN countries. This practice was different from consumers from other ASEAN member states, who still preferred products sourced from ASEAN countries. The trend of HS 3305 import value of Thailand from intra ASEAN countries, extra ASEAN, and in the world markets increased significantly 143.11%, 205.70 %, and 187.83%, respectively compared between 2007 and 2013. The result also showed that the Thai consumers still consumed a lot of HS 3305 imported products. In 2013, the import growth rates of Thailand from intra ASEAN market, extra ASEAN market, and the world market were quite low which were 26.74%, 27.38%, and 27.22%, respectively. The data showed that Thailand still continuously imported HS 3305 products from all markets.

For export, Thailand exported the HS 3305 to intra ASEAN market similarly with the extra ASEAN market during 2007-2009, and the exportation to extra ASEAN market was then about 2 times higher than intra ASEAN market from 2010 to 2013. This means that the potential market of HS 3305 for Thailand was still be extra ASEAN. The trends of HS 3305 export value of Thailand to intra ASEAN countries, extra ASEAN, and in the world markets were 59.51%, 176.45 %, and 121.18%, respectively compared between 2007 (before ASEAN harmonization) and in 2013 (after 6 years ASEAN harmonization implementation). This means that ASEAN exported a lot of HS 3305 to all markets during the 6 years after ASEAN harmonization. In 2013, the export growth rates of HS 3305 of Thailand to intra-, extra ASEAN, and world markets dropped to -9.53%, -6.57%, and -7.60%, respectively. The results showed that the trend of export of HS 3305 of Thailand to all markets was decreased.

Thailand had positive trade balance of both intra- and extra AEAN markets for this category during 2007-2013. Thailand was the biggest exporting country in the region in 2013. Its export value was more than 10 times of its import value. Only Thailand and Vietnam had the positive trade balance of this category in all markets. The trade balances of the other countries were negative. The data has been shown in Figures 19-20.

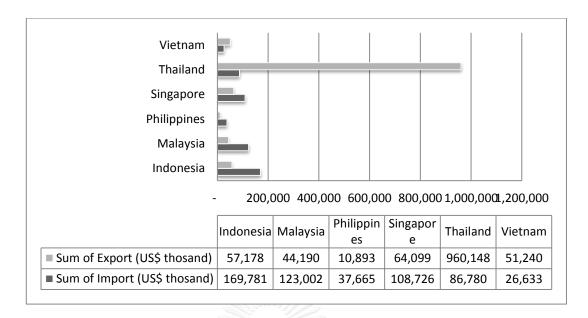


Figure 19 HS 3305 import and export of 6 ASEAN leading countries to the world market in 2013.

The top 5 countries consuming HS 3305, which Thailand exported to were Japan, Indonesia, Malaysia, Philippines, and Australia. For Vietnam, the exported markets were Philippines, Japan, Cambodia, Singapore, and China. It could be seen that Vietnam had the same markets as Thailand of Japan and Philippines.

Since the HS 3305 is the biggest cosmetics export of Thailand, it is worth for Thailand to spend its effort to maintain its market in this category in order to maintain its position as the leading country of cosmetics sector in this region.

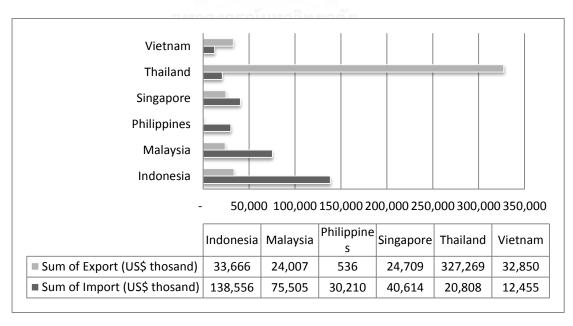


Figure 20 HS 3305 import and export of 6 ASEAN leading countries to intra ASEAN market in 2013.

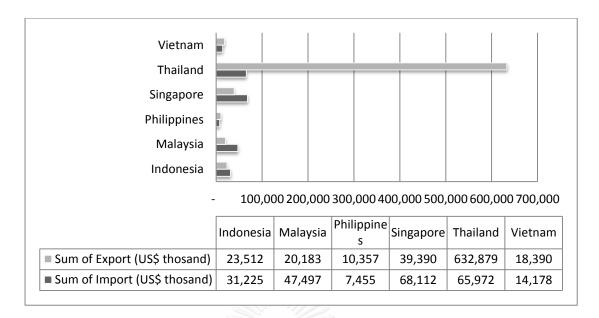


Figure 21 HS 3305 import and export of 6 ASEAN leading countries to extra ASEAN market in 2013.

The Figures 18-19 have shown the import/export of HS 3305 of the 6 leading countries intra-, and extra ASEAN markets. The data confirms that Thailand was the dominant market of this category. Since we exported a huge amount of HS 3305 to both markets; intra- and extra ASEAN markets, there was a huge gap between Thailand and the second exported ranking country in both markets.

Reveal Competitiveness Advantage (RCA)

The secondary data from International Trade Center was calculated for RCA. The result is shown in the Table 49.

Table	10	TIC	2205	DO	
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Countries	RCA of HS 3305									
Countries	2007	2008	2009	2010	2011	2012	2013			
Indonesia	1.16	1.10	0.94	0.82	0.70	0.64	0.64			
Malaysia	0.45	0.55	0.58	0.53	0.56	0.74	0.74			
Philippines	0.26	0.16	0.13	0.09	0.10	0.14	0.02			
Singapore	0.17	0.18	0.16	0.16	0.23	0.14	0.16			
Thailand	1.93	1.96	1.85	1.96	1.88	1.88	2.37			
Vietnam	0.13	0.19	0.33	1.03	1.39	1.95	1.05			

Thailand was the only country in which its RCA values were more than 1 during the 7 years of 2007-2013. Indonesia used to have the RCA more than 1 during 2007-2008, but it dropped down in 2009-2013. It was found that Vietnam's RCA in this category was more than 1 during 2010-2013.

This means Thailand had high reveal competitiveness advantage on its exportation of HS 3305 to the ASEAN region compared with other leading country in ASEAN. However, Vietnam is another hot spot to be focused on for the future as the production base of this category in this region. Therefore, Thailand needs to ensure that it can maintain the production base and export values in order to maintain its competitiveness in this category. A huge support from the relevant parties may be required.

Market Share (MS)

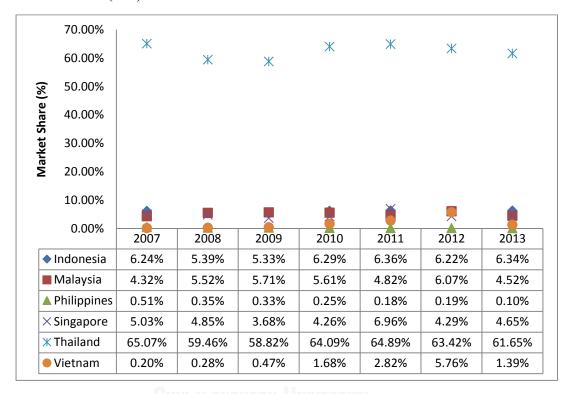


Figure 22 the market share of 3305 of 6 leading countries intra ASEAN market during 2007-2013.

For the market share of HS 3305 (Figure 22), Thailand had MS more than 50% during 2007-2009, and it became more than 60% in 2010-2013. Indonesia, Singapore and Malaysia gained similar MS values which were more than 5% during 2007-2013.

For Thailand, the trend of MS gained was high, but stable and may be slightly decreased in the future. This means Thailand had high competitiveness in selling the HS 3305 category in the region compared to other member states. However, in order to maintain this excellent competitiveness in selling, the support must also be provided, because the HS 3305 was also the key business cosmetics products ranking number 3 in terms of values in the worldwide market.

RCA and MS interpretation

For the HS 3305 of Thailand, the RCA was more than 1 and the MS was also more than 50% during the 7 years of 2007-2013. From this could be interpreted that Thailand has more market share with high competitiveness and still has potential to gain more market share in the future. To maintain its business, both effort and support are required.

4. HS 3306

ASEAN General Overview of HS 3306

ASEAN region had positive trade balance to extra ASEAN market in HS 3306 category during 2008-2013. The region used to have the negative trade balance in 2007. The export values were increased significantly during 2010-2012 while the import values were mainly stable. The exportation tended to stabilize in 2013 while the importation dropped down. This has been shown in Table 50.

Table 50 the import/export/trade balance of HS 3306 of ASEAN region

Year	Intra	ASEAN (mil	US\$)	Extra ASEAN (mil US\$)			
1 Cai	Import	Export	TB	Import	Export	TB	
2007	66.33	81.87	15.54	68.87	68.86	(0.01)	
2008	90.52	108.89	18.37	78.17	92.80	14.64	
2009	98.91	120.64	21.73	73.94	104.57	30.64	
2010	125.87	150.76	24.90	90.32	136.72	46.41	
2011	125.79	168.20	42.41	98.75	173.19	74.44	
2012	141.13	190.49	49.36	117.28	210.41	93.13	
2013	108.02	160.74	52.71	83.39	210.64	127.25	

Table 51 the import/export/trade balance of HS 3306 of ASEAN region

Year	World (mil US\$)				
i ear	Import	Export	TB		
2007	135.21	150.73	15.52		
2008	168.68	201.69	33.01		
2009	172.85	225.21	52.36		
2010	216.18	287.49	71.30		
2011	224.55	341.40	116.85		
2012	258.40	400.90	142.49		
2013	191.41	371.38	179.97		

The growth rate of import, export, and trade balance of HS 3306 of ASEAN region in all markets; intra-, extra-, and in the world market has been shown in Table 52-53.

Table 52 Growth Rate of HS 3306 of ASEAN

Year	Intra	ASEAN (%	GR)	Extra ASEAN (% GR)		
1 eai	Import 🚫	Export	TB	Import	Export	TB
2007	n/a	n/a	n/a	n/a	n/a	n/a
2008	36.47	33.00	18.21	13.50	34.77	n/a
2009	9.27	120.64	21.73	73.94	104.57	109.29
2010	27.26	150.76	24.90	90.32	136.72	51.47
2011	-0.06	168.20	42.41	98.75	173.19	60.40
2012	12.19	190.49	49.36	117.28	210.41	25.11
2013	-23.46	160.74	52.71	83.39	210.64	36.64
6 Years GR; 2013 vs 2007	62.85	96.34	239.19	21.08	205.90	n/a

Table 53 Growth Rate of HS 3306 of ASEAN

Year	World (% GR)					
i ear	Import	Export	TB			
2007	n/a	n/a	n/a			
2008	24.75	33.81	112.69			
2009	172.85	225.21	52.36			
2010	216.18	287.49	71.30			
2011	224.55	341.40	116.85			
2012	258.40	400.90	142.49			
2013	191.41	371.38	179.97			
6 Years GR; 2013 vs 2007	41.56	146.39	1059.60			

As a region, ASEAN gained trade balance of HS 3306 intra-, extra ASEAN, and in the world markets during the 7 years of 2007-2013. However, the growth rates of the trade balance in all markets were positive. However, the trade balance decreased intra ASEAN while it still continuously increased extra ASEAN and in the world markets in 2013. This means the HS 3306 exported from ASEAN was higher. ASEAN could be a production base for this category.

For import, ASEAN region imported the HS 3306 products from intra ASEAN market a little bit higher than from the from extra ASEAN market. The trend of HS 3306 import value of ASEAN from intra ASEAN countries, extra ASEAN, and in the world markets increased significantly 62.85%, 21.08%, and 41.56%, respectively compared between 2007 and 2013. The result showed that the ASEAN consumers still consumed a lot of HS 3306 products from intra ASEAN markets. In 2013, the import growth rates of ASEAN region from intra ASEAN market, extra ASEAN market, and the world market were quite low which were -23.46%, -28.90%, and -25.92%, respectively. This means that the trends of imported of HS 3306 products decreased in all markets.

For export, ASEAN exported the HS 3306 to intra ASEAN market higher than extra ASEAN market during 2007-2010, but the exportation to extra ASEAN market was higher than the intra ASEAN market during 2011-2013. This meant the extra ASEAN was still considered the bigger potential market for HS 3306 for the ASEAN region. The trend of HS 3306 export value of ASEAN from intra ASEAN countries, extra ASEAN, and in the world markets were 96.34%, 205.9 %, and 146.4%, respectively compared between 2007 (before ASEAN harmonization) and in 2013 (after 6 years ASEAN harmonization implementation). This means that ASEAN exported high amount HS 3306 to all markets during the 6 years after ASEAN harmonization. In 2013, the export growth rates of HS 3306 of ASEAN region were quite low in all markets; intra ASEAN market, extra ASEAN market, and the world

market of -15.62 %, 0.11%, and -7.36%, respectively. It was found that the trend of exportation of HS 3306 of ASEAN region decreased in all markets in 2013.

The study showed that ASEAN consumers demanded the HS 3306 from intra ASEAN markets more than the products sourced from the extra ASEAN market.

For Thailand, the HS 3306 of Thailand intra- and extra ASEAN markets during the 7 years of 2007-2013 was shown in the Table 54-55.

Table 54 Thailand HS 3306 import/export/trade balance intra-, and extra ASEAN markets during 2007-2013

Year	Intra A	ASEAN (mi	l US\$)	Extra ASEAN (mil US\$)		
1 eai	Import	Export	TB	Import	Export	TB
2007	9.76	52.80	43.04	7.58	41.94	34.36
2008	12.89	72.57	59.67	12.05	63.63	51.58
2009	12.64	77.69	65.05	11.04	71.04	60.00
2010	16.38	93.61	77.23	17.19	92.84	75.66
2011	14.79	111.02	96.23	23.48	119.95	96.47
2012	18.76	125.88	107.13	22.48	144.32	121.84
2013	8.21	112.79	104.58	33.17	161.16	128.00

Table 55 Thailand HS 3306 import/export/trade balance intra-, and extra ASEAN markets during 2007-2013

	Cum	NI ONGKOD	M HMWEE
Year	W	orld (mil US	S\$)
i ear	Import	Export	TB
2007	17.34	94.74	77.40
2008	24.94	136.19	111.25
2009	23.68	148.73	125.05
2010	33.57	186.45	152.88
2011	38.27	230.98	192.70
2012	41.23	270.20	228.96
2013	41.38	273.96	232.57

The growth rate of import, export, and trade balance of HS 3306 of Thailand in all markets; intra-, extra-, and in the world market has been shown in Table 56

Table 56 Growth Rate of HS 3306 of Thailand

	IMGR-	EXGR-	TBGR-	IMGR-	EXGR-	TBGR-	IMGR-	EXGR-	TBGR-
Year	A	A	A	NA	NA	NA	W	W	W
2007	n/a								
2008	32.07	37.44	38.64	58.97	51.72	50.12	43.83	43.75	43.73
2009	-1.94	7.06	9.02	-8.38	11.65	16.32	-5.05	9.21	12.40
2010	29.59	20.49	18.72	55.71	30.69	26.10	41.77	25.36	22.26
2011	-9.71	18.60	24.60	36.59	29.20	27.50	14.00	23.88	26.05
2012	26.84	13.38	11.33	-4.26	20.32	26.30	7.73	16.98	18.82
2013	-56.24	-10.40	-2.38	47.55	11.67	5.06	0.36	1.39	1.58
2013									
vs									
2007	-15.88	113.62	142.98	337.60	284.26	272.53	138.64	189.17	200.48

Remark: IMGR: Growth Rate of Import, EXGR: Growth Rate of Export, TBGR: Growth Rate of Trade Balance, A: Intra ASEAN market, NA: Extra ASEAN Market, W: World Market

For Thailand, it gained trade balance of HS 3306 in all markets during the 7 years of 2007-2013. Also, the trade balance growth rate continuously increased in all markets during that period.

For import, Thailand imported the HS 3306 from extra ASEAN market in a similar amount to the products sourced from intra ASEAN market during 2007-2010. However, the import from extra ASEAN market was then higher than intra ASEAN products from 2011 to 2013. Thailand imported the HS 3306 from extra ASEAN market 4 times more than intra ASEAN products in 2013. This shows that Thai consumers demanded imported products from extra ASEAN markets rather than products sourced from ASEAN countries. The trend of HS 3306 import value of Thailand from intra ASEAN countries, extra ASEAN, and in the world markets increased significantly -15.88%, 337.60 %, and 138.64%, respectively compared between 2007 and 2013. In 2013, the import growth rates of Thailand from intra ASEAN market decreased to -56.24%, but it increased in the extra ASEAN market by 47.55%, and the world market by 0.36%. The data showed that Thailand imported less HS 3306 products from intra ASEAN, but imported more from extra ASEAN market.

For export, Thailand exported the HS 3306 to intra ASEAN market similarly with the extra ASEAN market during 2007-2011, and then the exportation to extra ASEAN market became higher than intra ASEAN market from 2012 to 2013. This means that the potential market of HS 3306 for Thailand would be extra ASEAN market in the future. The trends of HS 3306 export value of Thailand to intra ASEAN countries, extra ASEAN, and in the world markets were 113.62%, 284.26 %, and 189.17%, respectively compared between 2007 (before ASEAN harmonization) and in 2013 (after 6 years ASEAN harmonization implementation). This means that

ASEAN exported a lot of HS 3306 to all markets during the 6 years after ASEAN harmonization. In 2013, the export growth rates of HS 3306 of Thailand to intra ASEAN market dropped to -10.40%, but they increased to 11.67%, and 1.39 % extra ASEAN, and in the world market respectively. The result showed that the trend of export of HS 3306 of Thailand to all markets decreased significantly during 2012-2013.

Thailand had positive trade balance of both intra- and extra AEAN markets for this category during 2007-2013. The export values of intra-and extra- ASEAN markets were similar. For importation, Thailand imported the HS 3306 from extra ASEAN market higher than intra ASEAN market. Thailand was the biggest exporting country for HS 3306 in the region in 2013. Its export value was more than 7 times of its import value. Only Thailand, Indonesia and Vietnam had the positive trade balance for this category. The trade balances of the other countries were negative. (Figure 23)

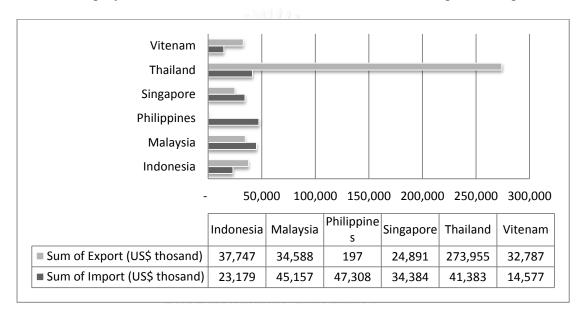


Figure 23 HS 3306 import and export of the 6 leading countries to the world market in 2013.

The top 5 countries, which Thailand exported HS 3306 to, were Philippines, Australia, Malaysia, Japan, and Hong Kong. For Vietnam, the exported markets were Ghana, Thailand, Philippines, South Africa, and Cambodia. For Indonesia, its markets were Philippines, Malaysia, Kenya, Singapore, and Uganda.

It could be noticed that there are potential markets for Thailand in Singapore, Ghana, South Africa, Kenya, and Uganda for HS 3306 products.

Reveal Competitiveness Advantage (RCA)

The RCA of HS 3306 was calculated from secondary data gathered from the International Trade Center. The result has been shown in Table 57.

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Countries	RCA of HS 3306									
Countries	2007	2008	2009	2010	2011	2012	2013			
Indonesia	1.40	1.02	1.40	1.79	1.30	1.13	1.18			
Malaysia	0.52	0.73	0.69	0.63	0.86	1.01	1.31			
Philippines	0.10	0.07	0.07	0.01	0.03	0.06	0.01			
Singapore	0.19	0.17	0.20	0.19	0.15	0.14	0.11			
Thailand	1.56	1.67	1.51	1.56	1.64	1.69	2.09			
Vietnam	7.20	5.60	4.74	3.48	2.72	1.87	2.89			

Thailand, Indonesia, and Vietnam were the only countries in which their RCA values were more than 1 during the 7 years of 2007-2013. Malaysia used to have the RCA less than 1 during 2007-2011, but its RCA increased to over 1 during 2012-2013. The interesting country is Vietnam, in which its RCA in this category was much higher than 1 during 2010-2013. Also, Vietnam's RCA was the same as of Thailand in 2013. This meant there are many countries in the ASEAN region which had reveal competiveness advantage on exportation of the HS 3306. Vietnam is another hot spot in the future to be focused on as the production base for this category in the region. Therefore, Thailand needs to ensure that it can maintain its production base and export values in order to maintain its competitiveness of this category. The huge support from the relevant parties may be required.

The Market Share (MS)

The market share of HS 3306 was calculated and has been shown in the Figure 24.

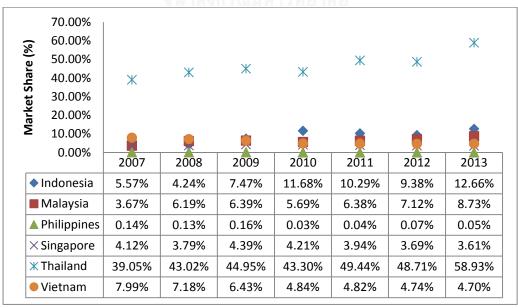


Figure 24 The market share of 3306 of 6 leading countries intra ASEAN market during 2007-2013.

For the market share of HS 3306, Thailand had MS more than 40% during the 7 years of 2007-2012, and it increased to more than 50% in 2013. Indonesia gained MS more than 10% in 2013. For Thailand, the trend of MS gained was high and may slightly increase in the future. This means Thailand had high competitiveness in selling the HS 3306 category in the region compared to other member states. However, in order to maintain this excellent competitiveness in selling, the support is needed.

RCA and MS interpretation

For the HS 3306 of Thailand, the RCA was more than 1 and the MS was also more than 40% during 2007-2012, and gained more market share more than 50% in the region in 2013. From this could be interpreted that Thailand has more market share with the high competitiveness and still has potential to gain more market share in the future for this category.

5. HS 3307

ASEAN General Overview of HS 3307

ASEAN region had positive trade balance to extra ASEAN market in HS 3307 category during 2007-2013. However, the import and export values were similar. (Table 58)

Table 58 the import/export/trade balance of HS 3307 of ASEAN intra-, and extra ASEAN market

Year	Intra	Intra ASEAN (mil US\$)			Extra ASEAN (mil US\$)			
1 Cai	Import	Export	TB	Import	Export	TB		
		CHULALO	ugkorn U	NIVERSITY				
2007	90.15	139.48	49.33	243.81	276.29	32.47		
2008	123.64	182.82	59.18	237.66	274.94	37.27		
2009	119.76	149.95	30.19	196.51	291.66	95.15		
2010	149.79	170.54	20.75	225.41	351.01	125.60		
2011	163.99	204.65	40.66	289.76	417.57	127.81		
2012	161.21	214.79	53.59	333.61	431.90	98.30		
2013	140.94	221.81	80.87	322.07	398.18	76.12		

Table 59 the import/export/trade balance of HS 3307 of ASEAN in the World market

Year	World (% GR)				
rear	Import	Export	TB		
2007	n/a	n/a	n/a		
2008	8.19	10.10	17.90		
2009	-12.46	-3.53	29.95		
2010	18.63	18.10	16.76		
2011	20.93	19.30	15.11		
2012	9.05	3.94	-9.85		
2013	-6.43	-4.13	3.36		
6 Years GR; 2013 vs 2007	38.64	49.12	91.88		

The growth rate of import, export, and trade balance of HS 3307 of ASEAN region in all markets; intra-, extra-, and in the world market has been shown in Table 60-61.

Table 60 Growth Rate of HS 3307 of ASEAN intra-, and extra- ASEAN markets

	Intra ASEAN (% GR)			Extra ASEAN (% GR)		
Year	Import	Export	TB	Import	Export	TB
2007	n/a	n/a	n/a	n/a	n/a	n/a
2008	37.15	31.07	19.97	-2.52	-0.49	14.78
2009	-3.14	-17.98	-48.99	-17.31	6.08	155.30
2010	25.08	13.73	-31.27	14.71	20.35	32.00
2011	9.48	20.00	95.95	28.55	18.96	1.76
2012	-1.70	4.95	31.80	15.13	3.43	-23.09
2013	-12.57	3.27	50.91	-3.46	-7.81	-22.56
6 Years GR; 2013 vs 2007	56.34	59.03	63.94	32.10	44.12	134.43

Table 61 Growth Rate of HS 3307 of ASEAN in the World market

Year	World (mil US\$)				
Y ear	Import	Export	TB		
2007	333.96	415.77	81.81		
2008	361.30	457.75	96.45		
2009	316.27	441.61	125.34		
2010	375.20	521.55	146.35		
2011	453.74	622.21	168.47		
2012	494.82	646.70	151.88		
2013	463.01	619.99	156.98		

As a region, ASEAN gained trade balance of HS 3307 intra-, extra ASEAN, and in the world markets during the 7 years of 2007-2013. However, the growth rate of the trade balance decreased to negative rate in extra ASEAN market in 2013. This meant the HS 3307 trended to be imported more from the extra ASEAN market.

For import, ASEAN region imported the HS 3307 products from extra ASEAN market around 2 times higher than from the from intra ASEAN market. The trend of HS 3307 import value of ASEAN from intra ASEAN countries, extra ASEAN, and in the world markets were increased significantly 56.34%, 32.10 %, and 38.64%, respectively compared between 2007 and 2013. The result showed that ASEAN consumers still consumed a lot of HS 3307 products from extra ASEAN markets. In 2013, the import growth rates of ASEAN region from intra ASEAN market, extra ASEAN market, and the world market were quite low which were -12.57%, -3.96%, and -6.43%, respectively. This meant that the importation of HS 3307 from all markets was decreased from 2012 to 2013.

For export, ASEAN exported the HS 3307 to extra ASEAN market 2 times of the exportation to intra ASEAN market. This meant the extra ASEAN was still considered the bigger potential market for HS 3307 for the ASEAN region. The trend of HS 3307 export value of ASEAN from intra ASEAN countries, extra ASEAN, and world markets were 59.03%, 44.12 %, and 49.12%, respectively compared between 2007 (before ASEAN harmonization) and in 2013 (after 6 years ASEAN harmonization implementation). This meant the ASEAN exported a lot of HS 3307 to all markets during the 6 years after ASEAN harmonization. In 2013, the export growth rates of HS 3307 of ASEAN region to intra ASEAN market, extra ASEAN market, and the world market were 27.11 %, -30.29%, and 5.63%, respectively. This result showed that the export to intra ASEAN market continuously increased while the export to extra ASEAN market dropped in 2013.

The study showed that ASEAN consumers demanded the HS 3307 sourced from extra ASEAN markets more than the products sourced from intra ASEAN market.

For Thailand, the HS 3307 of Thailand intra- and extra ASEAN and world markets during the 7 years of 2007-2013 have been shown in the Table 62-63.

Table 62 Thailand HS 3307 import/export/trade balance intra-, and extra ASEAN market during 2007-2013

Year	Intra ASEAN (mil US\$)			Extra ASEAN (mil US\$)			
rear	Import	Export	TB	Import	Export	TB	
2007	11.26	24.49	13.23	18.86	102.26	83.40	
2008	14.29	33.41	19.12	23.41	89.78	66.38	
2009	11.82	37.25	25.43	22.32	91.91	69.59	
2010	16.80	40.66	23.85	35.34	96.01	60.66	
2011	17.63	50.83	33.20	51.51	144.21	92.70	
2012	17.99	55.96	37.97	54.30	148.97	94.67	
2013	21.35	57.00	35.65	54.14	156.81	102.67	

Table 63 Thailand HS 3307 import/export/trade balance in the world market during 2007-2013

Year	World (mil US\$)					
1 cal	Import	Export	TB			
2007	30.12	126.74	96.62			
2008	37.70	123.19	85.49			
2009	34.14	129.16	95.02			
2010	52.15	136.66	84.52			
2011	69.14	195.04	125.90			
2012	72.29	204.93	132.64			
2013	75.49	213.81	138.33			

The growth rate of import, export, and trade balance of HS 3307 of Thailand in all markets; intra-, extra-, and in the world market has been shown in Table 63.

Table 64 Growth Rate of HS 3307 of ASEAN

		EXGR-		IMGR-	EXGR-	TBGR-	IMGR-	EXGR-	TBGR-
Year	IMGR-A	A	TBGR-A	NA	NA	NA	W	W	W
2007	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
2009	-17.28	11.49	33.00	-4.66	2.37	4.84	-9.44	4.85	11.15
2010	42.13	9.15	-6.21	58.33	4.46	-12.83	52.75	5.81	-11.05
2011	4.94	25.01	39.20	45.76	50.20	52.82	32.58	42.72	48.96
2012	2.04	10.09	14.37	5.42	3.30	2.13	4.56	5.07	5.35
2013	18.68	1.86	-6.11	-0.29	5.26	8.45	4.43	4.33	4.29
6 years GR: 2013 vs 2007	89.61	132.75	169.46	187.06	53.34	23.11	150.63	68.70	43.17

Remark: IMGR: Growth Rate of Import, EXGR: Growth Rate of Export, TBGR: Growth Rate of Trade Balance, A: Intra ASEAN market, NA: Extra ASEAN Market, W: World Market

For Thailand, it gained trade balance of HS 3307 in all markets during the 7 years of 2007-2013. However, the trade balance growth rate negatively decreased in intra ASEAN markets in 2013. This meant the trend of HS 3307 trading balance of Thailand with intra ASEAN markets was stabilized and may possibly decrease in the future.

For import, Thailand imported the HS 3307 from extra ASEAN market around 2-3 times of the products sourced from intra ASEAN markets. This showed that Thai consumers demanded imported products from extra ASEAN markets rather than products sourced from ASEAN countries. The trend of HS 3307 import value of Thailand from intra ASEAN countries, extra ASEAN, and in the world markets increased significantly 89.61%, 187.06 %, and 150.63%, respectively compared between 2007 and 2013. The result also showed that Thai consumers still consumed a lot of HS 3307 imported products. In 2013, the import growth rates of Thailand from intra ASEAN market, extra ASEAN market, and the world market were quite low which were 18.68%, -0.29%, and 4.43%, respectively. The data showed that Thailand continuously highly imported HS 3307 products from intra ASEAN markets. Also it tended to import less from extra ASEAN market for this category.

For export, Thailand exported the HS 3307 to extra ASEAN market 2-3 times higher than exportation to the intra ASEAN market. This meant that the potential market of HS 3307 for Thailand would still be extra ASEAN. The trend of HS 3307 export value of Thailand to intra ASEAN countries, extra ASEAN, and in the world markets were 132.75%, 53.34 %, and 68.70%, respectively compared between 2007 (before ASEAN harmonization) and in 2013 (after 6 years ASEAN harmonization implementation). This meant the ASEAN exported a lot of HS 3307 to all markets during the 6 years after ASEAN harmonization. In 2013, the export growth rates of HS 3307 of Thailand to intra-, extra ASEAN, and world markets were 1.86%, 5.26%, and 4.33 %, respectively. The result showed that the trend of export of HS 3307 of

Thailand increased continuously in extra ASEAN market, but it little dropped a little for intra ASEAN and in the world markets.

Thailand had positive trade balance of both intra- and extra ASEAN markets for this category during 2007-2013. The export values to extra- ASEAN markets were about 3 times higher than intra-ASEAN market. This meant that Thailand's export markets of HS 3307 were extra-ASEAN countries. For importation, Thailand imported the HS 3307 from extra ASEAN market about 2 times higher than from intra ASEAN market. Thailand was the biggest exporting country in the region in 2013. Its export value was more than 3 times of its import value. In ASEAN, there were Thailand, Singapore, Vietnam, and Philippines which had the positive trade balance of this category. Malaysia and Indonesia had negative trade balance. (Figure 25)

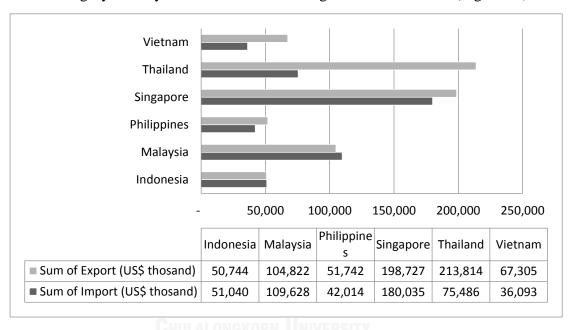


Figure 25 HS 3307 import and export to the world market in 2013.

The top 5 countries, which Thailand exported HS 3307 to were Japan, Vietnam, Malaysia, Australia, and Myanmar. The exported markets for Singapore were Indonesia, Hong Kong, Malaysia, Philippines, and Japan. Thailand and Singapore had the same markets of Japan and Malaysia.

Reveal Competitiveness Advantage (RCA)

The RCA of HS 3307 was calculated from secondary data from the International Trade Center. The result has been shown in Table 84.

Table 65 RCA of HS 3307

Countries			RO	CA of HS 33	307		
Countries	2007	2008	2009	2010	2011	2012	2013
Indonesia	0.58	0.52	0.58	0.64	0.68	0.66	0.55
Malaysia	2.05	1.80	2.07	2.21	2.52	2.73	3.15
Philippines	3.05	2.74	2.58	2.87	2.52	3.23	0.69
Singapore	1.26	1.22	1.05	0.87	0.95	0.88	0.98
Thailand	0.42	0.46	0.58	0.60	0.62	0.66	0.76
Vietnam	1.11	1.72	1.05	1.76	1.81	1.29	3.27

Malaysia and Vietnam were the only countries which had their RCA values more than 1 during the 7 years of 2007-2013. Philippines used to have the RCA more than 1 during 2007-2012, but it dropped to be less than 1 in 2013. Thailand had the RCA less than 1 during the 7 years of 2007-2013.

This meant Thailand has less reveal competiveness advantage on exportation of the HS 3307 compared to Malaysia and Vietnam. In order to increase its competitiveness of this category, a huge support from the relevant parties is needed.

The Market Share (MS)

The MS of HS 3307 was calculated from secondary data from the International Trade Center. The result has been shown in Figure 26.

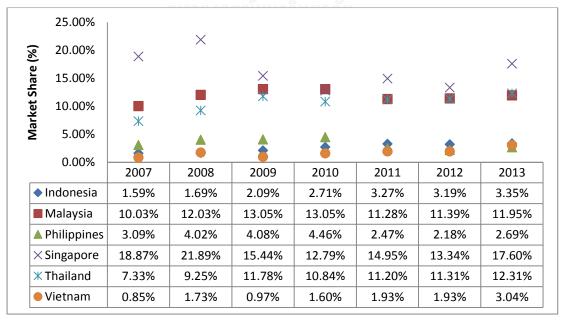


Figure 26 The market share of 3307 of 6 leading countries intra ASEAN market during 2007-2013.

For the market share of HS 3307, Singapore, Thailand and Malaysia had MS more than 10% during the 7 years of 2009-2013.

For Thailand, the trend of MS gained was high and may slightly increase in the future. This means Thailand had high competitiveness in selling the HS 3307 category in the region. Supports is also needed.

RCA and MS interpretation

For the HS 3307 of Thailand, the RCA was less than 1, but the MS was also more than 10% during the 7 years of 2007-2013. From this could be interpreted that even Thailand had the MS higher than other leading countries. Thailand's competitiveness may still tend to decrease in the future. There are other leading countries, i.e. Malaysia and Vietnam which had high RCA, which means Thailand may have to apply more effort in order to increase its RCA and its market share in the future.

High Potential Product Category Selection for Further Study

From the quantitative study result in part 2, the potential products selected for further study were HS 3304 and HS 3305 with the following criteria.

- 1. Major Impact to the total cosmetics of the country
- 2. High market share but less RCA to improved.
- 3. High market share and high RCA to maintain

HS 3304

This category was selected for further competitiveness study by using Diamond model because it was the biggest cosmetic category in the market in terms of trade values, but Thailand had market share less than 10% during the 7 years of 2007-2013. Thailand market share was close to 10% during 7 years which was ranked number 2 after Singapore which had market share more than 10% during 2007-2013. Thailand had RCA less than 1 during 2007-2013. Philippines was the key competitor of Thailand because it had RCA more than 1 during 2007-2013, and it had its market share increased to 6% in 2013. To increase Thailand competitiveness, and market share, the following questions required clarification.

- 1. Thailand was import oriented for HS 3304 from extra ASEAN market. It imported a lot of products from France, USA, and Japan. Does this reflect the demand of Thai consumers?
- 2. To enhance Thailand exportation, or to reduce the Thailand importation, what would be the country's strategy?
- 3. How to promote the use of local products instead of imported products?
- 4. How to improve the local made product quality and technology and R&D of this category, what is the weakness or threat?
- 5. If Thailand would like to export its products to extra ASEAN market, what are the major improvements and supports required?

- 6. Does the FTA with extra ASEAN i.e. ASEAN+3, ASEAN+6, ASEAN China, and other bilateral trade agreements have benefits for Thailand exportation?
- 7. Does Thailand have enough productivity and serve the consumer's need?
- 8. Does the local industry realize the AEC as well as trades benefits from the FTA?
- 9. For intra ASEAN market, what were the strengths and weaknesses of Thailand for this category?
- 10. For extra-ASEAN market, what were the strengths and weaknesses of Thailand of this category?
- 11. Does Thailand have enough skilled labor, R&D, Production, QA, RA, GMP experts for this category?
- 12. Does Thailand have enough support on local investment for this category?
- 13. Does Thailand have good technology, and good database to support industry?
- 14. Does Thailand have good basic infrastructure i.e. logistic, transportation, communication, electric, health, water, etcetera.?
- 15. What do the Thai consumers' demand from cosmetics?
- 16. Which factors are important for Thai people selection of skin care products? Do they want better price, quality, or do they have specific needs?
- 17. Which factors are necessary for ASEAN consumers' selection of skin care products? Do they want better price, quality, or do they have specific needs?
- 18. What factor may motivate a foreign investor to move their manufacturing to other countries?
- 19. What is the adjustment of Thai business to AEC next year? Will they reduce cost, and / or improve production quality?
- 20. What are the problems or barriers for this category for Thailand to be a part of AEC next year?

HS 3305

The HS 3305 was selected for further competitiveness study by using Diamond model because Thailand is the biggest source of the products of the region. Also Thailand gained market share more than 60% during 2010-2013. However, it seems the MS dropped in 2013. Thailand needs to put its effort to maintain the high competitiveness for this category. It is worthwhile to maintain the MS of this business sector, because the HS 3305 is a big size of cosmetic business ranking in number 3 behind HS 3304, and HS 3303 worldwide.

- 1. What is the key success for this category of Thailand exportation in terms of productivity factors?
- 2. What is the trend of consumers' demand for this category in the future?

- 3. What are the supports needed by this category for exportation?
- 4. Is there any specific country strategy for this category?
- 5. What companies can contribute to the high export value? Should the focus be on multinational companies or SMEs?
- 6. For sustainable growth, does Thailand need to improve the SME for this sector?
- 7. Why have multinational companies selected Thailand as a production base for this category?
- 8. Does the government have special support for this category? How?
- 9. What are the key factors which support Thailand competitiveness for this category?
- 10. What support is required to maintain and/or expand this business sector?
- 11. Can the success factors of HS 3305 be applied for other categories?

Potential Markets for HS 3304 and HS 3305

HS 3304

The imported HS 3304 products demand by ASEAN member states has been shown in Table 66.

Table 66 HS 3304 import from intra-, extra ASEAN, and world market by ASEAN member states in 2013 (Thousand US\$)

Countries	Intra ASEAN	Extra ASEAN	World Market
Brunei	ลู้ M เยสา	GMEL MP992EL	เสย
Darussalam	21,177	2,561	23,738
Indonesia	58,278	116,121	174,399
Malaysia	63,236	231,284	294,520
Philippines	38,202	33,496	71,698
Singapore	69,556	1,120,036	1,189,592
Thailand	59,181	448,024	507,205
Grand Total	309,630	1,951,522	2,261,152

The data from the above table shows the product demand of imported HS 3304 from the intra-, extra ASEAN markets, and world market of the ASEAN member states. It was found that Singapore, Malaysia, and Thailand were the top 3

markets where huge amounts of the HS 3304 were imported from intra-, extra ASEAN, and world markets in 2013.

The country in ASEAN which supplied amounts of HS 3304 to all markets, for 2013 has been shown in Table 67.

Table 67 HS 3304 exported by ASEAN member states to intra-, extra ASEAN, and world market in 2013 (Thousand US\$)

Countries	Intra ASEAN	Extra ASEAN	World Market
Brunei Darussalam	37	19	56
Indonesia	87,258	49,516	136,774
Malaysia	54,360	58,179	112,539
Philippines	144,198	10,086	154,284
Singapore	387,012	1,589,919	1,976,931
Thailand	160,071	280,845	440,916
Grand Total	832,936	1,988,564	2,821,500

The data from the above table shows the source of HS 3304 exportation in ASEAN. The top 3 sources of exportation of HS 3304 to intra ASEAN, and world markets in 2013 were Singapore, Thailand, and Philippines. However, the top 3 exporting countries to extra ASEAN market in 2013 were Singapore, Thailand, and Malaysia. Philippines exported less to extra ASEAN market.

The top 5 countries which each key member states imported and exported its HS 3304 to and from the world markets in 2013 has been shown in Table 70.

Table 68 Top 5 HS 3304 imported and exported countries of the ASEAN leading countries $\frac{1}{2}$

	HS3304 (US\$ thousand)	
	In	donesia	
Country	Import		Export
Thailand United States of	46,845	Singapore	29,149
America	22,814	Thailand	26,946
France	19,775	Malaysia	19,053
United Kingdom	15,310	Hong Kong, China	13,136
Japan	15,244	Philippines	10,081
	M	alaysia	
Country United States of	Import		Export
America	37,348	Singapore	28,164
Japan	32,971	Hong Kong, China	14,064
France	28,622	Thailand	9,442
Thailand	28,619	Indonesia	9,373
Korea, Republic of	24,437	United Arab Emirates	6,035
	a w la vi Phi	ilippines	
Country	Import	CORN UNIVERSITY	Export
Thailand	18,920	Malaysia	140,645
Indonesia	10,406	Singapore	2,432
China	9,549	United Arab Emirates	1,640
Singapore United States of	6,512	United States of America	1,592
America	6,448	Australia	1,137

Table 68 Top 5 HS 3304 imported and exported countries of the ASEAN leading countries (Cont.)

	-	Singapore	
Country	Import		Export
France	598,110	Korea, Republic of	409,797
Japan	164,335	Hong Kong, China	350,309
Germany	63,339	China	326,778
United Kingdom	60,435	Japan	201,374
China	48,565	Thailand	163,134
		Thailand	
Country	Import	Country	Export
France United States of	100,922	United Kingdom	61,361
America	88,726	Indonesia	40,678
Japan	76,765	Cambodia	30,801
Indonesia	44,894	Malaysia	27,534
United Kingdom	41,208	Myanmar	25,924
	จูฬาลงก	Vietnam amanaia	
Country	Import		Export
Thailand	26,551	Japan	7,279
Korea, Republic of	12,846	Philippines	1,679
France	7,590	Singapore	964
Japan	5,963	China	901
Canada	2,045	Hong Kong, China	783

From the study results from RCA and MS from part II, the competitors of Thailand for the HS 3304 were as follows.

- 1. Philippines
- 2. Indonesia
- 3. Singapore

For this study, there were only the RCA and MS data available which resulted from Part II of this study and were used to identify competitors of Thailand from intra ASEAN region. Therefore, the competitors identified for HS 3304 were selected based on such available data. A competitor means a country which had higher RCA than Thailand on that category. This means those countries had more comparative advantage on their exportation to ASEAN market than Thailand. If a country has RCA more than 1, it means that country has comparative advantage on exportation higher than Thailand. Those countries were then classified as the competitors. After the competitors had been identified, then the details of import and export of the trade partners of those identified competitors were reviewed. Based on the assumption that cosmetic products were the same type/category, if the competitors could export their products to the markets which Thailand had never imported its products to, this meant those markets could be classified as future potential markets for Thailand of that particular category.

The new potential markets of HS 3304 for Thailand from intra-, and extra ASEAN markets are as follows.

- a) Intra ASEAN market: Malaysia, Singapore, and Philippines
- b) Extra ASEAN market: Hong Kong, United of Arab Emirates, USA, and Australia

HS 3305

The imported HS 3305 products demanded by ASEAN member states have been shown in Table 69.

Table 69 HS 3305 import from intra-, extra ASEAN, and world market by ASEAN member states in 2013 (Thousand US\$)

Countries	Intra ASEAN	Extra ASEAN	World Market
Brunei Darussalam	4,553	340	4,893
Indonesia	138,556	31,225	169,781
Malaysia	75,505	47,497	123,002
Philippines	30,210	7,455	37,665
Singapore	40,614	68,112	108,726
Thailand	20,808	65,976	86,784
Grand Total	310,246	220,605	530,851

The data from the above table shows the product demand of imported HS 3305 from the intra-, extra ASEAN markets, and world market of the ASEAN member states. It was found that Indonesia, Malaysia, and Singapore were the top 3

markets where huge amounts of the HS 3305 were imported from intra ASEAN and world markets. The top 3 ASEAN countries which imported HS 3305 from extra ASEAN market were Singapore, Thailand, and Malaysia.

Table 70 has shown the ASEAN countries which supplied HS 3305 to all markets in 2013.

Table 70 HS 3305 exported by ASEAN member state to intra-, extra ASEAN, and world market in 2013 (Thousand US\$)

	Intra		
Countries	ASEAN	Extra ASEAN	World Market
Brunei			
Darussalam	1		1
Indonesia	33,666	23,512	57,178
Malaysia	24,007	20,183	44,190
Philippines	536	10,357	10,893
Singapore	24,709	39,390	64,099
Thailand	327,269	632,888	960,157
Grand Total	410,188	726,330	1,136,518

The data from the above table has shown the source of HS 3305 exportation in ASEAN. It has clearly shown that Thailand was the only big player in the region for exportation of HS 3305 to all markets. There gaps were too high between Thailand and the exportation of the 2nd and 3rd countries. From this, it may be said that Thailand is a dominant export base of the HS 3305 in the region.

The top 5 countries which each key member states imported and exported its HS 3305 to and from the world markets in 2013 has been shown below.

Table 71 Top 5 HS 3305 imported and exported countries of the ASEAN leading countries

	•	US\$ thousand)	
Country	Ind Import	onesia	Export
Thailand	135,109	Thailand	11,124
China	20,657	Malaysia	10,487
Spain	2,479	Philippines	7,940
Viet Nam	2,373	United Arab Emirates	5,868
India	2,304	Yemen	3,988
	Ma	laysia	
Country	Import		Export
Thailand	64,929	Singapore	14,296
China	13,073	Thailand	3,917
Indonesia	8,743	Australia	2,678
Japan	5,809	Hong Kong, China	2,677
United States of			
America	4,852	Indonesia	2,295

Table 71 Top 5 HS 3305 imported and exported countries of the ASEAN leading countries (Cont.)

Philippines			
Country	Import		Export
-		United States of	_
Thailand	21,717	America	6,126
Indonesia	7,375	United Arab Emirates	2,536
China	3,513	Japan	433
United States of			
America	1,583	Saudi Arabia	294
Singapore	1,039	Indonesia	205
	Sin	gapore	
Country	Import		Export
Thailand	33,487	Malaysia	15,100
United States of			
America	15,644		5,841
Japan	8,286	Pakistan	5,689
India	5,318	Korea, Republic of	5,485
China	4,615	Australia	4,497
		JS\$ thousand)	
	Th	ailand	
Country	Import	Country	Export
Germany	17,663	Japan	381,599
Indonesia	14,344	Indonesia	120,777
Japan	11,732	Malaysia	65,668
China	10,999	Philippines	64,239
United States of		**	
America	6,801	Australia	57,980
	Vic	etnam	
Country	Import	zuiaili	Export
Thailand	9,741	Philippines	22,263
Italy	*	Japan	13,509
United States of	3,214	Japan	15,509
America	2,514	Cambodia	4,443
Korea, Republic of	2,217	Singapore	3,895
Malaysia	1,499	China	2,375
1.1uiu j biu	1,777	Cilliu	2,373

From the study results from RCA and MS from part II, the competitors of Thailand on the HS 3305 were as follows.

- 1. Indonesia
- 2. Vietnam

3. Singapore

For this study, there was only the RCA and MS data available which result from Part II of this study and used to identify competitors of Thailand from intra ASEAN region. Therefore, the competitors identified for HS 3304 were selected based on that available data. A competitor meant a country which had higher RCA than Thailand in that category. It meant those countries had more comparative advantage for their exportation to ASEAN market than Thailand. If the countries had RCA more than 1, those countries had comparative advantage on exportation higher than Thailand. Those countries were then classified as the competitors. After the competitors were identified, then the details of import and export of the trade partners of those identified competitors were reviewed. Based on the assumption that cosmetic products were the same type/category, if the competitors could export their products to the markets which Thailand had never imported its products to, this meant such markets could be classified as future potential markets of Thailand for that particular category.

From the study, the new potential markets of HS 3305 of Thailand from intra-, and extra ASEAN markets are as follows.

- a) Intra ASEAN market: Malaysia, Singapore, Philippines, and Cambodia
- b) Extra ASEAN market: United Arab Emirate, Yemen, Japan, Australia, Hong Kong, and China

Part III: The Country Competitiveness Evaluation and Potential Markets via the Diamond Model

The HS 3304 and HS 3305 were selected from Part II for further study by Diamond Model and SWOT. The in-depth interviews with the questionnaires developed from economic model of Michael E. Porter namely Diamond Model were performed with the purposive samples. The study results and discussion including the SWOT analysis of each category could be found in Table 73

All purposive samples confirmed that the Diamond Model factors which impacted to HS 3304 and HS 3305 of Thailand were not different. Therefore, there it was not necessary to separate the study result from HS 3304 and HS 3305. However, the only different between HS 3304 and HS 3305 was the nature of the products which are as follows. (Table 72)

Table 72 The difference between HS 3304 and HS 3305

Description	HS 3304	HS 3305
1 Market Size intra	2,000 mil US\$ (Biggest	500 mil US\$ (ranking #3
ASEAN	category in all markets)	behind HS 3303)
2.Thailand Market Share	ASEAN leader with market	ASEAN leader with
Status	share around 10% of the	market share around
	world products consumed	60% of the world
	by ASEAN consumers	products consumed by
	ranking number 2 behind	ASEAN consumers
	Singapore which shared	ranking number 1 market
	20% of the market.	share leader in ASEAN market.
3.RCA of Thailand	Less than 1 during 7 years of 2007-2013. 2013 was the worst year of Thailand with	More than 1 during the 7 years of 2007-2013. No main competitors, only
	the RCA 0.57, less than	Vietnam had RCA more
	Philippines, Singapore, Indonesia, and Malaysia.	than 1 during 2010-2013 after Thailand.
4.Product Nature	Variety of products for consumer selection;	Less variety of products compared with HS 3304.
	premium, mass, and cosmetoceutics. The	The products could be classified as necessary
0	medium and high income	for daily use products for
W.	people tend to use the	all people, sexes and
_	premium imported branded	ages.
จู พ	products. Brand loyalty, and	
Сиш	less switching.	
5.Thailand Context	How to expand the market	How to expand or at
	share and increase the	least to keep market
	competitiveness of this	share and
	category?	competitiveness of the
		country in this category.

With the country context and need for the improvement of HS 3304 and for the good maintenance of HS 3305, the evaluation made by the 6 purposive samples who understand well about the country context, regional and world cosmetic business situation have been presented in Table 78.

Table 73 Diamond Model Evaluation

Diamond	Evaluation
Elements 1.Government	Supports
Factor	Supports:
-Supporting	1. Department of Industrial Promotion, Ministry of Industry; to
-Barriers to	train the SMEs who just started the business.
trades	Just survey the control of the contr
-Protection	2.Community Development Department, Ministry of Interior;
Country	provided special support for SMEs and OTOPs and the use of
Economics	Thai herbal products
	3. Ministry of Agriculture and Cooperatives; to provide financial support including technology and equipment.
	4. Department of Intellectual Property, Ministry of Commerce; R&D competition awards to inspire SMEs. However, this particular event no longer occors.
	5. Department of International Trade Promotion, Ministry of Commerce; to encourage industry to expand business to international trades by arrangements for oversea trips for market visits and business matching. However, the information was not well communicated to all industries.
	Barriers to trades: Thai FDA/MSD; pre-, post- marketing controls were too stringent for SMEs.
	SME2: "Thai FDA is another barrier to trade i.e. the product name, this is an unnecessary process which happens for export only products because only the exported products should be supported by government, and the control should be subject to the exported country. These country specific requirements were sometime barriers for exportation."
	"To encourage the investment in Thailand, the department of industrial works, Ministry of Industry should support the industry on the plant setting up and approval. The process should not be too complicate or take too long time for the SMEs."
	"The Department of Trade promotion, Ministry of Commerce, sets up the criteria for the support of the SMEs on business matching and exportation. There are currently only 30% of industries which have met the requirements of the MOC. In the previous government, the OTOP products were promoted for

Table 73 Diamond Model Evaluation (Cont.)

Diamond	Evaluation
Elements	
	exportation. The roadshow and business matching was made for OTOP, but there were a lot of problems because when the business was agreed with the foreign trade partners, the OTOP industry did not have ability to supply the products as committed. This created a loss of Thai credibility on exportation at that time. To prevent such problems, since then the MOC has to filter all industries before business matching and support for the exportation exhibition events in the foreign countries. The problem of the OTOPs was not just their ability, but also other factor i.e. product quality, English communication, the intra management and production.
	LL1: "Tax 20-30% of imported raw materials requires government to re-consider cosmetics tax policy for raw materials".
	LL2: "Thailand started its cosmetic industry 20 years ago. The continuous improvement has made Thailand stronger than other countries in this sector. However, to improve the country competitiveness for both categories, the following supports are required from government; (i) Government should take the role of the project director for long term cosmetic business development. The goal and roadmap must be clear. All related parties should know their roles and responsibilities. For example, the IT and entertainment businesses of Korea entered the world market successfully because of the good support from government. The direction from government must be clear for all parties. Since, other factors are ready to move on, but the project owners required direction and support from government sector".
	PS: "The government should analyse the pros and cons before publishing the bad news about cosmetics of Thailand because the impact from the bad news has a negative consequential impact to the whole industry. The end consumers and the world markets started to question about the quality and safety of Thai products. The illegal companies should be punished, and the PR activities should also be done appropriately in order to promote the "products of Thailand" and build the trust of the world markets. Protections Currently, there is no a barrier or protection criterio from
	Currently, there is no a barrier or protection criteria from government agencies for cosmetic sector

Table 73 Diamond Model Evaluation (Cont.)

Diamond	Evaluation
Elements	
2.Demand Conditions	1. Key players of both HS 3304 and HS 3305 are multinational companies (MNCs). The local large companies and SMEs are not considered as the key players for Thailand cosmetic industry at the present time. The MNCs products cover all cosmetic types in all markets including mass, premium and cosmetoceutical cosmetics.
	2. To build the local brands to be equal with the MNCs may take more than 10 years. The Thai people still like to use the imported products particularly Korean and Japanese products. Thai people connect to the brands. That's why the consumer goods which they use regularly in daily life are still the products of MNCs which have strong brands. While 90% of Thai people use the MNCs products, only 10% use the local products.
	3. It was also noted that the ASEAN consumers in particular CLM trust and love the cosmetic products made in Thailand. They think that the products produced in Thailand have the high quality compared to the same brands, same products made in their own country.
	4. The unique Thai cosmetics which were accepted by extra ASEAN countries i.e. in the EU, US are mostly the original Thai herbal and spa products. These products were perceived as premium products and well known worldwide. Thai herb products may be able to expand its market with the combination of the related industry i.e. spa, hotel, massage, and beauty treatment medical programs.
	SME2. "Middle-High incomes of people tend to use imported products in particular HS 3304. For HS 3305 which is the routinely used products, the perception and trust of consumers to the MNC brands are still high (80-90% of sales volumes are from the MNCs, 10% from SMEs). Consumers considered hair products as general goods for daily life use while skin care products are for beauty. Fewer consumers switch the hair products while consumers are always ready to try the new skin care products. The brand switching happens with skin products more frequently than hair products."
	LL1: "There are still potential to grow of both HS 3304 and HS 3305. For the niche products, if the brand is built strongly, the potential markets would be worldwide. Customers will walk into the country for the niche products, no need to go out for nocked door businesses. In Asia, Japan, Korea, Taiwan are

Table 73 Diamond Model Evaluation (Cont.)

potential for niche products like THANN (famous Thai natural cosmetics brand) product. Price is not a key concerned factor for this category. The uniqueness of Aromatherapy and Thai spa are demanded worldwide."
LL2: "The Thai products (both HS 3304 and HS 3305) were largely demanded by neighboring countries; Cambodia, Lao, Myanmar, and Vietnam. The consumers of those countries and Thailand have the similar daily life style. The skin products (HS 3304) were consumed by a lot of women from CLM countries because they see the Thai beauty as a model. Their perception of the beauty is the same."
MNC: "The cosmetics from Thailand are trusted by ASEAN Consumers. The new markets beyond ASEAN would be Japan, Taiwan and Korea. The European was not the good market of Thailand because of the world economic crisis. Thailand should plan for expanding its business to North American market because the ASEAN market tends to be saturated. The bilateral agreements should be more focused."
PS: "The cosmetics from Thailand are trusted by ASEAN Consumers. The total cosmetic business if Thailand per year is 250, 000 million baht (≈ US\$ 8,000 US\$). (The domestic industry (intra country market and border trades) in Thailand is 160,000 million baht (≈ US\$ 5,000). The directed exportation cosmetics are 90,000 million baht (≈3,000US\$) via customs. Also, there were around 60,000 million bath (≈ US\$ 2,000) exported via Thai borders. This means the estimated domestic business of Thailand is around 100,000 million baht (≈ US\$ 3,000) The number varied because the local businesses did not report its numbers. Since, the local companies did not report, the numbers were obtained from the research institute, which was only 60,000 million baht (≈ US\$ 2,000) for the intracountry market of Thailand which was different from the data from the President of TCMA (Thai Cosmetic Manufacturing Association). There were no reports from locally made companies, but it was estimated by the experts in commercial area that 80% percent of the domestic market was shared by the MNCs. This meant there was only 12,000-30,000 million baht (US\$ 400-1000) which were Thai made products used by Thai consumers. The amount of 60,000 million baht (US\$ 2,000 million) was exported to the borders without recording because of the threat from the exported countries i.e. Cambodia classifies cosmetics as luxury products with additional 30% tax

Table 73 Diamond Model Evaluation (Cont.)

Diamond	Evaluation
Elements	
	India has a tax policy up to 60%. With such constraints, the cosmetic products of Thailand were then shipped out to India via Myanmar border through Mandalay city. Thai products were shipped to Vietnam and China via Lao PDR and Cambodian Borders
3.Firm Strategy, Structure, and Rivalry	1. Most of SMEs' cosmetic products are fashionable products and are very fast moving. Currently, there is no brand loyalty building.
	2. The rewards and endorsement by authorities could be claimed and help to increase the trust from consumers.
	3. The product samples distributed for end consumers to gain the words of mouth have much more impact to competitiveness than print advertising and/or brochures.
	4. 90% of SMEs outsourced the R&D and production to OEMs so there was less innovation.
	5. The trend of the next 2-3 years will be cosmetics which contain Thai herbs. SMEs cannot deny the highly competitive market in which the Korean and Japanese like products have been the key products during the past 2-3 years.
	Thailand has a weak point on English communication and lacks marketing skills.
	6. That industry must dare to go out and expand its business to either intra- or extra ASEAN.
	7. The SME business does not focus on the long term business. They just want the short term success, so they do invest much on R&D. The product innovation may only be 2-3 items per year.
	8. The technology and equipment were not the business constraints of SMEs because Thailand has all equipment with reasonable prices. Also such equipment can be produced locally by Thai suppliers.
	9. There are more than 4,000 manufacturers in the country, but only 137 manufacturers have the GMP certificate. The GMP is required for exportation to some countries.
	SME2: "The strategy on exportation should be more focused on

Table 73 Diamond Model Evaluation (Cont.)

Diamond	Evaluation						
Elements							
Liements	the intra ASEAN market rather than extra ASEAN in this period of time, because the economic situations of EU and US have been down during the world economic crisis. The main potential markets should be Asia i.e. China and Indonesia in which potential users are high. Also the trusts of ASEAN consumers in Thai products are still high in particular consumers from the CLMV (Cambodia, Laos, Myanmar, and Vietnam). The belief that Thai products are high quality still exists. The bilateral trade agreements of THAILAND-China, THAILAND-Taiwan, THAILAN-Korea of 0-5% tax may induce product dumping from such countries into Thailand. The investment on R&D is less in SMEs (20-30 new items per year for Medium size, and less than 0-3 for Small size while the MNCs have an average 10,000 new products or more. The competitiveness at this stage relies on price more than quality of the products. However, the GMP is requested by the trade partners even it's not required by the government. It seems the GMP requirement is self-control by the trade partners, not from the government requirement." LL1: "Branding is value added to a product. Try to reduce cost, but keep quality. Looking for new markets, new products (10 items per year at least). There is no internal R&D. The new formulations were requested from MKT and business development and consulted R&D of suppliers. The GMP, COA (Certificate of Analysis), and Halal are necessary for some markets. There are some barriers in some markets i.e. Japan, Korea, and United States of America in which the formulation must be adjusted to comply with the local laws.						
	LL2: "If Thailand would like to be the business leader or trader like Singapore, the areas of improvements are politics, corruption, and complication of local processes including regulation, language and management skills." "Thailand has qualified R&D and advanced technology. The products from Thailand of both HS 3304 and HS 3305 have been developed with the international standards while suitable for the ASEAN skin types. The products have been developed from the needs of real use by consumers"						
	MNC: "Thailand should focus on the Thai natural and/or herbal cosmetics. This will help promote the "Made in Thailand" products. Thailand could be the leader in cosmetics "NOT" just for the finished products, but as a hub of cosmetic business of the region. If it is the regional hub on cosmetics, this will convince the investors to use Thailand to be the						

Table 73 Diamond Model Evaluation (Cont.)

Diamond	Evaluation
Elements	
	headquarters. The investors could invest on innovation, technology and equipment, raw material suppliers, services and distributors, not limited only as a production base. As a hub, Thailand should also support the industry to invest in other ASEAN countries where it has been considered cost-effective. Thailand could also be the cosmetic innovative driven economy. The strategy would combine between the cosmetic science and technology and the herbal and natural products of Thailand. The innovative driven economy will support the worlds needs which are more likely to be "Green", "Organic", "Natural", "Halal", Nano Technology", and/or related other health businesses i.e. massage and spa, tourism and fashions. The good reputation of Thailand is the "Service". This cosmetics hub could be established because actually, the exportation value is
	not the absolute competitiveness. The future actual rivalry is not ASEAN. There are new rivalries e.g China because of its labor cost advantage. To keep the MNCs which are the key players of exporters of Thailand, the support on tax incentive from BOI (Board of Investment) is required i.e. help reduce the equipment import tax, Raw materials import tax, waive the tax for legal entity of the foreign investor and treat equally as national investors. The package incentive should also be offered. Support policy is needed for local-local manufacturers on trading, financial investment, and exported channels. The investment on innovation requires a huge financial support from government. Malaysia is trying to be the hub of Halal products. The Halal registration and Halal laws tend to be mandated for Malaysia and Indonesia. These are strategies of the competitor countries".
	PS: "The intrinsic strengths of Thailand are the herbal and natural products. These are the needs of the worldwide markets. Foods and services are very successful on PR. The cosmetics are weak on PR. With this intrinsic weak point, Thailand should start promotion events on cosmetics by handing over to the world professional PR agencies which are well known worldwide and can convince the world's interested companies to come and see Thai products including to help promote the business matching for local industry. The Thai manufacturers have to develop their skills on branding, marketing, and particularly social media marketing. There are still the threats from the extrinsic factors which are the penetration of the products from China, Philippines, and Vietnam. For example, there are still cosmetics with hydroquinone and vitamin A acid placed in the central markets in Manila. These products could

Table 73 Diamond Model Evaluation (Cont.)

Diamond	Evaluation
Elements	
	still be easily accessible by end consumers. In Thailand, there
	are about 700-1000 manufacturers (considered as
	manufacturers with equipment and labors), of which only 132
	manufacturers have GMP certificate from Thai FDA. Within
	this number, 3% are considered large manufacturers (more than 200 people), 29% are medium size of manufacturers (50-200 people), and 68% are the small size of manufacturer (less than
	50 people). However, the numbers in this industry in the Thai FDA database is around 4000, because the individual person,
	OTOP, and family business have been included. The other
	limitation of local manufacturers is the limit to access market in particular modern trading countries, because the enter fees are
	too high. The SMEs could not afford such fees. Therefore, the
	major markets for the SMEs are selling their products in the foreign countries via exhibition, roadshow and/or border
	markets. The roadshow and exhibition in the foreign countries
	could help the SMEs to sell the products and to meet the local
	distributors in those countries. The major benefits at this stage
	are to sell its products. Also, when they come back they can
	have more investment budget to scale up the production. To go
	out for the roadshow and exhibition sometimes benefits for
	business matching. If the products are interesting to end
	consumers via the word of mouth, then such companies will then
	be approached by the big distributors. It is an opportunity to
	increase the export for SMEs. However, to travel abroad there
	are a lot of cost concerns. Not all companies could afford the
	traveling cost, so the president of TCMA required the
	government to arrange the events in Thailand. However, the
	event must be performed by the professional agencies i.e.
	Cosmoprof, and budgets should be shared supported by
	government".
4.Factor Conditions	1. The major factor condition of SMEs is the labor cost which has been increased to 300 baht.
	2. The raw materials must be imported on average about 98-99%. There are only 1-2% of cosmetic raw materials which can
	supplied by local manufacturers i.e. the raw materials from palm
	oil derivatives.
	3. For the packaging, both primary and secondary packaging can be supplied by Thailand local companies around 70-80%, with only 20% imported.

Table 73 Diamond Model Evaluation (Cont.)

Diamond	Evaluation
Elements	
	SME: "Thailand could not produce the cosmetic raw materials locally. Most RMs are imported and require stock planning. The logistics may be an issue if not well planned. This may risk shortage and unpredictable price from suppliers. Thailand has the best infra-structure to be the cosmetics production base. To keep the MNCs' manufacturers in the country, the political factors should be considered, and tax incentives should also be supported by the government. The best production base rankings in ASEAN are Thailand, Vietnam, and Indonesia."
	LL1: "Labor cost of 300 baht is a huge impact. The 20-30% tax of RM is also a key production factor. There are only a few THANN RM produced in Thailand which are essential oils and rice oil. Thailand is ready on infra-structure, but Vietnam is interesting because their labor cost is lower than Thailand and Vietnamese are well educated and knowledgeable."
	LL2: "Actually, the labor cost of 300 baht was not the major impact, because it finally became manageable. However, the most impact factor condition would be how to ensure the long term and sustainable business if the investors invest in the innovation. For example, the new ingredient (Thai grass) was patented by the initiator and not allowed others to produce the products composed of that ingredient. This kind of protection eliminated the country competitiveness as a whole."
	MNC: "The major factor condition of SMEs is the labor cost which has been increased to 300 baht. The raw materials must be imported on average about 98-99%. There have been only 1-2% of cosmetic raw materials which could be supplied by local manufactured company. In ASEAN, the countries which are interested for cosmetic investments are (i) Indonesia because of 1/3 population of ASEAN (250 mil), (ii) Vietnam because the main consumers have moved from low income to medium income (iii) Myanmar is another interested country because it has just opened and investors get a lot of support from government. The political issue is also a key concern of foreign investment in Thailand.
5.Related and Supporting Industries	There was a 5 years project of "cosmetic industry cluster" established by the Thai Cosmetic Manufacturing Association, and the Cosmetic Industry Group of the Federal Thai Industry composed of all related businesses;
	(i) "Upstream" are the raw materials suppliers, packaging

Table 73 Diamond Model Evaluation (Cont.)

D' I	T . 1 . 4*
Diamond Elements	Evaluation
	suppliers, and technology and equipment suppliers. (ii) "Midstream" are local manufacturers (SMEs), consultants (National Science and Technology Department Agency, Academic Sector i.e. Mahidol University and Naresuan University.) The consultants supported R&D including formulations and GMP.
	(iii) "Downstream" are product distributers to consumers i.e. there will be the "Model Shop" of the cluster supported by department of Industrial Promotion, Ministry of Commerce. This will solve the current problems in which the SME must pay the high entry fees to the middle men distributors i.e. Tesco Lotus, Seven Eleven, etcetera. The SMEs have to pay more than 40% of their gross profit (GP) which was too high and most SMEs could not afford.
	There is trading among related businesses intra a cluster. The financial management copies the country "cooperatives" system which will create the sustainable growth for SMEs. The cluster has already been officially registered under the Department of Industrial Promotion, and there was be the strategic plan set up among cluster members on Dec 12-14, 2014.
	SME2: "The "Cluster" will help negotiate the price with RM suppliers and to support SMEs which cannot have the large scale production. Packagings are still supplied from foreigner countries. There should be more investment in the country. The fast growth of "modern trades" has also impacted the cosmetic business. Because of the faster growth, more negotiations are required to get the entry free and entry requirements with "no" standard and uncontrollable requirements."
	LL1: "Hotels and spas are supporting business"
	LL2: "The country requires the cosmetic competitiveness improvement project owners. It should be from government. The project must be clear i.e. the goal of Thailand, which products need promoting. After that, the clear direction must be identified for all supporting functions from upstream, middle stream, and downstream".
	MNC: "In Thailand, currently there are two "clusters" related to cosmetics industry which are (i) the health and beauty cluster initiated by the Federal Trade Industry of Thailand. This cluster

Table 73 Diamond Model Evaluation (Cont.)

Diamond	Evaluation
Elements	
	comprises many healthcare products i.e. medical, cosmetics, traditional medicine, and biotechnology. This "cluster" was established in 2013. This cluster has only just got plans, but no actions. The purpose is to share the RM, technology, R&D, and GMP. Cosmetics is the biggest sector of this cluster sharing 90% of total business of this cluster. (ii) there is also another cosmetic cluster which was established by the Department of Industrial Support, Ministry of Industrial. This cluster is composed of only cosmetic supported businesses with around 20 companies with the concept of "Upstream", "Middle Stream", and "Downstream" businesses. This cluster has just been initiated. However, this cluster has started the clear actions and plans. This cluster comprises real related businesses which have the common concerns and issues. Therefore, they know what they need and the actions/plans settings are clear for long term and sustainable growth. The clusters must be expanded and scaled up in order to cover the whole country."

Remark: SME2: Representative from Medium size business, LL1: Representative from local large business (Niche Market), LL2: Representative from Local Lard Company, MNC, representative from multinational company, PS: President of Cosmetic Manufacturer Association of Thailand

Others Factors

- 1. Political unsustainable issues of Thailand during 2012-2013 have impacted the decision of the industry investment
- 2. Unmanageable flooding of the country in 2011 impacted the decision making on investment to select Thailand as a manufacturing base from foreign investment.

Recommendation:

Sustainable politics should within national policy.

Notice

From the study on the Diamond Model Evaluation, it was found that there were some impact factors from the Diamond Model in which 100% of the purposive samples confirmed that those factors had the same impact and/or influence to either HS 3304 or HS 3305 at the same level. Those factors were as follows.

- 1. Government Factors
- 2. Factor Conditions
- 3. Related and Supporting Industries
- 4. Other conditions

There were 2 factors which could be considered different between HS 3304 and HS 3304 as follows. The differences have already been shown in Table 94.

- 1. Demand Condition
- 2. Firm Strategy and Rivalry

The inputs from the in-depth interviews and Diamond Model Evaluation were analyzed by the SWOT analysis and SWOT matrix to obtain the proposed strategies and priority for HS 3304 and HS 3305.

SWOT Analysis:

The Thailand cosmetic industry is a main focus. The important factors which impacted on Thailand Cosmetic Competitiveness derived from the Diamond model evaluated result could then be SWOT analyzed as shown in Figure 27.

Opportunities

- 1. Thai herbal and natural products
- 2. The availability of related and supported business
- 3. GMP

Weaknesses

- 1.Language
- 2.Labour cost
- 3.Raw materials
- 4. Unsustainable business
- 5. Branding and marketing skills

Threats

Rules/Laws/Regulation (country specific requirements of trade partners)

Strengths

- 1.Trusted Products.
- 2.Qualified R&D
- 3. Advancecd Technology and equipment
- 4. Logistic hub (geograhical area)

Figure 27 The Strengths, Weaknesses, Opportunities and Threats of Thailand Cosmetic Industry

As mentioned earlier, there are more than 4,000 manufacturers in Thailand and more than 90% are SMEs. However, SMEs are not the key players of Thai cosmetic industry. The SWOT analysis from this study may contribute to the future strategy of the country which is being focused on the improvement of the local-local business.

It has been noted that the SWOT analysis was based on the information gathered from the in-depth interviews of 6 purposive samples from all types and sizes of Thai cosmetic industry. All of the purposive samples provided their inputs based on the questions developed from the Diamond Model and the quantitative study results from Part II. The subjects provided their inputs from the country's perspectives. The data from part II confirmed that 90% of the contribution to the country's cosmetic industry was from the key players which are MNCs. Parts of the analysis were mainly based on the perception of MNCs' contributors.

Strengths

From the SWOT analysis, the factors which are considered as "Strengths" of Thailand are as follows.

- 1. **Trusted Products**: Thai cosmetic products are currently trusted by the neighboring countries for product quality and in particular Indochinese countries i.e. Lao PDR, Cambodia, and Myanmar.
- 2. **Qualified R&D:** Thailand has a huge qualified resource in R&D, but the only area which required improvement was how to utilize these qualified people. The innovations on cosmetics have been continuously conducted, but fewer studies were applied for use in real business.
- 3. **Advanced Technology and Equipment:** Thailand has been known as sources of products produced from high technology and equipment. Most of the new and advanced equipment are imported, but those new technologies were then quickly transferred to the qualified resources in the country.
- 4. **Logistics Hub:** Thailand has the best location for logistics hub for the Asia region. It is the center for distribution to the world gateways according to its geographical area.

Weaknesses

- 1. **Language**: Thai people do not use English for official communication. This can cause barriers for business for the effective communication.
- 2. **Labor Cost:** The minimal labor cost of 300 baht (10US\$) was considered high for industry sector. This impacted to all sizes and types of business. Some industries had planned to move their investment to other countries because of this factor / condition.

Table 74 Minimum Wage Levels across ASEAN ("Minimum Wage Levels Across ASEAN," 2013)

Country	TH	SG	IND	MY	PHI	VN	BRU	MM	CAM	LAO
Labor	10.34	No	7.53	9.87	6.80	3.76	No	2.30	2.64	2.60
Cost		mini					mini			
(US\$)		mum					mum			

Source: ASEAN Briefing, Business Intelligence from Denza Shira Associates, April 16, 2013

- 3. **Raw materials:** It was confirmed by all cosmetic types and sizes that more than 90% of ingredients used in the cosmetic production were imported ingredients. There are no qualified sources of raw materials produced in the country. This reflected the country's lack of competitiveness competitiveness because the cost of the finished goods would then be marked up. Also the price increase was then be absorbed by end consumers.
- 4. **Unsustainable business:** The local-local cosmetic business in Thailand does not normally think about the sustainable growth. Most of them are doing short term business, copying the market trends, and quickly quit. This cannot promote the innovation and sustainable business in future. The Thai cosmetic industry has less investment on R&D and innovation (Table 75), in particular when compared with Singapore and Malaysia. However, Singapore is not a production base country for cosmetics segment. If Thailand would like to improve its competiveness to be at SG level, more investment on R&D should be considered.

Table 75 R&D Investment Cost across ASEAN ("R&D: Key of ASEAN Improvement," 2014)

Country	TH	SG	IND	MY	PHI	VN	BRU	MM	CAM	LAO
R&D	0.21-	2.04-	< 0.1	0.59-	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Cost (%)	0.26	2.83		1.07	S\$ // ///					
(Total			2/	10000	3 / /// /					
R&D			1	.co.(3) >>>	200 W					
expense/					EUUS.					
GDP)				2000	Mary .	(2)				

Source: Bangkok Business, 2014.

5. **Branding and Marketing Skills:** Thailand's local-local cosmetic industry lacks branding and marketing skills. The industry has good products, which are improperly promoted to the world.

Opportunities

- 1. **Thai herbal and natural products**: Actually, Thailand is the best source of the unique Thai herbal and natural raw materials which could be used for cosmetics. The natural products are the global market trend. With the good strategy, the country competitiveness in cosmetic sector could be increased from this opportunity.
- 2. **Relating and Support Business:** Thailand has successfully promoted the country as having the best services in the world market. To use this opportunity, the cosmetic business could combine marketing with the services businesses i.e. massage, spa, hotels, tourism and airways, etcetera. The medical area is also the well-known service business of Thailand in the world market which cosmetics could share this advantage to improve the country's cosmetic competitiveness.
- 3. **GMP:** It was confirmed by business sector that the GMP certificate is the trade requirement. In terms of rule, law, and regulation, it might be required locally by authority. However, the trade partners use the GMP certification as one criterion to

select the products for their markets. They also use the GMP as a filter to confirm the quality of the products and the trusted sources.

Threat

The "Threat" of Thailand's cosmetic business which can be clearly seen for exported products at this stage was mainly the specific requirements from the trade partners (importing countries). These constraint have already been discussed in Part 1 of this study.

SWOT Matrix and Proposed Strategy

In order to improve the country competitiveness, the SWOT matrix was used to develop the strategy. After the SWOT matrix was applied, the following are the recommended strategies for both government and industry sectors in each particular related area; HS 3304 and HS 3305.

1. Strength and Opportunities:

- 1.1Provide continuous support for the herbal and natural products of Thailand in all aspects; financial investment, R&D, technology, and GMP.
- 1.2 Promote "Made in Thailand Trusted Products" and in particular Thai herbal and natural products.
- 1.3 Arrange business matchings between cosmetic industry and other related and supported businesses i.e. spa, massage, tourism business, hotels, airways, beauty, medicinal and treatment clinics.
- 1.4 Utilize the qualified R&D by matching the academic resources with the real businesses. The studies and/or innovations should be properly shared properly to make real use possible.

Note:

The priorities suggested by 100% purposive samples were (1.1) and (1.3) for both HS 3304 and HS 3305.

2. Strengths and Threat:

- 2.1 Support by government is required on the negotiations to reduce the unnecessary trade barriers in trade partner's countries.
- 2.2 Maintain the "Trusted Product" and utilize this strength to deal with the trade partners to eliminate the concerns on consumer safety issues.

Note:

The priority suggested by 100% purposive samples was (2.2) for both HS 3304 and HS 3305.

3. Weaknesses and Opportunities:

- 3.1 Provide strong and professional training to local industry on business communication, branding, and marketing skills. The trainings provided should be usable in real practice. The trainings should be continuously promoted, provided and supported by government.
- 3.2 Promote and maintain the country to be the production base for cosmetic industry including raw materials, packaging and all related businesses in the region. The incentive package on tax and other benefits should be offered for the investors from foreign countries.
- 3.3 Encourage the local businesses to perform sustainable business for long term growth by giving rewards and/or endorsement for the innovative products.

Note:

The priorities suggested by 100% purposive samples were (3.1) and (3.2) for both HS 3304 and HS 3305.

4. Weaknesses and Threat:

- 4.1 Government should provide the special events for the industry to meet the trade partners i.e. roadshow, business matching, and exhibition. The business barriers and issues could possibly be y solved when there is a face to face meeting between two partners with the same purposes.
- 4.2 Thailand is currently weak on PR and communications to promote the cosmetics of Thailand which at this initial state requires the professional PR agencies by good cooperation between the government and industry sectors.
 - 4.3 Provide the interpreter for business communication if needed.

Note:

The priority suggested by 100% purposive samples was (4.2) for both

CHAPTER V

CONCLUSION

This study was conducted with two purposes; to study the compliance of Thai FDA on ASEAN Cosmetic Directive (ACD) and to evaluate "competitiveness" of Thailand Cosmetic Industry. The study was separated in 3 parts; the first part was the compliance study between Thai cosmetic regulation and ASEAN cosmetic directive which reflected Thailand's status on ASEAN harmonization in cosmetic regulatory aspects. The second part was conducted to evaluate the cosmetic industry competitiveness by comparing the 6 ASEAN leading countries which are Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam by the economical tools to evaluate which was the market share (MS) and revealed comparative advantage (RCA). Also, the third part was conducted to study the factors which influenced Thai cosmetic competitiveness by Diamond Model and SWOT analysis.

The first part of the study was qualitative research. This part of the study was conducted to determine whether Thailand has complied with ASEAN Cosmetic Directive (ACD) after 6 years of implementation in 2013. Content analysis and indepth interview were performed. The study revealed that Thailand has highly complied with ACD in all regulated areas; (i) definition and scope of cosmetics products (ii) ingredients' listing (iii) labelling (iv) product claims and (v) good manufacturing practice. To officially implement ACD, the Thai regulator has to transpose the directive into local laws. During the legal process, one might notice discrepancy between these two laws. Although the country regulator intended to fully harmonize, some minor issues remained such as the ingredients' listing and labelling, which cannot be implemented all at once. In summary, it can be concluded that the main objectives of AHCRS have been achieved. Harmonization in Thailand happened in an ASEAN way.

The second part was the quantitative analysis on the cosmetic industry competitiveness by comparing the 6 ASEAN leading countries which were Indonesia, Malaysia, Philippines, Singapore, Thailand, and Vietnam. The study was conducted by using the secondary data from the International Trade Center (ITC) during the years of 2007-2013. There were 5 cosmetics categories selected for this study based on cosmetics harmonized codes of 3303 (Perfumes and toilet waters), 3304 (Beauty or make-up preparations and preparations for the care of the skin (other than medicaments), which includes sunscreen or sun tan preparations, and manicure or pedicure preparations.) 3305 (Preparations for use on the hair) 3306 (Preparations for oral or dental hygiene, including denture fixative pastes and powders; yarn used to clean between the teeth (dental floss),in individual retail packages.) 3307 (Pre-shave, shaving or after-shave preparations, personal deodorants, bath preparations, depilatories and other perfumery, cosmetic or toilet preparations, and not elsewhere listed disinfectant properties). The competitiveness in this study was evaluated by

timely sequence. The study result showed Thailand cosmetic industry status either intra- or extra ASEAN markets.

It was found that the HS 3303 produced from Thailand had less comparative advantage (RCA less than 1) to be exported while Singapore and Indonesia had high competitiveness (RCA more than 1). Thailand's market share (MS) of this category was less than 1%. Therefore, it was not worth to put effort into this category.

For HS 3304, the products produced from Thailand had less comparative advantage (RCA less than 1) to be exported to all markets when compared to Singapore and Philippines which had RCA more than 1. However, Thailand's MS of this category is closed to 10%, which is the 2nd ranking after SG. This means it is worth to put effort into improving the competitiveness of Thailand in this category. It needs to find out which elements impacting on country competitiveness need to be focused on and supported. However, when compared to Vietnam, Thailand products of HS 3304 had more comparative advantage to be exported to ASEAN than products produced in Vietnam. This means, currently, there is only Vietnam that Thailand could compete with for exportation of the HS 3304.

For the HS 3305, Thailand had an absolute comparative advantage (RCA more than 1 and higher MS than other countries) of this category in all markets. The MS gained by Thailand was more than 50% during the 7 years of 2007-2009 and became more than 60% during 2010-2013. However, the MS tended to decrease in 2013. Vietnam also had a chance to gain MS from Thailand because it also had comparative advantage more than 1 during the last 4 years of 2010-2013 even though its market share was less than 5%. Thailand must make a huge effort to maintain the MS of this category. This category is considered a big size of cosmetic business which may impact the whole cosmetic industry of the country. To keep the competitiveness of this category, will help to keep Thailand as a leader of the cosmetic sector in the region.

For HS 3306, Thailand had an absolute comparative advantage (RCA more than 1, and high market share). Also, the trend is increased competitiveness. Thailand MS was more than 30% during 2007-2012, and increased to more than 50% in 2013. However, this category is a small size compared with cosmetics business worldwide. It is worth to maintain the MS and try to increase the opportunities in the future. The study shows that the trend of Thailand business has been increased accordingly. Thailand is already doing quite well in this category. Thailand, Vietnam, and Indonesia have the comparative advantage to export their products to the region. However, it was interesting to know that products produced from Vietnam currently have more comparative advantage to be exported to the region than products produced from Thailand. This means Vietnam had a chance to gain more MS from Thailand in the future for this category. However, Vietnam currently has MS less than 5%, while Thailand's MS was more than 50% in 2013.

For HS 3307: Thailand had less comparative advantage (RCA less than 1) to export its products in this category compared to Philippines, Malaysia, and Vietnam.

However, Thailand gained MS more than 10%, which gives it the 2nd ranking after SG in the region. When bilaterally compared with others, Thailand's products in this category had more comparative advantage to be exported to the region than products produced from Indonesia and Philippines. This means, Thailand may tend to have more comparative advantage in this category in the future. Thailand can gain more market share from Philippines. Also, the general overview of trades has shown that Thailand's potential market for this category was extra-ASEAN market rather than intra-ASEAN market.

After reviewing the key findings, the HS 3304 and HS 3305 were selected for further in-depth study for the following reasons; the HS 3304 was selected because it is the biggest size of all cosmetic categories in terms of trade values, but Thailand had MS less than 10% during the 7 years of 2007-2013. In order to increase Thailand's competitiveness, and market share, the further in-depth study for this category is required. Also, the HS 3305 was also selected for further in-depth study in part 3 because Thailand is the biggest source of HS 3305 in the region. Also Thailand gained market share more than 60% during 2010-2013. However, it seems the MS dropped in 2013. Thailand needs to put its effort and its resources to maintain the MS of this business sector because the HS 3305 is a big size of cosmetic business worldwide. The further study in part 3 was conducted to help Thailand to maintain the leader status in this category and to build the suitable growth of this category in all markets in the future.

In the last part of the study, the evaluation of the factors which influenced the competitiveness of Thai cosmetic industry in two particular key categories, which were selected from part 2, were HS 3304 and HS 3305. The qualitative study was conducted by using the economic Diamond Model. The study was qualitative approach via the induction method. The secondary data was from the literature reviews from either internal country or external countries including all information related to ASEAN and ASEAN Economic Community. The primary data of this part was consolidated by in-depth interviews. The main purpose of in-depth interviews was to fully understand Thailand's cosmetic business situation and to assess the attitude of its cosmetic industry on key factors which may impact Thai cosmetics industry competitiveness. The purposive samples were mostly executive levels of all types and sizes of business who fully understood Thailand cosmetic business situation and were able to forecast the cosmetic industry competitiveness trend in the future. Those key informants could also provide the emphasis on competitiveness evaluation at the company level and overall country. The saturated information was a signal that the information obtained was adequate. There was no specific pattern which depended on the interviewees' experiences and attitudes. The study showed that there were more than 4,000 manufacturers in Thailand and more than 90% were SMEs. However, SMEs are not the key players of Thai cosmetic industry. The key players are multi-national companies. It was found that the factors, conditions and government factors mainly impacted on the competitiveness of the country.

The strengths of Thailand are its cosmetic products have been trusted by neighboring countries. Thailand has opportunities in herbal and natural sources of cosmetic ingredients and the well-known related and supporting business i.e. service and medical businesses.

However, Thailand still has weaknesses under the factor conditions, i.e. labor and raw material costs. There were more than 90% of raw materials imported from foreign countries. These factors impacted the cost of goods sold and increased price which finally impacted the country's competitiveness. With the threat from extrinsic environment i.e. the regulatory country specific requirements of the trade partners, other intrinsic factors which could be considered weaknesses of Thailand were the English communication, marketing and branding skills including the knowledgeable and well trained R&D. These factors are also important and require improvement by Thailand. The recommendations to the policy makers are; (i) the government should educate and support Thai cosmetic industry particularly SMEs for an opportunity in other open markets extra the country, either intra- or extra ASEAN markets, (ii) promote "Made in Thailand Products" particularly the Thai herbal and natural products. To arrange business matching between cosmetic industry and other related and supported businesses i.e. spa, massage, tourism business, hotels, airways, beauty, medicinal and treatment clinics, (iii) promote "Thai herbal products" to the niche markets worldwide, (iv) support investment on raw material production based in Thailand, (v) improve Thai cosmetic industry on English communication, marketing and brand building skills, (vi) encourage the investment on well trained R&D and GMP. In order to maintain the absolute competitiveness of HS3305 and to improve the competitiveness of HS 3304, the good coordination between government and industry should be considered. A huge effort and support from all relevant parties are required.

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REFERENCES

- Alexander Eickelpasch, A. L., Andreas Stephan. (2010). Locational and Internal Sources of Firm Competitive Advantage: Applying Porter's Diamond Model an the Firm Level: Jonkoping International Business School, Jonkoping University.
- ASEAN Cosmetic Document (2007). ASEAN Secretariat.
- ASEAN Economic Community Blueprint. (2008). ASEAN Secretariat Retrieved from http://www.asean.org/archive/5187-10.pdf.
- Balassa, B. (2008). *Trade Liberalisation and "Revealed" Comparative Advantage* (Vol. 33): The Manchester School.
- Barragan, S. (2005). Assessing the Power of Porter's Diamond Model in the Automobile Industry in Mexico After Ten Years of NAFTA. from University of Lethbridge https://www.uleth.ca/dspace/bitstream/handle/10133/586/barragan,%20salvador.pdf?sequence=1
- Basu, C. (2013). The Importance of Porter's Diamond & Porter's Five Forces in Business. Retrieved 28 April 2003, 2013, from http://smallbusiness.chron.com/importance-porters-diamond-porters-five-forces-business-33891.html
- Berlianto, A. (2009). *Tax Competition and Harmonization in Southeast Asia*. Massey University, Albany, New Zealand.
- Demers, G. (2004). *Impact of Harmonization at the International Level*. Paper presented at the The Tenth FELASA Symposium and the XIV ICLAS General Assembly & Conference, Canada.
- Haddad, M. (2008). Overcoming Trade Barriers From Standards and Technical Regulations (pp. 1-48): The World Bank.
- Harmonization Handbook: Accountable Governance in the Era of Globalization: the WTO, NAFTA, and International Harmonization of Standards. (2000): Public Citizen.
- International Trade Centre. (2013). Retrieved 28 April 2013, 2013, from http://www.intracen.org/itc/market-info-tools/trade-statistics/
- Ismail Bakan, I. F. D. (2012). Competitiveness of the Industries Based on the Porter's Diamond Model: An Empirical Study. *International Journal of Research and Reviews in Applied Science*, 11(3).

- Ketels, C. H. M. (2013). *Thailand's Competitiveness:Key Issues in Five Clusters*. Retrieved from http://www.hbs.edu/faculty/Publication%20Files/CAON%20Thailand%20CLUSTERS%202003%2005-04-03%20CK_0b41394a-f699-4374-b8de-dab19eb49ad3.pdf. members, A. (2007). *General Information Booklet on ASEAN Harmonized Cosmetic Regulatory Scheme*. ASEAN Secretariat.
- Minimum Wage Levels Across ASEAN. (2013, 16 April 2013). Retrieved 28 April 2013, 2013, from http://www.aseanbriefing.com/news/2013/04/16/minimum-wage-levels-across-asean.html
- Porter's Diamond-Determining Factors of National Advantage. (2001). from http://www.themanager.org/pdf/diamond.pdf
- R&D: Key of ASEAN Improvement. (2014, 20 May 2014). *Bangkok Business*. Retrieved from http://www.itd.or.th/research-article/554-ar
- Sakulbumrungsil, R. (2008). Need Assesment on Innovation and Pharmaceutical and Chemistry Research in Thai Industrial Sector: Herbal Cosmetics: Chulalongkorn University.
- Severino, R. C. (2010). An ASEAN Economic Community by 2015? : ASEAN Studies Centre Institute of Southeast Asian Studies (ISEAS), Sigapore.
- South-east Asia Cosmetics Industry Starts Harmonization Process. Retrieved 24 September 2010, 2010, from http://www.thefreelibrary.com/South-east+Asia+cosmetics+industry+starts+harmonisation+process.-a0226475818
- A Study on the Impacts of Thailand-U.S. Free Trade Agreement. (2003). Thailand-U.S. Business Council American Chamber of Commerce U.S.-ASEAN Business Council: The Thailand Development Research Institute.
- Suriya, K. (2001). The Technique of RCA and Market Share Interpretation. *Journal of Economics*, 5(3), 10-15.
- Vladimir Cini, N. N. (2009). Porter's Diamond Model of osijek-baranja County Industry. *Interdisciplinary Management Research Vporter's*, 01, 761-769.
- Vytautas Snieška, J. B. (2009). Measurement of Lithuanian Regions by Regional Competitiveness Index. *ENGINEERING ECONOMICS*, *1*(61), 45-49.

APPENDIX



APPENDIX A

In-depth Interview Protocol

Part I: Introduction

- 1. Good morning. My name is Neeranard Jinachai, a student of Graduate Program in Social and Administrative Pharmacy, Faculty of Pharmaceutical Sciences, Chulalongkorn University. I would like to thank you for your time for an interview today.
- 2. Research Subject is: "AN EVALUATION OF ASEAN HARMONIZED COSMETIC REGULATORY SCHEME IMPLEMENTATION IN THAILAND".
- 3. Importance and Research Problems: Thailand has adopted and fully implemented the ASEAN Cosmetic Directive (ACD) since 2008. The ASEAN harmonization implementation impacts to both regulator and industry sector. The regulator who has been impacted by ACD implementation is Thai FDA while the impacted industry sector composed of all types and all sizes of cosmetic business i.e. local manufacturers, importer which both industry sectors are also classified by small, medium, big sizes.
- 4. The research objectives:
- 4.1 To study the compliance of Thai FDA on ASEAN Cosmetic Directive (ACD) which has been fully implemented since January, 2008.
- 4.2 To evaluate AHCRS implementation on competitiveness of the Thai cosmetic industry.
- 5. Expected benefits: Results from the study should help empowering both Thai FDA and cosmetic industries to better prepare for full AHCRS implementation. Moreover, evidence from an evaluation on competitiveness of the Thai cosmetic industry could also provide information to management from both regulators and industry sectors to set up an appropriate plan to improve Thailand competitiveness within the intra and extra region of ASEAN as well as to increase or at least protect its market share in the cosmetic sector in the competitive market

Part II Interview:.

- 6. I would like to start asking questions of ten items.
- 7. The ten items will be asked item by item by semi-structure questionnaires which I were prepared and showed to you.
- 8. It would take times totally about 2 hours.

- Part III Closing:9. If you have any comments or suggestion on this particular topic interviewed, please do not hesitate to let me know.
- 10. The information from this interview will then be used for content analyzing before putting together under the part of results, discussion and conclusion of the thesis study.
- 11. Thank you very much for your time and kind contribution to this interview.



APPENDIX B

In-depth Interview Probe Questions Derived from Diamond Model

The definition of Diamond Model elements and the probe questions for the indepth interview of the competitiveness evaluation study are followings.

I. Government Factor in this study means governmental policies and strategies. The governmental policies/strategies which may have "positive" or "negative" impact to competitiveness.

This could be the government policy or strategy which could be the strength or weakness of the country for cosmetic industry competitiveness. This could be separated into 3 areas.

- 1.4 The local policy and/or strategy
- 1.5 The ASEAN agreements
- 1.6 Bilateral trade agreements

The above policy could be implemented in Thailand for trade facilitation, or trade barriers, or protection policy of the country.

Questions:

- 4) What is government policies or strategies related to cosmetic industry competitiveness?
- 5) Does policies/strategies are trade barriers or supports? How?
- 6) What are weakness and threats of such policies/strategies?
- 7) What are strength and opportunity of such policies/strategies?
- **II. Firm Strategy, Structure, and Rivalry:** This is the competition situation of cosmetic industry. This is to analysis the firm structure of Thai cosmetic industry. This also includes the analysis of the internal trades. The key competitors intra-, and extra ASEAN markets as well as the major players of each cosmetics category. (The quantitative study result from Part II were used as inputs)

Questions:

- 6) Do you agree with the study result from Part II?
- 7) Who are your actual rivalries? How strengths are they?
- 8) What is the strategy of your firm and others in this economic environment? And what should be the country strategy?
- 9) What is the strength and opportunity of your business in this economic environment?
- 10) What is the weakness and threats of your business in this economic environment?

III. Factor Conditions are input factors which related to human resources, Physical Resources, Information Resources and financial resources.

This factor condition shall also mean the current status of cosmetics productivity, the employment, and the trade of the industry. This is to specify the strength and weakness of the internal factors of the industry

Questions:

- 6) What are the key factors which majority impact to the cost of production?
- 7) Does your organization have competitive R&D and technology? How?
- 8) Does your organization have concern on GMP?
- 9) What are the strength and opportunity of Thailand on cosmetics industry competitiveness at the present moment in terms of input factors?
- 10) What are the weakness and threats of Thailand on cosmetics industry competitiveness at the present moment in terms of Input factors?
- **IV. Demand Conditions** are the needs of consumers on cosmetic products which is related to competitiveness of the country. The demand of each particular cosmetic category was reflected by market size shown in the result of Part II. This could also reflect the opportunity for Thai cosmetics industry.

Ouestions:

- 5) Do you agree with the quantitative input from Part II?
- 6) When asking about the demand on cosmetic products, what do you think about the Thai cosmetic products? Why?
- 7) What are the strength and opportunity of Thai cosmetic industry on demanding factors?
- 8) What are the weakness and threats of Thai cosmetic industry on demanding factors?
- **V. Related and Supporting Industries** are the facility and capacity of the related and supporting industrials which help enhance the cosmetic industry competitiveness.

This is also to focus on the business linkages which would help increase the demanding of cosmetic products from Thailand i.e the tourism and spa industries including the hotels and airways, travelling agencies which may require cosmetic products for theirs services. This would include the supply chain which may create the opportunity or threats for Thailand to expand the cosmetic business intra ASEAN market.

Ouestions:

- 4) What are your related and supporting industries and future possibilities?
- 5) What are the strength and opportunity of Thai cosmetic industry regarding those related and supporting industries?
- 6) What are the weaknesses or threats of Thai cosmetic industry regarding the related and supporting industries?

APPENDIX C GDP of ASEAN

Table 76 GDP of ASEAN

Country	Population in Millions	GDP (mil USD)	GDP per capita (USD)
Brunei Darussalam	0.4	16,628	41,703
Cambodia	15.25	14,241	934
Indonesia	244.47	878,198	3,592
Lao PDR	6.38	9,217	1,446
Malaysia	29.46	303,527	10,304
Myanmar	63.6	53,140	835
Philippines	95.8	250,436	2,614
Singapore	5.41	276,520	51,162
Thailand	64.38	365,564	5,678
Vietnam	90.39	138,071	1,5

Data Source: http://en.wikipedia.org, 2012

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APPENDIX D

Top 5 Import/Export of ASEAN Leading Countries

1. Indonesia

Table 77 Indonesia Total Cosmetics-Top 5 Import and Export of 2013 by Category

Total Cosmetics (US\$ thousand)						
Country	Import	Country	Export			
Thailand	336,896	Singapore	117,361			
China	59,126	Malaysia	48,107			
United States of America	28,527	Philippines	41,361			
France	22,001	Thailand	39,714			
Malaysia	21,693	United Arab Emirates	34,179			
Grand Total	585,393	Grand Total	391,942			
	HS 3303 (US	\$ thousand)				
Country	Import	Country	Export			
Thailand	135,109	Singapore	117,361			
China	20,657	Malaysia	48,107			
Viet Nam	2,373	Philippines	41,361			
India	2,304	Thailand	39,714			
Italy	1,104	United Arab Emirates	34,179			
Grand Total	166,994	Grand Total	391,942			

Table 77 Indonesia Total Cosmetics-Top 5 Import and Export of 2013 by Category (Cont.)

HS3304 (US\$ thousand)							
Country	Import	Country	Export				
Thailand	46,845	Singapore	29,149				
United States of America	22,814	Thailand	26,946				
France	19,775	Malaysia	19,053				
United Kingdom	15,310	Hong Kong, China	13,136				
Japan	15,244	Philippines	10,081				
Grand Total	174,399	Grand Total	136,774				
	HS3305 (US		1				
Country	Import	Country	Export				
Thailand	135,109	Thailand	11,124				
China	20,657	Malaysia	10,487				
Spain	2,479	Philippines	7,940				
Viet Nam	2,373	United Arab Emirates	5,868				
India	2,304	Yemen	3,988				
Grand Total	169,781	Grand Total	57,178				
	HS3306 (US	,	T				
Country	Import	Country	Export				
Thailand	15,409	Philippines	17,426				
United Kingdom	3,028	Malaysia	5,024				
Malaysia	1,755	Kenya	4,856				
Ireland	1,469	Singapore	1,478				
United States of America	816	Uganda	1,243				
Grand Total	23,179	Grand Total	37,747				

Table 77 Indonesia Total Cosmetics-Top 5 Import and Export of 2013 by Category (Cont.)

HS3307 (US\$ thousand)					
Country	Import	Country	Export		
		United Arab			
Australia	12,013	Emirates	10,988		
Malaysia	10,293	Malaysia	7,061		
China	8,488	Philippines	4,718		
Thailand	4,424	Ukraine	1,992		
United States of					
America	3,183	Ghana	1,910		
		13311			
Grand Total	51,040	Grand Total	50,744		

2. Malaysia

Table 78 Malaysia Total Cosmetics-Top 5 Import and Export of 2013 by Category

Total Cosmetics (US\$ thousand)				
Country	Import	Country	Export	
Thailand	141,498	Singapore	64,109	
France	64,771	Thailand	32,246	
United States of America	59,021	Indonesia	27,459	
	,		,	
China	58,594	Hong Kong, China	26,783	
Japan	40,715	Viet Nam	19,234	
Grand Total	667,070	Grand Total	303,984	

Table 78 Malaysia Total Cosmetics-Top 5 Import and Export of 2013 by Category (Cont.)

	HS 3303 (U	JS\$ thousand)	
Country	Import	Country	Export
France	27,415	Singapore	3,831
United Kingdom	11,457	Thailand	1,195
United States of America	9,423	United Arab Emirates	395
Philippines	6,752	Brunei Darussalam	355
Indonesia	6,090	Indonesia	300
Grand Total	94,763	Grand Total	7,845
	HS 3304 (U	JS\$ thousand)	
Country	Import	Country	Export
United States of America	37,348	Singapore	28,164
Japan	32,971	Hong Kong, China	14,064
France	28,622	Thailand	9,442
Thailand	28,619	Indonesia	9,373
Korea, Republic of	24,437	United Arab Emirates	6,035
Grand Total	294,520	Grand Total	112,539
	HS 3305 (U	JS\$ thousand)	
Country	Import	Country	Export
Thailand	64,929	Singapore	14,296
China	13,073	Thailand	3,917
Indonesia	8,743	Australia	2,678
Japan	5,809	Hong Kong, China	2,677
United States of America	4,852	Indonesia	2,295
Grand Total	123,002	Grand Total	44,190

Table 78 Malaysia Total Cosmetics-Top 5 Import and Export of 2013 by Category (Cont.)

HS 3306 (US\$ thousand)				
Country	Import	Country	Export	
Thailand	29,292	Thailand	9,306	
Indonesia	4,377	United States of America	4,845	
Hong Kong, China	2,237	Singapore	4,586	
United Kingdom	1,916	United Kingdom	2,481	
Ireland	1,803	Australia	1,851	
Grand Total	45,157	Grand Total	34,588	
	HS 3307 (U	JS\$ thousand)		
Country	Import	Country	Export	
China	23,788	Viet Nam	14,171	
Thailand	18,386	Indonesia	13,842	
Viet Nam	8,333	Singapore	13,232	
United States of America	6,516	Hong Kong, China	9,384	
France	6,301	Australia	8,849	
Grand Total	109,628	Grand Total	104,822	

3. Philippines

Table 79 Philippines Total Cosmetics-Top 5 Import and Export of 2013 by Category

Total Cosmetics (US\$ thousand)				
Country	Import		Export	
Thailand	79,028	Malaysia	147,872	
Indonesia	39,645	United States of America	14,343	
China	20,370	Australia	8,457	
United States of America	11,187	United Arab Emirates	8,274	
Singapore	10,943	Belgium	8,050	
Grand Total	208,170	Grand Total	222,914	
	HS330	3 (US\$ thousand)		
Country	Import		Export	
Singapore	2,026	Malaysia	1,990	
Hong Kong, China	1,690	United States of America	807	
China	1,457	India	496	
Indonesia	1,408	Viet Nam	485	
United Kingdom	711	Australia	459	
Grand Total	9,485	Grand Total	5,798	
	HS 330	94 (US\$ thousand)		
Country	Import		Export	
Thailand	18,920	Malaysia	140,645	
Indonesia	10,406	Singapore	2,432	
China	9,549	United Arab Emirates	1,640	
Singapore	6,512	United States of America	1,592	
United States of				
America	6,448	Australia	1,137	
Grand Total	71,698	Grand Total	154,284	

Table 79 Philippines Total Cosmetics-Top 5 Import and Export of 2013 by Category (Cont.)

	HS 330	05 (US\$ thousand)	
Country	Import		Export
Thailand	21,717	United States of America	6,126
Indonesia	7,375	United Arab Emirates	2,536
China	3,513	Japan	433
United States of			
America	1,583	Saudi Arabia	294
Singapore	1,039	Indonesia	205
Grand Total	37,665	Grand Total	10,893
		06 (US\$ thousand)	
Country	Import		Export
•			•
Thailand	22,270	Malaysia	66
Indonesia	18,026	Singapore	33
China	2,632	United Arab Emirates	21
		Micronesia (Federated States	• •
United Kingdom	885	of)	20
Ireland	874	Papua New Guinea	20
Grand Total	47,308	Grand Total	197
	HS 330	7 (US\$ thousand)	
Country	Import		Export
Thailand	16,118	Belgium	8,050
Malaysia	8,538	Australia	6,753
China	3,219	United States of America	5,815
Australia	2,491	Malaysia	5,000
Indonesia	2,430	United Arab Emirates	3,748
Grand Total	42,014	Grand Total	51,742

4. Singapore

Table 80 Singapore Total Cosmetics-Top 5 Import and Export of 2013 by Category

	Total Cosmetic	es (US\$ thousand)	
Country	Import		Export
France	947,190	Hong Kong, China	480,167
Japan	189,154	Korea, Republic of	448,724
United States of			
America	135,128	China	374,578
United Kingdom	131,771	Indonesia	260,979
Italy	102,918	Japan	242,699
Grand Total	2,165,141	Grand Total	3,072,034
	HS 3303 (U	JS\$ thousand)	1
Country	Import		Export
	226 747	United States of	1.62.055
France United States of	326,747	America	162,855
America	95,587	Indonesia	127,908
America	75,567	muonesia	127,700
Italy	83,187	Hong Kong, China	96,173
United Kingdom	55,878	Netherlands	62,685
Spain	36,750		49,515
Grand Total		Grand Total	807,386
		JS\$ thousand)	1
Country	Import		Export
France	598,110	Korea, Republic of	409,797
Japan	164,335	Hong Kong, China	350,309
Germany	63,339	China	326,778
United Kingdom	60,435	Japan	201,374
China	48,565	Thailand	163,134
Grand Total	1,189,592	Grand Total	1,976,931

Table 80 Singapore Total Cosmetics-Top 5 Import and Export of 2013 by Category (Cont.)

	HS 3305 (U	JS\$ thousand)	
Country	Import	,	Export
Thailand	33,487	Malaysia	15,100
United States of America	15,644	Myanmar	5,841
Japan	8,286	Pakistan	5,689
India	5,318	Korea, Republic of	5,485
China	4,615	Australia	4,497
Grand Total		Grand Total	64,099
	HS 3306 (U	JS\$ thousand)	
Country	Import		Export
China	6,809	Australia	4,715
Thailand	5,137	United States of America	3,526
Mexico	3,448	Thailand	2,912
Hong Kong, China	3,204	United Arab Emirates	2,258
United States of America	2,714	Malaysia	1,807
Grand Total	34,384		24,891
	HS 3307 (U	JS\$ thousand)	
Country	Import		Export
Hong Kong, China	25,678	Indonesia	31,631
United States of America	21,183	Hong Kong, China	30,291
France	17,885	Malaysia	22,632
China	17,099	Philippines	13,519
Malaysia	15,727	Japan	10,947
Grand Total	180,035	Grand Total	198,727

5. Thailand

Table 81 Thailand Total Cosmetics-Top 5 Import and Export of 2013 by Category

	Total Cosn	netics (US\$ thousand)	
Country	Import	Country	Export
France	164,567	Japan	500,961
United States of America	126,551	Indonesia	179,359
Japan	94,034	Philippines	140,948
China	67,186	Malaysia	138,333
Indonesia	64,996	Australia	125,876
Grand Total	796,872	Grand Total	1,894,650
	HS 330	03 (US\$ thousand)	
Country	Import	Country	Export
France	60,090	Cambodia	2,167
United States of	1 533		
America	6,661	Myanmar	1,436
United Kingdom	6,581	Sri Lanka	571
Italy	4,420	Philippines	467
Switzerland	2,873	Lao People's Democratic Republic	175
Grand Total	86,018	J.	5,817
	HS 330	04 (US\$ thousand)	
Country	Import	Country	Export
France	100,922	United Kingdom	61,361
United States of America	88,726	Indonesia	40,678
America	00,720	muonesia	40,078
Japan	76,765	Cambodia	30,801
Indonesia	44,894	Malaysia	27,534
United Kingdom	41,208	Myanmar	25,924
Grand Total	507,205	Grand Total	440,916

Table 81 Thailand Total Cosmetics-Top 5 Import and Export of 2013 by Category (Cont.)

	HS 330	05 (US\$ thousand)	
Country	Import	Country	Export
Germany	17,663	Japan	381,599
Indonesia	14,344	Indonesia	120,777
Japan	11,732	Malaysia	65,668
China	10,999	Philippines	64,239
United States of America	6,801	Australia	57,980
Grand Total	86,780	Grand Total	960,148
	HS 330	06 (US\$ thousand)	, ,
Country	Import	Country	Export
United States of America	10,301	Philippines	45,652
Malaysia	8,420	Australia	31,640
Viet Nam	8,126	Malaysia	28,766
China	6,473	Japan	21,367
Ireland	3,719	Hong Kong, China	16,000
Grand Total	41,383	Grand Total	273,955
		07 (US\$ thousand)	
Country	Import	Country	Export
United States of America	14,062	Japan	72,690
China	11,733	Viet Nam	16,305
Malaysia	8,409	Malaysia	16,282
Australia	8,065	Australia	12,382
Indonesia	5,444	Myanmar	11,026
Grand Total	75,486	Grand Total	213,814

6. Vietnam

Table 82 Vietnam Total Cosmetics-Top 5 Import and Export of 2013 by Category

Total	Cosmetics (I	US\$ thousand)	
Country	Import		Export
	•		*
Thailand	57,873	Japan	32,756
Korea, Republic of	16,930	Philippines	28,290
Malaysia	12 112	India	26 122
Malaysia	13,112	Korea, Republic	26,123
France	12,054	of	12,143
Trance	12,034		12,173
Japan	8,116	Ghana	11,957
Grand Total	152,440	Grand Total	172,593
Н	IS 3303 (US\$	thousand)	,
Country	Import		Export
	1///2		
France	2,400	Cambodia	3,051
Philippines	911	Area Nes	675
Indonesia	838	China	507
Italy	513	Philippines	328
United States of	Q The same	C. Millian	
America	464	Japan	200
Grand Total	6,487	Grand Total	5,245
	IS 3304 (US\$		3,443
Country	Import	diousand)	Export
Country	Шроге		Laport
Thailand	26,551	Japan	7,279
		1	,
Korea, Republic of	12,846	Philippines	1,679
			074
France	7,590	Singapore	964
_			
Japan	5,963	China	901
G 1	2.045	Hong Kong,	702
Canada	2,045	China	783
Grand Total	68,650	Grand Total	16,016

Table 82 Vietnam Total Cosmetics-Top 5 Import and Export of 2013 by Category (Cont.)

ont.)	IS 3305(US\$	thousand)	
Country	Import	thousand)	Export
Country	Import		Laport
Thailand	9,741	Philippines	22,263
	- 7	TT	,
Italy	3,214	Japan	13,509
United States of			
America	2,514	Cambodia	4,443
Korea, Republic of	2,217	Singapore	3,895
3.6.1	1 400	CI :	2 275
Malaysia	1,499	China	2,375
Grand Total	26,633	Grand Total	51,240
	S 3306 (US\$	thousand)	ъ.
Country	Import		Export
Thailand	8,260	Ghana	11,957
United States of	0,200	Glialia	11,757
America	2,765	Thailand	5,513
- Innerieu	7,700	(OEOS)	5,515
China	917	Philippines	4,005
	- 1000	CONTROL OF THE PROPERTY OF THE	
Korea, Republic of	772	South Africa	2,153
361	20.4	G 1 1 0	1.704
Malaysia	394	Cambodia	1,724
Grand Total	14,577	Grand Total	32,787
	S 3307 (US\$	tnousana)	F
Country	Import		Export
Thailand	13,313	India	25,931
Thanana	13,313	Iliula	23,931
Malaysia	9,934	Japan	11,356
	2,72	Korea, Republic	
China	3,115	of	10,762
United States of	,		•
America	1,564	Taipei, Chinese	5,179
Philippines	1,422	Malaysia	4,784
Grand Total	36,093	Grand Total	67,305

VITA

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Document Type: Article

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2008: Obtained "Certificate of Recognition for Contribution to the Success of Regional Regulatory Affairs, Asia Pacific" of Wyeth Consumer Healthcare

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