UNIVERSITAS INDONESIA

THE ANALYSIS OF INDONESIAN TEA COMPETITIVENESS IN GLOBAL MARKET

THESIS

USMAN AFFAN
0806469054

FACULTY OF ECONOMICS
MASTER OF PLANNING AND PUBLIC POLICY
JAKARTA
DECEMBER, 2009

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Submitted in partial fulfillment of the requirements for
The Degree of Master of Economics

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Name	:	Usman Affan
Student Register Number	:	0806469054
Signature	:	
Date of Signature	:	December 3rd, 2009

PAGE OF ENDORSEMENT

This thesis is proposed by

Name	:	Usman Affan
Student Register Number	:	0806469054
Program	:	Master of Planning and Public Policy
Title	:	The Analysis of Indonesian Tea Competitiveness in Global Market

It has been defended to the Board of Examiners and submitted in partial fulfillment of requirements for the degree of Master of Economics in Master of Planning and Public Policy, Faculty of Economics, Universitas Indonesia.

BOARD OF EXAMINERS

Supervisor	:	Dr. Maddaremmeng A. Pannennungi	( )
Examiner	:	Dr. Andi Fahmi Lubis	( )
Examiner	:	Dr. Ir. Widyono Soetjipto	( )

Stipulated in	:	Jakarta
Date	:	December 2nd , 2009

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Praise be to ALLAH SWT, up on the completion of this thesis entitled "The Analysis of Indonesian Tea Competitiveness in Global Market, I have finished my study in Master of Planning and Public Policy, Faculty of Economics, Universitas Indonesia. This final assignment is submitted to fulfill one of requirements to achieve the degree of Master of Economics.

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"Indeed, after hardship there is relieve"

Al-Insyirah

This work is dedicated to my beloved family: mom, dad, brother & sisters

Thank you for the unconditional love

And also to my princess ... Thank you for the love I feel inside

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Usman Affan

ABSTRACT

Name : Usman Affan
Program : Master of Planning and Public Policy
Title : Analysis of Indonesian Tea Competitiveness in Global Market

A number of problems and challenges surround international tea trade. This study aims to investigate the recent competitiveness of Indonesian tea which consists of package green tea, bulk green tea, package black tea and bulk black tea in global market compared with other tea exporting countries, using two analytical tools: competitiveness matrix and constant market share analysis. Here, competitiveness is defined as the ability to enlarge the share. The study reveals that package green tea and bulk black tea are under bullish period. On the other hand, bulk black tea and package black tea are under bearish period. Indonesian package green tea, in the fifth position, has performed fairly well. Standing in the fifth position, Indonesian bulk green tea export value grows far above its hypothetical level which shows high competitiveness amid less favorable market situation. Indonesian package black tea has performed poorly. The export value is declining as the consequence of misallocation problem and uncompetitive product. Indonesian bulk black tea reaches the third rank although it is still disrupted by misdistribution problem.

Keywords: competitiveness, competitiveness matrix, constant market share analysis.

ABSTRAK

Nama : Usman Affan
Program : Magister Perencanan dan Kebijakan Publik
Judul : Analisa Daya Saing Teh Indonesia di Pasar Dunia

Berbagai masalah dan tantangan yang meliputi perdagangan teh dunia seakan mengikis keunggulan teh Indonesia dan menjadikan teh sebuah komoditas ekspor yang kurang menggiurkan bagi Indonesia. Terkait dengan hal tersebut, bagaimanakah sebenarnya daya saing teh Indonesia di pasar dunia saat ini yang dalam hal ini diartikan dengan sebagai kemampuan meningkatkan pangsa pasar. Inilah yang akan dijawab pada penelitian ini. Dengan menggunakan matrik kompetisi dan pendekatan CMS, empat jenis produk Indonesia: teh hijau kemasan, teh hijau curah, teh hitam kemasan dan teh hitam curah akan ditandingkan dengan yang berasal dari negara pengekspor lain. Studi ini mengungkap bahwa ditingkat dunia, teh hijau kemasan dan teh hitam curah sedang bergairah namun tidak demikian dengan teh hijau curah dan teh hitam kemasan. Daya saing teh hijau kemasan Indonesia menduduki posisi lima dunia. Walaupun dinilai perlu merelokasi pasarnya, daya saing teh hijau curah Indonesia juga menempati posisi lima dunia namun tertinggi dibandingkan komoditas teh lainnya. Kinerja ekspor teh hitam kemasan Indonesia menurun, diliputi masalah komposisi pasar yang kurang tepat dan produk yang kurang bersaing. Daya saing teh hitam curah Indonesia menempati posisi tiga di dunia.

Kata Kunci: daya saing, matrik persaingan, pendekatan constant market share.

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CHAPTER I
INTRODUCTION

1.1. Background

Tea is one of important commodities to Indonesian economy. The development of tea industry not only benefits Indonesia in economic side which contributes around Rp. 1.2 trillion to Indonesian gross domestic product and $ US 110 million to Indonesian foreign reserve every year but also in non economic side like supporting environmental sustainable as the plantations conserve the soil and water[1], protect erosion, absorb carbon dioxide, release oxygen and become tourism spots.

Tea plantation sector helps government in reducing unemployment since this sector absorbs a considerable amount of labor. Tea plantation sector is classified as labor intensive sector. According to Barani[2], Indonesian tea plantation sector employs around 320 thousands employees or supports around 1.3 millions lives.

Tea is used primarily as the raw material for tea drink which has been an acceptable drink for most people around the world. The chemical compound inside the tea creates impressing color, taste and fragrance which satisfy its consumers. Tea has a special value in some societies, for instance, Japanese consumes tea in a particular manner that has been a ritual. Tea also takes part in a meditation activity.

In general, people's assessment on foods or drinks is based on the nutrition they contain and the ability to fulfill people's preference. However, recently the assessment has shifted to the function to enhance the body metabolism. Bambang (2006) explains that functional drinking increase the body immunity system, protection from degeneration, recovery process, body metabolism and anti aging. Tea fulfils requirement as functional drinking. This makes tea a special commodity.

[1] The tea plant can absorb 0.04 meter cubic of water per meter square of land in a second.
[2] From the Director General of Plantation (Ministry of Agriculture) opening address in Indonesian Tea Board Annual Meeting held in Jakarta, December 9th, 2008.

Tea experts confirm that the quality of tea leaves is determined based on the level of *catechine*[3] inside. This chemical compound is very useful in enhancing body immunity especially from cancer, controlling blood pressure, reducing cholesterol inside the blood, activating nerve system and slowing the aging process.

The high level of *catechine* is found in the top leaves of *camellia sinensis*[4] and its level inside the tea reaches more or less 20 percent of its dry weight. Indonesian tea farmer culture *camellia sinensis of assamica sinesis*, a superior tea variety as Indonesian natural environment and climate is very suitable for this variety.

The level of *catechin* inside Indonesian tea leaves is higher than the tea from other tea major producers such as China which grows the *camellia sinensis* of *sinensis* and Japan which grows the same variety. Indonesian black tea orthodox, black tea CTC, green tea for export, green tea for domestic consumption and aroma tea contain *catechine* as much as 8.24%, 7.02 %, 11.6 %, 10.81 % and 9.28 % of gross weight respectively. Meanwhile Japan's *sencha* contains *catechine* only 5.06 % of gross weight. China's oolong and aroma tea have slightly better of *catechine* level than Japan's *sencha*, 6.73 % and 7.47% of gross weight respectively. Sri Lanka black tea has similar level of *catechine* with China's tea, which is 7.39 % of gross weight (Bambang, 2006).

Since the level of *catechine* inside the tea leaves determines the quality of the tea it self as mentioned earlier, we know that the quality of Indonesian tea leaves is better than tea from any tea producer. In other word high-level *catechine* has been the advantage of Indonesian tea leaves.

However, the high *catechine* level does not make tea an interesting commodity for Indonesian export. A number of problems and challenges surround international tea trade like the rapid growth of world tea supply that

[3] *Catechine* is the main chemical compound inside the tea which is a strain of condensed tannin known as polifenol. The *catechine* is a very strong anti oxidant which neutralizes the free radical inside human body. Tea also contains *alkaloid caffeine*, several vitamins such as vitamin a, and c and *flouride* that effective in strengthening human teeth structure.

[4] *Camellia sinensis* is an *assamica* variety. 80 percent of *camellia sinensis* top leaves are processed to yield black tea while the rest (20 percent) are processed to yield green tea.

is not quite followed by the increasing world tea consumption creates over supply which has dragged its international price down.

Moreover, a big challenge faced by Indonesian tea sector occurs for a number of causes. First, a large number of countries produce tea and many of them are big enough to prevent the establishment of a monopolistic leader. Second, tea deteriorates so quickly, force the producer to cut the selling price. Third, high investment and monoculture characteristic have made tea sector less flexible[5].

Indonesian tea export shows a progression in term of value in the last five years although the value is far below other estate crops. In international level, Indonesian tea export value frequently stays in 6th position below Kenya, China, India, United Kingdom and Germany which take 1st to 5th position respectively[6].

The sluggishness of Indonesian tea sector can be seen from its production growth. From 2002 until 2007, Indonesian tea production grew only around 7%. Meanwhile, other estates production such as rubber, palm oil, palm kernel and cocoa show impressing growth as much as 10%, 91%, 114% and 22% respectively[7]. In other word, dry rubber, palm oil, palm kernel and sugar cane are experiencing impressing production progression while tea productivity has not changed much.

Moreover, some tea plantation area has been converted to other functions. This can be seen from the declining tea plantation area in period 2002 – 2007.

Table 1.1

Indonesian Estates Area by Crops

in 000 ha

Year	Rubber*	Oil Palm*	Cocoa*	Coffee*	Tea**	Cinchona*	Sugarcane*	Tobacco*
2002	492,9	3.258,6	145,8	58,2	150,7	1,2	375,2	5,4
2003	517,6	3.429,2	145,7	57,4	143,6	3,3	340,3	5,2
2004	514,4	3.496,7	87,7	52,6	143,9	3,2	344,8	3,3
2005	512,4	3.592	85,9	52,9	140,5	3,1	381,8	4,8
2006	513.2	3.748,5	101,2	53,6	135,6	3,1	396,4	5,1
2007	514	3753,1	102	53,6	133,7	3	404,7	5,1

Source: * BPS
** Estate Crops Statistic

[5] Taken from the tea market – a background study (2002).
[6] Processed from World Integrated Trade Solution.
[7] Processed from Indonesian Statistic Agency.

Table 1 tells that Indonesian tea plantations area is experiencing quite significant reduction while other crops plantations area such as rubber, palm and sugar cane are expanding. This is a serious problem, considering the various benefits from tea plantation and the millions of people who relies their life up on this sector. It will be very interesting to investigate the Indonesian tea competitiveness in international market.

1.2. Problem Statement

In line with the background, the question is stated as follow: how is the current Indonesian tea competitiveness in global market?

1.3. The Research Objective

The objective is to investigate the current Indonesian tea competitiveness in global market.

1.4. The Research Coverage

The commodities which are going to be investigated consist of four products namely, packaged black tea, bulk black tea, package green tea and bulk green tea. These are the classifications that have been widely used in tea international trade. These commodities competitiveness will be compared among tea major exporters. The period of observation is five-year interval, from 2004 up to 2008 since we want to investigate the latest situation.

1.5. The Research Methodology

1.5.1. Analysis Methods

In order to analyze the problem stated above, we use qualitative analysis through library research and employ two well-known competitiveness analytical tools; competitiveness matrix and constant market share analysis.

Competitiveness matrix is an advance analytical tool to clarify changes in the competitiveness of certain products (Rachman). Meanwhile constant market share analysis is a tool used to asses the position of export of certain country relative to its competitors by providing a set of indicators to find out

whether an exporter can manage its export contribution to all consumers in certain period of time as previously employed by Suprihatini (2005) and Juswanto & Mulyanti (2003).

1.5.2. Data and Source of Data

The two quantitative methods require secondary data such as countries tea export-import value which is available at world integrated trade solution (WITS).

CHAPTER II
THEORIES OF INTERNATIONAL TRADE AND PREVIOUS STUDIES ON COMPETITIVENESS

2.1. International Trade

Everyone in the world gets involve in goods and services exchanges since no single person in order to live normally is able to fulfill all needs through producing them by him/ her self. Beside the time limit, everyone does not have all capabilities to produce every good. For instance, some people have ability to produce clothes in most effective way, whereas the others have ability to produce foods. But they most likely can not produce both goods at a time.

The same thing applies in larger scale, nation. Nations have different capabilities to produces goods. The capability of nations in producing goods can be determined by availability of natural resources and human resources. The natural endowments available are different among nations. Therefore, in order to achieve all necessities, nations should be involved in trading.

Fulfilling national needs is the original motivation of international trading. But the motivation has been extended to the desire of pursuing national wealth. Mahmood and Akhtar (1996 p.693) mention that the reliance on international trade and foreign capital inflows has become crucial to sustain and enhance the pace of economic growth in the scarcity and misuse of the domestic resources. Further, the international trade has proven to be the engine of economic growth at international level. They argue that one of the major reasons for the rapid growth of the East Asian countries is their excellent in export performance. These countries get involve in international trade and offer many incentives for the establishment and development of their export sectors.

In line with them, Hultman emphasized that foreign trade and payments have assumed a central role in the development plans of many underdeveloped countries. For most of these countries, exports represent an important share of

total output and hence trends in foreign sales are critical in fostering over all growth. For some underdeveloped countries, export trade is such an important factor that an estimate of the foreign exchange earnings represents a first step in the formulation of development plans.

The study to reveal the relationship between export and economic growth has been conducted by many researches. Brazzel and Hicks (1968) try to prove that the exports or some group of exports are the key source of regional economic growth. Glezakos (1973) tests in more systematic way the validity of the a priori arguments regarding the effects of export instability on the economic growth of both less developed countries and developing countries, determines the effects of export instability on the growth of exports and evaluates the relatives importance of the export price and export quantity instability effects on economic growth. Chen and Tang (1990) separate the scale effect from the other forces affecting exports in their investigation of the relationship between export performance and economic growth.

Krugman (1996 p.4) explains that the gains from trade is an important reason for conducting international trade amid the argumentation that every country should produce all its resident necessities as it helps create jobs within country. When countries sell goods and services to each other, this exchange is almost always to their mutual benefit.

2.2. Absolute Advantage

Smith (1776)[8] stated that countries should trade in goods that they produce more efficiently than any other nations. The statement implies that two countries can involve in trade if only both countries have different absolute advantages. For example country j can sell product i to country k if only country j is able to produce product i in more efficient way rather than country k.

This theory can not longer explain the trade activities which have been practiced around the world. Countries can involve international trade

[8] Excerpted from Mahanani, 2009.

regardless their absolute advantage. Then, this theory was further improved by the next generation economists.

2.3. Comparative Advantage

David Ricardo came up with his argument which explains the trade activities which have been conducted around the world. He introduces a concept so called comparative advantage. Krugman (2006 p.24) state that although comparative advantage is a simple concept, experiences shows that it is a surprisingly hard concept for many people to understand or accept.

The essence of comparative advantage in international trade is that trade between two countries can benefit both countries if each country exports the goods in which it has a comparative advantage (Krugman, 2006 p. 26). It suggests that countries should specialize in producing goods with the lowest opportunity loss. Although a country can produces a set of goods in more efficient way rather than other countries, it is better to pick producing particular goods with lower cost compared with producing other goods within country. It will enable countries to join international trade. Thus the gain come from selling abroad the chosen products then exchange them by other commodities come from abroad in greater amount. This is what we call indirect production.

2.4. Factor-proportion Theory

Another advance theory in international trade was introduced by Eli Heckscher and Bertil Ohlin. The theory emphasizes the interplay between proportion in which different factors of production are available in different countries and the proportion in which they are used in producing different goods (Krugman, 2006 p. 54). Thus this theory uses different approach in the explanation, which is using two production factors instead of one production factor introduced in the comparative advantage concept.

According Heckscher-Ohlin theory, the proportion of factor production used in producing goods is determined by the prices of the factor productions. It means the cheaper price of factor production x relative to the factor

production y will encourage the producer to use more factor production x and to use less factor production y.

This theory is able to explain the tendency of economies in choosing the goods to be produced and distribution of income among the factors owners. The economies will tend to produce commodities with production factors of which are abundant. Further, if the price a commodity increases, the owner of the production factor used most the production will receive greater benefit.

2.5. Competitiveness Concept

Competitiveness is a term commonly used in economic literature especially in commodity discussions. Kubiak (2006 p.5) implies that the concept of competitiveness advantage and concept of comparative advantage frequently overlap. Indeed, they are two different concepts. Comparative advantage implies that the factors that determine the competitiveness is given while elements of competitive advantage introduced by Porter are artificial or man made.

Porter (1990 p.71) set up a formula that determines competitiveness which consists of (1) factor conditions: the nation's position in factors of production, such as skilled labor of infrastructure necessary to compete in a given industry, (2) demand conditions: the nature of home demand for the industry's products or service, (3) related and supporting industries: the presence or absence in the nation of supplier industries and related industries that are internationally competitive, and (4) firm strategy, structures and rivalry: the condition in the nation governing how companies are created, organized and managed and the nature of domestic rivalry. These elements simultaneously create competitiveness force needed for a nation to survive in particular industry.

Kubiak (2006 p.7) describes that there are three major approach to measure competitiveness, namely macro, micro and trade approach. From macro stand point, competitiveness is defined as the ability of nation's economy to make rapid and sustained gains in living standard. Similar with it, competitiveness is defined as the ability of an economy to provide its

population with high and rising standards of living and high rates of employment on a sustainable basis. So it refers to an aggregate competitiveness.

From the micro stand point, competitiveness is directly connected with the process of competition. In terms of ability to sell, competitiveness indicates the companies' ability to retain and strengthen their market position. Further, since the effect of competition among players is the seizure of subjects' market by other subjects, then the result of competition is the change of competitive position on the market. The company has competitiveness if it is willing to accept the return available from selling its product at the prevailing market price. Otherwise, it will be uncompetitive and will be excluded from the market.

In the trade approach, as early explained, competitiveness is based on the classical theories of international trade, the comparative advantage theory and the factor-proportion theory. In this stand point, the domestic trade is excluded.

Canada's Task Force on Competitiveness in the Agri-Food Sector defines competitiveness as the sustained ability to profitably gain and maintain market share (Martin et al. 1991). This definition provides two concepts than can be used to measure and monitor competitiveness; profit and market share.

Further, Martin et al (1991) disentangle the factors affecting the industry's competitiveness. There are four sets of factors contribute to competitiveness, namely factors controlled by individual firms, factors controlled by governments, factors that are quasi-controllable and factors that are uncontrollable.

Factors that are controlled by firm comprise strategy, products, technology, training, research & development and cost. Factors that are controlled by governments comprise business environment, taxes, interest rates, exchange rates, international trade policy, education & training, regulation and standards. Inputs prices and demand condition are factors classified as quasi-controllable. Meanwhile natural environment is classified as uncontrollable factor.

In other words, the achievement of competitiveness is driven from mutual cooperation by public policy and management or private policy. Inputs prices, demand condition and the international trade environment are under the quasi-controllable category as they are either outside the direct influence of an country's government or can only be somewhat affected by the actions of either companies and government.

Rao and Tang (2004) use similar definition of competitiveness in micro sense as it is more applicable at the company or firm level, but emphasizing both in domestic market and international market. A firm is said to be competitive if it is profitable and maintains or gains market share in a world of fair and freer markets with intense domestic and international competition.

One of competitiveness measurement is trade performance. The trade performance of an industry can be influenced by a number of factors such as domestic and international trade barriers or distortions, difference in taste and population growth rate and exchange rate changes. Thus, Rao and Tang (2004) argue that a gain or loss in market share and an improvement or deterioration in trade balance do not necessarily imply a gain or loss in competitiveness.

For example, the depreciation of national currency may lead to increasing export volume due to lower price in term of trading partner's currency and discourage import due to higher prices in term of domestic currency. In one side, this might favor the trade balance. But in the other side it will damage the real wages and real incomes because it raises the cost of imports and the cost of living.

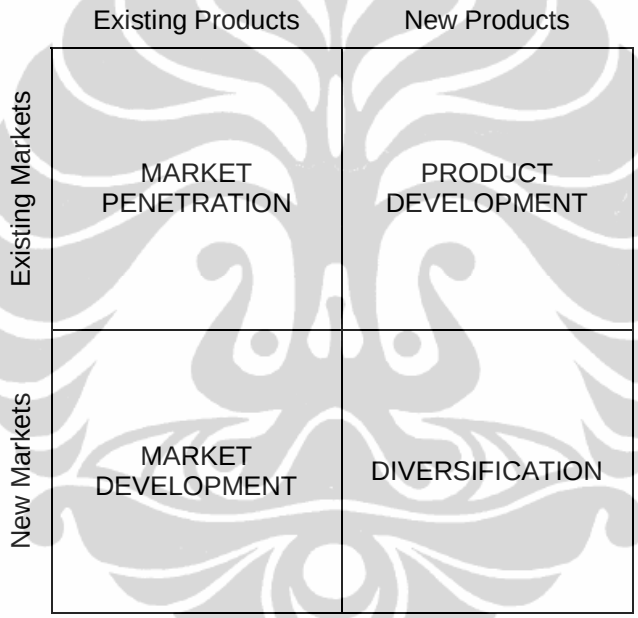
Therefore the United States Commission on Industrial Competitiveness defines competitiveness of a country as the level to which it can, under free and fair market conditions, produces goods and services that meet the test of international markets while simultaneously maintaining and expanding the real incomes of its citizens. Thus, competitiveness is a multi-dimensional concept that reflects the general health of both industry and country.

2.6. Market Growth Strategy

Since the competitiveness is our main discussion, it would be appropriate to link it to market growth strategy. A classical marketing approach was introduced by Igor Ansoff who developed matrix which identifies suitable marketing strategy for particular marketing objective. It suggests that each marketing objective whether to maintain existing markets or to seek new ones and to intensify existing products or to introduce brand new products need special efforts.

Figure 2.1

Market Growth Strategy Matrix



Source: Strategies for Diversification, Harvard Business Review in www.ecsb.org

Each quadrant represents the combination between market and product situation. Behind those quadrants lies several steps needed to achieve the objectives.

1. Market penetration is a growth strategy terminology where the business focuses on selling existing products into existing market. The objectives can be to maintain or to increase their market share, to secure dominant market growth, to restructure a mature market and to enhance the usage by current consumers. These objectives can be achieved by combining competitive pricing strategies, advertisement and sales promotion. Market

penetration is an ordinary business practice. It intensifies the existing products in the existing market. Therefore it requires less investment or resources.

2. Market development is a growth strategy terminology where business search new markets to sell the existing products. This can be reached by picking new geographical markets, new distributional channels and different pricing policies to attract different customers or create new market segments.
3. Product development is a growth strategy terminology where a business aims to introduce new products into the existing markets. This strategy needs resources and investment devoted to create new interesting products which will be acceptable in the current markets. Once a product has been introduced, it is urgent to find customers to ensure the sustainability of the products. In brief, developing new products is quite risky.
4. Diversification is a growth strategy terminology where a business introduces new products to new markets. This strategy put high risk to the business following the considerable investment and resources devoted to modify brand new products and to recognize or to learn new market characteristic. Diversification can be run in four ways: (1) horizontal diversification, (2) vertical diversification, (3) concentring diversification and (4) conglomerate diversification.

We can pick the right one or a combination of marketing strategies presented above once we have found out the result of the competitiveness matrix and the constant market share analysis. This makes our analysis become deeper.

2.7. Prior Studies on Commodity and Industry Competitiveness

Table 2.1 is the summary of selected previous studies on competitiveness used as the main references on this study. The detail result of each study will be exposed in the following paragraphs.

Table 2.1
Summary of Previous Studies on Competitiveness

No	Themes	Author	Analytical Tool	Brief Result
1	Assessing the Competitiveness of Indonesia's Ten Largest Export Products to Tunisia and South Africa	Mahanani (2009)	Competitiveness Matrix and CMSA	Indonesian polyethyline terepthalate is competitive in Tunisia, Indonesian ceramics and cylinder are competitive in South Africa.
2	Analysis of Competitiveness of Hungarian Wheat Sector with Porter's Diamond Model	Karacsony (2008)	Porter's Diamond Model	Hungarian wheat industry is supported by production factor side.
3	Competitiveness Challenges Facing Canadian Industries	Rao & Tang (2004)	Literature Study	Canadian competitiveness was derived from low prices due to Canadian currency depreciation.
4	Indonesian's Manufactured Export: A Constant Market Shares Analysis	Juswanto & Mulyanti (2003)	CMSA	Product composition bring advers effect into Indonesian manufacture goods export.
5	NAFTA and the Loss of U.S Market Share by Brazil 1992-2001	Batista (2002)	An Expanded Model of CMSA	Brazil loss its share since NAFTA enter into force, the missing share goes to Mexico.
6	The Export Growth of Pakistan: A Decomposition Analysis	Mahmood & Akhtar (1996)	CMSA	Market distribution is improving but the commodity composition erode the positive effect of growing market.
7	International Competitiveness in Services in Some European Countries: Basic Facts and a Preliminary Attempt of Interpretation	De la Guardia et al (n.a)	Competitiveness Matrix	The change of three service products category status between year 1990-1995 and 1995-2000.
8	Analyzing the Competitiveness of Indonesian Agricultural Commodities under WTO Commitments	Rachman (n.a)	Competitiveness Matrix	Indonesian agriculture products lose their competitiveness since Indonesia joint WTO.

Mahanani's (2009) study on competitiveness of Indonesian ten largest product exported to Tunisia and South Africa using constant market share approach arrived at conclusion that in Tunisian market, Indonesian *polyethylene terephtalate* has good competitiveness. On contrary Indonesian other form of copra has weak competitiveness. Meanwhile in South African market, Indonesian ceramics and cylinder have strong competitiveness but weak in palm oil.

Karacsony (2008) uses Porter's Diamond model in showing the production situation and competitiveness of Hungarian wheat sector. Porter introduced his model since the changing environment of world economy has made comparative advantage no longer appropriate and he preferred competitive advantage instead.

The essence of his model is that competitive advantage of a country is made possible by four correlated making of local economic environment. The four factors are: production factor condition, demand condition, related and supporting industries such as firm strategy and company structure beside two outer factors, chances and the roles of government. Thus, a nation is capable of competitiveness in sector in which the diamond provides the most favorable makings.

Karacsony identified some advantages and disadvantages in Hungarian wheat sector. In production factor side, Hungarian is benefited by the climate and natural resources which support the production. The transportation infrastructure is improving. But the loans drawn into this sector has made the farmer indebted and the loading capacities are still limited. In demand side, Hungarian wheat sector is facing downward demand both for human consumption and poultry consumption. Moreover, the demand for export is still small. Hence, Hungarian frequently over produces the wheat. In related and supporting industries side, Hungarian wheat industry still depend on imported seeds and fertilizer. In company strategy and structure side, it is revealed that the procurement and trade of wheat are very concentrated since the product chains are controlled by a few hands. Government assists the wheat industry through direct payment to farmer based on area and yield. The export and import actions are also regulated within the frame of common agricultural policy of the EU. Entering European Union both opens large opportunities for marketing Hungarian wheat and induces competition among members.

Rao and Tang (2004) analyze the Canada's performance in terms of productivity relative to the United States and the factors behind Canada's productivity. They found that the good economics performance and strong trade performance during observation period (1997-2002) have concealed the weak competitiveness. The increasing export was the consequence of strong United States economy and a large real depreciation of the Canadian dollar against United States dollar instead of any competitiveness improvement of Canada's Industries.

Although in the short run, depreciation of domestic currency leads to cost competitiveness, it brings adverse effect into domestic economy in the long run. A prolonged real depreciation lowers the real wages and real incomes. Moreover, it will undermine innovation, productivity, and hence living standard as it delays the necessary relocation of sources from less efficient into more efficient firms, or hinder the shift from the resources or low skilled based industry to high tech and knowledge-intensive industries. Therefore, sustained improvement in cost competitiveness and living standards can only come from longer-term improvement in relative productivity.

The constant market share analysis approach was also employed by Juswanto and Mulyanti (2003) to reveal the competitiveness of Indonesian manufacture products. The result shows that product composition seems to be the main problem of Indonesian manufacture export and Indonesian manufacture exports tend to be concentrated in some specific markets.

The study on competitiveness of export commodities and Industry's competitiveness have been performed either in connection with some particular events such as imposition or elimination of trade policies and bilateral or regional trade agreement. Batista (2002) measures Brazil's loss of United States market share to Mexico as result of the entry in force of the North American Free Trade Agreement.

Mahmood and Akhtar (1996) assess competitiveness of Pakistan's export in two sets period of time, which are between 1984-85 and 1988-1989 and between 1988-1989 and 1992-1993. Instead of five-year interval, the one-year interval was chosen to capture yearly change. They found that the market distribution and competitiveness of Pakistan export have improved significantly between two sets period of time. However, the concentration on traditional commodities has offset the positive contribution of effective market distribution and improved competitive strength to a large extent.

De la Guardia et al. investigate the competitiveness of services activities in European nations. By using competitiveness matrix, they analyze the primary changes in the world competitiveness of three major service sectors-transport & communication, travel and other business services in 21 European

countries. Their study reveals that in the period of 1990-1995 all economies classified the export activities of transport & communication services and of other business services as declining star or retreats. By contrast, the exports of travel services were rising stars or missed opportunities. Meanwhile in the period of 1995-2000, the market behavior changed. The export activities of transport & communication services continued classified as declining stars or retreats followed by travel services. The export of other business services shifted to rising stars or missed opportunities classification.

Rachman employs competitiveness matrix to provide an ex post analysis of the competitiveness of Indonesian agricultural commodities during the implementation of World Trade Organization (WTO) commitments. He came up with the result that Indonesian agriculture commodities have decreased in terms of its competitiveness under WTO agreement.

CHAPTER III
METHODS OF MEASURING COMMODITY COMPETITIVENESS

3.1. Competitiveness Matrix

Competitiveness matrix, introduced by O. Mandeng, is employed to see position of a product to competitor countries[9]. De la Guardia and Molero (2003 p.12) explain that a particular exported commodity can be classified according to its international competitiveness through the behavior of the market share and the evolution of the world import. The world import of commodities may go up and down thus the exporting countries take appropriate action accordingly.

The aforesaid allows classifying the exporting sectors as rising stars, missed opportunities, declining stars and retreat. The rising stars are those economic activities in which a country enhances its market share, in circumstances in which those activities have an increasing importance in the world wide commerce. The missed opportunities take place in those sectors in which the country is loosing market share in a context in which these sectors are enhancing. The declining stars are situations of those sectors of the economic activity in which the exporting country increase its market share in circumstances in which the international market is being reduced. Retreat indicates the declining export activity of sectors which are having declining dynamism of world import (De la Guardia and Molero, 2003 p.12).

There are four competitiveness variables used to examine the competitiveness of Indonesian commodities (Mahanani, 2009 p.17).

a. Market share which is the value of export of commodity i from country a to importing country b as a percentage of total value of imports of commodity i on importing country b.
b. Percentage of exports which is the value of exports of commodity i from country a to importing country b as a percentage of total value of exports of country a to importing country b.

[9] Excerpted from Mahanani (2009 p. 17-10).

c. Specialization which compares the market share of country a for commodity i to the overall market share of country a, wherein if the commodity market share is higher than the overall market share, the country is said to be specialized in commodity i, and if it is lower, the country is said not to be specialized in commodity i.

d. Percentage of imports which is the value of imports of commodity i on importing country b expressed as a percentage of total value of imports on importing country b.

The formula of the four variables above are shown as below

a. Market Share (MS): Mij/Mi

b. Percentage of Export (PE): Mij/ Mj

c. Specialization (SP): (Mij/Mi)/(Mj/M)

d. Percentage of Imports (PI): Mi/M

Where

M is the total import value

Mj is the value of imports that originated from exporting country j

Mi is the value of imports of commodity i

Mij is the value of imports of commodity i that originated from exporting country j

Advanced analysis using the competitiveness matrix as an analytical tool is used to clarify a change in the competitiveness of Indonesian tea. This method allows classifying the exporting sector as rising star, declining stars, missed opportunities and retreat. This classification based on (FY denotes final year and BY denotes base year):

a. with market share on the vertical axis

Rising star meets criteria:

Mi/ M (FY) > Mi/ M (BY) and Mij /Mi (FY) > Mij/ Mi (BY)

Declining star meets the criteria:

Mi/ M (FY) < Mi/ M (BY) and Mij/ Mi (FY) > Mij/ Mi (BY)

Missed opportunity meets the criteria:

Mi/ M (FY) > Mi/ M (BY) and Mij/ Mi (FY) < Mij/ Mi (BY)

Retreat meets the criteria:

Mi/ M (FY) < Mi/ M (BY) and Mij/ Mi (FY) < Mij/ Mi (BY)

b. with percentage of exports on the vertical axis of the competitiveness matrix

Rising star meets criteria:

Mi/ M (FY) > Mi/ M (BY) and Mij /Mj (FY) > Mij/ Mj (BY)

Declining star meets the criteria:

Mi/ M (FY) < Mi/ M (BY) and Mij/ Mj (FY) > Mij/ Mj (BY)

Missed opportunity meets the criteria:

Mi/ M (FY) > Mi/ M (BY) and Mij/ Mj (FY) < Mij/ Mj (BY)

Retreat meets the criteria:

Mi/ M (FY) < Mi/ M (BY) and Mij/ Mj (FY) < Mij/ Mj (BY)

c. with specialization on the vertical axis of the competitiveness matrix

Rising star meets criteria:

Mi/ M (FY) > Mi/ M (BY) and (Mij/ Mi) / (Mj/ M) (FY) > (Mij/ Mi)/ (Mj/ M) (BY)

Declining star meets the criteria:

Mi/ M (FY) < Mi/ M (BY) and (Mij/ Mi)/ (Mj/ M) (FY) > (Mij/ Mi)/ (Mj/ M) (BY)

Missed opportunity meets criteria:

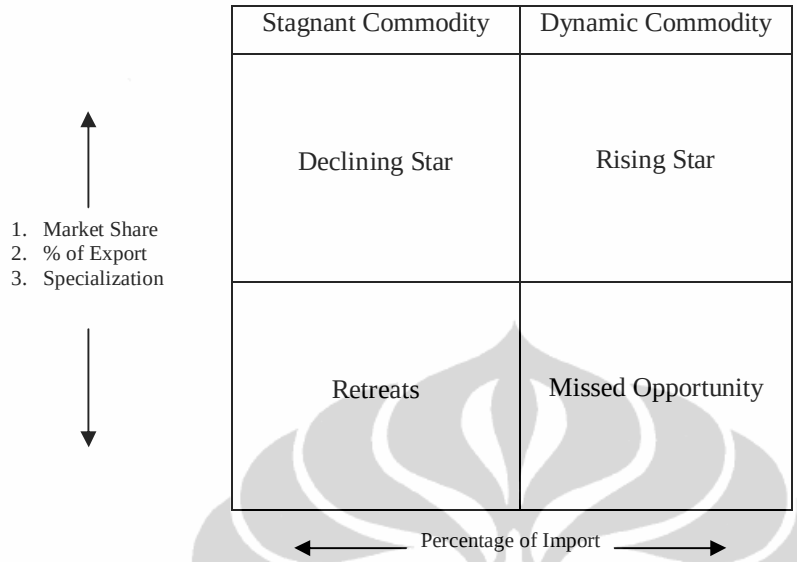
Mi/ M (FY) > Mi/ M (BY) and (Mij/ Mi)/ (Mj/ M) (FY) < (Mij/ Mi)/ (Mj/ M) (BY)

Retreat meets the criteria

Mi/ M (FY) < Mi/ M (BY) and (Mij/ Mi)/ (Mj/ M) (FY) < (Mij/ Mi)/ (Mj/ M) (BY)

Figure 3.1

The Matrix of Competitiveness Situation



Source: Rachman P.5

Rachman explains that the matrix use percentage of import as the horizontal axis. This is the change in percentage of demand. A commodity with positive change over time in demand is called dynamic commodity. On contrary, a commodity with negative change over time in demand is called stagnant commodity. Meanwhile, for the vertical axis, one of three variables can be selected, namely market share, percentage of export and specialization.

The analysis depends on the variable selected for vertical axis. For instance, if the market share increases along with the rising demand, the commodity is classified as rising star. The other way around, if the increasing demand of a commodity is followed by decreasing market share, then we miss the opportunity.

3.2. Constant Market Share Analysis

There is one approach commonly used by researches in their studies assessing the competitiveness of certain product so called constant market share analysis (CMSA). Simonis (2000 p. 8) explains that the constant market share analysis is a decomposition method which was applied for the very first time to international trade flow by Tyszynski in 1951. The technique, well

known as shift-and-share analysis, has been used in the empirical studies of structural change in the field of industrial and regional economics.

Further, Simonis (2000 p.8) describes that the idea behind constant market share analysis is disentangling the change in the aggregate export or the global export share of a country into two major parts. The first part indicates the hypothetical change in a given country's export assuming that the share of this country export relative to the exports of the rest of the world has remained the constant, called structural effect. The second part is a residual effect, showing the difference between the real change and the hypothetical change with regard to the country's export, called competitiveness effect.

Since a nation's export flow and the rest of the world are heterogeneous, the decomposition method should be applied in the disaggregate level of markets and products. In this case, the aggregate exports are defined as the double sum of individual products exported to single foreign market. Hence, it is possible to specify the effect of export structure on a country's export performance and to measure the market composition effect and the product composition effect. A nation may lose the market share in the aggregate level albeit it can manage its every commodity export share constantly if its export growth rate below the world average or if it export products for which the demand grows slower than the average.

The decomposition method offered by constant market share analysis has limitations. The constant market share analysis is a descriptive method which does not provide insight into the factors that explain the changes in the market shares. It does not reveal the causal relationship between the trade performance and economic variables such as gross domestic product or exchange rate. The constant market share analysis tries to separate and quantify the contribution of a country's trade pattern (market and product composition) to trade performance and to quantify the contribution of other factors (Simonis, 2000 p.9).

There are four terms in the CMSA, standard growth, commodity composition, market distribution and competitiveness (Mahanani, 2009 p. 14-15). Standard growth indicates the general standard of export growth of all

countries the world market or the world to the world export. The growth reflects the export performance of other countries compared to a particular nation observed. If the standard growth of export is below a nation observed export growth, it indicates that nation export performance in better than the rest of the world export performance. The formula is expressed as below:

$$STD = r \times E_{iby}$$

Commodity composition defines the influence of the product composition of a country's export. It captures the effect of aggregate export value change of commodity being observed. The formula is expressed as below:

$$CC = (r - ri) \times E_{iby}$$

The value of commodity composition can be positive or negative. The positive value indicates that a nation has exported particular product to its trade partner which has the higher growth of demand relative to other products.

Market distribution affect measures the effect of demand change of particular commodity in export destinations. It can be either growing or shrinking. It is calculated by aggregating the changes in the individual export markets of particular commodity. The formula is expressed as below:

$$MD = (r_{ij} - r_i) \times E_{ijby}$$

Market distribution effect can be positive or negative. The positive value implies that the nation distributes its product to market with central of growing demand. Vice versa, the negative value indicates that nation distributes its products to sluggish markets.

The competitiveness effect reveals the capacity of a country to increase its market share due to competitiveness factors only, independently of structural development in the market or in the product trade pattern. It is calculated by aggregating the changes in the export shares of a country for each market and for each product (Simonis, 2000 p.12). The formula is expressed as below.

$$\text{Re}\,sidual = (E_{ijfy} - E_{ijby}) - (r_{ij} \times E_{ijby})$$

The positive value confirms the nation strong competitiveness compared with other competitors. The other way around, the negative value shows nation's weak competitiveness compared with other competitors.

Where:

$$r = \frac{W_{fy} - W_{by}}{W_{by}}$$

$$r_i = \frac{W_{ify} - W_{iby}}{W_{iby}}$$

$$r_{ij} = \frac{W_{ijfy} - W_{ijby}}{W_{ijby}}$$

Notations:

$E_{(iby)}$: Country export value of certain type of tea in base year.

$E_{(ijby)}$: Country export value of certain type of tea to particular market in base year.

$E_{(ijfy)}$: Country export value of certain type of tea to particular market in final year.

$W_{(by)}$: World export value of aggregate tea in base year.

$W_{(fy)}$: World export value of aggregate tea in final year.

$W_{(iby)}$: World export value of certain type of tea in base year.

$W_{(ify)}$: World export value of certain type of tea in final year.

$W_{(ijby)}$: World export value of certain type of tea to particular market in base year.

$W_{(ijfy)}$: World export value of certain type of tea to particular market in final year.

CHAPTER IV
THE PROFILE OF TEA

4.1. The General Description of Indonesian Tea

Tea with its refreshing and health function is one of important commodity for Indonesian people. In economic side, tea export contributes $ US 110 millions to Indonesian foreign reserve. Although the share of its foreign reserve is relatively small compared with other commodities, tea contributes net foreign reserve due to its small import. Indonesian tea import value on average only around 4.65 percent of its export value.

In environmental conservation aspect, tea plantation improves the hydrology as good as forests do. Tea plantation enhances water infiltration, lowers the water flow on top soil and maintains humidity. Tea plantation can grow in land with more than 40 percent elevation. Further, it reduces the land erosion since it holds kinetic energy of rain and absorbs carbon dioxide as much as 2.5 ton per hectare annually.

In order to grow well, tea plantation requires certain conditions of soil, climate and land altitude. Tea plantation requires *latosol* or *podzolik* soil with ph between 4.5 and 5.6 and more than 40 cm effective depth. Tea plantation grows in area with temperature between 13^{o} C and 25 ^{o} C, intense sunlight with humidity no less than 70 percent at noon, annual rain fall not less than 2000 mm. The more intense the sunlight it is exposed, the faster it grows as long as it receives sufficient rain falls.

Tea is not the Indonesian original plantation. Tea seeds were brought to Indonesia from Japan by a German named Dr. Cleyer in 1686 which in the very first time, tea was intended to be a decorative plants. In 1728 the Dutch Government failed to breed tea plant in Java. This move was followed by Dr. Siebold In 19^{th} century. Jacobson pioneered tea plantation in 1828. He was successful bringing tea plantation as a profitable industry so became one of commodities included in *culture stelsel*.

In 1878 the first Assam tea seeds were imported from Sri Langka by R.E. Kerkhoven and planted in Gambung, West Java. In 1897, the tea industry initiated to establish a research unit. In 1900 the Dutch Government started to pay attention to small holder tea plantation. In 1902 the research unit was upgraded to be the Tea Research Institute[10]. Later in 1910, the Assam tea plantations were developed in North Sumatera followed by tea plantations in West Sumatera and Southern Sumatera[11]. During the Dutch occupation, tea plantations were developed and spread to some regions and they were eventually taken over by Indonesian government after the declaration of independence (csr-review).

Indonesian climate supports the tea plantation. Tea plantation is suitable grown in land with the altitude 200 up to 2000 meters above the sea level. In other word, the higher the altitude, the better quality of the tea can be produced. West Java Province has large high land area which is suitable for tea plantation. Therefore this province is able to contribute 70 percent of national tea production. The other major tea farms can be found in Central Java, East Java, North Sumatra and South Sumatra.

Based on the altitude, tea farms can be classified into five groups. High Ground, the farms located in the altitude more the 1.500 meters above sea level for instance, Sinumbra farm and Sperata farm in West Java. Good Medium, the farms located in the altitude 1.200 up to 1.500 meters above sea level for example, Malabar farm, Kertamanah farm, Gunung Mas farm and Goalpara farm in West Java. Medium, farms located in the altitude between 1.000 and 1.200 meters above sea level for instance Wonosari farm in East Java and Pangheotan in West Java. Low Medium, the farms located in the altitude 800 up to 1.000 meters above sea level for example Pasir Nangka farm, Cikopi Selatan farm in West Java. Common, the farms located in the altitude less than 800 meters above sea level such as Gunung Raung farm. Around 50 percent of Indonesian tea plantation is in medium level and only 20 percent located in high ground. The rest is classified as low medium.

[10] Taken from the 5th National Focal Point Working Group on Tea, Chiang Ray – Thailand.
[11] Taken from Indonesian Tea Catalogue, Ministry of Agriculture Republic of Indonesia.

The performance of Indonesian tea sector in last five years can be read from the next two tables. Table 4.1 displays Indonesian tea plantation area, production and productivity in a whole. Meanwhile table 4.2 breaks down the tea sector performance by province.

Table 4.1
Indonesian Tea Plantation Area, Production and Productivity

Year	Area (Ha)							Production (ton)	Productivity (000 kg)
	Small Holder	State Owned	Large Holder	Pre-productive	Productive	Damage	Total		
2004	61,902	46,185	35,878	12,291	115,156	16,518	143,965	167,136	1.45
2005	60,771	45,483	34,284	9,105	114,404	17,029	140,538	167,276	1.46
2006	60,990	46,662	27,939	8,730	111,055	15,806	135,591	146,847	1.32
2007	60,947	42,579	30,207	7,422	110,524	15,787	133,733	150,223	1.36
2008	61,185	38,199	30,205	6,726	106,948	15,915	129,589	150,851	1.41

Source: Teh Indonesia dalam Angka, 2009 p.1

Indonesian tea plantation is dominated by personal holders, about 44.75 percent of total area in average. 32.06 percent belongs to state owned companies and the rest, 23.19 percent, owned by large companies. Those three groups are experiencing area downsize, especially state owned plantation and large company plantation. State owned tea plantation area decreased more than four thousand hectares in year 2008. PTPN IV (Persero) Medan decided to convert their land from tea plantation into palm plantation because it will be more profitable.

The plantation area can be divided based on three plant categories, pre productive, productive and damage. The pre productive plant area decreased sharply, the number in year 2008 is around half of number in year 2004. The number of productive and damage area did not change much. It means the farmer aborted the tea culture in early stage and replaced it by other crops. This indicates the sluggishness of national tea sector.

The land productivity hit 1,450 kg per hectare in year 2004. It rose a bit in year 2005 (1,460 kg per hectare) and felt significantly in year 2006 (1,320 kg per hectare). It went up again in year 2007 and continued to grow in year 2008. In general, the tea plantation productivity does not change much, or the variance productive area number is positively followed by the production yield.

Table 4.2
Indonesian Tea Production (ton) and Area (ha) by Province

No	Province	Year				
		2004	2005	2006	2007	2008
1	NAD	- -	- -	17,503 8,574	- -	- -
2	North Sumatera	18,158 9,160	17,799 8,779	299 205	13,388 8,897	10,944 5,100
3	West Sumatera	4,248 5,240	4,197 4,202	1,785 2,697	4,343 4,817	4,317 4,892
4	Jambi	5,630 2,625	5,630 2,625	5,817 2,625	2,625 2,625	5,858 2,625
5	South Sumatera	1,962 1,571	2,371 1,571	2,375 1,470	2,371 1,470	2,375 1,470
6	Bangka Belitung	- 1	- -	- -	- -	- -
7	Bengkulu	2,370 2,834	2,025 2,834	1,175 1,417	1,522 1,118	1,502 1,098
8	Lampung	54 81	26 47	- -	- -	- -
9	West Java	117,301 105,976	120,666 103,573	103,058 104,314	109,957 101,080	110,651 100,540
10	Banten	- -	- -	4 24	- -	- -
11	Central Java	12,220 11,055	10,101 11,068	10,401 10,366	10,888 9,239	9,406 9,372
12	DIY	276 310	297 300	252 192	226 136	117 136
13	East Java	3,765 3,242	3,025 3,660	3,046 1,819	3,653 2,460	4,256 2,465
14	Central Celebes	1,002 1,760	1,021 1,760	1,005 1,760	1,005 1,760	1,226 1,760
15	South Celebes	150 119	118 119	127 128	245 129	199 129

Source: Teh Indonesia dalam Angka, 2009 p. 2 & 3

In brief, there are fifteen provinces involve in national tea production. Amongst them, only eleven provinces produce tea continually. NAD, Bangka Belitung, Lampung and Banten stop producing tea. West Java, North Sumatera, Central Java, Jambi, and West Sumatera are the top five of tea producer province. In average, they contribute respectively 71.79, 7.74, 6.78, 3.27 and 2.41 percent of national production. West Java province is the top tea producer, supported by abundant high land. West Java accounts for 75.43 percent of national tea plantation area, followed by Central Java (7.48%), North Sumatera (4.7 %), West Sumatera (3.2 %) and East Java (2%). In terms of productivity, West Java takes the first position. NAD, Jambi, North Sumatera and South Sumatera take second, third, fourth and fifth position respectively.

4.2. The Health Benefit of Tea

The benefits of tea for human health have been recognized among its consumers. Tea is a remedy for headaches, diarrhea, migraines, fevers, growths, tumors and a range of cancers. Tea is also capable in repressing cold, flues and some other viruses beside increasing energy, stamina, immunity and reliving physical fatigue and mental stress.

Tea is very helpful for the blood flow and urinal discharge as it breaks down cholesterol, fats, sugar, toxin and chemical sediment in the organs, urinal tract and circulatory system. Tea helps the body to release the sediments and stones thus reduce the blood pressure. In addition, tea increases the conductivity of nerve system, promotes protein absorption that increases tissues growth and promotes the sugar conversion into energy which reduces the risk of diabetes and glaucoma. The beta carotene improves the eyesight.

Moreover, the *polyphenols* inside tea are the active components which become the medicinal properties. There are four types of *polyphenols* namely *catechine, flavanoles, thearubigins* and *underfined polyphenols.* The Research Institute for Tea and Cinchona found that the *catechine* level of Indonesian tea is higher than any tea from all other nations.

4.3. Types of Tea

Wijayanto (2007 p. 40) gives description of tea. Tea comes from processed –leafs of tea plantation. *Camellia sinensis* is one of tea varieties which commonly grown in Indonesia tea farms. *Camellia sinensis* is originated from high lands of Himalaya high lands which lie in border line of the People Republic of China, India and Burma. *Camellia sinensis* grows in tropic and sub tropic regions which are exposed by intense sun light.

Only two leafs and a bud is picked because leaves being those near the growing tip the most desirable. The leaves are picked by hands during the active growth period. These buds and leaves are called flushes. The plants will grow a new flush every seven to ten days during the growing season.

Based on the treatment, tea is classified into four groups. They are black tea, green tea, oolong tea and instant tea[12]. Black tea, comes from fully-fermented (oxidized) tea leafs. The tea leaves are allowed to be completely oxidized before being heated and dried. Such leaves produce dark reddish-brown brew. This is the most common form of tea. Black teas are graded according to the size of the leaf; orange pekoe has smaller leaf size than medium-size coarser pekoe leaf. Although black tea favors vary, most are more assertive than those of green or oolong teas. Among the well known black teas are Darjeeling, English breakfast and Lapsang Souchon.

Green tea is favored among Asians. It is produced from leaves that are steamed and dried but not fermented. The oxidation process is ended after a minimal amount of oxidation by application of heat, either with steam or by dry cooking in hot pans. The leaves become greenish-yellow tea with slightly bitter favor, closer to the taste of the fresh leaf. Scientific studies reveal that both black and green teas increase the body's antioxidant activity by up to about 45 percent. The leaves have antibacterial powers against cavities and gum disease.

Oolong tea comes from half-fermented tea leafs. This type of tea is popular in China. The word came from Chinese word *wu-lung*. *Wu* means black and *lung* means dragon[13]. The partial-fermentation process yields teas with a flavor, color and aroma that falls between black tea and green tea. The fermentation process is the same with black tea process but with lesser period of oxidation, (two or three days) before the leaves are dried.

Instant tea provides a combination of dehydrated and granulated brewed tea, sugar or sweetener and other flavoring such as cinnamon and lemon. Instant tea can be dissolved quickly in cold or hot water.

The black tea is produced by state owned plantations and major private plantations. Meanwhile the green tea is produced by small plantation which owned by personal and some major private plantations. The green tea is sold to private tea plant to be further processed as aroma tea which is mostly consumed domestically, whereas most of the black tea production is sold abroad. In the last couple years, Indonesian green tea has been penetrating foreign market.

[12] Taken from Indonesian Tea Catalogue, Ministry of Agriculture.
[13] Taken from Indonesia Export News.

4.4. Tea Trading and Preferences

The international tea trading is conducted through tea auction centers in several tea producing countries besides direct selling to importing countries. Tea auction centers are located in England (London), Limbe, India (Calcutta, Cochin, Coonnor, Amritsar, Gauhati, Coim, Batore), Sri Lanka (Colombo), Bangladesh (Chittagong, Siliguri), Kenya (Mombassa), Indonesia (Jakarta) and Taiwan (Chaw Ching)[14].

Calcutta, London and Colombo are the oldest tea auction centers. They have been operating for one and half century. Jakarta tea auction was established in 1972. Tea market can be classified as *oligopsony* where several major buyers who have tea processing plants control the tea trading. The buyers are also the intermediate sellers who supply the tea plants that produce instant tea for final consumers. Not all imported teas are consumed by importing countries. Some of them are further processed and exported with higher value such as in England, Germany, Netherlands and Czech.

Suprihatini (2005) gives general picture of world tea preferences based on her study using nine parameters: price, grade, taste, appearance, aroma, claim handling, color, package and infused leaf which were tested to respondents from 22 buyers in Jakarta Tea Auction. Her study reveals that Indonesian tea, especially black tea, is quite preferable. It is ranked in the third position after Sri Langka tea in the first place and North Indian tea in the second position. However, Indonesian tea has to be improved in all above parameters.

The respondents regard Sri Langka tea has the most preferable grade aspect. Sri Langka tea production is dominated by low grown tea, around 56 percent of total production. High grown tea reaches around 29 percent and medium grown tea reaches 15 percent of total production. Meanwhile Indonesian tea production consists of 50 percent medium grown tea, 30 percent low grown tea and 20 percent high grown tea[15]. Further, in the taste, appearance, color and fragrance aspects, North Indian orthodox gives the most satisfaction. China is advantage in claim handling.

[14] Taken from profil dan potensi negara produk teh di Ceko.
[15] This was the production composition in year 2002.

The study also reveals that in general, Middle East market except Egypt, Pakistan, Afghanistan and Iraq prefer low grown tea. Russian Federation only prefers medium grown tea. Australia, Western European especially England, Netherlands and Germany, Eastern European, Polish, Hungarian, Turkey and Japan prefer high and medium grown tea. Meanwhile, Pakistan, Iraq, Afghanistan, Egypt, Singapore and Malaysia prefer medium to high grown tea. United States, due to multiethnic population, accept all kind of teas.

Table 4.3
Tea Market Grouping based on Type and Grade

Type/ Grade	Small	Broken	Small & Broken	Leafy	Leafy & Broken
High – Medium – Low Grown	United States, Canada	-	Middle and Southern America	-	-
High – Medium Grown	Polish, Hungarian	Japan, Turkey, Eastern European	England, Netherlands, Germany, Australia	-	-
Medium Grown	-	Russian Federation	-	-	-
Medium – Low Grown	Singapore, Malaysia, Egypt	Iraq	Pakistan, Afghanistan	-	-
Low Grown	-			Iran	Middle East

Source: Suprihatini (2005 p.5)

Based on tea type and grade, Suprihatini broke down the market into eleven groups. Middle East countries except Egypt, Pakistan, Afghanistan and Iraq favor low grown tea in balance portion of leafy and broken grade. Iran prefers low grown tea with leafy grade. Pakistan and Afghanistan desire medium and low grown tea with small and broken grade. England, Netherlands, Germany and Australia favor high to medium grown tea in small and broken grade. Middle and Southern America favor small and broken grade from all tea types. Japan, Turkey and Eastern European prefer broken grade from high and medium grown tea. Broken grade is also interesting for Russian Federation and Iraq but in different compositions, Russian Federation wants medium grown tea while Iraq wants medium and low grown tea. United States, Canada, Polish, Hungarian, Singapore, Malaysia and Egypt desire small grade tea in different compositions. Singapore, Malaysia and Egypt prefer medium and low grown tea meanwhile Polish and Hungarian prefer high to medium grown tea. Only United States and Canada can enjoy mixed types of tea.

According to National Agency for Export Development, in general Indonesian tea consumers place tea as a substitution of mineral water. Indonesian people are not accustomed to differentiate various quality of tea. The serving manner has not reflected high appetite and disregards the health benefit of tea. In the other word, their preferences are indifference. Thus, tea can be easily replaced by other beverages. This condition is much different from several nations which give special value for tea. Japanese has special ceremony for tea drinking. English has tea hour or tea break. Indian and Middle East people love dark tea. Chinese prefers green tea and American like herbal tea.

4.5. Tea Organizations

There are several international tea organizations, namely The International Tea Committee (ITC), The Inter-Governmental Group on Tea, The National Focal Point Working Group on Tea and United Kingdom Tea Council. In Indonesia there are many institutions established both by private and government to enhance the national tea sector. Indonesian Tea Farmers Association, Indonesian Tea Association, Cooperative Commodity Development Center on Tea, Jakarta Tea Auction, Bandung Tea Auction and Indonesian Tea Board are owned by private while Direktorat Budidaya Tanaman Rempah dan Penyegar, Direktorat Jenderal Pengolahan dan Pemasaran Hasil Pertanian, Dinas Perkebunan Daerah dan Research Institute for Tea Cinchona and are owned by Government.

Indonesian Tea Board has three functions[16]: coordinative function, facilitator function and operational function. Coordinative functions comprise making coordination with the development of tea programs through planning scheme, monitoring, and evaluation programs of concerned institutions, making coordination and close operation with the concerned institutions or organizations in tea sector, representing Indonesia in national and international tea forum, making coordination with the marketing and promotion sector through the effectiveness of a trading house and suggesting some policies to

[16] Taken from Indonesian Tea Catalogue.

government. Facilitator functions comprise facilitating the tea industry with the information of technology on communication, research and development as well as promoting the workforce and facilitating the implementation of government policy and suggesting the acceleration of the implementation for tea industry. Operational functions comprise sending Indonesian representatives to attend any international meeting or conference as requested, negotiating with any foreign country to eliminate market barrier either in the form of tariff or non tariff, providing data, publication, newsletter, brochure, poster, booklet, market information, market intelligence and website, negotiating with several finance institution in the framework of tea to include the warehousing receipt concept, giving licenses to tea producers, traders, manufacturers, exporters, brokers, packers, and downstream industries and investigating the quality control system.

Research Institute for Tea and Cinchona has two functions[17], namely research and services. This institute carries out research mainly on applied research in all aspect of tea and cinchona commodities to increase quality and quantity of production to be more profitable, efficient and environmental friendly beside providing several services to tea industries such as chemical analysis of tea and cinchona, soil, leaf, planting material, fertilizer and pesticides, tea quality test for export purposes, soil and land sustainability survey, environmental impact assessment, tea fertilizer recommendation and feasibility study, high productive planting material (seeds), consultation and upgrading course on tea culture and workshop to improve productivity.

4.6. Problems in Indonesian Tea Industry

Indonesian tea sector so much rely on export. This could be caused by low tea domestic consumption, only 300 grams per capita, very small number compared with English consumption which reaches 2.5 kilograms per capita. Based on National Agency for Export Development report, sixty five percent of national production is dedicated for foreign market. The dependency to foreign market induces adverse effect to Indonesian tea. The price is affected by

[17] Taken from Indonesian Tea Catalogue.

international demand and supply situation. Consequently, the excess international tea supply drags down the Indonesia tea price and brings loss to tea farmers if the selling price fall sharply and hardly cover the production cost.

According to country report of Indonesian tea industry, there are quite many problems faced by Indonesian tea industry[18]. Indonesian tea export price is still low. The price growth is slower than the growth of production cost besides the low productivity which is still far below its optimum level[19]. It only reaches 1300 kg per hectare, 60 percent of its optimum level. The low productivity is caused by more than half the tea population are old tea plants and the population per hectare is still below the population standard.

National tea industry is dealing with tariff and non tariff barriers (Hazard Analysis and Critical Control Point, Bioterrorism Act) beside saturated traditional market. The tea export is dominated by primary commodity with low value added.

Indonesian government takes some measures to support the improvement of tea production, productivity and quality such as implementing tea revitalization programs with replanting, rehabilitation as well as intensification, imposing fertilizer subsidy, promoting good agriculture practice (GAP) and cooperation between tea farmer and tea processor to produce high value added tea and releasing value added tax.

Indonesian government also fosters the investment in tea downstream industry by improving Indonesia National Standard for tea, providing industry area with good facilities like tax incentive, implementing one door policy for investment license, providing technologies from research and technology and implementing good manufacturing practice (GMP) which complies with Hazard Analysis and Critical Control Point.

4.7. National Tea Road Map

Ministry of Agriculture has composed sets of medium and long run objectives pertain to tea sector development. The objectives comprise expanding tea plantation area, enhancing tea production, improving land

[18] Taken from country report of Indonesian tea Industry, the 5th NFPWG on Tea.
[19] Taken from Indonesian Tea Rod Map, Ministry of Agriculture.

productivity, enhancing labor absorption, improving farmer revenue, strengthening tea domestic consumption, improving tea sector contribution in gross national product, increasing the product quality, developing downstream industry and fixing the selling system. The difference between medium run and long rung objectives lies in the level of achievement.

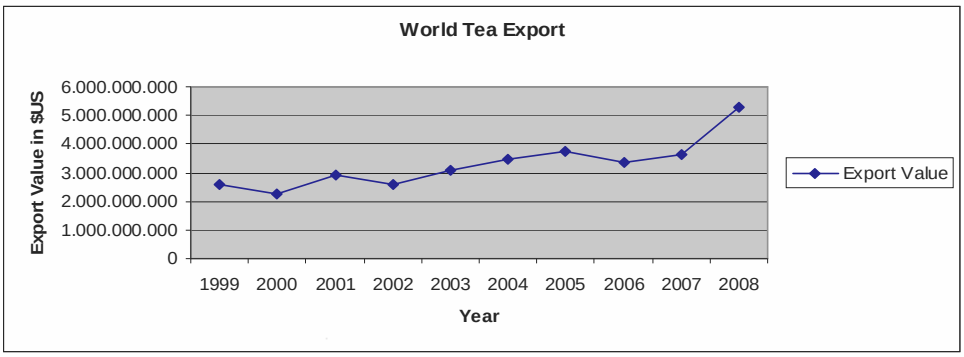
In order to reach the objectives, government implements special programs covering productivity and quality improvement, value added improvement, financial support, fiscal support and farmer empowerment. Productivity and quality improvement programs encompass area intensification, plants rehabilitation using high quality seeds and tea plants diversification. Value added improvement covers renewable energy resource usage in tea processing, downstream industry development and national standard imposition. Financial support embraces providing collective investment contract and warehouse receipt. Fiscal support consists of zero percent value added tax imposition and import tariff harmonization. Farmer empowerment includes strengthening farmer institution, providing technical training and establishing partnership between farmer and tea entrepreneur.

4.8. World Tea Trade Overview

The world tea trade performance in the last decade is depicted in this section. The first sub section delineates general view of tea trade. We proceed to explains more details both in export side and import side in the next sub sections.

4.8.1. World Tea Trade in General

Chart 4.1

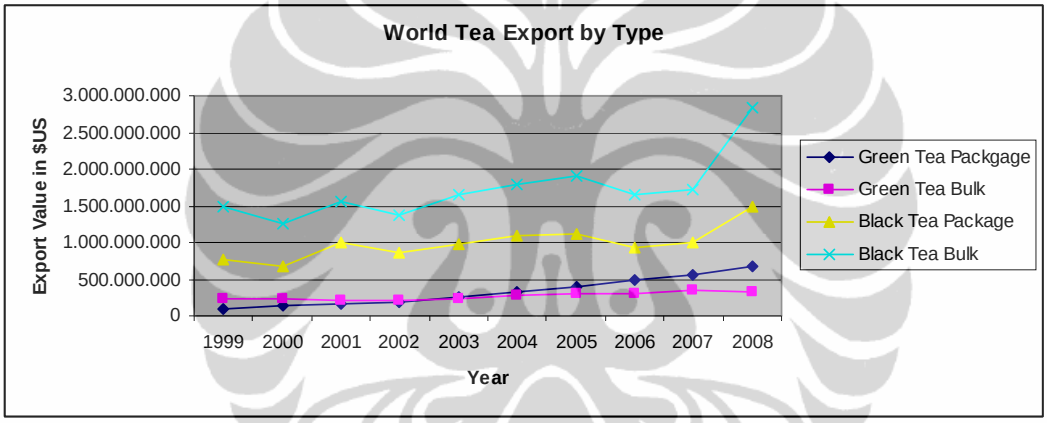


Source: WITS processed

As shown in chart 4.1, in general, world tea trade is experiencing upward trend. The decrease of tea export in term of value only occurred in three periods. Compared with previous year, world tea trade dropped as much as twelve percent in year 2000, and ten percent both in year 2002 and year 2006. In the other seven periods, world tea trade increased around ten percent. In year 2001 the export value increased quite high, as much as twenty seven percent and much higher in 2008, hit forty six percent.

Now we take a look at the world trade of each type of tea, green tea both package and bulk and black tea both package and bulk to find the trade performance of each type.

Chart 4.2



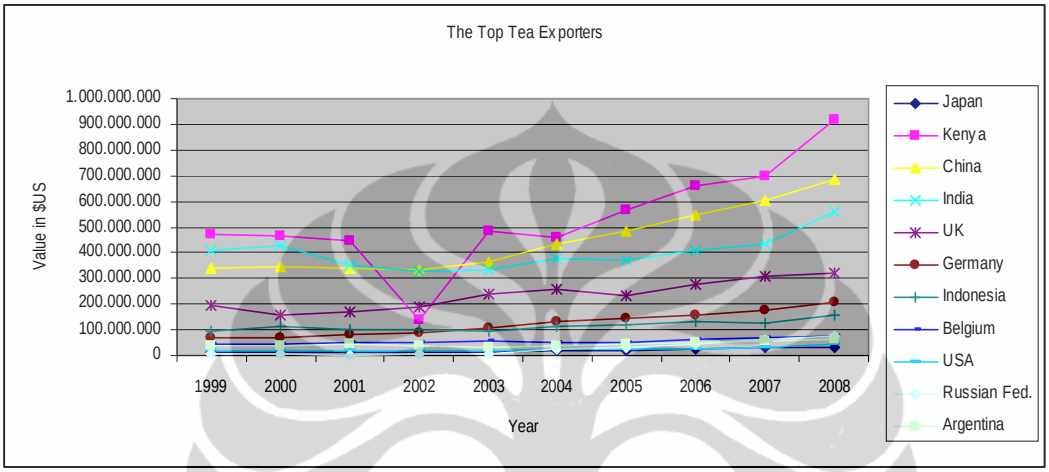
Source: WITS processed

Chart 4.2 indicates that black tea both bulk and package dominates world tea trade. Although fluctuating, it fell in year 2000, 2002 and 2006 but rose in rest periods, bulk black tea contributes the higher portion and shows impressing increase, especially in year 2008 as much as 64 percent. Black tea package experienced similar trend as bulk black tea, its export value fell in year 2000, 2002 and 2006 but rose in other periods. The highest increase occurred in year 2001 as much as 49.5 percent and in year 2008 as much as 47.3 percent. Green tea package shows increment as much as 24 percent per year. Green tea bulk fell slightly in year 2001 and 2002 as much as 12 percent and 0.18 percent respectively before went up in the next five periods (12 percent average) and finally decrease a bit (8.5 percent) in 2008.

4.8.2. Export Side of World Tea Trade

Many countries get involve in tea trade. Here we disclose the world major tea sellers. Let us begin with comparing the total export value, comprise all kind of teas, of each exporting countries. Then we move to further detail, comparing export value of particular type from various exporting countries.

Chart 4.3

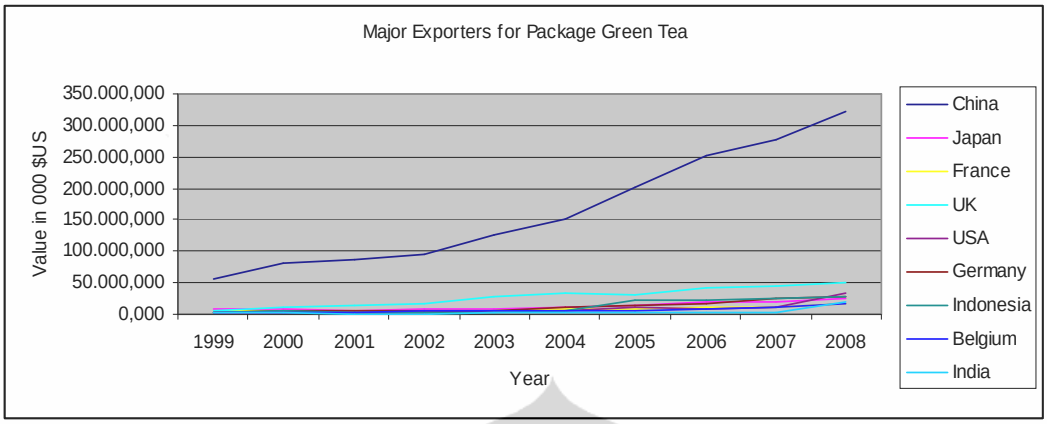


Source: WITS processed

Chart 4.3 shows the top eleven tea exporting countries with complete annual export value data in the last decade. Kenya is the largest tea trader which account for 16 percent world tea trade in average. China and India take the second and the third position, holding 13.61 percent and 12.55 percent total tea trade. United Kingdom, in fourth position, seizes 7.2 percent world tea trade. Germany and Indonesia are competing in the fifth and the sixth place grab 3.65 percent and 3.63 percent world tea respectively. Belgium stays in the seventh place, holds 1.71 percent total trade followed by Argentina with 1.39 percent market share. United States, Russian Federation and Japan stay in ninth to eleventh place with 0.74 percent, 0.7 percent and 0.55 percent share respectively.

Each type of tea has different major traders. The next four charts show the major traders of each specific type of tea. We will know for sure the main commodity contributing the tea trade from certain country.

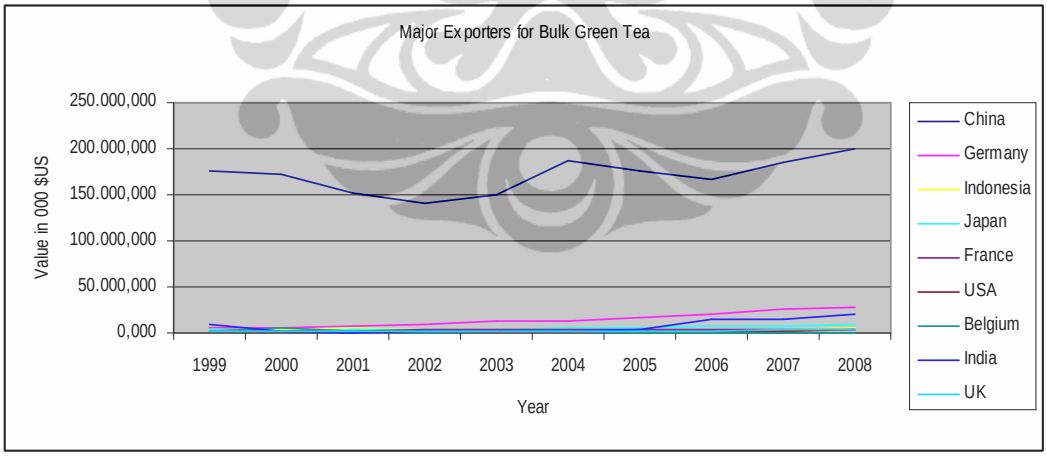
Chart 4.4



Source: WITS processed

Look at chart 4.4. China is the largest exporters of package green tea. In average, China grabs 36.64 percent of world trade for package green tea. Its average share is so far above any others. United Kingdom and Japan in the second and the third place hold 5.53 percent and 3.1 percent share. Whereas Indonesia, Germany, France, USA, Belgium and India stand in fourth to ninth position seize 2.73 percent, 2.64 percent, 2.15 percent, 1.98 percent, 1.28 percent and 0.86 percent share respectively.

Chart 4.5

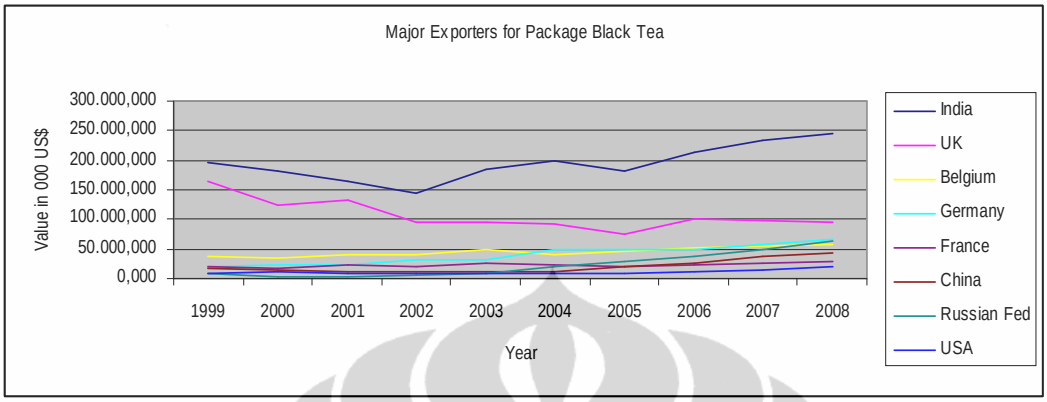


Source: WITS processed

Chart 4.5 exhibit top exporters for bulk green tea. World's bulk green tea trade is also dominated by China. Its share reaches 66.82 percent in average, leave all others exporters so far behind. Germany, in the second position, holds only slightly above 5 percent share. India, Japan, Indonesia, France, USA, UK

and Belgium contribute small parts of trade with 2.24 percent, 1.91 percent, 1.38 percent, 1.24 percent, 0.88 percent, 0.74 percent, and 0.68 percent share.

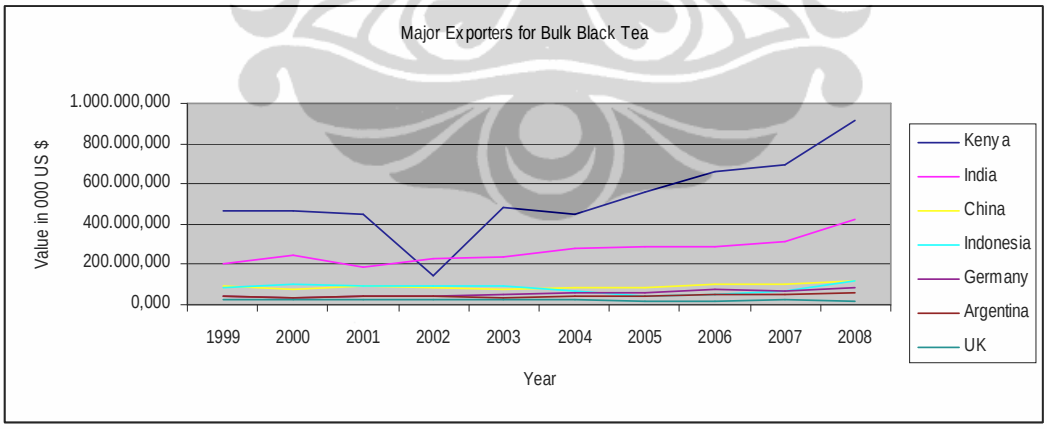
Chart 4.6



Source: WITS processed

Chart 4.6 clearly confirms that China is leading in green tea trade but not in black tea. India stands in the first position for package black tea export with 20.24 percent share followed by United Kingdom in the second place, holding 11.65 percent share. Belgium, Germany, France, Russia, China and USA stand in 3rd to 8th place, grab 4.66 percent, 3.94 percent, 2.37 percent, 2.1 percent, 2 percent and 1.14 percent.

Chart 4.7



Source: WITS processed

Chart 4.7 shows top exporters for bulk black tea. Kenya seize 30.36 percent share for world trade of bulk black tea. The figure brings Kenya to the number one position. India, in the second position, holds 15.78 percent share. They are followed by China, Indonesia, Germany, Argentina and United

Kingdom with 5.52 percent, 4.93 percent, 3.3 percent, 2.6 percent and 1.42 percent share.

Now we scrutinize the export growth engine of each tea major trader (see Annex 1). Russian Federation shows best annual progression in exporting tea, around 45 percent supported by bulk green tea which experiences the highest growth among other types of tea, around 5.75 per part and bulk black tea which grows 1.19 per part yearly. Meanwhile package green tea and package black tea grows 96 percent and 44 percent in average.

Kenya has 27 percent annual progression in exporting tea. Its bulk green tea is experiencing growing demand which hits 20.48 per part every year. Its package green tea, package black tea and bulk black tea grows 2.52 per part, 30 percent and 27 percent respectively every year.

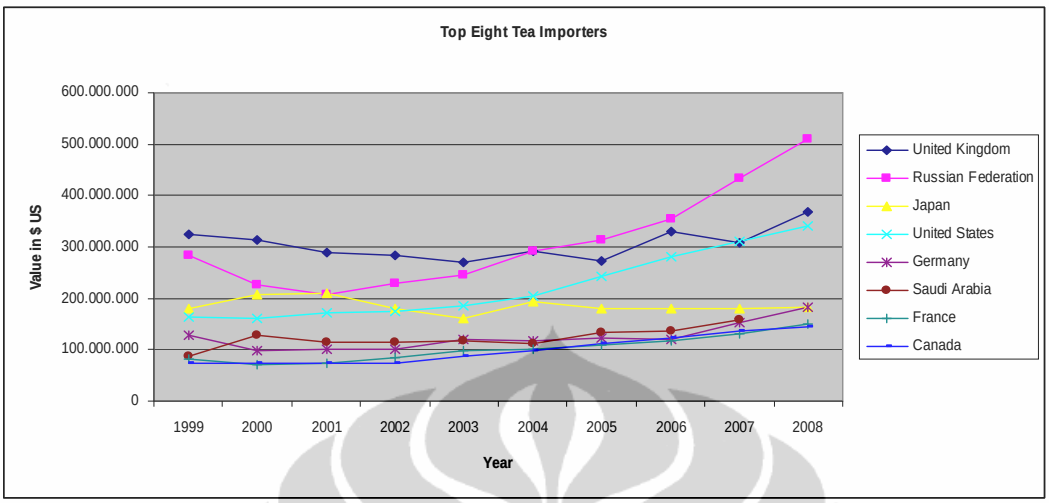
Japan and Germany have similar tea export growth, around 13 percent. Japan's growth is mainly pushed by the bulk black tea and package black tea trading performance with 19 percent and 18 percent yearly growth. Whereas Japan's package green and bulk green tea export grows 15 percent and 11 percent. Germany growth is primarily boosted by package and bulk green tea trade performance which increase 28 percent and 21 percent respectively. Meanwhile Germany package and bulk black tea trade incline 16 percent and 9 percent respectively.

USA records 11 percent export growth for tea. The growth is mainly boosted by the growth of package green tea export which hits 20 percent annually. Bulk green tea and package black tea also play important role in pushing the trade performance. Bulk green tea increase as much as 10 percent while package black tea grows by 12 percent annually. Its bulk black tea trade slightly increases, around 6 percent.

China, Belgium, United Kingdom, Indonesia, Argentina and India shows slight annual progression, only 8 percent, 8 percent, 7 percent, 6 percent, 6 percent and 4 percent respectively. Package green tea is the major booster for India, United Kingdom and China tea export growth. Bulk green tea becomes the main booster for Argentina. Meanwhile package black tea pushes the export growth for Indonesia. Belgium growth is supported by bulk black tea trade.

4.8.3. Import Side of World Tea Trade

Chart 4.8

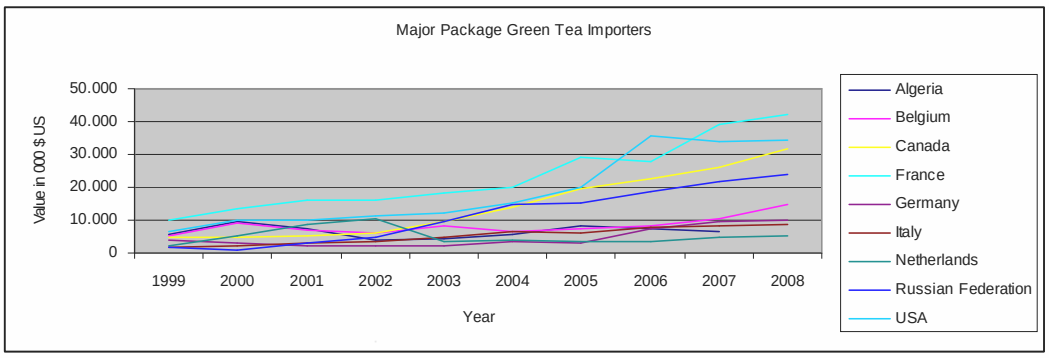


Source: WITS processed

Chart 4.8 implies that United Kingdom absorbs tea in a whole as much as 9.71 percent of total supply in average followed by Russian federation which absorbs 9,3 percent world supply. Meanwhile in last decade, United States, Japan, Saudi Arabia, Germany, France and Canada take respectively 6.7 percent, 6 percent, 3.9 percent, 3.8 percent, 3.1 percent and 3 percent of world total tea supply in average. Germany shows impressing tea trade performance last five years. In the beginning of this decade, its tea import value exceeded tea export value but in the following years the trade deficit became smaller and eventually it becomes net tea exporter.

We can trace the demand pattern of each type of tea to find out its major markets. The lines of these following charts indicates upward trend of world tea trade which is consistent with export side we have shown earlier.

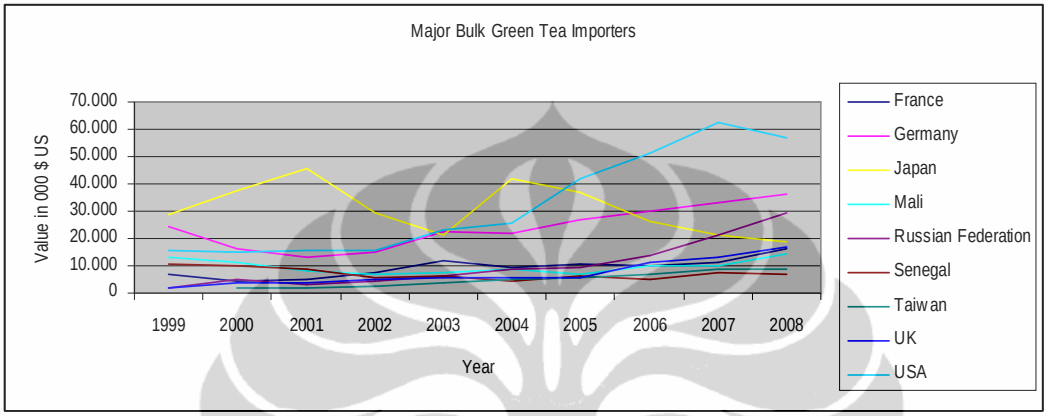
Chart 4.9



Source: WITS processed

See chart 4.9. In the last decade, France has been absorbing the largest part of package green tea world supply, 10.41 percent in average. USA takes the second largest part, around 7.93 percent, followed by Canada (5.73 percent), Belgium (4.22 percent), Russia (4.14 percent), Algeria (3.85 percent), Netherlands (2.8 percent), Italy (2.2 percent) and Germany (2.17 percent).

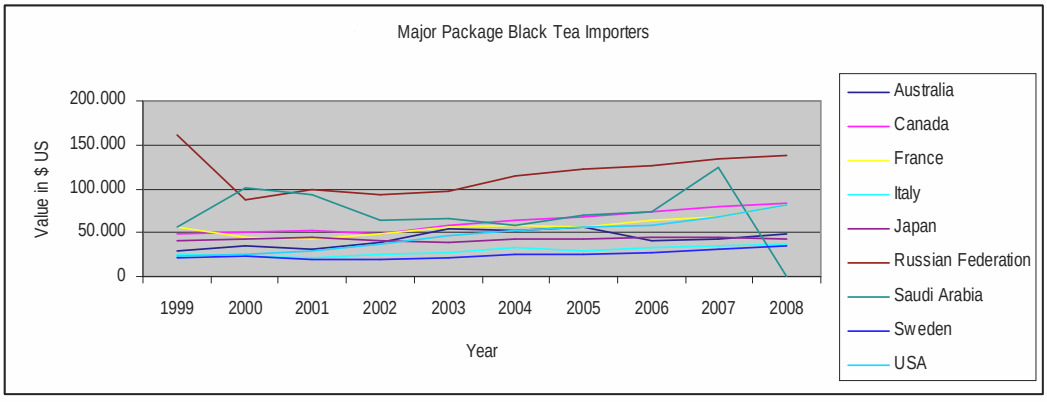
Chart 4.10



Source: WITS processed

Chart 4.10 reveals top bulk green tea importers. In average, Japan absorbs 13.87 percent world supply of bulk green tea, which brings Japan to the number one importer. Meanwhile USA receives 11.95 percent world supply. Germany, in the third position, seize slightly below USA part, 9.73 percent world supply. The other six top importers namely Mali, France, Russian Federation, Senegal, United Kingdom and Taiwan, in size order, receive no more than five percent of total supply, to be exactly, only 4.24 percent, 3.75 percent, 3.55 percent, 3.29 percent, 2.65 percent and 1.76 percent respectively.

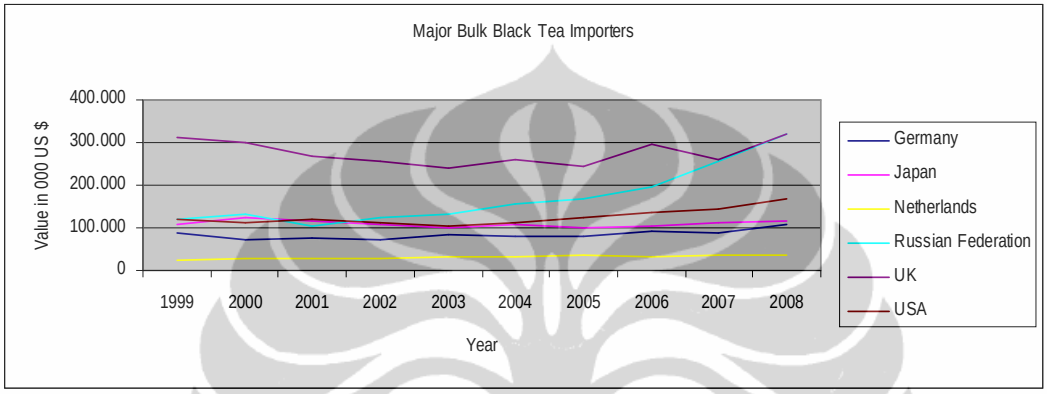
Chart 4.11



Source: WITS processed

Chart 4.11 reveals top package black tea importers. Russian Federation, in the first position, absorbs in average 12.65 percent world total supply in the last ten years. In the second place, Saudi Arabia, in average imports 8.78 percent world supply. Canada, France, USA, Japan, Australia, Italy and Sweden take the third to ninth position, receiving in average 6.51 percent, 6.07 percent, 4.73 percent, 4.66 percent, 4.57 percent, 3.08 percent and 2.61 percent world supply.

Chart 4.12



Source: WITS processed

Chart 4.12 displays major bulk tea importers. In the top of the list, United Kingdom imports 15.59 percent world supply in average. One level below, Russian Federation in average seizes 8.89 percent world supply. USA, Japan, Germany and Netherlands follow with importing in average 6.9 percent, 6.19 percent, 4.68 percent and 1.71 percent world supply.

CHAPTER V
THE ANALYSIS OF INDONESIAN TEA COMPETITIVENESS IN GLOBAL MARKET

5.1. Competitiveness Matrix

This sub section observes the position of Indonesian tea in certain trading partners. Markets are selected based on the availability of trading value data reported in every observation period. The absence of trading value in any year being observed will lead to bias calculation and decision. Thus the trading partners should be excluded from the investigation.

Competitiveness matrix allows us to classify the position of Indonesian commodities in its export destinations. The commodities will be classified either as rising star, declining star, missed opportunities or retreats according to the variable used namely market share, percentage of export and specialization.

5.1.1. Competitiveness Matrix for Package Green Tea

Table 5.1
Summary of Competitiveness Matrix for Package Green Tea

No	Export Destinations	Import Growth	Indonesian Performance		
			Market Share	Percentage of Export	Specialization
1	Australia	Growing	Increase	Increase	Increase
2	Brunei	Shrinking	Increase	Decrease	Increase
3	China	Growing	Decrease	Decrease	Decrease
4	Germany	Growing	Decrease	Increase	Decrease
5	Hong Kong	Growing	Decrease	Decrease	Decrease
6	Japan	Shrinking	Increase	Increase	Increase
7	Korean Rep.	Growing	Decrease	Increase	Decrease
8	Malaysia	Growing	Increase	Increase	Increase
9	Mongolia	Shrinking	Increase	Increase	Increase
10	Netherlands	Growing	Decrease	Decrease	Decrease
11	New Zealand	Growing	Increase	Increase	Decrease
12	Pakistan	Growing	Increase	Increase	Increase
13	Philippines	Growing	Increase	Increase	Increase
14	Russian Fed.	Shrinking	Increase	Increase	Increase
15	Singapore	Growing	Increase	Increase	Increase
16	Taiwan	Shrinking	Increase	Increase	Increase
17	Thailand	Shrinking	Increase	Increase	Increase
18	United Arab Emirates	Growing	Decrease	Increase	Decrease
19	United Kingdom	Growing	Increase	Increase	Increase
20	United States	Growing	Decrease	Decrease	Decrease
21	Vietnam	Growing	Increase	Increase	Decrease

Source: WITS processed

Indonesian package green tea position in twenty one export destinations, are implied in table 5.1 (see also annex 2). From the table 5.1 we infer that Indonesian package green tea is distributed appropriately in Australia, Malaysia, Pakistan, Philippines, Singapore and United Kingdom. These markets are experiencing import growth of package green tea and this condition is well responded by Indonesia with increasing its market share, percentage of export and specialization. Thus we classify our package green tea as rising star.

Indonesia loses in China, Hong Kong, the Netherlands and the United States due to failure to increase its market share, percentage of export and specialization amid growing import. Thereby, our package green tea is categorized as missed opportunity.

Japan, Mongolia, Russian Federation, Taiwan and Thailand experiences negative import growth, nevertheless, Indonesia still manages to expand its market share, percentage of export and specialization there. This makes our package green tea a declining star. Meanwhile, the other six markets have split decision. The classification, then, is determined according to the dominant status of the variables. Hence, Indonesian package green tea is classified as declining stars in Brunei, missed opportunities in Germany, Korea and UAE, and rising stars in New Zealand and Vietnam.

5.1.2. Competitiveness Matrix for Bulk Green Tea

Table 5.2
Summary of Competitiveness Matrix for Bulk Green Tea

No	Export Destinations	Import Growth	Indonesian Performance		
			Market Share	Percentage of Export	Specialization
1	Afghanistan	Shrinking	Increase	Increase	Increase
2	Australia	Growing	Increase	Increase	Increase
3	Germany	Shrinking	Decrease	Decrease	Decrease
4	Hong Kong	Shrinking	Increase	Increase	Increase
5	Japan	Shrinking	Increase	Decrease	Increase
6	Malaysia	Shrinking	Increase	Increase	Increase
7	Netherlands	Shrinking	Increase	Increase	Increase
8	Pakistan	Shrinking	Increase	Decrease	Increase
9	Poland	Shrinking	Increase	Increase	Increase
10	Russian Federation	Shrinking	Increase	Increase	Increase
11	Singapore	Shrinking	Decrease	Decrease	Decrease
12	Suriname	Shrinking	Increase	Increase	Increase
13	Taiwan	Shrinking	Increase	Increase	Increase
14	United Arab Emirates	Growing	Increase	Increase	Increase
15	United Kingdom	Growing	Increase	Increase	Increase
16	United States	Shrinking	Increase	Increase	Increase

Source: WITS processed

Most of Indonesian bulk green tea export destinations experience downward import. From sixteen selected markets, only three markets experience upward demand, namely Australia, UAE and the United Kingdom (see table 5.2). Indonesia has responded appropriately to these markets. In growing markets like Australia, UAE and the United Kingdom, Indonesia manages to expand its market share, percentage of export and specialization. We classify our bulk green tea as rising star there.

Meanwhile, in the shrinking markets like Afghanistan, Hong Kong, Japan, Malaysia, Netherlands, Pakistan, Poland, Russian Federation, Suriname, Taiwan and United States, Indonesia is still able to reach more shares, increase its export proportion and increase the specialization. Therefore our bulk green tea is categorized as declining star there.

In other downward import markets such as Germany and Singapore, Indonesia has responded with reducing its export consequently lower its market share, percentage of export and specialization. Thus, our bulk green tea is classified as retreats there.

5.1.3. Competitiveness Matrix for Package Black Tea

Table 5.3
Summary of Competitiveness Matrix for Package Black Tea

No	Export Destinations	Import Growth	Indonesian Performance		
			Market Share	Percentage of Export	Specialization
1	Australia	Shrinking	Decrease	Decrease	Decrease
2	Canada	Shrinking	Decrease	Decrease	Decrease
3	Egypt	Growing	Decrease	Decrease	Decrease
4	Germany	Growing	Decrease	Decrease	Decrease
5	India	Shrinking	Decrease	Decrease	Decrease
6	Iran	Growing	Decrease	Decrease	Decrease
7	Japan	Shrinking	Decrease	Decrease	Decrease
8	Korea	Growing	Decrease	Decrease	Decrease
9	Malaysia	Shrinking	Decrease	Decrease	Decrease
10	Netherlands	Shrinking	Decrease	Decrease	Decrease
11	Pakistan	Shrinking	Decrease	Decrease	Decrease
12	Poland	Shrinking	Decrease	Decrease	Decrease
13	Russia	Shrinking	Decrease	Decrease	Decrease
14	Saudi Arabia	Growing	Increase	Decrease	Decrease
15	Singapore	Shrinking	Decrease	Decrease	Decrease
16	Sri Lanka	Growing	Decrease	Increase	Decrease
17	Taiwan	Shrinking	Increase	Increase	Increase
18	Ukraine	Shrinking	Decrease	Decrease	Decrease
19	United Arab Emirates	Shrinking	Decrease	Decrease	Decrease

20	United Kingdom	Shrinking	Decrease	Decrease	Decrease
21	United States	Growing	Decrease	Decrease	Decrease
22	Vietnam	Shrinking	Decrease	Decrease	Decrease

Source: WITS processed

Indonesia is dealing with unfavorable situation in package black tea market (see table 5.3). From twenty two export destinations, only seven countries show growing import such as Egypt, Germany, Iran, Korean Republic, Saudi Arabia, Sri Lanka and the United States. Unfortunately, Indonesia misses these opportunities indicated by loosing its market share, shrinking its export proportion and lowering its specialization.

The other fifteen export destinations experience downward import situation like Australia, Canada, India, Japan, Malaysia, Netherlands, Pakistan, Poland, Russian Federation, Singapore, Taiwan, Ukraine, UAE, United Kingdom and Vietnam. Among these shrinking market, Taiwan is the only market where Indonesia is able to reach declining star status for package black tea. In the rest area, Indonesian package black tea is classified as retreats.

5.1.4. Competitiveness Matrix for Bulk Black Tea

Table 5.4
Summary of Competitiveness Matrix for Bulk Black Tea

No	Export Destinations	Import Growth	Indonesian Performance		
			Market Share	Percentage of Export	Specialization
1	Afghanistan	Shrinking	Decrease	Decrease	Increase
2	Australia	Shrinking	Decrease	Decrease	Decrease
3	Canada	Shrinking	Increase	Increase	Increase
4	Chile	Shrinking	Increase	Increase	Increase
5	Egypt	Growing	Increase	Increase	Increase
6	Germany	Shrinking	Increase	Increase	Increase
7	Hong Kong	Shrinking	Increase	Increase	Increase
8	India	Shrinking	Increase	Increase	Increase
9	Iran	Growing	Decrease	Decrease	Decrease
10	Italy	Shrinking	Increase	Increase	Increase
11	Japan	Shrinking	Increase	Increase	Increase
12	Jordan	Shrinking	Decrease	Decrease	Decrease
13	Kazhaktan	Shrinking	Decrease	Decrease	Decrease
14	Kenya	Growing	Decrease	Decrease	Decrease
15	Korea	Shrinking	Decrease	Decrease	Decrease
16	Malaysia	Growing	Decrease	Decrease	Decrease
17	Netherlands	Shrinking	Increase	Increase	Increase
18	New Zealand	Shrinking	Decrease	Decrease	Decrease
19	Nigeria	Growing	Decrease	Decrease	Decrease
20	Pakistan	Shrinking	Increase	Increase	Increase

21	Poland	Shrinking	Increase	Increase	Increase
22	Russian Fed.	Shrinking	Increase	Decrease	Increase
23	Saudi Arabia	Shrinking	Increase	Increase	Increase
24	Singapore	Shrinking	Decrease	Decrease	Decrease
25	Sri Lanka	Growing	Increase	Increase	Increase
26	Taiwan	Shrinking	Increase	Decrease	Increase
27	Turkey	Shrinking	Increase	Increase	Increase
28	Ukraine	Shrinking	Decrease	Decrease	Decrease
29	United Arab Emirates	Shrinking	Increase	Increase	Increase
30	United Kingdom	Shrinking	Increase	Increase	Increase
31	United States	Growing	Increase	Increase	Increase

Source: WITS processed

Indonesia is also facing somewhat similar situation for bulk black tea (see table 5.4). From thirty one export destinations, only seven countries experience growing import. The other twenty four countries show downward import trend. Moreover, of seven growing markets, Indonesia is only able to expand its share, export proportion and specialization in three markets namely Egypt, Sri Lanka and United States. Thus our bulk black tea is categorized as rising star. On the contrary, in the rest growing markets namely Iran, Kenya, Malaysia and Nigeria, Indonesia loses the opportunities.

Although many countries show downward import trend, Indonesia is still able enlarge its share, export proportion and specialization such as in Canada, Chile, Germany, Hong Kong, India, Italy, Japan, Netherlands, Pakistan, Poland, Russian Federation, Saudi Arabia, Taiwan, Turkey, UAE and United Kingdom to reach declining star status. In the rest area namely Australia, Jordan, Kazakhstan, Korea, New Zealand, Singapore and Ukraine, Indonesian share, export proportion and specialization decline following the downward demand situation. We got retreat category there.

5.2. Constant Market Share Analysis

This sub section interprets the result from constant market share formula which decomposes the change of trade performance into four groups of trigger namely standard growth, commodity composition, market distribution and residual effect. As we have explained in chapter three, the first part of CMSA formula indicates the hypothetical change in a given country's export assuming that the export share of this country relative to the export share of the rest of the

world has remained constant, called structural effect. Standard growth, commodity composition and market distribution are included the first part. Whereas the second part is a residual effect, showing the difference between the real change and the hypothetical change with regard to the country's export, called competitiveness effect.

Indonesia along with other top twelve tea exporters namely Kenya, India, Argentina, Russian Federation, Belgium, Germany, Japan, Sri Lanka, China, United States, United Kingdom and Vietnam are measured pertaining to their export performance on tea using constant market share analysis. Two points of time are required, thus in order to examine the latest situation, we use five-year interval, year 2004 and year 2008. The scores will be ranked.

In general, as earlier shown in chart 4.1, the world tea trade is experiencing upward trend or positive growth. CMSA formula yields around 52 percent standard growth. This is the first effect, depicting favorable situation which creates opportunity for any country to increase its export. The next effect that should be measured is the growth status of each commodity. The following results of CMSA formula are presented in percentage of its actual variance.

5.2.1. CMS Analysis on Package Green Tea

Table. 5.5
Summary of CMS Result for Package Green Tea

No	Growth	Country	Standard Growth	Commodity Composition	Market Distribution	Competition Effect
1	(+)	India	0,07	0,07	-0,01	0,86
2	(+)	Argentina	0,05	0,05	0,04	0,85
3	(+)	Russian Federation	0,06	0,06	0,37	0,51
4	(+)	Belgium	0,23	0,22	0,09	0,47
5	(+)	Indonesia	0,14	0,13	0,29	0,43
6	(+)	Germany	0,38	0,37	0,05	0,20
7	(+)	Japan	0,40	0,39	0,05	0,17
8	(+)	Sri Lanka	0,34	0,34	0,21	0,11
9	(+)	China	0,46	0,45	0,06	0,02
10	(+)	United States	0,59	0,58	0,09	-0,26
11	(+)	United Kingdom	0,97	0,95	-0,03	-0,88
12	(+)	Vietnam	2,50	2,45	1,20	-5,16
13	(-)	Kenya	-0,54	-0,52	0,88	1,18

Source: Data processed

Package green tea world export experiences positive growth. The growth hits 103 percent, exceeding the standard growth. This is what we call

commodity composition effect. Any country which gets involved in package green tea trading is supposed to be benefited.

Look at table 5.5, most countries have distributed appropriately their package green tea to economies where the import growth supersedes the world growth. Only India and United Kingdom are disturbed by distribution problem.

Among the top tea exporters, only Kenya experiences negative export growth on package green tea. The positive sign of market distribution and competitiveness effect confirm misdistribution problem and non competitiveness. Kenyan export on package green tea fluctuates sharply. Before the observation period (year 2000, year 2003 and year 2004), Kenya experienced amazing growth but entering the last five year the export plunged.

India, although affected by negative effect from its export destinations situation, is able to boost its export far above the hypothetical change. Argentina, in the second place, is able to raise its export above the hypothetical level as well. Residual effect for India and Argentina are 86 percent and 85 percent respectively. Russia and Belgium follow in the third and fourth place with 51 percent and 47 percent residual effect. 43 percent of Indonesian export growth shows its competitiveness. This makes Indonesia stay in the fifth position, followed by Germany, Japan, Sri Lanka and China which only achieve residual effect as much as 20 percent, 17 percent, 11 percent, 2 percent. USA, United Kingdom and Vietnam growth are still below their hypothetical amount due to uncompetitive product.

5.2.2. CMS Analysis on Bulk Green Tea

Table. 5.6
Summary of CMS Result for Bulk Green Tea

No	Growth	Country	Standard Growth	Commodity Composition	Market Distribution	Competition Effect
1	(+)	Kenya	0,17	-0,12	-0,19	1,14
2	(+)	Vietnam	0,52	-0,38	-0,19	1,05
3	(+)	Russian Federation	0,00	0,00	0,00	1,00
4	(+)	India	0,07	-0,05	0,05	0,93
5	(+)	Indonesia	0,16	-0,12	0,05	0,91
6	(+)	United Kingdom	0,35	-0,26	0,01	0,90
7	(+)	China	8,41	-6,14	-1,61	0,35
8	(+)	Germany	0,50	-0,36	0,82	0,04
9	(+)	Sri Lanka	0,39	-0,28	0,94	-0,04
10	(+)	Japan	0,89	-0,65	0,98	-0,22

11	(+)	Argentina	1,88	-1,37	1,51	-1,02
12	(+)	United States	1,51	-1,11	1,78	-1,19
13	(-)	Belgium	-0,68	0,50	-0,55	1,73

Source: Data processed

Although bulk green tea world export shows positive growth, as much as 14 percent, the growth is below the standard growth. CMSA regards this as unfavorable situation and it hypothetically calculates the damage. In other word, bulk green tea is a less attractive commodity. However, among top major exporter countries, only Belgium records export decrease on this commodity.

Table 5.6 confirms the less attractive commodity of bulk green tea in commodity composition column. This adverse effect hits all exporting countries. Further more China, Argentina and USA suffer a lot from this problem. CMSA projects their loss exceed the real growth. Meanwhile, Japan and Belgium are also disrupted by this problem but not as bad as those three countries.

China, Belgium, Kenya and Vietnam should relocate their export destination since their bulk black tea is distributed to markets which are experiencing sluggishness. Great part of Germany, Sri Lanka, Japan, Argentina and USA export growth come from the growing demand of their market.

From the competition effect point of view, Indonesia stands in the fifth position with 91 percent of the export growth exceed the hypothetical growth. Kenya, Vietnam, Russia and India take the 1st to 4th place with residual effect 114 percent, 105 percent, 100 percent and 93 percent respectively. United Kingdom is slightly below Indonesia, records 90 percent competition effect. China and Germany follow in 7th and 8th position, only record 35 percent and 4 percent residual effect. Meanwhile Sri Lanka, Japan, Argentina, United States and Belgium can not compete.

5.2.3. CMS Analysis on Package Black Tea

Table. 5.7
Summary of CMS Result for Package Black Tea

No	Growth	Country	Standard Growth	Commodity Composition	Market Distribution	Competition Effect
1	(+)	China	0,18	-0,06	0,10	0,78
2	(+)	United States	0,42	-0,13	-0,06	0,77
3	(+)	Argentina	1,19	-0,37	-0,45	0,62
4	(+)	Belgium	1,37	-0,43	-0,53	0,59

5	(+)	Kenya	0,51	-0,16	0,13	0,52
6	(+)	Germany	1,40	-0,44	-0,41	0,44
7	(+)	Sri Lanka	0,57	-0,18	0,25	0,36
8	(+)	Russian Federation	0,27	-0,08	0,56	0,26
9	(+)	United Kingdom	2,21	-0,69	-0,24	-0,28
10	(+)	Japan	1,28	-0,40	0,76	-0,64
11	(+)	India	10,4	-3,2	1,0	-7,1
12	(-)	Vietnam	-2,17	0,67	1,34	1,16
13	(-)	Indonesia	-0,61	0,19	0,22	1,20

Source: Data processed

The world trade of package black tea shows slowness (see table 5.7). The growth only reaches 35.8 percent while world tea trade in aggregate hits 52 percent. CMSA regards this as unfavorable situation and it hypothetically reports the casualty. Nevertheless, among the top tea exporters, only Vietnam and Indonesia record decrease of export value. Indonesian export in final year plunges 86 percent while Vietnam export value drops 24 percent compared with base year. Undoubtedly, Indonesian and Vietnamese package black tea are very uncompetitive. Moreover, Indonesia is the worse.

India, United Kingdom and Vietnam suffer severely from commodity composition issue. Each country bears the negative impact as much as 320 percent, 69 percent and 67 percent. Argentina, Belgium, Germany and Japan bear quite big adverse impact around 37 percent, 43 percent, 44 percent and 40 percent respectively. China, USA, Kenya, Sri Lanka, Russia and Indonesia endure quite small impact, 6 percent, 13 percent, 16 percent, 18 percent, 8 percent and 19 percent respectively.

Market distribution problem worsens the trade performance of USA, Argentina, Belgium, Germany and United Kingdom. Consequently, these countries must immediately revise their export destinations. China, Kenya, Sri Lanka, Russia, Japan, India, Vietnam and Indonesia have distributed their product appropriately.

Eventually, from the competitiveness side, China stands in the first place followed by USA in the second place with 78 percent and 77 percent competition effect each. Argentina, Belgium, Kenya, Germany, Sri Lanka, and Russia, in 3rd up to 8th position, record as much as 62 percent, 59 percent, 52 percent, 44 percent, 36 percent and 26 percent export growth exceed their

hypothetical figure. On contrary, British, Japanese and Indian package black tea do not compete well.

5.2.4. CMS Analysis on Bulk Black Tea

Table. 5.8
Summary of CMS Result for Bulk Black Tea

No	Growth	Country	Standard Growth	Commodity Composition	Market Distribution	Competition Effect
1	(+)	Belgium	0,10	0,01	-0,05	0,94
2	(+)	Vietnam	1,15	0,15	-0,91	0,60
3	(+)	Indonesia	0,60	0,07	-0,19	0,51
4	(+)	Kenya	0,51	0,07	0,15	0,27
5	(+)	Germany	1,23	0,16	-0,52	0,14
6	(+)	Sri Lanka	0,82	0,10	0,04	0,04
7	(+)	India	1,02	0,13	-0,10	-0,04
8	(+)	United States	2,09	0,27	-1,25	-0,11
9	(+)	China	1,46	0,19	-0,55	-0,11
10	(+)	Argentina	0,91	0,12	0,09	-0,12
11	(-)	Japan	-2,23	-0,28	2,72	0,79
12	(-)	Russian Federation	-0,83	-0,11	0,67	1,26
13	(-)	United Kingdom	-3,01	-0,38	1,86	2,54

Source: Data processed

The observed period becomes bullish period for world trade of bulk black tea which grows 58.6 percent, slightly above the standard growth. CMSA regards this as favorable situation and it hypothetically calculates the positive contribution. Yet, not every country manages to take benefit from this situation. Japanese, Russian and the British export value drop around 23 percent, 63 percent and 17 percent respectively.

Column commodity composition in table 5.8 confirms the relative small figure of each country, no more than 20 percent, the impact from the commodity growth. Belgium, Vietnam, Indonesia, Kenya, Germany, Sri Lanka, India, USA, China and Argentina receive 1 percent, 15 percent, 7 percent, 7 percent, 16 percent, 10 percent growth triggered by commodity composition effect.

Many countries are facing misdistribution problem. Belgium, Vietnam, Indonesia, Germany, India, USA and China show negative sign in market distribution column. Consequently, these countries should be smart in selecting export destination or learn from Kenya, Sri Lanka and Argentina pertaining to their market distribution.

Belgium, in the first place, records 94 percent competition effect from the total growth. Meanwhile, Vietnam, Indonesia, Kenya, Germany and Sri Lanka take the second to sixth position of competitiveness level. They manage to increase their export over the structural level. On the other hand, India, USA, China and Argentina can not compete.

5.3. Competitiveness Matrix – CMSA Joint Analysis & Market Growth Strategy

In this sub section we try to elaborate more the analysis by combining the competitiveness status given by competitiveness matrix and CMSA. The analysis will be ended with setting up suitable market growth strategies introduced by Igor Ansoff.

5.3.1 Competitiveness Matrix – CMSA Joint Analysis

Now let us take a look table 5.3 to find out how the two analytical tools relate and simultaneously give clear picture about current competitiveness of Indonesian tea products.

Table 5.9
Competitiveness Matrix - CMSA Joint Analysis

No	Commodity		Competitiveness Matrix*					CMSA
	HS	Name	Rising Star	Missed Opportunity	Declining Star	Retreat	Total	
1	090210	Package Green Tea	8	7	6	0	21	Competitive
2	090220	Bulk Green Tea	3	0	11	2	16	Competitive
3	090240	Bulk Black Tea	3	4	16	8	31	Competitive
4	090230	Package Black Tea	0	7	1	14	22	Uncompetitive

Source: data processed

* number of markets

Competitiveness matrix reveals our response upon the situation in certain export destination. How it works is simply determining whether the import demand movement is correctly responded by exporters. Meanwhile, CMSA calculates the hypothetical change of export value according to base year condition and several parameters as mentioned in chapter three. Since it defines competitiveness as the ability to enlarge the market share in whatever market condition, the competitiveness occurs where the actual change exceeds the hypothetical change.

Intersection between competitiveness matrix and CMSA takes place in the market distribution effect, a CMSA component which gives information about export destinations condition in more specific way as it is presented in figure. The competitiveness matrix columns in table 5.3 present the numbers of sample which are classified into rising star, missed opportunity, declining star and retreat. The first two groups imply the growing market whereas the last two groups indicate the shrinking market.

Fifteen of twenty one Indonesian package green tea markets experience growing demand and other six markets experience decreasing demand. We can say that in general Indonesian market composition for package green tea is favorable. CMSA calculates around 29 percent of total change comes from this positive effect. On contrary, most Indonesian markets for bulk green tea, package black tea and bulk black tea experience shrinking demand or unfavorable market situation (thirteen of sixteen, fifteen of twenty two and twenty four of thirty one respectively). CMSA confirms that Indonesian market composition for bulk green tea contributes positively as much as 5 percent to its total change, just a slight above the zero-effect point. The worse market condition hit the package and bulk black tea. CMSA calculation shows that Indonesia lost around 22 percent and 19 percent share due to unfavorable market situation in package and bulk black tea respectively.

Even though, the negative effect of market composition not necessarily causes negative growth to Indonesian export of tea products. We still win in bulk black tea. In short, generally Indonesia only loses in package black tea.

5.3.2 Competitiveness – Ansoff Market Growth Strategy Linkage

We will have further discussion by figuring out the implication derived from product competitiveness status and market situation. Market growth strategy matrix introduced by Igor Ansoff can be a great complement of this study. According to Ansoff matrix, each product with certain competitiveness status and market situation needs distinct approaches.

In case of package green tea, with competitive status and dominated by growing markets, Ansoff market growth strategy matrix proposes market penetration, aiming to maintain the position in existing favorable markets, to

secure the dominance of growth markets and to increase the usage by current customers. This strategy can be combined with product development to overcome the missed opportunity. The current products needs improvements to meet the demanded quality thus can respond positively to growing markets.

In case of bulk green tea, where the product can compete amid sluggish markets, Ansoff market growth strategy matrix suggests a mix between market development and market penetration. It means we should find other favorable export destinations where we can make higher sell in terms of volume and value beside we keep maintaining the position in current markets by conducting an intense promotion and advertisement to encourage the usage by existing consumers.

In case of package black tea, where the uncompetitive product meets the sluggish markets, Ansoff market growth strategy matrix proposes a perfect combination between product development, market development and diversification. The Indonesian current package black tea has not satisfied the markets preferences. Therefore the product needs improvement in order to meet markets preferences. Meanwhile, in order to overcome the sluggish markets, we can explore new markets, where the package black tea is more wanted. Moreover, we can try to sell the improved product in new markets although this is very risky as it needs considerable resources and investment devoted not only to modify the product but also to study the new markets.

Indonesian bulk black tea is dealing with more complex situation, a mix not only between competitive and uncompetitive product but also between bullish and bearish markets. Ansoff market growth strategy matrix proposes a combination of market penetration, market development and product development. We execute the market penetration in order not only to maintain but also to strengthen the product position in current growing markets by taking over shares previously held by other competitors. Product should be further improved to meet customer satisfaction thus the missed opportunity problem would be over. Meanwhile in order to solve the bearish market problem, we can try to penetrate the fresh markets with growing demand of bulk black tea.

CHAPTER VI
CONCLUSION AND RECOMMENDATION

6.1. Conclusion

This study aims to discover whether our tea products are acceptable or not around the globe under fierce competition due to rapid growth of world tea supply which is not quite followed by increasing world demand. Competitiveness matrix delineates Indonesian responds over the particular market situation meanwhile constant market share approach comprehensively provides specific competitiveness measurement presented in number. Using these two approaches, we arrive at similar conclusion.

All together, the world tea trade shows upward trend or positive growth. But each tea commodity has different story. On one hand, package green tea and bulk black tea are in the middle of bullish period. On the other hand bulk green tea and package black tea are having bearish period. Indonesia sells these four types of tea product around the world.

Competitiveness matrix reveals that except for package black tea, Indonesian tea products are still acceptable in their export destinations. Our green tea products don't have downward import problem in most of their export destinations. In general, we respond correctly to upward import market situation and are still gain even in decreasing import market condition. Most of export destinations for package black tea are experiencing downward demand and our trade performance for package black tea simply follows the demand condition. The downward import trend is also faced by our bulk black tea markets, though our product is still able to show an outstanding performance.

Constant market share approach calculates the competitiveness, defined as general ability to enlarge the share of each tea product (comparing the structural change and the actual change). It shows that the competitiveness our package green tea amongst 13 world largest tea exporters takes the fifth position with 43 percent after India, Argentina, Russia and Belgium. The competitiveness of our bulk green tea also takes the fifth position with 91 percent below Kenya,

Vietnam, Russia and India, while our bulk black tea takes third position with 51 percent under Belgium and Vietnam. Package black tea is the only product that suffers from loses due to commodity composition, market distribution and competitiveness problems. In brief, except for package black tea, Indonesian tea products are still acceptable in global market and able to grow their shares under tight competition.

6.2. Recommendation

In order to enhance the export performance, we can follow the Ansoff market growth strategy which consists of market penetration, product development, market development and diversification. The strategy should be matched with the actual problem faced by each product. If we are already competitive in growing market, then it would be right if we intensify our promotion and advertisement to secure our position, moreover to take over other competitor's shares. If we find our product uncompetitive, then we should improve the quality closer to consumer's preference. If we realize that our unfavorable market composition adversely affects our trade performance, we can search other export destinations with growing demand to correct the market distribution effect. If we are dealing with uncompetitive product and sluggish markets, a most risky movement should be taken. We modify the current product to meet the demanded quality and in the same time we explore new healthier markets. This is very risky since it requires considerable resources and investment.

Competitiveness matrix and constant market share analysis are very helpful in understanding the current trade performance of an economy. But these tools do not provide sufficient evident of the determinant factors of competitiveness as they do not try to show any cause-and-effect relationship. Therefore, in order to improve this work, I encourage the next researcher to investigate the determinant factors of competitiveness. Understanding the variables contribute the competitiveness level will be very helpful in setting up trade policies which support export performance.

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Annex 1

The Export Growth of Top Tea Exporting Countries

No	Country	Average Growth				
		All Tea	Package Green Tea	Bulk Green Tea	Package Black Tea	Bulk Black Tea
1	Russian Federation	0,45	0,96	5,75	0,44	1,19
2	Kenya	0,27	2,52	20,48	0,30	0,27
3	Japan	0,13	0,15	0,11	0,18	0,19
4	German	0,13	0,28	0,21	0,16	0,09
5	USA	0,11	0,20	0,10	0,12	0,06
6	China	0,08	0,22	0,02	0,15	0,03
7	Belgium	0,08	0,33	0,09	0,05	0,64
8	United Kingdom	0,07	0,33	0,19	0,06	-0,02
9	Indonesia	0,06	0,66	0,16	3,50	0,08
10	Argentina	0,06	1,74	1,88	0,09	0,06
11	India	0,04	0,74	0,44	-0,06	0,10

Source: WITS processed

Annex 2

Competitive Matrix for Package Green Tea (090210)

No	Country	Variable		
		Market Share	Percentage of Export	Specialization
1	Australia	Rising Stars	Rising Stars	Rising Stars
2	Brunei	Declining Stars	Retreats	Declining Stars
3	China	Missed Opportunity	Missed Opportunity	Missed Opportunity
4	Germany	Missed Opportunity	Rising Stars	Missed Opportunity
5	Hong Kong, China	Missed Opportunity	Missed Opportunity	Missed Opportunity
6	Japan	Declining Stars	Declining Stars	Declining Stars
7	Korea, Rep.	Missed Opportunity	Rising Stars	Missed Opportunity
8	Malaysia	Rising Stars	Rising Stars	Rising Stars
9	Mongolia	Declining Stars	Declining Stars	Declining Stars
10	Netherlands	Missed Opportunity	Missed Opportunity	Missed Opportunity
11	New Zealand	Rising Stars	Rising Stars	Missed Opportunity
12	Pakistan	Rising Stars	Rising Stars	Rising Stars
13	Philippines	Rising Stars	Rising Stars	Rising Stars
14	Russian Federation	Declining Stars	Declining Stars	Declining Stars
15	Singapore	Rising Stars	Rising Stars	Rising Stars
16	Taiwan, China	Declining Stars	Declining Stars	Declining Stars
17	Thailand	Declining Stars	Declining Stars	Declining Stars
18	United Arab Emirates	Missed Opportunity	Rising Stars	Missed Opportunity
19	United Kingdom	Rising Stars	Rising Stars	Rising Stars
20	United States	Missed Opportunity	Missed Opportunity	Missed Opportunity
21	Vietnam	Rising Stars	Rising Stars	Missed Opportunity

Source: WITS processed

Competitive Matrix for Bulk Green Tea (090220)

No	Country	Variable		
		Market Share	Percentage of Export	Specialization
1	Afghanistan	Declining Stars	Declining Stars	Declining Stars
2	Australia	Rising Stars	Rising Stars	Rising Stars
3	Germany	Retreates	Retreates	Retreates
4	Hong Kong, China	Declining Stars	Declining Stars	Declining Stars
5	Japan	Declining Stars	Retreates	Declining Stars
6	Malaysia	Declining Stars	Declining Stars	Declining Stars
7	Netherlands	Declining Stars	Declining Stars	Declining Stars
8	Pakistan	Declining Stars	Retreates	Declining Stars
9	Poland	Declining Stars	Declining Stars	Declining Stars
10	Russian Federation	Declining Stars	Declining Stars	Declining Stars
11	Singapore	Retreates	Retreates	Retreates
12	Suriname	Declining Stars	Declining Stars	Declining Stars
13	Taiwan, China	Declining Stars	Declining Stars	Declining Stars
14	United Arab Emirates	Rising Stars	Rising Stars	Rising Stars
15	United Kingdom	Rising Stars	Rising Stars	Rising Stars
16	United States	Declining Stars	Declining Stars	Declining Stars

Source: WITS processed

Annex 3

Competitive Matrix for Package Black Tea (090230)

No	Country	Variable		
		Market Share	Percentage of Export	Specialization
1	Australia	Retreates	Retreates	Retreates
2	Canada	Retreates	Retreates	Retreates
3	Egypt, Arab Rep.	Missed Opportunity	Missed Opportunity	Missed Opportunity
4	Germany	Missed Opportunity	Missed Opportunity	Missed Opportunity
5	India	Retreates	Retreates	Retreates
6	Iran, Islamic Rep.	Missed Opportunity	Missed Opportunity	Missed Opportunity
7	Japan	Retreates	Retreates	Retreates
8	Korea, Rep.	Missed Opportunity	Missed Opportunity	Missed Opportunity
9	Malaysia	Retreates	Retreates	Retreates
10	Netherlands	Retreates	Retreates	Retreates
11	Pakistan	Retreates	Retreates	Retreates
12	Poland	Retreates	Retreates	Retreates
13	Russian Federation	Retreates	Retreates	Retreates
14	Saudi Arabia	Rising Stars	Missed Opportunity	Missed Opportunity
15	Singapore	Retreates	Retreates	Retreates
16	Sri Lanka	Missed Opportunity	Rising Stars	Missed Opportunity
17	Taiwan, China	Declining Stars	Declining Stars	Declining Stars
18	Ukraine	Retreates	Retreates	Retreates
19	United Arab Emirates	Retreates	Retreates	Retreates
20	United Kingdom	Retreates	Retreates	Retreates
21	United States	Missed Opportunity	Missed Opportunity	Missed Opportunity
22	Vietnam	Retreates	Retreates	Retreates

Source: WITS processed

Annex 4

Competitive Matrix for Bulk Black Tea (090240)

No	Country	Variable		
		Market Share	Percentage of Export	Specialization
1	Afghanistan	Retreates	Retreates	Declining Stars
2	Australia	Retreates	Retreates	Retreates
3	Canada	Declining Stars	Declining Stars	Declining Stars
4	Chile	Declining Stars	Declining Stars	Declining Stars
5	Egypt, Arab Rep.	Rising Stars	Rising Stars	Rising Stars
6	Germany	Declining Stars	Declining Stars	Declining Stars
7	Hong Kong, China	Declining Stars	Declining Stars	Declining Stars
8	India	Declining Stars	Declining Stars	Declining Stars
9	Iran, Islamic Rep.	Missed Opportunity	Missed Opportunity	Missed Opportunity
10	Italy	Declining Stars	Declining Stars	Declining Stars
11	Japan	Declining Stars	Declining Stars	Declining Stars
12	Jordan	Retreates	Retreates	Retreates
13	Kazakhstan	Retreates	Retreates	Retreates
14	Kenya	Missed Opportunity	Missed Opportunity	Missed Opportunity
15	Korea, Rep.	Retreates	Retreates	Retreates
16	Malaysia	Missed Opportunity	Missed Opportunity	Missed Opportunity
17	Netherlands	Declining Stars	Declining Stars	Declining Stars
18	New Zealand	Retreates	Retreates	Retreates
19	Nigeria	Missed Opportunity	Missed Opportunity	Missed Opportunity
20	Pakistan	Declining Stars	Declining Stars	Declining Stars
21	Poland	Declining Stars	Declining Stars	Declining Stars
22	Russian Federation	Declining Stars	Retreates	Declining Stars
23	Saudi Arabia	Declining Stars	Declining Stars	Declining Stars
24	Singapore	Retreates	Retreates	Retreates
25	Sri Lanka	Rising Stars	Rising Stars	Rising Stars
26	Taiwan, China	Declining Stars	Retreates	Declining Stars
27	Turkey	Declining Stars	Declining Stars	Declining Stars
28	Ukraine	Retreates	Retreates	Retreates
29	United Arab Emirates	Declining Stars	Declining Stars	Declining Stars
30	United Kingdom	Declining Stars	Declining Stars	Declining Stars
31	United States	Rising Stars	Rising Stars	Rising Stars

Source: WITS processed

Annex 5

CMS Result for Package Green Tea

No	Country	Growth		Composition							
				Standard Growth		Commodity Composition		Market Distribution		Competition Effect	
1	India	16.650,444	(+)	1.241,434	0,07	1.212,025	0,07	-92,904	-0,01	14.289,129	0,86
2	Argentina	293,469	(+)	15,584	0,05	15,215	0,05	11,989	0,04	250,671	0,85
3	Russia	13.400,436	(+)	783,344	0,06	764,787	0,06	5.012,040	0,37	6.839,785	0,51
4	Belgium	11.654,027	(+)	2.635,011	0,23	2.572,588	0,22	1.003,665	0,09	5.441,149	0,47
5	Indonesia	22.811,537	(+)	3.161,569	0,14	3.073,052	0,13	6.672,185	0,29	9.902,797	0,43
6	Germany	13.776,000	(+)	5.249,920	0,38	5.125,552	0,37	638,286	0,05	2.759,026	0,20
7	Japan	13.591,071	(+)	5.369,424	0,40	5.242,225	0,39	720,288	0,05	2.255,844	0,17
8	Sri Lanka	17.026,454	(+)	5.866,814	0,34	5.727,832	0,34	3.499,058	0,21	1.929,157	0,11
9	China	170.395,017	(+)	78.820,622	0,46	76.953,399	0,45	10.495,209	0,06	4.077,501	0,02
10	United States	6.119,064	(+)	3.631,162	0,59	3.545,142	0,58	559,887	0,09	-1.619,351	-0,26
11	United Kingdom	18.066,293	(+)	17.541,273	0,97	17.125,729	0,95	-623,904	-0,03	-15.987,551	-0,88
12	Vietnam	248,796	(+)	623,093	2,50	608,332	2,45	299,553	1,20	-1.284,960	-5,16
13	Kenya	3.170,094	(-)	1.702,629	-0,54	1.662,295	-0,52	-2.793,292	0,88	-3.749,318	1,18

Source: WITS Processed

Annex 6

CMS Result for Bulk Green Tea

No	Country	Growth		Composition							
				Standard Growth		Commodity Composition		Market Distribution		Competition Effect	
1	Kenya	738,879	(+)	124,412	0,17	-90,888	-0,12	-138,757	-0,19	844,141	1,14
2	Vietnam	11.038,079	(+)	5.688,495	0,52	-4.155,683	-0,38	-2.138,182	-0,19	11.644,743	1,05
3	Russia	46,451	(+)	0,189	0,00	-0,138	0,00	0,158	0,00	46,242	1,00
4	India	17.634,522	(+)	1.284,761	0,07	-938,571	-0,05	928,666	0,05	16.359,959	0,93
5	Indonesia	3.732,679	(+)	608,617	0,16	-444,978	-0,12	176,059	0,05	3.393,119	0,91
6	United Kingdom	2.469,741	(+)	868,963	0,35	-634,814	-0,26	14,452	0,01	2.221,338	0,90
7	China	11.610,231	(+)	97.603,354	8,41	-71.303,327	-6,14	-18.676,469	-1,61	4.008,874	0,35
8	Germany	14.462,000	(+)	7.199,400	0,50	-5.259,462	-0,36	11.880,713	0,82	642,987	0,04
9	Sri Lanka	1.057,449	(+)	411,770	0,39	-300,815	-0,28	992,434	0,94	-45,846	-0,04
10	Japan	3.082,716	(+)	2.732,306	0,89	-1.996,063	-0,65	3.026,806	0,98	-679,710	-0,22
11	Argentina	275,960	(+)	518,827	1,88	-379,025	-1,37	416,404	1,51	-280,128	-1,02
12	United States	887,112	(+)	1.343,625	1,51	-981,574	-1,11	1.583,381	1,78	-1.058,014	-1,19
13	Belgium	1.822,712	(-)	1.240,594	-0,68	-906,305	0,50	999,719	-0,55	-3.156,437	1,73

Source: WITS Processed

Annex 7

CMS Result for Package Black Tea

No	Country	Growth		Composition							
				Standard Growth	%	Commodity Composition	%	Market Distribution	%	Competition Effect	%
1	China	32.675,964	(+)	5.870,843	0,18	-1.825,989	-0,06	3.260,616	0,10	25.373,499	0,78
2	United States	10.974,394	(+)	4.625,865	0,42	-1.438,768	-0,13	-669,911	-0,06	8.459,575	0,77
3	Argentina	172,199	(+)	204,847	1,19	-63,713	-0,37	-76,923	-0,45	107,305	0,62
4	Belgium	15.547,921	(+)	21.315,297	1,37	-6.629,627	-0,43	-8.268,949	-0,53	9.142,108	0,59
5	Kenya	97,860	(+)	49,454	0,51	-15,382	-0,16	13,158	0,13	50,465	0,52
6	Germany	18.286,000	(+)	25.664,600	1,40	-7.982,377	-0,44	-7.428,691	-0,41	8.045,601	0,44
7	Sri Lanka	246.822,627	(+)	140.065,695	0,57	-43.564,175	-0,18	61.870,940	0,25	88.521,843	0,36
8	Russia	40.983,967	(+)	11.064,211	0,27	-3.441,265	-0,08	22.864,976	0,56	10.501,707	0,26
9	United Kingdom	46.894,559	(+)	103.654,206	2,21	-32.239,229	-0,69	-11.349,929	-0,24	-13.117,446	-0,28
10	Japan	282,511	(+)	360,216	1,28	-112,037	-0,40	215,227	0,76	-180,711	-0,64
11	India	4.570,799	(+)	47.381,958	10,4	-14.737,056	-3,2	4.460,227	1,0	-32.510,084	-7,1
12	Vietnam	1.229,061	(-)	2.665,355	-2,17	-828,997	0,67	-1.643,043	1,34	-1.421,012	1,16
13	Indonesia	38.823,599	(-)	23.541,443	-0,61	-7.357,375	0,19	-8.486,650	0,22	-46.508,996	1,20

Source: WITS Processed

Annex 8

CMS Result for Bulk Black Tea

No	Country	Growth		Composition							
				Standard Growth		Commodity Composition		Market Distribution		Competition Effect	
1	Belgium	3.431,587	(+)	353,878	0,10	45,022	0,01	-187,053	-0,05	3.219,847	0,94
2	Vietnam	24.694,792	(+)	28.419,903	1,15	3.615,742	0,15	-22.353,094	-0,91	14.802,226	0,60
3	Indonesia	55.194,847	(+)	33.143,860	0,60	4.135,307	0,07	-10.373,018	-0,19	28.298,705	0,51
4	Kenya	459.245,960	(+)	235.385,690	0,51	29.947,106	0,07	69.241,493	0,15	122.932,241	0,27
5	Germany	24.740,000	(+)	30.466,800	1,23	3.876,160	0,16	-12.984,586	-0,52	3.390,846	0,14
6	Sri Lanka	284.105,945	(+)	233.244,022	0,82	29.674,631	0,10	10.037,999	0,04	11.219,875	0,04
7	India	143.877,892	(+)	146.467,070	1,02	18.634,374	0,13	-14.940,817	-0,10	-6.238,412	-0,04
8	United States	1.170,528	(+)	2.445,870	2,09	311,177	0,27	-1.460,305	-1,25	-125,474	-0,11
9	China	30.687,731	(+)	44.852,315	1,46	5.706,367	0,19	-16.840,698	-0,55	-3.361,697	-0,11
10	Argentina	22.295,076	(+)	20.308,129	0,91	2.583,716	0,12	2.037,325	0,09	-2.784,165	-0,12
11	Japan	98,071	(-)	218,660	-2,23	27,819	-0,28	-266,977	2,72	-77,507	0,79
12	Russia	72,875	(-)	60,457	-0,83	7,692	-0,11	-49,019	0,67	-91,986	1,26
13	United Kingdom	4.004,121	(-)	12.072,394	-3,01	1.535,919	-0,38	-7.448,746	1,86	-10.160,034	2,54

Source: WITS Processed