## GLOBAL COFFEE VALUE CHAIN AND VIETNAM'S PARTICIPATION

## CHUỖI GIÁ TRI CÀ PHÊ TOÀN CẦU VÀ SƯ THAM GIA CỦA VIỆT NAM

## Mai Van Xuan, Nguyen Le Thuc Uyen, Nguyen Minh An

College of Economics, Hue University; xuanmv@hce.edu.vn

Abstract - Global value chains (GVCs) have gained unusual prominence in the research agendas of international and academic organisations devoted to the study of international trade and economics. The research has investigated the current context of coffee sector of Vietnam on the contemporary participation of Vietnam in the whole global coffee value chain. As a result, the research figures out Vietnam is stuck in the very low value-added created stage because it is exporting coffee in the raw material form. The research also comes up with the conclusion about the high potential value added stage that Vietnam should move towards to affirm Vietnam's coffee position and charisma in the world market. In order to achieve this goal, Vietnam coffee sector should concentrate on improving the quality of coffee instead of running after the coffee export volume and emphasize the importance of brand building and further investing in processing stage.

**Key words** - global value chain (GVC); value added (VA); participation; globalization; global coffee value chain.

#### 1. Statement of Problem

Globalization have led to the vast growth of international trade, internationalized production and trading of multinational companies (MNCs), and reduced telecommunication cost. One of related trends of globalization is creating and widening modern markets and new organizational forms. These innovations have led to new approaches to the conceptualization of multinational firms which, instead of focusing on the ownership of internationally based assets, stress the power to coordinate and control international operation even when no ownership right exists (Dicken, 2007). The concept of global value chains has been developed to explore the functional integration of internationally dispersed valueadding activities in a variety of inter-organizational networks. Vietnam is currently the world's second largest producer and exporter of coffee, after Brazil. Nowadays, coffee is generating an income of more than \$1.5 bn. According to the data of General Statistics Office (GSO), the coffee sector represents 3% of national GDP, providing livelihood for around 2.6 million people- 800,000 of whom are farmers and many of minority ethnic groups. Participating in Global value chain as a key green exporter, Vietnam has early recognized the crucial role of development of coffee industry. Therefore, investigating and upgrading the value chain should be an essential practice that bring Vietnamese coffee go further into foreign consumers. The main purpose of the paper is to develop a methodology for analyzing the global value chain of Vietnamese coffee, evaluating the participation in order to find practical solutions to enhance our position of participation in GVC.

## 2. Literature review on global value chain

So far, there have been many theoretical and research models on global value chain. This paper resumes the

Tóm tắt-. Chuỗi giá trị toàn cầu (GVCs) đã và đang giành được sự chú ý đặc biệt trong nghiên cứu của các tổ chức quốc tế và học thuật, đóng góp cho nghiên cứu về thương mại quốc tế và kinh tế. Nghiên cứu đã điều tra bối cảnh hiện tại của ngành hàng cà phê Việt Nam dựa trên sự tham gia của Việt Nam trong chuỗi giá trị cà phê toàn cầu. Kết quả nghiên cứu chỉ ra rằng Việt Nam đang bị mắc kẹt tại khâu tạo giá trị gia tăng rất thấp bởi vì chúng ta đang xuất khẩu chủ yếu cà phê dưới dạng nguyên liệu thô. Nghiên cứu cũng đã đi đến kết luận và chỉ ra đâu là khâu tiềm năng tạo giá trị gia tăng cao mà Việt Nam nên theo đuổi để khẳng định vị trí và uy tín của ngành hàng cà phê Việt Nam trên thị trường thế giới. Để đạt được mục tiêu này, ngành hàng cà phê Việt Nam cần tập trung vào việc cải thiện chất lượng cà phê thay vì chạy theo sản lượng cà phê xuất khẩu và nhấn mạnh vai trò quan trọng của việc xây dựng thương hiệu cũng như đầu tư hơn nữa vào khâu chế biến.

**Từ khóa** - chuỗi giá trị toàn cầu (GVC); giá trị gia tăng (VA); sự tham gia; toàn cầu hóa; chuỗi giá trị cà phê toàn cầu.

theoretical framework of concept of GVC by depicting the evolution of the GVC concept and introduction of value added model as essential part to be investigated when taking GVC analysis into account.

### 2.1. Theory of evolution of Global value chain

Theory of evolution of Global value chain was first introduced by Michael Porter in 1985. According to him, a value chain "disaggregates a firm into its strategically relevant activities in order to understand the behavior of costs and the existence and potential source of differentiation" (Porter, 1985). It allows firms to diagnose the competitive advantage and to enhance this advantage by tailoring the value chain (Porter, 1985). However, the value chain concept has evolved over years since Porter's definition.

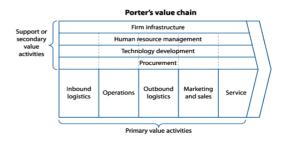


Figure 1. Porter's (1985) representation of a value chain Source: Porter (1985)

Porter breaks company's activities down into single activities. The method allows a firm to understand which part of its operation creates value and which does not. Primary activities are those involved in a product's physical creation, sales, distribution and after-sale service. In detail, this involves the product interrelations inbound logistics and operations and the market interrelations outbound logistics, marketing, sales and after-sales service. Primary activities are always defined as value-added

activities which are "those customers perceive as adding utility to the goods or services they purchase".

Later on, the global commodity chain (GCC) concept was developed by Gereffi in the 1990s, and developed further with the value-added chain concept to the global organization of industries (Gereffi and Korzeniewicz, 1994). Gereffi defines GCCs as "systems that give rise to particular patterns of coordinated international trade, rooted in transnational production systems". Supply chains are central to the GCC analysis. There are three unequal relationships in supply chain that was defined by Urminsky by 2005. Firstly, relationship between buyer and supplier generally favors MNCs with suppliers having little chance to negotiate their contracts and constantly being pressured to cut costs. The second is management and workers relationship; and third, between states and MNCs, expressed in the tendency of MNCs to displace the state and resume the role of labor inspectors through the adoption of private mechanisms.

In the 2000s, there was a shift in terminology from the GCC to GVC combining the analysis of trade and industrial organization as a value chain. It is one of analytical approaches that can be used to understand the nature of linkages between local firms and global markets, and to analyze links in global trade and production. It provides insights into the way producer-firms, regions or countries - are connected with global markets, which influences their ability to gain from participating in the global economy. Furthermore, it helps to explain the distribution of benefits, particularly income, to actors that are participating in the global economy. This allows identification of policies, which can be implemented to enable producers to increase their share of gains that globalization can result in (Kaplinsky and Morris, 2001). Hence, it plays a key role in determination of the importance of upgrading the value chain and improving the participation of each actors of chain or the whole nation in global value chain.

### 2.2. Value added model

Value added can be defined as an integral part of the total production value, as the added value of products which are created and implemented in goods production and consumption processes.

A smiling curve is an illustration of value-adding potentials of different components of the value chain in an IT-related manufacturing industry. The concept was first proposed by Stan Shih, the founder of Acer, an IT company headquarter in Taiwan, in 1992 (Wikipedia). According to Shih observation, in the personal computer industry, both the beginning and the end of the value chain command higher values added to the product than the middle part of the value chain. In the narrow sense of agricultural products, number of the chain in global value chain (GVC) is shorter than manufacturing commodity and value added at different stage are also different. The key chain of coffee global value added are: research and development (R&D), cultivation, processing, distribution and marketing. Among this model, highest value added lies at distribution and marketing segment, lowest created-value added is cultivation.

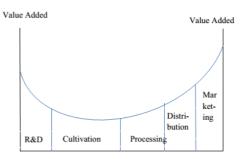


Figure 2. The value added model of agricultural commodity Source: Dinh Van Thanh (2010)

The value added model has contributed to explain why MNCs have focused on distribution activities, marketing and R&D subsequently transferred them to developing countries to carry out the cultivation segment. Parent companies take responsible for R&D, distribution and brand development and the low created-value added such as cultivation has been undertaken by subsidiaries in cheap-labor countries.

The main purpose of the following section work is to define the current position or specific stage that Vietnam is participating and how its value added is.

#### 3. Research result and discussion

Vietnam is located in the tropical belts of Northern Hemisphere, where the climate is suitable for developing coffee trees, and brings Vietnamese coffee a very special flavor. Robusta coffee accounts for more than 95 per cent of total output, and Arabica makes up most of the remaining 5 percent. In Vietnam, harvesting is performed manually and is quite labor-intensive. The major technology used was dry processing. Most of local farmers dry coffee outdoor by themselves and then sell it to collectors. Recently, domestic companies have started to use wet technology with very limited scope.

According to the survey result of project "Enhancing the competing competitiveness of Vietnamese coffee sector by 2015 and orientation toward 2020 ", it was estimated that (Anh, 2009):

- + More than 97 firms with capacities ranging from 5,000 to 60,000 tons/ year.
- + 18 corporations which focus on ground roasted coffee and instant coffee. Among them, Vinacafe Bien Hoa, Nestle Thai Hoa, Olam Viet Nam, Trung Nguyen and Nestcafe...are key processors producing soluble coffee with total output of 10,500 tons per year.

According to statistics from DakLak's Committee, more than 64 percent of the province's populations - over 1 million farmers - are growing coffee as their primary activity. In addition to farming, the coffee industry is responsible for more than 800,000 jobs in the whole area.

# 3.1. Real situation and factors affecting Global coffee value chain

The coffee sector is very important to the overall export industry within Vietnam and, therefore, this particular industry carries a lot of weight in an export industry that already plays a relative large role in the national economy.

Subsequent to 2000 Vietnam became the second largest coffee exporter in the world, following only Brazil. According to the annual report of crop year 2014/15 from MARD, Vietnam exported coffee beans to 82 countries worldwide. The top fifteen markets accounted for 83 per cent of total green coffee bean exports, a slight increase from 82 per cent of the same period of the previous year.

Table 1. World coffee export by volume

Unit: Thousand 60-kilogram bags

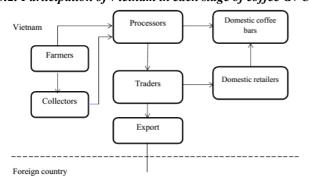
Calendar years	2010	2011	2012	2013	2014		
Total	96,953	104,171	110,632	112,352	113,945		
In which:							
Brazil	33,052	33,542	28,324	31,550	36,421		
Vietnam	14,229	17,717	22,864	21,681	25,298		
Colombia	7,822	7,734	7,170	9,670	10,954		
Indonesia	5,489	6,159	10,722	10,882	6,166		
India	4,647	5,414	5,044	5,033	5,131		
Exported share (%)							
Brazil	34.09	32.20	25.60	28.08	31.96		
Vietnam	14.68	17.01	20.67	19.30	22.20		
Colombia	8.07	7.42	6.48	8.61	9.61		
Indonesia	5.66	5.91	9.69	9.69	5.41		
India	4.79	5.20	4.56	4.48	4.50		

Source: Complied by Author, based on ICO data.

Vietnam is not only the key green coffee bean supplier for the United States but also is the major exporter to EU countries. According to coffee report of Europe coffee federation, since 2010, Vietnam always captures the leading position of green coffee bean supplier in Europe market. Vietnam does not only play as key exporter to Germany market but also as primary exporter to high-consumption markets such as Italy, Belgium, and Spain. Nevertheless, Vietnam is still weak in exporting soluble coffee and other coffee products. While green coffee export has brought Vietnam the leading position among exporters, Vietnam soluble coffee sector still does not make much success and value added for Vietnam coffee industry.

There are three factors which were figured out affecting the participation of Vietnam in the global coffee value chain. They are: (i) Comparative advantage of country, (ii) Policies for coffee sector and (iii) Role of the Vietnam Coffee and Cacao Association.

#### 3.2. Participation of Vietnam in each stage of coffee GVC



**Chart 1.** The participation of Vietnam in global coffee value chain Source: Author

The detail participation model of Vietnam in current global coffee value chain has been mapped out in the below chart. Although Vietnam participate in global coffee market later than traditional exporters, Vietnam has quickly affirmed its position in coffee GVC – being known as the second largest coffee exporter in the world after Brazil and the largest Robusta coffee exporter.

The main form of coffee export is in raw material formgreen coffee bean. According to trade data, Vietnam exported about 25 million bags of green coffee bean during the marketing year 2014/2015. Export in raw material form has caused the problem of low value added received from export value. 95% of the total coffee production goes to the foreign market and most of it is green bean coffee and completely lost its original and brand name of Vietnamese coffee after processing stage in consumed markets. The rest of total coffee production have been consumed in domestic market against the vast growth trend of foreigner coffee chains.

Table presents the income distribution along the coffee value chain between Vietnam and its biggest importer-USA. The right hand side column displays the proportion income of different nodes over the retail price. Farm gate prices present only 6.2 percent of retail price. Even at the CIF price, the proportion is also lower than 10 percent. Between the farm gate and import harbor, Robusta coffee goes through other intermediate agents (trader, processor, exporter...). Although the difference between farm gate price and FOB price is not significant, the coffee price has changed noticeably from landing CIF to retail price. This noticeable change has implied that the value added of a coffee value chain is mainly created at processing and marketing stage.

Table 2. US- Vietnam coffee value chain

Value chain	Details	US/kg	Proportion of retail price (%)
Farm gate	Price paid to grower	1.57	6.2
Export harbor	FOB	1.77	7
Import harbor	CIF	1.85	7.3
Roaster	Selling price to supermarket chain	11.49	45.5
Retail Consumer price at supermarket		25.32	100

Source: Author, adapted from VICOFA.

The received prices of different stages of the whole coffee value chain are assigned in the following chart. It is important to note that there is a big distance between prices paid to coffee grower and retailed price at consumption market. According to the current coffee price survey, for coffee which leaves the farm or plantation as fresh cherry is priced at VND 35,000-42,000/kg, corresponding to USD 1.57/kg. Afterwards, local collectors/traders continuously sell these coffee beans to local processors or MNCs, Domestic Private Firms directly sell them to domestic roasters. If coffee beans flow into the export channel, they would be traded via middlemen and agents. At export harbor, green coffee bean is traded at FOB price of 1.77 USD/kg. Nevertheless, after entering the foreign market and being transformed to final coffee product after processing and distributing phase, 1 kilogram of ground/roaster coffee has its price increased fourteen times in terms of retail price and reached approximately 25.32 USD/kg. This evidence also points out that the most value added created stage is processing and branding stage.

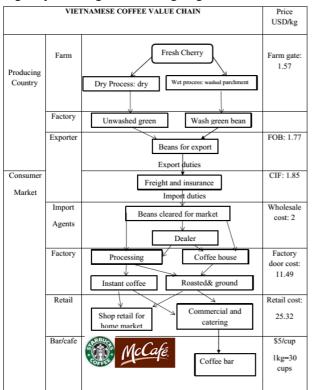


Chart 2. Vietnam global coffee value chain Source: Author, adapted from Fitter and Kaplinsky (2001)

Trung Nguyen coffee company is one of the true stories about building brand name for Vietnamese coffee and being the mirror lesson for Vietnamese coffee enterprises in trying to help move the nation's coffee up the value chain from an exporter of beans into a recognizable symbol of quality in its own right.

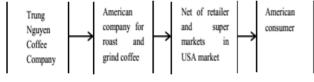


Figure 3. Export channel of Trung Nguyen Company to U.S market Source: Dung (2007)

Trung Nguyen is an exceptional case among the domestic enterprises that got investigation within the region. They are the first one that has built the trade mark, opened the website and exported ground/roasted coffee into many prestige markets. In addition, Trung Nguyen has been the first unit application of Franchise in Vietnam since 1998, currently, delivering Trung Nguyen coffee product to more than 1,000 coffee shop across Vietnam and 8 shops in foreign countries such as: U.S, Japan, Singapore, Thailand, Cambodia and China...

Trung Nguyen export on FOB prices, transport by sea, ships defined by clients. Export to be on FOB, import tax to US's market is to be shouldered by company purchaser. Major export products of Trung Nguyen in US's market include instant coffee or coffee cans.

In brief, after 30 years enter the coffee production, Vietnam has participated in coffee global value chain at production, processing and export stage of green coffee beans. Lately, besides optimal exploit value added of available stages, Vietnam has ability to participate further into higher value added of coffee global value chain, affirming an appropriate position of Vietnam coffee in international markets. Vietnam's coffee industry is expected to grow strongly in coming years following the vast globalization It opens many more prospective-doors for Vietnam to enrich the agricultural economy and improve farmers' livelihood from the coffee production.

## 4. Proposed solution to enhance the participation of Vietnam in global coffee value chain

### 4.1. Solution to improve the participation in export stage

Promoting the quality of coffee products to effectively participate in global value chain.

Concentrating on increasing quality, diversifying the products in roasted/ ground coffee sector to meet export's demand, paying attention to demand and needs of importer's market.

Enhancing consciousness of national enterprises in building trademarks and brand developing; emphasizing the image of Vietnamese coffee at international market.

Promoting the operation efficiency of Buon Me Thuot coffee trade center to establish the modern coffee assumption system, adapting to domestic and international trade process; Sailing into domestic market.

# 4.2. Measures to improve the participation in marketing and brand development stage

Marketing measures:

Organizing and strengthening management of retail systems; Establishing mechanism and policies for state-owned and private enterprises to participate in the competition for the coffee supply

Creating mechanisms and policies for the domestic retail coffee businesses to gain land and capital in order to extend their retail chains as planned; providing investment incentives to build infrastructure; strengthening investment in trade promotion activities.

Improving management practices in franchising system for coffee; Strengthening domestic market promotion and development

Brand establishment and development measures:

Further improving the legal requirements for branding; providing information, supporting on consultation, organizing training courses for businesses; Establishing large enterprises and businesses specializing in coffee export.

Creating awareness of products with good quality, reducing intermediary distribution channel to gradually build prestige brand for Vietnam coffee; Selecting the reasonable branding model and formulating overall strategy for branding; Registering national and international trademark protection.

#### REFERENCES

- Adriana Roldán-Pérez, Maria-Alejandra, Gonzalez-Perez, Pham Thu Huong, Dao Ngoc Tien. Coffee, Cooperation and Competition: A Comparative Study of Colombia and Vietnam. UNCTAD Virtual Institute.
- [2] Anh, V.T.H, (2009), The global coffee value chain and Vietnam's participation. Vietnam institute of trade research.
- [3] Dicken, P., (2007), Global Shift: Mapping the Changing Contours of the World Economy, 5th ed. London: The Guilford Press.
- [4] Dung, L.,(2007), "The study on penetration capacity of coffee products into USA's market". Agriculturall Tropica Et Subtropica.
- [5] Fitter, R. and R. Kaplinsky., (2001), "Who gains from Product Rents as the Coffee Market becomes more differentiated? A Value Chain Analysis.", IDS Bulletin Paper, Institute for Development Studies (IDS).
- [6] Gereffi, G. and M. Korzeniewicz, (1994), Commodity Chains and

- GlobalCapitalism. Westport, CT: Greenwood Press.
- [7] Kaplinsky, R. and M. Morris, (2001), Handbook for Value Chain Research. Sussex, UK: Institute for Development Studies (IDS).
- [8] Khoi, H.L., (2013), Solutions for enchancing value added for Vietnamese coffee in global coffee value chain.
- [9] Porter, M.E., (1985), Competitive Advantage, Free Press, New York, 1985
- [10] Thanh, V.D., (2010), "Strenthening the participation capacity of Vietnamese agricultural products in the global agricultural product value chain in actual suitable condition for Vietnam", Vietnam Institute of Trade Research.
- [11] Urminsky, M., (2005), "Public policy, reporting and disclosure of employment and labour information by multinational enterprises (MNEs)", P.61 in series on Management Systems and Corporate Citizenship, vol.2005. Geneve: International Labour Office.

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