

Oligonomy: The case of international cocoa markets after Covid-19 and Russo-Ukrainian war.

Dr. Dimitrios Dapontas

^{1,2}University of Patras, department of Agriculture, TermaTheodoropoulou, Amaliada, Greece.

Submitted: 15-06-2022

Revised: 25-06-2022

Accepted: 27-06-2022

ABSTRACT: In the present work Cocoa Markets (Unprocessed beans and processed butter and powder) are presented as they work as a market structure of oligonomy under the covid-19 pandemic and the Russo – Ukrainian war framework. The structure of the markets is established for the last two centuries the numerous cultivators and the final consumers are drawn by a small number of firms having market power on both market sides. The result is consistently minimized income, rising cost and diminishing product quality for the beans producers and raising cost and weighted loss for final product (chocolate) consumers. These effects are expected to enchain due to Russo-Ukrainian conflict and the expected inflation bring-up.

KEYWORDS: Oligonomy, Cocoa Beans, Cocoa Butter, Covid-19, Russo-Ukrainian war.

I. INTRODUCTION

Despite its temporary decline due to Covid-19 the cocoa remains one of the most important goods in the international market. While cocoa and chocolate are dubbed as non-prerequisite goods and due to current inflationary pressure on agricultural markets as expected, they still hold a high share on imports reaching 46.61 billion in 2021. On use perspective the cocoa for two centuries has been ranked as a high value material widely utilized in nutrition, pharmaceutical and cosmetological industries. Economically market is examined as a major example of the oligonomy model on multiple levels beginning from numerous cocoa growers and concluding to multiple cocoa powder consumers and candy eaters. This manuscript lays as follows. On the first part there is an introduction to the cocoa market presentation. On the second part the oligonomy market model is explained. The cocoa market as currently structured on the pandemic's

aftermath is presented on the third part. Finally, on the final part conclusions of the study presented.

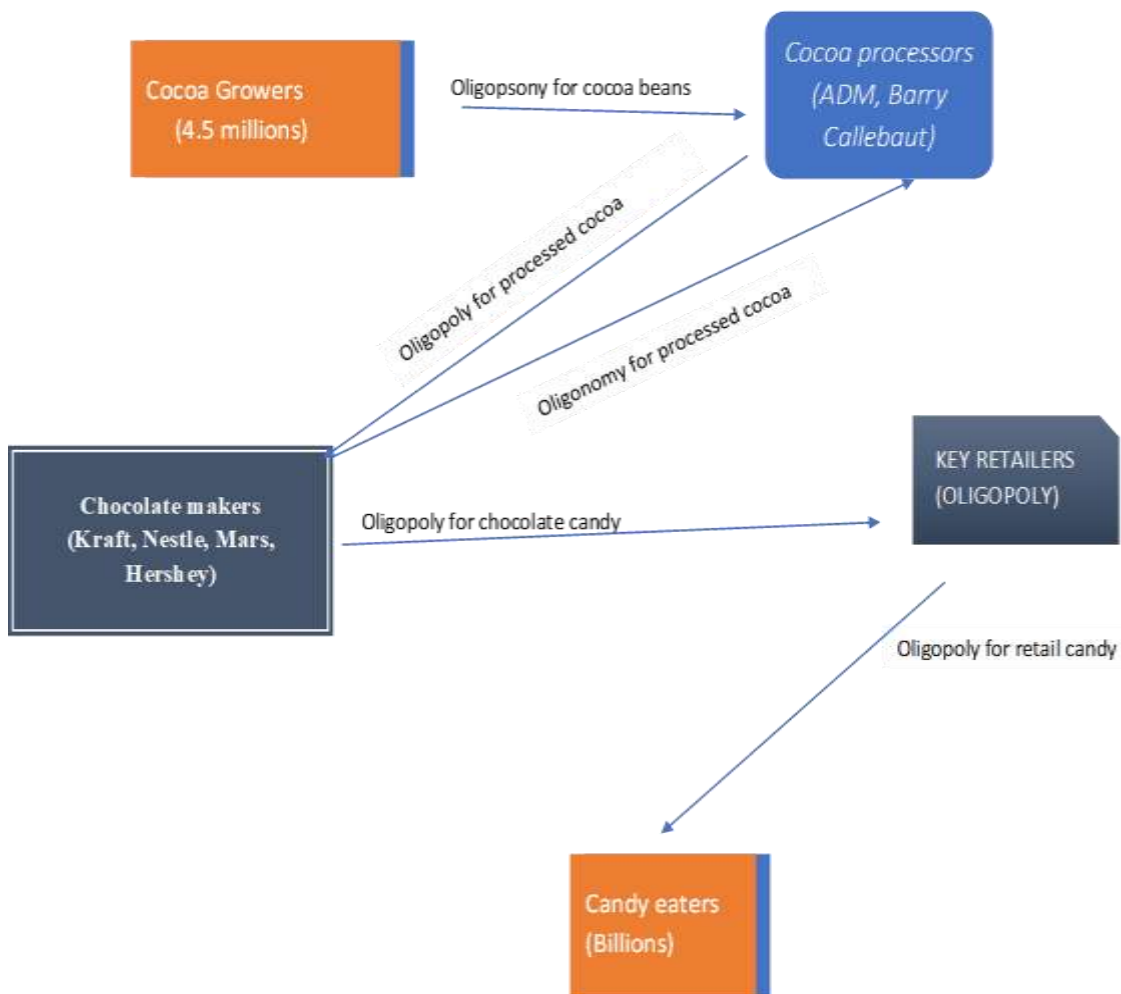
II. OLIGONOMY

Oligonomy refers to real situation where a small group of firms acts as an oligopoly to its customers and as an oligopsony to its suppliers manipulating both supply and demand as well as price in both markets influencing. Under this framework the oligonomist becomes omnipresent and creates bottlenecks at all participating markets. The presence of few major firms who act as “gatekeepers” absorbs any possible disruptive forces that could possibly threaten their established market structure and share. Thus, through forces of internalization the oligonomy survives. The creation of long prosper stable oligonomies can justify the rapid concentration in many industries. A new oligopoly or oligopsony can restore the equilibrium between demand and supply in oligonomist participating markets. In the most cases though, final consumer has only one right: The denial to buy. The other exploited team, the small producers in numerous agricultural products have the least market power over oligonomist schemes, they have the least leverage against them. The only exceptions where groups of small producers have any market power can be found on (agricultural) cooperatives and labour unions but these schemes have declined over the last 20 years. Oligonomies have spread everywhere because it is very attractive to be an oligopolist and an oligopologist at the same time. But in many cases, it can also be a defensive move. As clients become multinational and massive and so their suppliers and customers are facing a possible dilemma of survival.

Oligonomistic trends are also widely built under the large economies of scale schemes. When an individual gets on a market where a vast number

of small producers cannot sell straight away to the final customer has to find at least one processor who can process his/her product. The size of the processor has to allow him/her to enable economies of scale on processing. Economies of this size can be found only on monopsonistic or oligopsolistic market schemes. Due to its size the firm also acts as a seller in a market having a relatively small number of enterprises. In retail area the Just in Time (JIT) supply has prevailed the supply but a

small company cannot respond as good as the large one. The products are sold worldwide in a 24-hour basis and advanced IT support systems to respond to multinational market. The further expansion in such a market is a survival strategy and the creation of a dominant oligonomy in three dimensions: Horizontal and Vertical Integration along with conglomerate(s) creation. The case of Cocoa has multiple levels of oligonomy as presented on following diagram:



The structure of the Cocoa Market.

III. THE COCOA MARKET STRUCTURE ON THE PANDEMIC AFTERMATH

Cocoa in the international market is traded based on quality post-harvest and botanic characteristics. The prices are determined by supply and demand in major Ecuadorian established markets. Numerous producers seek better results, try to keep sanitary requirements,

develop technical practices to diminish or reduce pests or possible related products; invest on the domestic market development and improving the cocoa processing and transformation capacity. They have to face two major processing companies which create and develop market norms and standards based on global value chains along with traditional ones. These limitations for the producers have significant impact on business network's

structure minimizing the competitive dynamics of industrial and agriculture producers. The processor's target is to barrier the entry of possible local producers or competitors who may try to enter market for the sale of their products.

Oligonomists are parts of environmental and social objectives projects or the protection of biodiversity promoted by civil organizations and international agencies. These projects introduced and promoted by international organizations regard with global social and economic development. Some large firms seem to care for the environmental sustainability. Another similar policy has to do with the active support of small-scale cocoa growers or landowners. This backup can take the form of lending guarantee, possible share on the made investment, education on agricultural practices or forward payments.

The International Cocoa organization (ICCO) issues monthly report on Cocoa Market statistics. Based on latest data for cocoa beans production Africa has a 75.6% share in 2021 production followed by America (19.1%) and Asia-Oceania on 5.4% respectively. On country level Cote d Ivoire holds a 44.7% of world production, next major share is hold by Nigeria (16.2%). Ecuador is Americas production leader with a 7.5% fragment. Finally, Indonesia has a 3.56% getting share of lion in Asia. The two processing markets are the fine flavour market where production is concentrated in Ecuador and the conventional non-flavoured cocoa is concentrated in western Africa.

On gridding processing level since the processing on industrial transformation level is hold in developed countries Europe holds a 35.9% share followed by Asia-Oceania (23.7%) and Africa (21.2%). America holds the last pace in processing with a 19.2% piece. Processing countries have developed a verticalized industry proceeding cocoa beans along with cocoa butter products as input for the chocolate market. Cote d Ivoire still holds a 12.6% fraction on this market following by Netherlands (12.4%), Indonesia (9.7%), Germany (9.5%) and USA (7.7%) respectively. The fact that the major consuming markets lay in developed countries the chocolate firms are further processing and producing chocolate in them. Within last decade demand has raised in Asia due to lines of production developed in the area. Hersey is the global leader holding a 31.9% on the market. Really close to it lays Mars with 29.1% smaller shares are Kraft with 5.4% and nestle at 5% respectively.

A nondistinctive but important segment of the market is the total organic cocoa. American cocoa beans producers (as of Ecuador or

Venezuela) try to get place in global market by certifying their organic and fair-trade production. The beans leave country in semi-processed beans form and gets refined in developed markets of Switzerland or Belgium.

The Covid-19 outburst led to lockdowns on international markets and even though consumption remained stable followed by major disruptions in the supply chains causing problems to craft. On pandemic decision break consumers reacted by stockpiling durable goods claimed as essential. While chocolate is not essential it could help consumers benevolence through long time. The fact that food retailers remained open and the e-commerce market places plundered helped on the proposed stability despite of seasonal decline during Easter when seasonality on the market booms. The biggest problems arose to the small-scale factories who faced a major demand fall. Sales initially seem to have faced a modest decline of almost 6% mainly fuelled by Americas 10.7% reduction to beans production followed by an 8.9% decline in previously growing Asian. On the same time Western African countries kept their market share and face a minor turn down as much as 4.4% and Europe grinding shrank by 8.9%. Prices on both US and European markets (powder and butter for each one of them) had been declined from December 2019 until 2020 March by 6 % had soared over 42% Between April and August 2020. On the same time the farm gate prices in Cote d Ivoire fall at a 21% rate. A small increase in production begun to raise on February 2021. Cocoa butter prices in both Europe and US went down at a 27% rate. In contrast the powder markets had rocketed to double price from February 2020 to 2021 followed by relative stability with minor fluctuations till the end on the year. Finally, within 2021 the production raised 6.3% in total which was a critical point for the end of the pandemic's turbulence with the exception of the Americas decay of 1.2%.

The war between the Russian Federation and Ukraine changed dramatically the post covid-19 state of the markets. Both countries are major exporters of raw commodities and agricultural products (such as energy resources, ores, wheat, fertilizers etc.). The exports reduction rise inflation in global scale following the pandemic influence on logistics. The war lasted longer than Russian Federation initially planned and it was followed by extensive western embargo on Russian products. The economic and financial impact on the cocoa markets is high. In both countries cocoa processors as long as chocolate brands operate in both countries.

IV. CONCLUSIONS

In this short oligonomy cocoa markets presentation we saw the contradiction between cocoa cultivators who always have the least power in the market, the final consumers of the product (chocolate) who suffer from high welfare loss and the bean processors and chocolate firms having oligopsonic and oligopolistic oppositely changing ends to both of them consisting a characteristic paradigm of the market structure characterized as oligonomy. The fact that this scheme maximizes the oligonomist raising profit and market power. This concertation on both cocoa markets (beans and grinded, respectively) kept the demand high on difficult pandemic or conflict times. The weak link of the markets (beans producers and final consumers) will face in the future and as long as the demand raises new markets on gridding and processing level arise (especially Asia) and compete on lower quality and more expensive product which even though it cannot be characterized as essential will continue to thrill people in the future as it does for over than two centuries.

The integrity of the firms' facilities is in doubt. Cocoa markets prices have significantly declined (-6%). The quantity of production has been increased in despite to poor crop in Western Africa due to raising demand. On cocoa beans cultivation level, the Russian - Ukrainian war aspired the prices of fertilizers (especially nitrogen, phosphate and potassium) as Russia and its ally Belarus are among major global suppliers at the fertilizers markets. The banking restrictions imposed to Russia further obstacle the fertilizers payments. Ship freight have also raised due to blockade to the Russian ships by certain flag authorities. The precision of this situation will hit severe the cocoa farmers because the majority of their trees are aged and the use of high-priced fertilizers is intensive. The nature of the production (small scale in less developed countries) and the described raising cost problems will lower the quality, quantity and the size of growing cocoa beans. Prices in cocoa markets are expected to elevate in the near future

REFERENCES

- [1]. Fountain, A. C., &Huetz-Adams, F. (2020). Cocoa Barometer 2020. Brussels: Cocoa Barometer Consortium.
- [2]. Hannaford, S. G. (2007). Market Domination! The Impact of Industry Consolidation on Competition,Innovation, and Consumer Choice. London: Praeger Publishers.
- [3]. International Cocoa Organization. (2022). Cocoa Market Reports February 2020 - May 2022. Monthly Review of the Market. Abidjan, Côte d'Ivoire: International Cocoa Organization. Ανάκτηση June 2022, από <https://www.icco.org/statistics/#tab-id-1>
- [4]. Musselli, I., & Olivier, C. (2008). Cocoa Study: Industry Structures and Competition. New York: UNCTAD.
- [5]. Salma, K. (2011, September 23). Bitter Chocolate: The Market Structure and Tariff Escalation that Prevents Fair Trade from being Free. *Econ Sun Zambia*, σ. 25.
- [6]. Sycheva, A. S. (2021). Pricing of the commodity market on the example of an integrated model of the economy. *EMMFT-2020* (σ. 8). Voronezh: Voronezh State Technical University.