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## CHOCOLATE, A GLOBAL BUSINESS

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**Please cite this paper as:**

**Toma, S.G. and Săseanu, A.S., 2020.** Chocolate, a Global Business. In: R. Pamfilie, V. Dinu, L. Tăchiciu, D. Pleșea, C. Vasiliu eds. *6<sup>th</sup> BASIQ International Conference on New Trends in Sustainable Business and Consumption*. Messina, Italy, 4-6 June 2020. Bucharest: ASE, pp. 1233-1240

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### **Abstract**

As an old food product, chocolate is consumed all over the world by people of different gender and ages. Chocolate has captured many consumer's attention and led to the emergence of an industry that provides a food product with a unique flavour and taste. As a result, the economic and business impact of chocolate has significantly increased in time. The paper aims to illustrate the main characteristics of chocolate and to present the key players acting in the global cocoa and chocolate markets, namely the largest cocoa producing countries and the largest chocolate companies. In order to attain the objectives of the paper, the authors used a quantitative research method. The information was gathered through desk research. Numerous secondary data from a significant literature review were collected, analysed and synthesized. The paper shows the expansion of chocolate business throughout the world and, therefore, its global dimension. Also, it demonstrates the need to analyse the global chocolate market in connection with the global cocoa market and illustrates the domination of multinational and transnational corporations in the chocolate businesses.

### **Keywords**

chocolate, chocolate market, global business, cocoa

### **JEL Classification**

F00, F23, M16

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### **Introduction**

As an old food product, chocolate is consumed all over the world by people of different gender and ages. Cocoa and chocolate products have constituted delicacies for human beings for hundreds of years (Keen, 2001). Chocolate is intrinsic to our lives from early years to elderly years through its effects on our mood, nutrition and health (Szogyi, 1997). Moreover, the economic and business impact of chocolate has significantly increased in time. Chocolate has captured many consumer's attention and led to the emergence of an industry that provides a food product with a unique flavour and taste. As a response, business organizations of all sizes and types, either small and medium enterprises or big corporations,

has entered the chocolate industry. In order to meet consumer's desire for new experiences chocolate makers and manufacturers are continuously innovating both in the production and marketing processes. On the other hand, new consumer standards have been imposed with major implications for the chocolate value chains and industry in recent years (Squicciarini and Swinnen, 2016). Thus, chocolate has become a global business.

The candy companies have hundreds and thousands of employees worldwide and obtain \$billion in revenues. Some of them, such as Mars Wrigley Confectionery (USA) or Nestlé (Switzerland), have become multinational and transnational corporations. Others have remained small to medium size or craft chocolate makers.

During its long history, the developments in the manufacture, distribution, trade and consumption of chocolate have highly contributed to the creation of a global chocolate market. As a multibillion dollars market, today's global chocolate market comprises a multitude of actors such as the cocoa producing countries, cocoa trading companies, chocolate makers and manufacturers and retailers. This is why a lot of literature related to the chocolate businesses, manufacturing and marketing, market size and trends, and industry analysis has been published in recent years (Bloss, 2010; International Cocoa Organization, 2020; Technavio, 2020).

The paper aims to illustrate the main characteristics of chocolate and to present the key players acting in the global cocoa and chocolate markets, namely the largest cocoa producing countries and the largest chocolate companies. The structure of the paper is as follows. The literature review is exposed in the second part of the paper. The third part of the paper deals with the research methodology. The fourth part of the paper shows the results of the research. The paper ends with conclusions.

### **Literature review**

A plethora of definition related to chocolate has been identified in the literature. Chocolate is defined from different perspectives as follows:

- "Chocolate designates the product obtained from cocoa products and sugars which,...., contains not less than 35 % total dry cocoa solids, including not less than 18 % cocoa butter and not less than 14 % of dry non-fat cocoa solids" (European Parliament, 2000, p. 8).
- "Chocolate is a natural food and is a mixture of many chemical compounds" (Tannenbaum, 2004, p. 1132).
- "Chocolate is a food made from the beans of the cacao tree" (Morganelli, 2006, p. 4).
- "Chocolate is a dense suspension of solid particles, with an average solids concentration of about 60 to 70 % from sugar, cocoa and milk (depending on the type) dispersed in a continuous fat phase, which consists mostly of cocoa butter" (Afoakwa, 2008, p. 109).
- "Chocolate is dense suspension of solid particles comprising 60-70% sugar and non-fat cocoa solids" (Aidoo et al., 2013, p. 84).
- "Chocolate is a snack produced in a liquid form, paste, or block or also used as an ingredient" (Technavio, 2018, p. 20).

Despite the fact that there is not a single comprehensive definition of chocolate some of its important features can be emphasized. First, chocolate is a natural product. The key ingredient of chocolate is cocoa, responsible for its flavour. The cocoa or cacao tree (*Theobroma cacao*), a native of the tropical forests, originated in Central and South America (Minifie, 1989; Moss and Badenoch, 2009). The four types of cocoa are: Criollo, Forastero (Amelonado), Trinitario, Nacional (Beckett, 2019). The cocoa supply chain is rather long as it extends "from smallholders, often in remote, less well-developed tropical regions of the world, to factories and consumers mainly in developed industrial countries" (Beckett, 2009, p. 10). Nowadays, the cocoa-chocolate value chain is characterized by "a fragmented supply structure, strong concentration in the intermediate industry, and a mixed set of final producers" (Poelmans and

Swinnen, 2019, p. 23). Second, chocolate comprises chemical compounds such as sugar and sugar substitutes, sweeteners, and milk powder. According to standards, chocolate may also include acidity regulators (e.g., citric acid, magnesium carbonate), emulsifiers (e.g., lecithins), flavour agents (e.g., vanillin), glazing agents (e.g., gum arabic) etc. (Food and Agriculture Organization of the United Nations, 2003). Third, the chocolate making process encompasses the following main phases:

- cocoa bean preparation (fermentation, drying, transport);
- cocoa liquor manufacture (clean, roast, remove shell, grind);
- press, mix, grind, agitate, enrobing, moulding, panning (Beckett, 2019).

Fourth, chocolate is produced in various forms and varieties such as black chocolate, chocolate as a drink, chocolate bars. Fifth, chocolate is not only a food but also a medicine (Keen, 2001). On the one hand, chocolate represents a highly caloric food (Paoletti et al., 2012). On the other hand, the medical literature stresses the presence of polyphenolic antioxidants in chocolate (McShea et al., 2009; Petrone et al., 2013). Sixth, chocolate represents an increasing global business. Thus, the global chocolate market was valued at around US\$98.3 billion in 2016 (BizVibe, 2018) and at \$103.28 billion in 2017 (Zion Market Research, 2018). It is said that the global sales for chocolate are expected to reach \$139.94 billion by 2024 (PR Newswire, 2019) and to hit \$145.17 billion by 2026 (Candy & Snack Today, 2020). During the period 2020-2024 the chocolate market size will grow by \$41.15 billion (Technavio, 2020).

### Research methodology

In order to attain the objectives of the paper, the authors used a quantitative research method. The information was gathered through desk research. Numerous secondary data were collected from a significant literature review. Then, these data were analysed and synthesized. The main sources were journals (e.g., Nutrition, Candy Industry), books from renowned publishing houses (e.g., Wiley, Oxford University Press), and reports of international organizations (e.g., International Cocoa Organization, Food and Agriculture Organization of the United Nations) from the fields of economics, business, chemistry and nutrition, and were found in electronic databases (e.g., Emerald Insight, Springer) and libraries (e.g., the Central University Library Carol I of Bucharest).

### Results and discussion

After reviewing the literature, the authors analysed and synthesized the data in order to present the key players acting in the global cocoa and chocolate markets. In the period 2017-2018, the global cocoa market was dominated by Cote d'Ivoire, the largest cocoa producing country in the world (Table 1 and 2). In 2017, five countries were from Central and South America (Brazil, Ecuador, Peru, Dominican Republic, Colombia), four countries were from Africa (Cote d'Ivoire, Ghana, Nigeria, Cameroon) and one country from Southeast Asia (Indonesia).

**Table no. 1 The 10 largest cocoa producing countries in the world, 2017**

| No. | Country       | Production (tonnes) |
|-----|---------------|---------------------|
| 1   | Cote d'Ivoire | 2,034,000           |
| 2   | Ghana         | 883,652             |
| 3   | Indonesia     | 659,776             |
| 4   | Nigeria       | 328,263             |
| 5   | Cameroon      | 295,028             |
| 6   | Brazil        | 235,809             |
| 7   | Ecuador       | 205,955             |
| 8   | Peru          | 121,825             |

|    |                    |        |
|----|--------------------|--------|
| 9  | Dominican Republic | 86,599 |
| 10 | Colombia           | 56,808 |

Source: Phayanak, *Top 10 cocoa producing countries in the world 2017*.  
<https://chocolatephayanak.com/unkategorisiert/where-is-cocoa-grown-around-the-world/>.

In 2018, five countries were from Central and South America (Brazil, Ecuador, Mexico, Peru, Dominican Republic), four countries were from Africa (Cote d'Ivoire, Ghana, Nigeria, Cameroon) and one country from Southeast Asia (Indonesia).

**Table no. 2 The 10 largest cocoa producing countries in the world, 2018**

| No. | Country            | Production (tonnes) |
|-----|--------------------|---------------------|
| 1   | Cote d'Ivoire      | 1,448,992           |
| 2   | Ghana              | 835,466             |
| 3   | Indonesia          | 777,500             |
| 4   | Nigeria            | 367,000             |
| 5   | Cameroon           | 275,000             |
| 6   | Brazil             | 256,186             |
| 7   | Ecuador            | 128,446             |
| 8   | Mexico             | 82,000              |
| 9   | Peru               | 71,175              |
| 10  | Dominican Republic | 68,021              |

Source: Matyasovszky, M., 2018. *Top 10 Cocoa Producing Countries*. WorldAtlas, 28.09.2018.  
[worldatlas.com/articles/top-10-cocoa-producing-countries.htm](http://worldatlas.com/articles/top-10-cocoa-producing-countries.htm).

In the period 2017-2019, the global chocolate market was dominated by Mars Wrigley Confectionery (USA), the largest chocolate company in the world (Table 3, 4 and 5). Interesting enough is the fact that the top of the four largest chocolate companies in the world remained the same in that period. In 2017, four companies were from Europe (Ferrero Group, Nestlé, Lindt & Sprüngli, Haribo), three companies from North America (Mars Wrigley Confectionery, Mondelēz International, Hershey), two from Asia (Meiji, Ezaki Glico), and one from South America (Arcor).

**Table no. 3 The 10 largest chocolate companies in the world, 2017**

| No. | Company                          | Net sales (US\$ billion) |
|-----|----------------------------------|--------------------------|
| 1   | Mars Wrigley Confectionery (USA) | 18.000                   |
| 2   | Ferrero Group (Luxembourg/Italy) | 12.000                   |
| 3   | Mondelēz International (USA)     | 11.560                   |
| 4   | Meiji (Japan)                    | 9.652                    |
| 5   | Nestlé (Switzerland)             | 8.818                    |
| 6   | Hershey (USA)                    | 7.533                    |
| 7   | Lindt & Sprüngli (Switzerland)   | 4.106                    |
| 8   | Ezaki Glico (Japan)              | 3.242                    |
| 9   | Haribo (Germany)                 | 3.180                    |
| 10  | Arcor (Argentina)                | 3.100                    |

Source: Pacyniak, B., 2018. *The top 100 candy companies in the world in 2018*. Candy Industry, 23.01.2018. <https://www.candyindustry.com/articles/88019-the-top-100-candy-companies-in-the-world-in-2018>.

In 2018, five companies were from Europe (Ferrero Group, Nestlé, Lindt & Sprüngli, Haribo, Perfetti Van Melle), three companies from North America (Mars Wrigley Confectionery, Mondelēz International, Hershey), and two from Asia (Meiji, Ezaki Glico).

**Table no. 4 The 10 largest chocolate companies in the world, 2018**

| No. | Company                          | Net sales (US\$ billion) |
|-----|----------------------------------|--------------------------|
| 1   | Mars Wrigley Confectionery (USA) | 18.000                   |
| 2   | Ferrero Group (Luxembourg/Italy) | 12.390                   |
| 3   | Mondelēz International (USA)     | 11.792                   |
| 4   | Meiji (Japan)                    | 9.662                    |
| 5   | Hershey (USA)                    | 7.779                    |
| 6   | Nestlé (Switzerland)             | 6.135                    |
| 7   | Lindt & Sprüngli (Switzerland)   | 4.374                    |
| 8   | Ezaki Glico (Japan)              | 3.327                    |
| 9   | Haribo (Germany)                 | 3.300                    |
| 10  | Perfetti Van Melle (Italy)       | 3.086                    |

Sources: Beautiful Data, 2020. *Global top 10 candy companies in the world (2012-2020)*. YouTube, 15.01.2020. [https://www.youtube.com/watch?v=R5LD\\_t-pajU](https://www.youtube.com/watch?v=R5LD_t-pajU); Scully, C. Z., 2019. *The 2019 top 100 candy companies*. *Candy Industry*, 16.01.2019. <https://www.candyindustry.com/articles/88488-the-2019-top-100-candy-companies>.

In 2019, five companies were from Europe (Ferrero Group, Nestlé, Lindt & Sprüngli, Haribo, Pladis), three companies from North America (Mars Wrigley Confectionery, Mondelēz International, Hershey), and two from Asia (Meiji, Ezaki Glico).

**Table no. 5 The 10 largest chocolate companies in the world, 2019**

| No. | Company                          | Net sales (US\$ billion) |
|-----|----------------------------------|--------------------------|
| 1   | Mars Wrigley Confectionery (USA) | 18.000                   |
| 2   | Ferrero Group (Luxembourg/Italy) | 13.000                   |
| 3   | Mondelēz International (USA)     | 11.800                   |
| 4   | Meiji (Japan)                    | 9.721                    |
| 5   | Hershey (USA)                    | 7.986                    |
| 6   | Nestlé (Switzerland)             | 7.925                    |
| 7   | Lindt & Sprüngli (Switzerland)   | 4.574                    |
| 8   | Pladis (United Kingdom)          | 4.515                    |
| 9   | Haribo (Germany)                 | 3.300                    |
| 10  | Ezaki Glico (Japan)              | 3.156                    |

Source: Scully, C. Z., 2020. *2020 top 100: exclusive list of the top 100 candy companies in the world*. *Candy Industry*, 31.01.2020. <https://www.candyindustry.com/articles/88964-top-100-exclusive-list-of-the-top-100-candy-companies-in-the-world>.

The results mentioned above show the dynamism of the two markets. In essence, several issues can be highlighted as follows:

- the booming global chocolate market has determined the rise of the global cocoa market as these two markets are connected;
- the global cocoa market is dominated by traditional producers from Africa, Asia, and Central and South America;

- chocolate is mostly manufactured, sold and consumed in different parts of the world than in the places where cocoa is produced;
- the global chocolate market is highly competitive because of the presence of big multinational and transnational corporations;
- the global chocolate market has been dominated by European and American companies.

### Conclusions

The discovery and exploitation of cocoa led to the emergence and development of the chocolate industry. During this time, chocolate manufacturing and marketing have transformed into a global multibillion-dollar business.

The importance of the research is given by its theoretical contributions. First, the paper provides a better understanding of an old food product called chocolate. Second, it shows the expansion of chocolate business throughout the world and, therefore, its global dimension. Third, the paper demonstrates the need to analyse the global chocolate market in connection with the global cocoa market. Fourth, it illustrates the domination of multinational and transnational corporations in the chocolate businesses.

Further researches might expand the analysis by taking into account other stakeholders involved in the chocolate business at a global level.

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