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From pralines to multinationals: The economic history of Belgian chocolate

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From Pralines to Multinationals

The Economic History of Belgian Chocolate

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Abstract

Belgium is associated with high-quality chocolate products and Belgian companies play an important role in cocoa processing. However, in historical perspective the global success and reputation of Belgian chocolate is a relatively recent phenomenon. Especially since the 1980s exports of “Belgian chocolates” have grown exponentially. We document the growth of the sector and discuss its determinants. Today, the very concept of “Belgian chocolate” faces challenges, as successful companies have been taken over by international investors and because its success has led others to imitate. Recently there have been attempts to protect “true” Belgian chocolate.

Keywords: Chocolate, Belgium, Economic History, Internationalization

Introduction

Today “Belgian chocolates” are famous all over the world¹. Belgium is associated with high-quality chocolate products such as pralines and truffles, with brand names such as Godiva, Neuhaus and Leonidas recognized globally. The Belgian successes in the chocolate business go beyond the final consumer market. Those with more knowledge of the sector know that the Barry Callebaut company has grown to become a dominant player on the intermediate chocolate products market.

However, the global success and reputation of Belgian chocolate is a relatively recent phenomenon². In 1847, at the eve of the first “great chocolate boom”, the jury in charge of awarding prizes for innovative and successful industries at the Exhibition of Belgian Industry in Brussels, decided not to give an award to emerging chocolate companies, believing that chocolate had no future in Belgium: “*Chocolate manufacturing [...], it is one of those industries that do not present a particular advantage for the country, given that few workers are required and the raw materials come partly from abroad.*”³ (Mercier 2008).

While exports grew significantly between 1900 and 1930, Belgium was still importing more chocolate than it exported for much of this period. It was only since the 1960s that Belgian exports dominated imports. However the success has grown rapidly in recent decades. Since 1980 exports of “Belgian chocolates” have grown exponentially and conquered the world.

¹This is supported by the findings of an online survey by the Belgian Brewers Association in 2012, which asked 1,230 non-Belgians ‘what comes to their mind when thinking about Belgium?’: 52% of respondents spontaneously stated chocolate. The respondents were from neighboring countries, such as the Netherlands, Germany and France, as well as other European countries including the UK, Denmark, Italy and Spain and non-European countries including the US, Russia and Japan.

² It was most likely during the Spanish occupation of the territory which is now Belgium that chocolate was first brought into this region. The first evidence of chocolate in the country is reported in 1635 by the abbot of Baudeloo in Ghent (Mercier, 2008).

³ Translation by Mercier of the original text: ‘*La fabrication du chocolat tend à se développer chez nous. Mais c’est une de ces industries dont la manutention ne présente pas de grands avantages pour le pays, parce qu’elle demande peu de main-d’œuvre et les matières premières nous viennent en partie de l’étranger*’ (Scholliers, 1996).

In this brief historical overview, we will document the growth of the chocolate sector in Belgium and relate its success to a combination of various elements and diverse growth strategies.

The sector's growth has also led to challenges for Belgian chocolate. In fact, the concept of "Belgian chocolate" is under siege, as several of the most successful companies are no longer owned by Belgian families or companies but by international investors instead. Another challenge is that the strong demand has led others to imitate "Belgian chocolates". These challenges have induced attempts to protect "true" Belgian chocolate.

The paper is structured as follows. The next sections provide an overview of the initial challenges faced by Belgian chocolate manufacturers to benefit from the rapidly growing chocolate demand in Europe in the 19th century and examine some of the main factors that have driven the competitiveness of the Belgian chocolate industry. Afterwards we focus on the growth and globalization process of the Belgian chocolate industry since the second half of the 20th century and we discuss the international dimension of Belgian firms operating in the chocolate industry. We then outline the historical development of the business growth of four of the largest Belgian companies. The next to last section discusses key issues related to the definition of and quality standards for "Belgian chocolate". The final section concludes.

The Growth of Chocolate Consumption and Lagging Production in the 19th Century

Across Europe, chocolate demand grew rapidly at the end of the 19th century (Clarence-Smith, 2000), but production in Belgium did not follow. The production of chocolate in Belgium was still characterized by craftsmanship and small-scale production. The average size of chocolate companies was just three employees (Scholliers, 1996). Although some chocolate manufacturers started investing in steam engines in the 1860s, the industrialization of the Belgian chocolate sector remained very limited.

The increased domestic demand for chocolate products was mostly absorbed by imports. From the 1850s onwards, chocolate imports grew rapidly while exports were negligible. There was an exponential increase in imports in the 1870s and 1880s (see Figure 1a).

Belgian chocolate producers lobbied the government to constrain the increased competition by foreign companies. In an attempt to contain the increasing import flows, in 1885 the Belgian government increased the import tax on chocolate from 30 to 45 Belgian Francs⁴ per 100 kilogram of chocolate (Scholliers, 1996). Yet the government's interventions had little effect: chocolate imports continued to grow. By the end of the 19th century, chocolate imports in Belgium were estimated at around 467 tons, while chocolate exports were around 39 tons (see Figure 1a).

Increased Competitiveness of Belgian Chocolate in the early 20th Century

In the decade before the First World War and during the interbellum, things changed: imports stabilized and exports increased significantly. A combination of several factors turned the tide for the Belgian chocolate producers.

First, taxes on the two main ingredients for chocolate production were reduced. The abolishment of import taxes on cocoa in 1898 as well as the halving of the consumption tax on sugar in 1903 resulted in a significant reduction of production costs for manufacturers (Scholliers, 1996).

Second, Belgian chocolate manufacturers invested in new technologies and grew in size, thereby capturing economies of scale. The average number of workers per chocolate company increased from 3 employees in the 1850s to 18,6 in 1896, and to 30,4 in 1910 (Scholliers, 1996).

Third, innovations enabled Belgian manufacturers to compete with imports and gain new export markets. One crucial product innovation was the creation by Jean Neuhaus in 1912

⁴ Which is equivalent to an increase from 0.74 to 1.12 euro per 100 kilogram of chocolate.

of the “praline”, a hard chocolate shell with a softer filling (see also later). Another important development was the introduction of the Belgian chocolate bar “batton” by Kwatta in 1920. Reducing the size of chocolate bars to 30g and 45g and making them into tablet shape further contributed to making chocolate an affordable snack (Barry Callebaut, 2015).

Another important innovation was the discovery of a method to produce, store and transport “couverture chocolate” – an intermediary product in the cocoa-chocolate value chain – in liquid form. This new technique eliminated the refrigeration and reheating phases of the chocolate production, thereby reducing overall production costs (Mercier, 2008). The innovation was made in 1925 by Octaaf Callebaut, the founding father of the Callebaut chocolate factory. As documented in the next section, the chocolate couverture would become a leading product of the Belgian chocolate sector from 1970 onwards.

This groundbreaking production innovation by Callebaut had two main implications for the growth of the Belgian chocolate sector in following decades. On the one hand, thanks to the use of innovative technologies, Callebaut was able to grow and concentrate the supply of gourmet chocolate couverture at competitive prices. On the other hand, it allowed Belgian chocolate makers to focus on their core business, such as the production of pralines, while procuring couverture directly from Callebaut rather than producing it in-house.

Innovations were not limited to production, but also occurred in marketing. In 1915 Neuhaus introduced the “ballotin”, a carton praline box, to protect pralines from being damaged and to enhance the “gift” aspect of the buying of chocolate. In 1935, Basilio, the predecessor of Leonidas, inaugurated its first window shop, with the so-called “guillotine-window” from where they could sell directly to passers-by who could witness the production process on display. This is still a distinctive feature of Leonidas shops today (Leonidas, 2014).

All these factors improved the competitiveness of “Belgian chocolate” on the domestic market and its export opportunities. As production costs fell and Belgian companies became

more competitive, the price of exported chocolate decreased significantly. Belgian chocolate exports increased from 25 tons in 1900 to 290 tons in 1911. During the interbellum, exports for the first time became larger than chocolate imports both in terms of volumes and values (see Figure 1b). As imports fell to low levels, exports grew strongly until the 1920 to a record level of 3,372 tons in 1928. The neighboring countries were the most important export destinations: exports to Germany, France and the Netherlands accounted for around 70 percent of total exports. However, the export sector collapsed in the 1930s due to the Great Depression. At the end of the 1930s export levels had fallen back to the level of 1920.

Growth and Globalization after the 2nd World War

At the end of the Second World War, chocolate consumption grew rapidly in Europe. Chocolate was no longer a luxury product, but rather a food item of mass consumption. As Figure 2 illustrates, over the following 60 years, real GDP per capita increased 4-fold, while the real price of chocolate declined. As chocolate became cheaper and incomes grew, the working class in Belgium and in Europe included chocolate bars in their regular diet (Mercier, 2008; Callebaut, 2014).

Belgian chocolate producers responded to this increased demand. The Belgian chocolate sector boom started with the 1958 World Expo in Brussels. A major campaign was launched by both the government and the industry to boost Belgian chocolate worldwide. In particular, it appeared that companies such as Côte d'Or were very active in promoting their chocolate products. Côte d'Or developed a brand new product, "Dessert 58", for the Expo. The story goes that as soon as you got out from Brussels' Midi train station for the Expo, you could smell a chocolate aroma coming from the Côte d'Or factory, which was opposite the station.

Further mechanization and scaling up of the production process improved productivity in the sector. The number of workers in the chocolate factories remained consistent between 1965 and 1990 with respectively 6,557 workers in 1965 and 6,224 workers in 1990. As a result,

the average production per worker increased strongly, from 11.1 tons per worker to 44.2 tons per worker (FOD Economie – Jaarlijkse Productiestatistieken, 1965 and 1990).

Production grew tremendously from the 1960s onwards. In 1965, Belgium produced 70,650 tons of chocolate, by 1990 268,068 tons and by 2013 production had increased to 545,200 tons, most of which was exported (see Figure 3)⁵.

The competitive strength of the Belgian chocolate industry became also apparent in trade (see Figure 1c). Since the 1960s, exports exceeded imports, and grew rapidly in the next decades⁶. Growth was particularly strong in the past three decades. The average annual growth rates of export values was 6.1% in the 1980s and 7.2% in the 1990s. Annual growth rates then slowed down in the 2000s due to the economic crisis to a rate of 2.5% per year (see Table 1). By 2013, the last year of data, Belgium was exporting more than 500,000 tons of chocolate worth more than 1.9 billion ⁷.

The EU is still the main market for Belgian chocolate, but its share has been declining in the past two decades. At present, it accounts for 77 percent of total Belgian chocolate export values, while the share of exports to the EU member states in 1993 accounted for 89 percent of the total export value. Total volume of exports to EU members increased from 173,345 to 437,368 tons (respectively 804 million to 1.4 billion in 2010 euro) between 1993 and 2013. The top 5 export destinations for Belgian chocolate in 2013 were the Netherlands, Germany, France, UK and US (see Figure 4). While exports to France have been relatively stable over time, exports to the Netherlands increased by 111 percent and to Germany by 69 percent over the past 20 years. Exports to the UK and US in 2013 were more than 3 times higher than in 1993.

⁵ It should be noted that the data of 2013 are an underestimation of the real production figures as the EUROSTAT data does not include the production data in categories with low number of producers due to confidentiality (Williams, 2008).

⁶ For more information on the recent developments in the Belgian chocolate export sector see Abraham et al (2015).

⁷ Expressed in 2010 euros.

The accession of new EU member states has further stimulated exports to the EU market. Figure 5 shows that exports to the countries that joined the EU in 2004 – Cyprus, Estonia, Hungary, Lithuania, Latvia, Malta, Poland, Slovenia, Slovakia and Czech Republic – dramatically increased after 2004.

The share of exports to non-EU countries has increased in the past two decades, rising from 11 percent to 23 percent from 1993 to 2013 (see Figure 6), and non-EU exports are now more than 4 times as high as they were twenty years ago. The US, Japan and Canada are the main importing countries outside the EU. In recent years China, Malaysia, Turkey, Brazil, Thailand and Mexico have become new important trade destinations for Belgian chocolate.

Chocolate products

A key driver of the considerable growth of the sector since the 1960s has been couverture chocolate (Figure 7). Broken down by product category, data on chocolate production volumes reveal that the share of filled and unfilled⁸ chocolate in total production decreased substantially between 1970 and 2013. Couverture chocolate, on the other hand, became the leading product of the Belgian chocolate sector. The share of couverture chocolate increased from 27 to 70 percent between 1970 and 2013. The share of bonbons and pralines remained more stable over time, fluctuating between 14 and 20 percent.

Most of the production of couverture in Belgium is used for the production of final consumption goods which are sold both in the domestic and export market. Only one third of the couverture chocolate produced in Belgium was exported abroad. Couverture is still the largest export product when we analyze the export shares by product category in total export volumes (Figure 8). But pralines and bonbons are the leading product of the Belgian export market in terms of values. In 2013, the share of pralines and bonbons accounted for 45 percent

⁸ For a technical definition of these categories see footnote 44. Generally speaking, unfilled chocolate refers to chocolate bars and tablets milked or plain with or without added fruits, cereals and nuts, while filled chocolate refers to bars and tablets (CAOBISCO, 2013).

of the total export value. Unfilled chocolate was the second largest export product with a share of 21 percent in total value. Couverture chocolate had only a share of 19 percent in total export values in 2013. Filled chocolate and other sugar confectionary containing cocoa had a share of respectively 10 and 5 percent.

From Crafts to Multinationals

The growth in the chocolate sector is also reflected in changes in the industry structure. Since the mid-1960s, several family-owned enterprises and artisan producers have evolved into or have been taken over by large chocolate manufacturers, some of which are now major global players present at most stages of the chocolate production chain – from the production of intermediate products, such as chocolate couverture, to final consumer goods such as pralines and chocolate bars.

Table 2 provides a non-exhaustive overview of some of the key larger chocolate companies with Belgian origin in 2013. With more than 1,000 workers, Puratos (Belcolade) is the largest Belgian chocolate company in terms of employees, followed by Barry Callebaut Belgium NV (850), Leonidas (385) and Neuhaus (320)⁹. Both Barry Callebaut and Puratos are mostly industrial producers while Leonidas and Neuhaus produce final consumption chocolate goods. In terms of revenue, Barry Callebaut Belgium NV is ranked first, with an annual turnover of approximately 1,900 million euro, with second-ranked Mondelēz Belgium and third-ranked Puratos (Belcolade) a long way behind (both around 400 million euro).

Before discussing some of these companies in more detail, it should be noted that many Belgian chocolatiers are still small scale. Data for 2014¹⁰ show that out of a total of 261

⁹ The figures include also employees in non-chocolate divisions or the corporate.

¹⁰ These statistical data refer to the 10.82 category, which also includes sugar confectionary. They refer to number of companies with at least 1 employee, so self-employed are not included.

Belgium chocolate companies, 173 companies are micro enterprises (with less than 10 employees), 70% of which employ less than 5 workers. Together with small-sized companies (between 10 and 50 employees), they account for more than 90% of the total number of Belgian chocolate companies¹¹ (see Figure 9) Most of these micro and small chocolate enterprises tend to position themselves in the upper premium segment and target niche markets of the chocolate sector.

Four Historical Cases of “Belgian Chocolate”

We use four company cases to illustrate the historical development of the business growth of four key Belgian chocolate companies which, in different ways and for different reasons, have played a distinctive role in the Belgian chocolate industry at home and worldwide.

Neuhaus: Inventor of the pralines¹²

In 1857, Jean Neuhaus immigrates from Neuchatel in Switzerland to Brussels and opens a pharmacy-confectioners shop in Galerie de la Reine in the center of the city. There, he sells his medicines covered in chocolate to make them more appetizing to customers. The business becomes such a huge success that, in 1885, he sets up the Neuhaus – Perrin Confectionery and Chocolate factory.

In 1912, his grandson Jean Neuhaus Jr. produces the first filled chocolate that he names “praline”, a new product that will become an essential feature of “the Belgian chocolate”. Louise Agostini, his wife, designs the “ballotin” (praline box), an invention that prevents pralines from being damaged. The design of ballotin is registered on 16th August 1915 and it became the most used chocolate box by all Belgian chocolate manufacturers (Neuhaus, 2015).

¹¹ This categorisation of companies follows a European Commission definition of small and medium sized enterprises (SMEs): micro = less than 10; small = 10 to 49; medium-sized = 50 to 249; large: more than 250 employee (EU recommendation 2003/261).

¹² Source: Neuhaus (2015), Bois Sauvage holding (2014) and Mercier (2008).

Neuhaus also took the lead in introducing franchising in the late 1940s. The company requests employers or partners responsible for sales of Neuhaus products to do a six-month internship at the Neuhaus shop in Galerie de la Reine in Brussels. Shops and boutiques selling Neuhaus products must have a distinctive look and decorations (Mercier, 2008).

In the 1970s, Neuhaus starts exporting overseas and expanding sales of Neuhaus pralines in the US, Canada, Colombia and Japan (Mercier, 2008). At the end of the 1990s the company is introduced on the stock exchange and in 2006 the Belgian holding group “Compagnie du Bois Sauvage” acquires all the shares of the company. Today, Neuhaus is one of the few “Belgian chocolate” makers that are still fully Belgian-owned. It mostly manufactures in Belgium, while exporting its products and running its own shops in around 50 countries worldwide (Bois Sauvage holding, 2014).

Côte d’Or¹³: merged into a multinational company

Charles Neuhaus¹⁴ founds the Côte d’Or¹⁵ factory in 1870 in Schaarbeek, Belgium. In 1889 the Bieswal family buys the Neuhaus chocolate factory, and merges in 1906 with the Michiels family company to create Alimenta S.A. The new company develops the “Côte d’Or” chocolate with its famous elephant trademark and expands: the number of workers increases from around 100 before the First World War to 350 in the 1930s. In 1931, the Côte d’Or trademark is registered in the US. At the Brussels World Fair in 1935 the company presents the “Cream tablets”, “Mignonettes”, “Bouchées” and “Chokotoffs” – products that are still very popular today (Olivier, 1997).

During the Second World War, the company decides to temporarily replace Côte d’Or with a lower quality chocolate brand “Congobar” because it cannot guarantee the delivery of high quality chocolate. After the war, the company stops the production of “Congobar” and

¹³ Côte d’Or (2014) and Mondelēz (2014).

¹⁴ Remarkably, he appears not to be family of the inventor of the pralines, Jean Neuhaus.

¹⁵ The name Côte d’Or refers to the country of origin of the cocoa beans "Gold Coast", now Ghana.

reintroduces its classic products and launches several new Côte d'Or products (Côte d'Or, 2014).

In the 1960s and the 1970s, the company continues to expand abroad, with new operations in France, the Netherlands, Switzerland, the UK and Japan (Olivier, 1997). In 1982, the company is launched on the stock exchange and in 1987, the Swiss Suchard company acquires 66% of the Côte d'Or shares. In the 1990s, Suchard is taken over by the US firm Philip Morris, which is in turn integrated into Kraft General Foods (KGF) International. In 1993, KGF Europe and Jacobs Suchard are merged to form Kraft Jacob Suchard, a unit of KGF International. In 1995, Kraft General Foods changes its name to Kraft Foods and, in 2012, following a split in the group, two separate companies are established: Mondelez International, one of the world's largest multinational companies in the snack sector, and Kraft Foods Group, the North American grocery products company. Côte d'Or becomes part of Mondelez International. While now part of a global multinational, Côte d'Or still retains significant chocolate production activities in Belgium. In 2013, Mondelez Belgium S.A. was ranked number one in chocolate confectionery in Belgium, accounting for 35% of Belgian chocolate retail value. With 21% value share, Côte d'Or is currently the company's greatest asset (Euromonitor, 2014).

(Barry) Callebaut: a dominant player in the global chocolate supply chain¹⁶

In 1850, Eugène Callebaut founds a brewery and milling company in Wieze, Belgium. Sixty-one years later, in 1911, Octaaf Callebaut, his grandson, turns one of the company divisions to chocolate production.

In 1925 he invents a mechanism for the storage and transport of “couverture chocolate” in liquid form. This dramatically reduces production and transport costs and thus facilitates the use of chocolate in other foodstuffs, such as cereals, bread, biscuits, etc. The company re-orient

¹⁶ Source: Barry Callebaut (2013 and 2014), Callebaut (2014) and Cohen and Covell (2005).

its business and specializes in supplying chocolate makers, bakeries and confectionaries with high-quality couverture chocolate. The production of the couverture chocolate becomes the Callebaut company's core business. While initially focusing on supplying to Belgian chocolate makers, after the Second World War, the company expands its business in both Europe and North America (Callebaut, 2014).

The 1980s mark the end of the family control of the Callebaut business. In 1981, the company is bought by Interfood, a subsidiary of the Swiss chocolate manufacturer Tobler-Suchard. In 1983, Interfood merges with Klaus J. Jacobs to form Jacobs Suchard, resulting in one of the world's leading chocolate companies (Cohen and Covell, 2005). In 1990, Philip Morris acquires the candy division of Jacob Suchard, while Klaus Jacobs, through his company KL Jacobs AG, keeps the industrial chocolate divisions of Jacobs Suchard, holding 100 percent control of Callebaut operations (Cohen and Covell, 2005). In 1996, Jacobs also acquires the French company Cacao Barry and constitutes the Barry Callebaut group¹⁷. With the merger, the Barry Callebaut group becomes a leading player in the global cocoa-chocolate supply chain, with activities worldwide. The group has cocoa and chocolate factories in 35 countries. In 2013, Barry Callebaut acquires Petra Foods, a cocoa ingredients business based in Singapore. This increases the company's cocoa grinding capacities by 60%, making it the world's top cocoa processor. The enlarged company has around 50 production facilities worldwide, sells its products in over 100 countries and employs around 8,500 people. Although Europe still represents the company's largest market, accounting for 43% of total sales volume, recent growth of sales is strongest in the Asian-Pacific region (Barry Callebaut, 2014).

The company is present in all stages of the supply chain, from sourcing and processing cocoa beans to couverture and final chocolate production, such as chocolate fillings, decorations

¹⁷ In 2013 Jacobs Holding AG is the Group's ultimate parent with a share of 50.11% of the shares issued (Barry Callebaut, 2013).

and compounds. It supplies both to large multinational and industrial customers and to small gourmet customers, such as artisanal chocolatiers, bakers and pastry chefs¹⁸.

*Godiva: luxury chocolates around the world*¹⁹

Godiva's history dates back to 1926, when chocolate-maker Pierre Draps Senior creates his chocolate pralines in a small atelier of his home in Brussels. His chocolate business quickly becomes a family affair. His four children are involved in the production, packaging and delivery of the family chocolates. These chocolates are initially sold in department stores in Brussels. Later the family opened a Godiva shop in Brussels (Godiva, 2015a and 2015b)

Since the beginning, the Draps family wants to position the Godiva brand in the luxury segment of the chocolate market. This is done through the development of distinctive products with elegant packaging, such as the "Fabiola" brand, created in 1958 to celebrate the engagement of Queen Fabiola to King Baudouin I of Belgium (Godiva Chocolatier, Inc. History, 2004).

Godiva is the first Belgian chocolate company to open a Belgian chocolate shop outside Belgium, launching a Godiva shop in Paris in 1958. Other shops are soon opened in the UK, Germany and Italy. Godiva expands to the US, in Philadelphia, in 1966. And to the Asian market, firstly Japan in 1972, followed by Hong Kong in 1998 and Taiwan and Singapore in the early 2000s. The first store in China is opened in 2009. Today, the Godiva brand is present in over 80 countries and the company owns and runs more than 450 boutiques and shops worldwide (Godiva, 2015a and 2015c).

For the first 40 years, until 1966, the Godiva company is owned exclusively by the Draps family. In 1967, Pepperidge Farm acquires a two-thirds stake and later, Campbell completes

¹⁸ The Barry Callebaut group is divided into three main business units: cocoa products (such as cocoa butter, cocoa powder and cocoa liquor), food manufacturers' products and gourmet products. The latter are produced and supplied by the Callebaut unit in Belgium and the Cocoa Barry unit in France, who still operate separately under the umbrella of the Barry Callebaut Group. (Barry Callebaut, 2013).

¹⁹ Godiva (2015a), e-watch (2006), Godiva (2015b) and Godiva Chocolatier, Inc. History (2004).

the purchase of the remainder of the Godiva company and sets up a US production facility in Reading, Pennsylvania (Godiva Chocolatier, Inc. History, 2004). The Pennsylvania plant supplies the whole North American market while the Belgian manufacturing facilities supply the markets in Europe, the Middle East and Asia (e-Business W@tch, 2006). The US plant produces approximately the same amount of chocolate for the North American market as the Belgian plant does for the rest of the world (Godiva, 2015b). In 2008, the Campbell Soup Company sells its Godiva Chocolatier unit to the Turkish company Yildiz Holding.

During its 80 years of operation, the Godiva has conducted an effective marketing strategy and brand image advertising, which have made the company one of the world's leaders of the luxury segment of the chocolate sector. For example, in the late 1970s in the US, customers at a Godiva "boutique" (as the company name its shops) are treated like a buyer at a fine jewelry store. Products included model kits of Porsche, Rolls Royce, and Mercedes automobiles, which could be "glued" together by melting an included extra pieces of chocolate. In 1995, a survey carried out via Godiva's website reveals that the typical customer is a woman earning an average salary of \$60,000 per year (Godiva Chocolatier, Inc. History, 2004).

Key Elements in the Growth and Global Expansion of "Belgian Chocolates"

Just as companies' innovations in both products and marketing have played a crucial role in making the history of Belgian chocolate, so too have the entrepreneurship skills and effective management strategies of many of the artisan firms that later became large chocolate Belgian manufacturers.

These cases illustrate several characteristics of the global expansion of "Belgian chocolates". First, the exports were associated with a global expansion of chocolate retailing by many Belgian companies. This was especially the case for luxury chocolate, such as pralines. The first Godiva shop outside Belgium was inaugurated in Paris in 1958. Similarly, Leonidas opened its first European store in Lille, France in 1969, and in 1978 Neuhaus' pralines were

launched overseas in US, Canada and Japan. At present, the large companies selling luxury Belgian chocolates own and operate shops in many – some more than 100 - countries around the world (see Table 2).²⁰

Second, a very different international strategy was followed by the companies producing intermediate chocolate products, especially the Callebaut company, which produces mostly chocolate couverture. They have achieved a dominant position in the global cocoa/chocolate industry. Since the merger of Callebaut with the French company Cocoa Barry, Barry Callebaut has dominated the entire supply chocolate chain, producing its industrial couverture chocolates for the entire food industry, from food manufacturers to artisans and professional users of chocolate such as chocolatiers, pastry chefs or bakers, and products for vending machines. Over the last years, Barry Callebaut has continued its expansion moving to emerging markets. The recent acquisition of the Singapore-based company Petra Food, has expanded the production capacity of the company as well as adding a strong position in the Asian markets (see above).

From an analysis of the sector, it can be seen that these two strategies have been mutually reinforcing. As mentioned before, many Belgian chocolate makers can focus on their core business, such as the production of pralines, while procuring couverture directly from Belgian intermediate chocolate producer, such as Callebaut and Puratos, rather than producing it in-house.

Finally, as the Belgian chocolate industry has evolved, so have its ownership and management structure. The successful global business of several Belgian chocolate companies – such as Godiva, Guylian and Côte d’Or – have led to their introduction on stock markets. Although most of these companies are still manufacturing in Belgium, foreign multinational corporations have taken over their businesses (see Table 2). Côte d’Or was bought by the US Kraft General Foods in 1990 and become part of Mondelēz international in 2012. In 1967

²⁰ In the 1930s, some Belgian companies had already achieved their international dimension; the brand Côte d’Or was for example registered in the US in 1931.

Godiva was acquired by the Campbel and in 2008 sold to Turkish company Yıldız Holding. Guylian was purchased by Lotte Confectionery from South Korea. As mentioned before, Callebaut merged with French chocolate maker Cacao Barry to form the Barry Callebaut Group, with a majority of the shares owned by Jacobs Holding AG and its corporate headquarters in Switzerland.

Defining and protecting “Belgian chocolate”

The worldwide success of the Belgian chocolate industry has led to a series of challenges which are threatening the notion of “Belgian chocolate” *per se*. Frequent attempts of copycats to imitate “Belgian chocolates” and benefit from the increasing global demand for chocolate have led the Belgian chocolate sector to define and seek protection of “Belgian chocolate”. Yet, the internationalization of some of the most successful Belgian companies, which have undergone an extensive ownership transformation through mergers and acquisitions with global investors and in some cases delocalization (partially or entirely) of their production process outside Belgium, makes the definition, qualification and protection of “Belgian chocolate” more challenging. Surging global demand for Belgian chocolate, mainly driven by emerging markets in Asia, has led to an expansion of fraudulently labelled “Belgian chocolate” products, as imitators seek to benefit from the rising demand. However, this is nothing new. Attempts to define Belgian chocolate are almost as old as the industry itself. As early as 1894, a Belgian royal decree²¹ limited the circulation of chocolate imitations that replaced cocoa with poor quality fats. Article 2 of this decree established that it was “illegal to sell, have in possession or expose for sale, or to transmit any product whatever, under the designation ‘chocolate’, that is not manufactured exclusively from shelled cocoa, and that in a minimum proportion of 35%,

²¹ Arrêté royal du 18 novembre 1894 relatif au commerce du cacao et du chocolat.

and ordinary sugar, with or without admixture of spices”²² (for more details see Meloni and Swinnen, 2015)

The definition of Belgian chocolate became a particularly sensitive issue during the 30-year “chocolate war” in the EU (see Cidell and Alberts, 2006; Meloni and Swinnen, 2015). The so-called chocolate war refers to a dispute on what could be called “chocolate”. It began in 1973, between the new member states the UK, Ireland and Denmark, and older member states Belgium, France, Italy, Spain and Germany. Belgium, together with France, Italy and Spain refused to allow products to be called “chocolate” if they contained cocoa butter substitutes. The war was ended by the EU “Chocolate Directive” adopted in 2003²³, which allowed up to 5% of cocoa butter in chocolate to be replaced. The 2003 Chocolate Directive was seen by most Belgian manufacturers – who explicitly indicate that their chocolate products contain 100% cocoa butter and no vegetable fats – as a potential threat of reduced quality standards for chocolate.

In 2000, before the EU Directive was adopted, the Belgian Federal Government tried to address the concerns of the Belgian chocolate industry by creating the chocolate collective trademark ‘AMBAO’ (with AMBAO meaning “chocolate” in Swahili). The AMBAO trademark stipulated quality and manufacturing criteria. The criteria included that “Belgian chocolate” products contain 100% cocoa butter. To produce “AMBAO chocolate”, any company, whether Belgian or foreign, had to register and pay a license fee to obtain the AMBAO trademark. However, the initiative failed, with only a few companies registering for AMBAO. Over the past decade, no company has applied for or used an AMBAO logo.

²² Author’s own translation of Article 2 of Arrêté royal 1894 : ‘*Il est défendu de vendre, d’exposer en vente, de détenir ou de transporter pour la vente sous la simple dénomination de chocolat, aucun produit qui ne serait pas exclusivement composé de cacao décortiqué, dans la proportion de 35 p. c. au moins, et de sucre ordinaire (saccharose), avec ou sans addition d’aromates*’ (Moniteur Belge, 1894).

²³ European Parliament and Council Directive 2000/36/EC.

There are several reasons for the lack of success of the initiative. Belgian chocolate manufacturers were not willing to pay for the trademark, which was mostly perceived as a certification and administrative cost only, rather than an investment to help protect the quality of their products. The AMBAO logo design did not have any reference to Belgium, making it very difficult for consumers to associate AMBAO with Belgian chocolate quality and, more generally, understand its meaning. Moreover, as any manufacturer, Belgian or otherwise, could register for the AMBAO trademark, Belgian companies did not see it as an effective tool to distinguish high-quality Belgian chocolate from other products (LCM Internation, 2006) Some Belgian companies, producing high-quality niche chocolate products, were even worried about harm to their reputation by applying it.

The Belgian Chocolate Code

In 2007, the chocolate companies themselves took the initiative. The Belgian national association of chocolate manufacturers (Choprabisco) approved the “Belgian Chocolate Code” in order to implement EU Directive 2000/13, a 2000 EU Directive²⁴ which established specific rules concerning labelling and advertising of foodstuffs to prevent consumers from being misled.

The Code is a private standard, with no legal weight, signed by chocolate manufactures members. It sets out specific criteria for “Belgian chocolate” products such as bars and pralines. The criteria include that the complete process of mixing, refining and conching is done in Belgium. Foreign manufacturers that use Belgian chocolate as an ingredient can only refer to it, indicating “Made with chocolate from Belgium/Belgian chocolate”. For instance, Choprabisco explained to the press in 2013 that some foreign companies procure the chocolate couverture from the Belgian factory of large manufactures such as Barry Callebaut. “*That*

²⁴ DIRECTIVE 2000/13/EC of the European Parliament and of the Council on the approximation of the laws of the Member States relating to the labelling, presentation and advertising of foodstuffs. The Directive has been now replaced by Regulation 1169/2011 on the provision of food information to consumers.

shouldn't count as Belgian chocolate. What you should be saying is: 'Made with Belgian chocolate'” (Blenkinsop, 2013)²⁵.

Exceptions are given to products for which an historical heritage link with Belgium is proven. In this case, the references “Belgian flavor”, “Belgian tradition”, “Belgian recipe” and “Belgian style” are permitted, but they can only be indicated on the back of the packaging and it should not lead the average consumer to believe the product is of Belgian origin (Choprabisco, 2007)²⁶.

In an attempt to counter both misleading and fraudulent practices, the Belgian Chocolate Code also provides guidelines for Belgian manufacturers on how to deal with and react to misleading labelling practices of foreign companies, including, if appropriate, pursuing legal action. Since the Code's entry into force, there have been several cases of misleading practices exposed by the Code, including in Hungary, Turkey, Australia and China. Choprabisco reported that in 2014 that at least 5 letters have been sent to foreign chocolate manufacturers to demand modifications to their labelling, which is believed to mislead consumers by using texts or illustrations referring to Belgium.

Since the adoption of the Belgian Chocolate Code, 55 Belgian manufacturers have signed up and 70 new members are in the process of finalizing their signature²⁷. Together, these businesses represent 85-90% of the total volume of the country's chocolate production. However, not all companies support the initiative. The Code is particularly problematic for companies with historical links to Belgium but which also have a very strong production presence outside the country. They feel penalized by the Code, which emphasizes strongly the Belgian location of the production process. For example, as a large part of its production is now localized in the US, Godiva seems to find that the criteria laid down in the Belgian Chocolate

²⁵ Article by Philip Blenkinsop on Reuters on 27 March 2013 ‘Belgian chocolate makers seek protection from copycats’ available at <http://www.reuters.com/article/2013/03/27/us-belgium-chocolateidUSBRE92Q05M20130327>.

²⁶ <http://www.choprabisco.be/engels/documents/BelgianChocolateCodeEN030507DEF.pdf>

²⁷ Choprabisco is made up by 170 members, going from the small-sized enterprise to the multinationals companies. The 70 new members are all artisanal small-sized companies.

Code, which narrows the labelling of “Belgian chocolate” to chocolate produced in Belgium only, are very restrictive. They were reported as saying in March 2013 that: “*these Godiva chocolates [coming from the US operations] are still essentially Belgian, in the same way that one might think of a BMW made in South Carolina as still essentially a German car*” and that “*It would be very limiting if only chocolate produced in Belgium could be considered*” (Blenkinsop, 2013)²⁸.

GI protection for Belgian chocolate?

In January 2013, the EU updated its rules on the protection of quality agricultural and food products, through Regulation 1151/2012 on the so-called ‘Geographical Indication’ (GI) regime. Broadly speaking, this new EU legislative framework for protecting agri-food products other than wine and spirits introduced two main changes, which could potentially have some important implications for Belgian chocolate.

First, the 2012 Regulation included widening the eligibility scope for food products, such as chocolate – allowing all “chocolate and derived products” to apply for a ‘PDO’ or ‘PGI’ label²⁹. Previously, “chocolate and other food preparations containing cocoa” could only apply for the lesser ‘TSG’ label (Council Regulation (EEC) No 2082/92)³⁰. However, as the PDO label requires all the production steps (production, processing and preparation) to take place within a given geographical area³¹, this cannot be applied to Belgian chocolate, which is instead eligible for PGI or TSG status³².

²⁸ Article by Philip Blenkinsop on Reuters on 27 March 2013 ‘Belgian chocolate makers seek protection from copycats’ available at <http://www.reuters.com/article/2013/03/27/us-belgium-chocolate/idUSBRE92Q05M20130327>

²⁹ As explained clearly in the Meloni and Swinnen (2015) ‘*Agricultural products and foodstuffs are divided into “products with a Geographical Indication” and “products without a Geographical Indication.” Within the first category, there are two subcategories: ‘Protected Designation of Origin’ (PDO) and ‘Protected Geographical Indication’ (PGI), with PDO as the highest quality level as all the stages of production take place in the same defined geographical area*’. For a PGI, only one of the production stages must be in the defined area.

³⁰ The Traditional Specialty Guaranteed (TSG) is the lowest “quality” label scheme where protection can be granted to products without a link to the origin (a geographical area) (see Meloni and Swinnen (2015)).

³¹ The exception to this rule only applies to certain raw materials (live animals, meat and milk), which can come from an area different from the defined geographical area, with the final product nonetheless still eligible for a PDO (Regulation (EU) No 1151/2012).

³² Cocoa beans are all imported from Third Countries and therefore they are not produced in the same geographical area where they are processed, i.e. Belgium.

Second, Regulation 1151/2012 also introduced other changes to the GI rules. Article 5 (2c) states that “geographical indication” is a term that identifies a product originating from a specific place, region or country, whereas before it was only a place or region. It is therefore now possible for countries to apply for a PGI, meaning that in principle a group of Belgian chocolate producers or processors could apply for a PGI designation for “Belgian chocolate” coming from all parts of Belgium.

This could be a potential opportunity for the Belgian chocolate industry to apply for an EU GI label (i.e. PGI) such as those in place for other processed products like wine and ham. This is reflected in the statement of the export manager of one of the top Belgian chocolate companies: “*We want Belgium to be thought of as the chocolate version of the Champagne region among sparkling wines*” (Blenkinsop, 2013)³³.

If Belgian chocolate was to be granted PGI status, this could have important trade implications for Belgian chocolate manufacturing. If it had PGI status, Belgian chocolate protection could be discussed at trade negotiations between the EU and third countries. This could potentially be a mechanism to protect “Belgian chocolate” from misleading and fraudulent commercial practices inside and outside the EU. The current EU trade policy includes pro-active efforts to ensure recognition of its GI products (European Commission, 2015). This was evident in the bilateral trade deal with Canada agreed in October 2013³⁴, in which Canada committed to recognizing nearly 150 EU GI products (both PDO and PGIs). The European Commission has made clear its hopes for a similar deal on GIs in a potential EU-US “Transatlantic Trade and Investment Partnership” (TTIP) currently being negotiated³⁵.

³³Article by Philip Blenkinsop on Reuters on 27 March 2013 ‘Belgian chocolate makers seek protection from copycats’ available at <http://www.reuters.com/article/2013/03/27/us-belgium-chocolateidUSBRE92Q05M20130327>.

³⁴The EU-Canada ‘Comprehensive Economic and Trade Agreement’ (CETA), agreed in October 2013 but not yet fully ratified.

³⁵Speech by EU Commissioner for Trade Cecilia Malmström on 18 November 2014, available at file:///C:/Users/n13057/Documents/Downloads/SPEECH-14-1921_EN.pdf

However, it could be a long time before a potential EU PGI is applied to Belgian chocolate. The GI application process is a complex one for a sector as large as that of chocolate. The National Association of Belgian chocolate manufacturers and the Belgian authorities, both at federal and regional level, have just started the process of assessing and studying what is needed to obtain GI status.

Conclusions

This paper has provided an historical overview of the remarkable evolution of the Belgian chocolate industry, which has led “Belgian chocolates” to be well-known and appreciated all over the world. But it has also shown that it is only in recent decades that the Belgian chocolate sector has achieved its tremendous success. Throughout the 19th century, Belgian chocolate manufacturers struggled to benefit from the rapidly growing chocolate demand in Europe. Until the 1960s, the performance of Belgium as chocolate exporter was mixed.

This paper has also identified the specific elements and factors that contributed to Belgian chocolate producers being able to compete globally in the early 20th century: a favorable import regime combined with investment in new technologies and new product and marketing innovations.

Once chocolate became a food item of mass consumption after the Second World War, Belgian producers were finally able to respond to the dramatic increase in European demand for chocolate. From the 1960s onwards, production boomed, mechanization and scaling-up of the production process improved productivity in the sector and exports grew rapidly. In the 1990s, the average annual growth rate was some 9% per year. Although the European market is still the main export destination for Belgian chocolate, the share of exports to non-EU countries increased from 10 percent to 17 percent from 1993 to 2013.

Three main elements seem to characterize the global growth of “Belgian chocolates”. First, the international expansion of chocolate retailing by many Belgian companies, some of

which now have shops in more than 100 countries. Second, some Belgian suppliers have achieved a dominant position in the global cocoa/chocolate industry; and third, a strategic restructuring of the ownership and management of many Belgian chocolate companies. This multinationalization of “Belgian companies” is reflected in the four cases we discuss on the historical development of the business growth of four big companies, Neuhaus, Cote d’Or, Barry Callebaut and Godiva. These companies have, in different ways and for different reasons, played a distinctive role in the Belgian chocolate industry at home and worldwide: Neuhaus made its name globally with the invention of pralines; Côte d’Or (Mondelēz) has had a tremendous expansion internationally and domestically – now ranked number one in chocolate confectionery in Belgium; Callebaut, the inventor of couverture chocolate, merged with Barry to create the Barry Callebaut group, a dominant player in the global chocolate supply chain with production houses worldwide; and Godiva, which has expanded its market and production globally and positioned itself as one of the world’s leaders in the super-premium chocolate category.

Several attempts have been made by the Belgian Federal Government as well as by the industry to define and protect “Belgian chocolate”. The AMBAO trademark has not been adopted by most manufacturers, while an initiative by the country’s private industry association – the “Belgian Chocolate Code” – is still in place today, as a tool for defining Belgian chocolate in order to tackle misleading and fraudulent practices. Following the introduction of EU Regulation 1151/2012 on protected “Geographical Indications” (GIs) in 2012, the Belgian chocolate industry could potentially apply for GI protection status, such as that applied to other processed products such as wine.

However, these discussions and commercial conflicts on the use of the “Belgian chocolate” itself signal the dramatic success of this product around the globe. And recent export data suggest that the global growth is far from finished.

References

Abraham F, Studnicka Z. and Van Hove J., 2015. 'Belgian Chocolate Exports: Quality and Reputation versus Increased Competition'. In *Economics of Chocolate*, edited by Jo Swinnen and Mara Squicciarini.

Barry Callebaut. 2013. 'Annual report 2012/13'. *Barry Callebaut AG*. Available at <http://www.barry-callebaut.com/documentation#c1997>.

Barry Callebaut. 2014. 'Half-year Results 2013/14'. *Media Conference April 3, 2014*. Available at http://www.barry-callebaut.com/sites/default/files/publications/half_year_results_2013_14_final_media_without_speaker_notes.pdf

Bois Sauvage 2014. *Neuhaus*. Available at <http://www.bois-sauvage.be/actien/BSACTINAVSTRA4.htm>

Callebaut. 2014. *Histoire du chocolat*. Available at <http://www.callebaut.com/frfr/chocophilia/histoire-du-chocolat>

COABISCO. 2013. 'Caobisco Statistical Bulletin'. *Caobisco*. Available at: <http://www.mah.se/PageFiles/55093/caobisco-statistical%20bulletin%202013.pdf>

Cidell J.L and H.C. Alberts 2006. 'Constructing quality: The multinational histories of chocolate'. *Geoforum* 37 (2006): pp. 999–1007

Cidell J.L and H.C. Alberts. 2006. 'Chocolate, Consumption, Manufacturing and Quality in Western Europe and the United States'. *Geography*, Volume 91 (3): pp. 218–226.

Choprabisco. 2007. *Belgian Chocolate Code*. Available at <http://www.choprabisco.be/engels/documents/BelgianChocolateCodeEN030507DEF.pdf>

Cohen, M. and Jeffrey Covell. 2005 *Barry Callebaut AG*. International Directory of Company Histories. Available at <http://www.encyclopedia.com/doc/1G2-3444800021.htm>

Côte d'Or (2014). *Notre Histoire*. Available <https://www.cotedor.be/home/histoire-de-la-marque>

e-Business W@tch. 2006. *Case Study: Ict in Support of CRM at Godiva Chocolatier Europe*. DG Enterprise & Industry European Commission. Available at http://ec.europa.eu/enterprise/archives/e-business-watch/studies/case_studies/documents/Case%20Studies%202006/CS_SR01_Food_5-Godiva.pdf

Euromonitor International. 2014. 'Chocolate Confectionery in Belgium'.

European Commission. 2003. *Commission Recommendation of 6 May 2003 concerning the definition of micro, small and medium-sized enterprises 2003/361/EC*. Available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:124:0036:0041:EN:PDF>

European Commission. 2015. *Geographical-indications*. Available at <http://ec.europa.eu/trade/policy/accessing-markets/intellectual-property/geographical-indications/>

Godiva. 2015a. *Our history*. Available at <http://www.godiva.com/experience-godiva/ourStory.html>.

Godiva. 2015b. *History of Godiva*. Available at <http://www.godiva.com/careersgodivahistory/careersGodivaHistory.html>

Godiva. 2015c. *Godiva*. Available at <http://www.godivachocolates.eu/en/godiva-the-story>

Lamfalussy Christophe. 2006. 'Percée arabe du chocolat Galler' *La Libre*, 21 December 2006. Available at <http://www.lalibre.be/economie/actualite/percee-arabe-du-chocolat-galler-51b89139e4b0de6db9aef2c2>

Leonidas. 2014. *Leonidas, history from a Belgian Chocolatier*. Available at http://www.leonidas.com/be_en/about/history

Meloni Giulia and Jo Swinnen. 2015. 'Chocolate Regulation'. In *Economics of Chocolate*, edited by Jo Swinnen and Mara Squicciarini.

Mercier, J. 2008. *The temptation of chocolate* Brussels: Lannoo.

Mondelēz. 2014. *Our corporate timeline*. Available at <http://www.Mondelēzinternational.com/about-us/our-corporate-timelines>

Neuhaus. 2015. *Our Belgian chocolate heritage*. Available at <http://www.neuhaus-online-store.com/en/heritage.htm?or=6274264124&cu=euro>

Oliver Etienne. 1997. 'Collection Chocolate. Nos Marques, Nos Images Nos Appetits...'. *Journal du Collectionneur*, n° 62 Septembre 1997

Yeon-hee Kim and Park Ju-min. 2008. 'UPDATE 1-S.Korea Lotte buys Belgium's Guylian for \$164 mln' *Reuters*, editing by Jonathan Hopfner. 23 June 2008. Available at <http://uk.reuters.com/article/2008/06/23/guylian-lotte-idUKSEO22252520080623>

Blenkinsop Philip. 2013. 'Belgian chocolate makers seek protection from copycats' 27 March 2013. *Reuters*. 27 March 2013. Available <http://www.reuters.com/article/2013/03/27/us-belgium-chocolate-idUSBRE92Q05M20130327>

Rosenblum Mort. 2006. *Chocolate: A Bittersweet Saga of Dark and Light*. New York : North Point Press.

Scholliers, P. 1996. *Van drank voor de elite naar een reep voor iedereen. Chocolade van drank voor edelman tot reep voor alleman 15^{de} -20^{ste} eeuw*. ASLK galerij.

Williams, B. 2008. 'Europroms. Prodcom Data'. Eurostat. Latest version 03/09/2008.

Data sources

Belgian National Office Social Security (RSZ). 2014. *Verdeling werkgevers en arbeidsplaatsen naar grootteklasse voor de chocoladesector Q1 2014*

De Tijd in collaboration with Graydon. 2013. Company guide. Accessed on 15th of November 2014.

Euromonitor International. 2014. 'Chocolate Confectionery in Belgium'. Passport. 2014.

Eurostat. 2015. Industrial Statistics. Accessed on 28th of February 2015. (<http://ec.europa.eu/eurostat/data/database>).

FOD Economie. 1845-1993. *Statistieken over de Buitenlandse handel*. Nationaal Instituut voor de Statistiek.³⁶

FOD Economie. 1965-1993. *Maandelijks Industriële Statistieken*. Nationaal Instituut voor de Statistiek.³⁷

FOD Economie. 1965. *Jaarlijkse Productiestatistieken*. Nationaal Instituut voor de Statistiek.

FOD Economie. 1990. *Jaarlijkse Productiestatistieken*. Nationaal Instituut voor de Statistiek.

Mitchell, B. R. 1998. *International Historical Statistics, Europe 1750-1993*. London: Macmillan; New York: Stockton, 1998.

National Bank of Belgium. 2014. Price data on chocolate from 1947 to 2013.³⁸

National Bank of Belgium. 2014. Export data and import data by category and destination from 1993-2013.³⁹

OECD. 2014. CPI Index. Accessed at 22nd of March 2015 (<http://stats.oecd.org/Index.aspx?querytype=view&queryname=221>)

³⁶ The data on exports and imports of Belgian chocolate were collected from the yearly statistics of foreign trade. Each year corresponds to the year of publication. In other words, we have used the books which have been published in the following years: 1845, 1850, 1855, 1860, 1870, 1875, 1880, 1885, 1890, 1895, 1896, 1897, 1898, 1899, 1900, 1901, 1902, 1903, 1904, 1905, 1906, 1907, 1908, 1909, 1910, 1911, 1920, 1921, 1922, 1923, 1924, 1925, 1926, 1927, 1928, 1930, 1931, 1932, 1933, 1934, 1935, 1936, 1937, 1938, 1939, 1948, 1949, 1950, 1951, 1952, 1953, 1954, 1956, 1957, 1958, 1959, 1960, 1961, 1962, 1963, 1964, 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993.

³⁷ The data on production of Belgian chocolate were collected from the yearly statistics of production. Each year corresponds to the year of publication. In other words, we have used the books which have been published in the following years: 1965, 1966, 1967, 1968, 1969, 1970, 1971, 1972, 1973, 1974, 1975, 1976, 1977, 1978, 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1989, 1990, 1991, 1992, 1993.

³⁸ The authors received the original data from the National Bank of Belgium after direct correspondence.

³⁹ The authors received the original data from the National Bank of Belgium after direct correspondence.

FOD Economie. 1997-2007. *Industriële Productie: PRODCOM sectoren*. National Instituut voor de Statistiek.⁴⁰

WHY5Research 2012. Survey for Belgian Brewers Association with regards the creation of a Belgian beer experience centre at the Stock Exchange⁴¹

⁴⁰ The data were collected from the yearly statistics on industrial production of the PRODCOM industry. Each year corresponds to the year of publication. In other words, we have used the books which have been published in the following years: 1997, 1998, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007.

⁴¹The authors received the original data from the National Bank of Belgium after direct correspondence with the Belgian Brewers Association .

Figure 1. Belgian Imports and Exports of Chocolate in Volumes and Values⁴²

Figure .1.a: 1845-1911

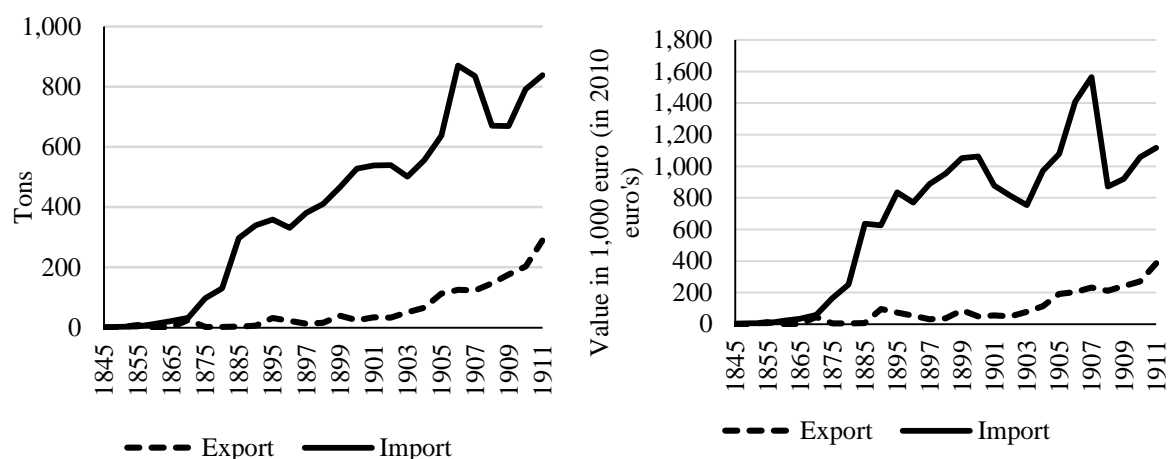


Figure .1.b: 1920-1939

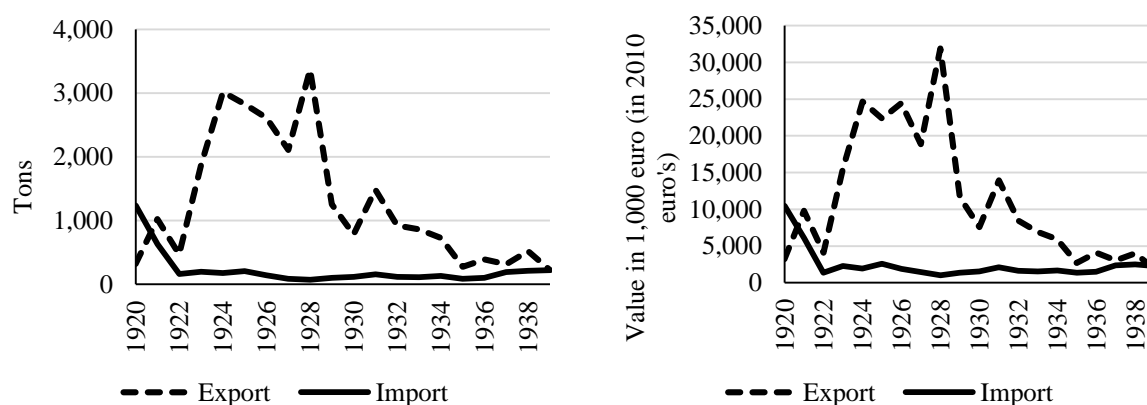
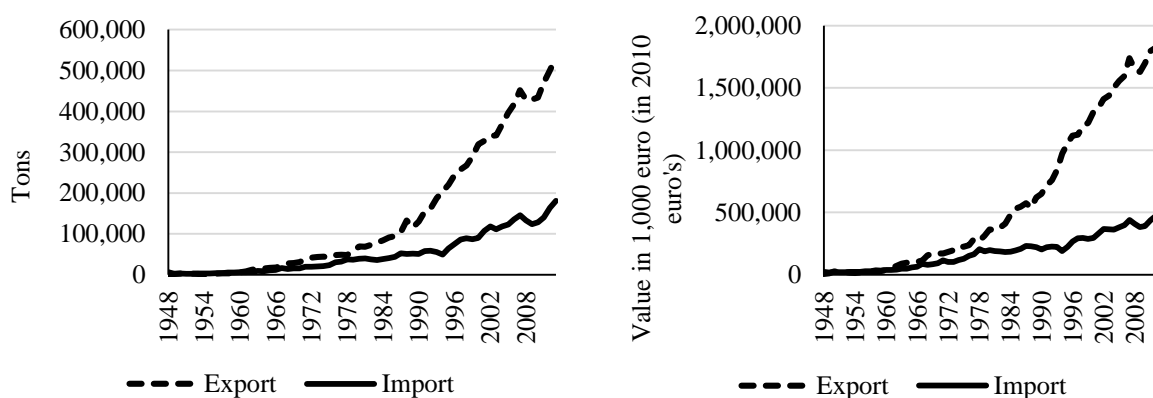


Figure .1.c: 1948-2013

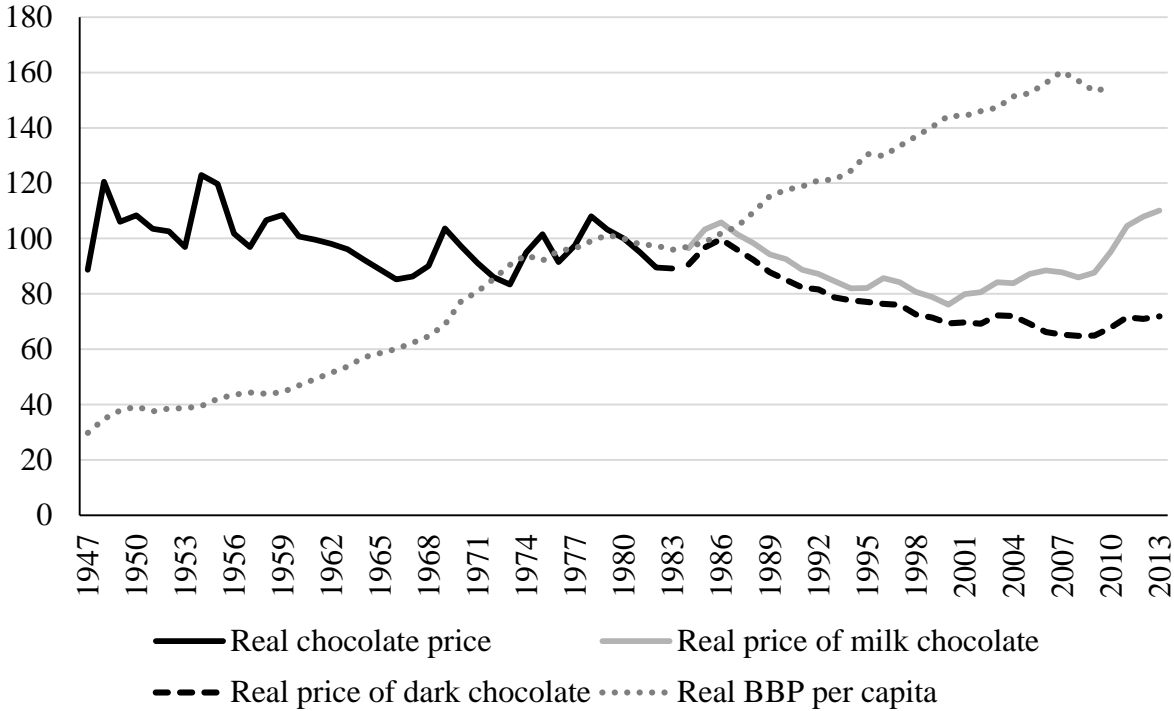


Source: FOD Economie – Statistieken over buitenlandse handel (1845-1911; 1920-1939; 1955-1992); National Bank of Belgium (1993-2013)

Note: The real values were calculated by deflating the values according to the historical database of Mitchell (1998) for the years 1845 to 1954. For the years after 1954, the deflator provided by the OECD (2014) was used.

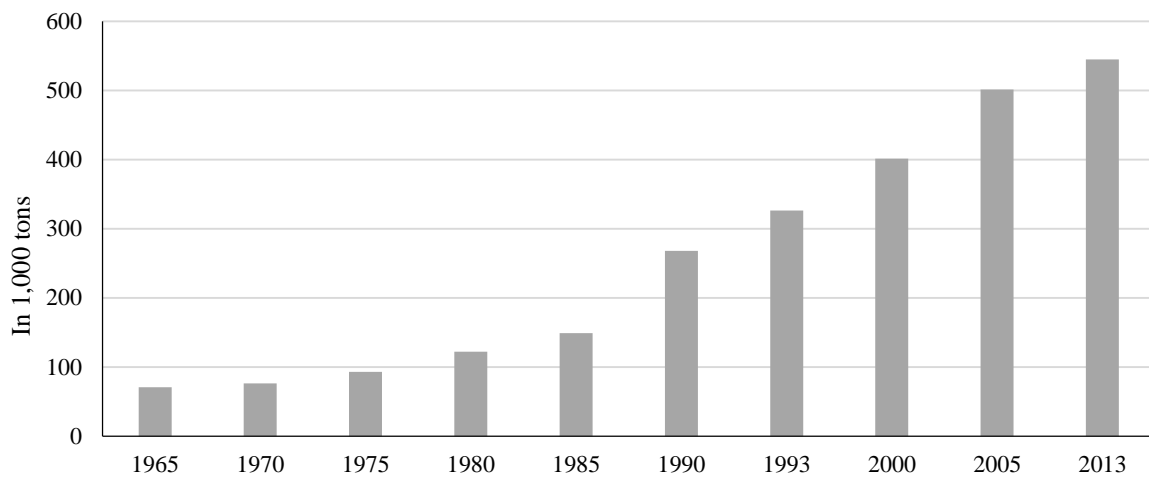
⁴² Chocolate is defined as chocolate used for consumption. It excludes export and imports of cocoa beans, cocoa paste, cocoa butter, fat and oil and cocoa powder.

Figure 2. Index of Real Chocolate Price and Real GDP Per Capita in Belgium (1980 = 100), 1947-2013



Source: National Bank of Belgium – Price data on chocolate

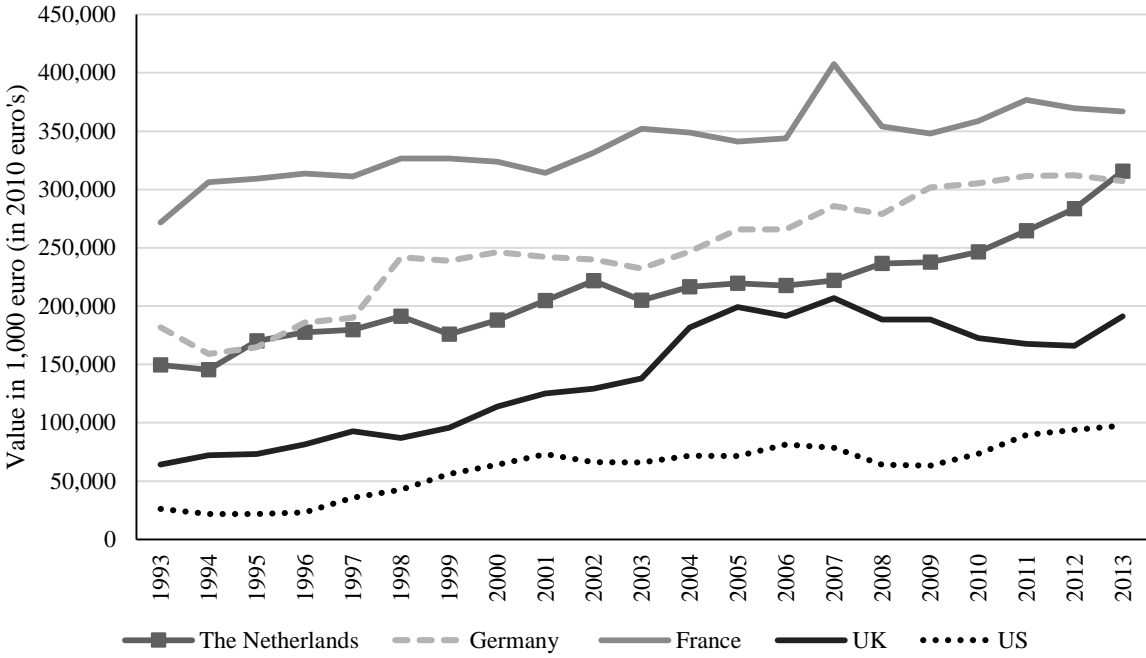
Figure 3. Production of Belgian Chocolate in Volumes (1965-2013)



Source: FOD Economie – Maandelijkse Industriële Statistieken (1965-1993); FOD Economie – PRODCOM (2000-2005); Eurostat – Production Statistics (2013)⁴³

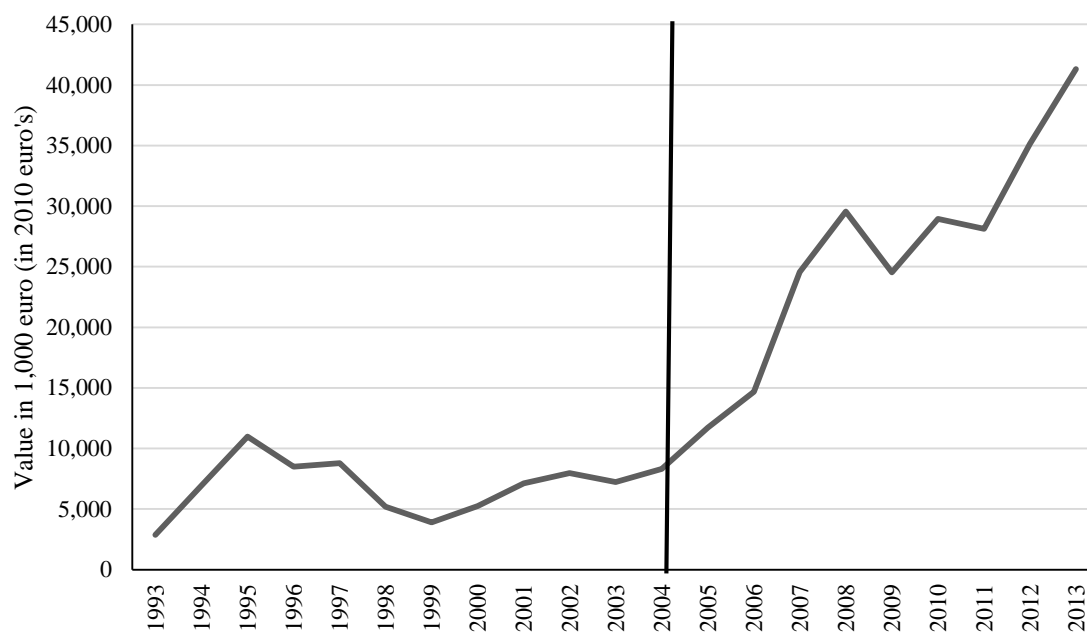
⁴³ The data in 2013 were calculated based on the EUROSTAT data. Total production is calculated by summing the production categories from 1082130 to 1082290. This calculation is an underestimation of the real production figures as the EUROSTAT data does not include the production data in categories with low number of producers due to confidentiality (Williams, 2008).

Figure 4. Top 5 Export Destinations of Belgian Chocolate in Values (1993-2013)⁴²



Source: National Bank of Belgium (1993 – 2013) – Export and Import data

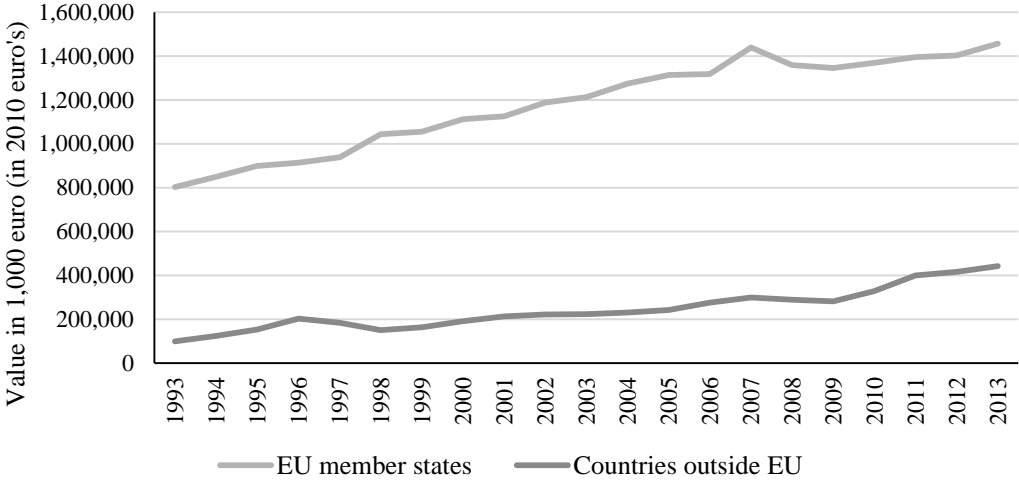
Figure 5. Exports of Belgian Chocolate to the EU New Member States entering in 2004 in Values⁴²



Source: National Bank of Belgium (1993 – 2013) – Export and Import data

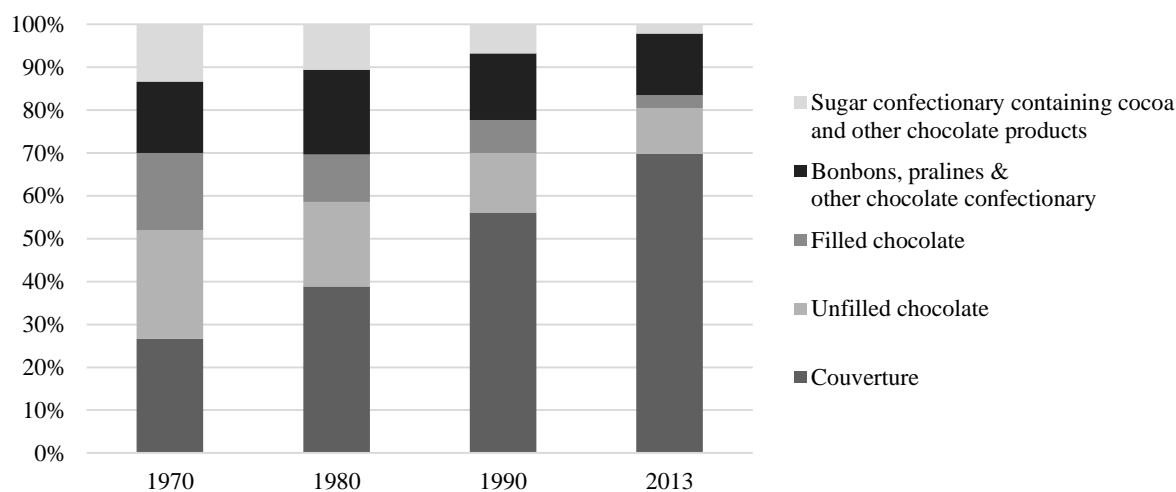
Note: Aggregation of exports to Slovenia, Cyprus, Malta, Estonia, Latvia, Slovakia, Hungary, Poland, Lithuania.

Figure 6. Exports of Belgian Chocolate to European Countries and Countries outside Europe in Values (1993-2013)⁴²



Source: National Bank of Belgium (1993 – 2013) – Export and Import data

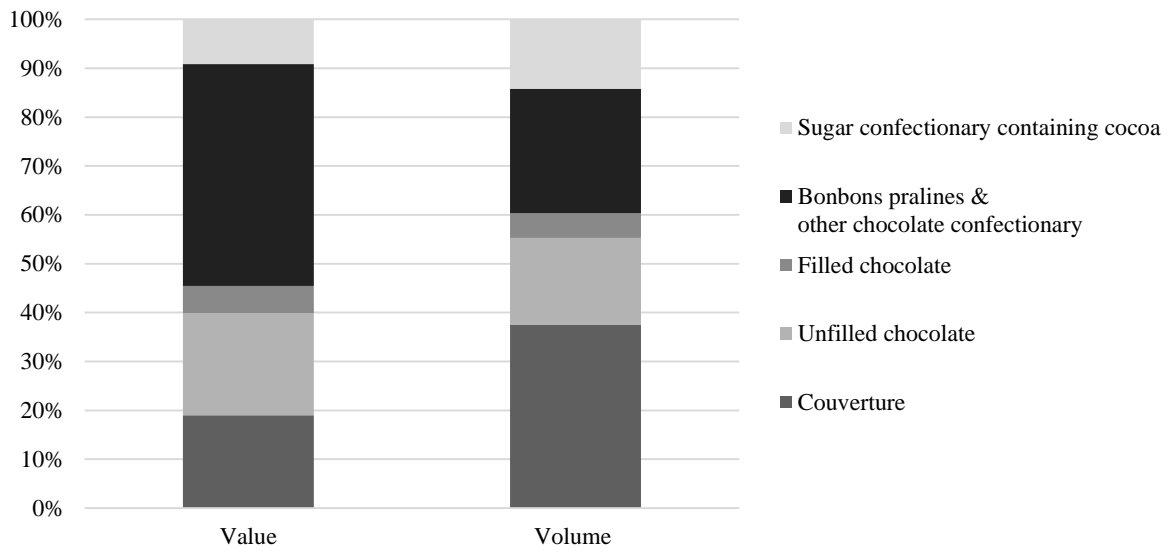
Figure 7. Production of Belgian Chocolate by Product Category in Percentage of Total Production Volumes⁴⁴ (1970-2013)



Source: FOD Economie – Maandelijkse Industriële Statistieken (1965-1993); FOD Economie – Industriële Productie: PRODCOM Sectoren (2000-2005); Eurostat – Industrial Statistics (2013)

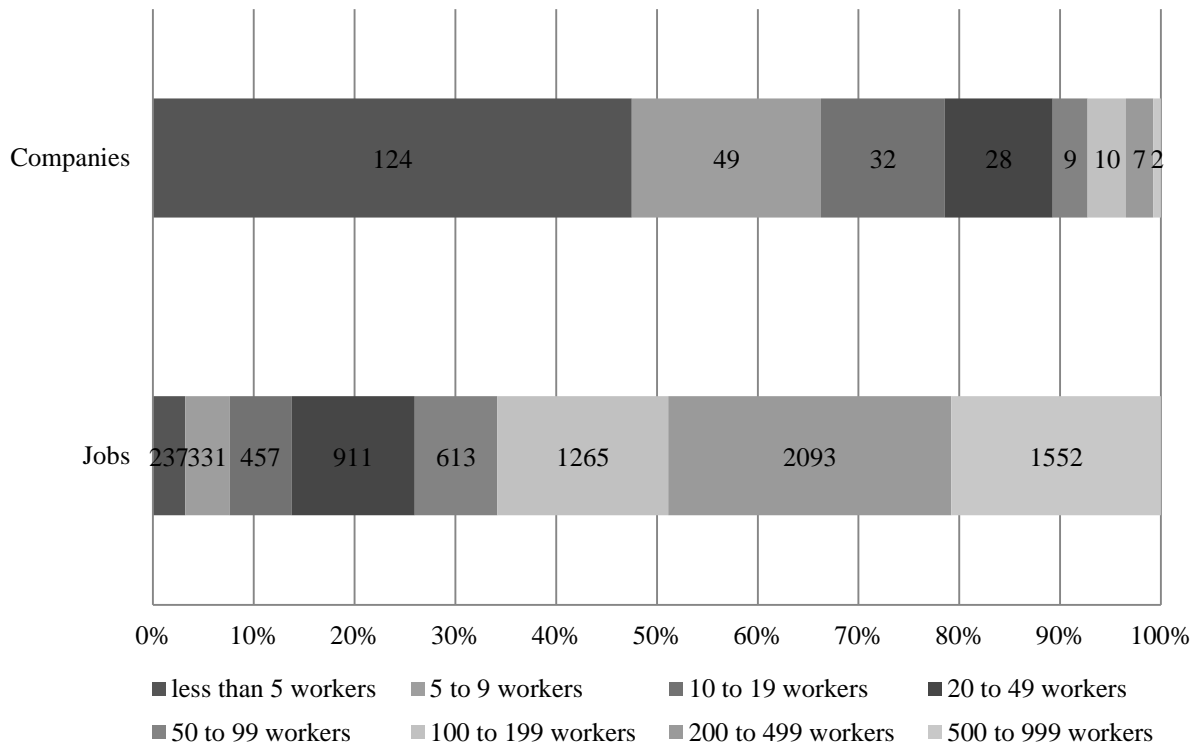
⁴⁴ For the years in 1970, 1980, and 1990, the categorization is obtained by summing the following categories found in the Maandelijkse Industriële Statistieken provided by the FOD Economie: ‘Dekchocolade’ for ‘Couverture’; ‘Volle chocolade (zonder melk)’ and ‘Volle melkchocolade’ for ‘Unfilled chocolate’; ‘Gevulde chocolade (repen en tabletten)’ for ‘Filled Chocolate’; ‘Volle chocolade bonbons’ and ‘Suikergoed met cacao: chocolade bonbons’ for ‘Bonbons, pralines and other chocolate confectionary’; and ‘Ander suikergoed met cacao’ for ‘Sugar Confectionary containing cocoa and other chocolate products’. For 2013, the categorization was based on grouping the following PRODCOM codes provided by the EUROSTAT database: 10822130-10822190 for ‘Couverture’; 10822235, 10822239 and 10822255 for ‘Unfilled chocolate’; 10822233 for ‘Filled chocolate’; 10822243 to 10822253 for ‘Bonbons, pralines and other chocolate confectionary’; and 10822260 to 10822290 for ‘Sugar Confectionary containing cocoa and other chocolate products’.

Figure 8. Export of Belgian Chocolate by Product Category in Percentage of Total Export Values and Volumes in 2013



Source: National Bank of Belgium (2014) – Export data in 2013

Figure 9. Distribution of Companies and Jobs by Size for the Belgian Chocolate Industry Q1 2014



Source: Data received from Choprabisco based on Belgian National Office Social Security (RSZ)

Table 1. Average Annual Growth Rates of Export of Belgian Chocolate Volumes and Values (1950-2013)

Period	1950-1959	1960-1969	1970-1979	1980-1989	1990-1999	2000-2009	2010-2013
Volume	2.9%	19.8%	7.5%	5.8%	9.2%	3.3%	6.9%
Value	0.8%	18.3%	6.9%	6.1%	7.2%	2.5%	3.8%

Table 2. Overview of Key Large Chocolate Companies with Belgian Origin

Company	Foundation Year	Headquarters	Ownership History	Country Destination	Turnover 2013 MLN Euro	Employment 2013	NBO Company share of Chocolate Confectionary %, 2013
Côte d'Or (Mondelēz Belgium)	1883	Mechelen	<ul style="list-style-type: none"> • Founded by Charles Neuhaus • Purchased by the Swiss company Jacobs Suchard in 1987; • Purchased by the American multinational company, Kraft General Foods in 1990, which was re-named Mondelēz international in 2012 	over 50 countries	402,2	155	34,6
Neuhaus	1857	Brussels (Vlezenbeek)	<ul style="list-style-type: none"> • Founded by Jean Nehaus • In 1974 the Belgian company Beukelaer acquired Neuhaus Group. • In 1997 Neuhaus was introduced on the stock exchange • In 2006 Compagnie du Bois Sauvage purchased all the shares of the company 	1000 sales outlets in more than 50 countries.	66,0	320	1,7
Callebaut (Barry Callebaut Belgium NV)	1850	Zurich (Lubbeek)	<ul style="list-style-type: none"> • Brewery and milling company founded by Eugène Callebaut in 1850 • In 1996 Callebaut merged with French chocolate maker Cacao Barry to form the Barry Callebaut group which has its corporate headquarters in Zurich, Switzerland. 	35 countries (as Barry Callebaut Group)	1899,4	846	2,9
Leonidas (Confiserie Leonidas)	1913	Brussels (Anderlecht)	<ul style="list-style-type: none"> • Founded in 1913 by Greek-Cypriot American confectioner Leonidas Kestekides in Ghent. • Since the 1970, the company is on the Belgian stock exchange in 1970, even though the family still played a role in its administration⁴⁵. 	1250 shops in around 50 countries	72,9	384	4,4

⁴⁵ Information retrieved from the book by Rosenblum (2006).

Company	Foundation Year	Headquarters	Ownership History	Country Destination	Turnover 2013 MLN Euro	Employment 2013	NBO Company share of Chocolate Confectionery %, 2013
Godiva (Godiva NV)	1926	Brussels (Koekelberg)	<ul style="list-style-type: none"> • Founded in Brussels by Pierre Draps Senior in 1926 • In 1967 it was purchased by the American company Campbell Soup • In 2008, Godiva was acquired by the Turkish company Yıldız Holding 	80 countries	74,9	307	2
Galler (Galler chocolatiers)	1930	Liège (Vuax-sous-Chevremot)	<ul style="list-style-type: none"> • Founded in 1976 by Jean Galler • In 2006 Galler increased by 3 million euros its financial base to permit its expansion in London, Lebanon, and Qatar. Control of the company remains with the Galler family (52% shareholding), but now expands to include 33% holding by two members of the Qatari royal family Al-Thani and 15% by the company executives⁴⁶. 	10 countries	17,5	97	1,7
Guylian (Chocolaterie Guylain)	1960	Sint-Niklaas	<ul style="list-style-type: none"> • Founded by Guy Foubert in 1960 • In 2008, Lotte Confectionery from South Korea bought the company for \$164 million⁴⁷ 	Over 100 countries	79,8	215	0,9
Puratos (Belcolade)	1988	Brussels (Groot-Bijgaarden)	<ul style="list-style-type: none"> • In 1988, Puratos, a Belgian international group specialised in bakery, pastry and chocolate, launched a new brand, Belcolade 	Puratos products, including Belcolade sold in over 100 countries.	396,9	1069	?

Source: Data on turnover and employment are from the ‘bedrijvengids’ developed by ‘De Tijd’ in collaboration with ‘Graydon’; Information on ownership history, country destination are from company’s websites, if not otherwise specified.

⁴⁶ Articles by Lamfalussy Christophe on 21 December 2006 *La Libre*,. ‘Percée arabe du chocolat Galler’ Available at <http://www.lalibre.be/economie/actualite/percee-arabe-du-chocolat-galler-51b89139e4b0de6db9aef2c2>

⁴⁷ Article by Yeon-hee Kim and Park Ju-min on 27 March 2013 on Reuters ‘UPDATE 1-S.Korea Lotte buys Belgium's Guylian for \$164 mln’ Available at <http://uk.reuters.com/article/2008/06/23/guylian-lotte-idUKSEO22252520080623>