

Sustainability and competition law in the Dutch Cocoa Sector

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- I may not have gone where I intended to go, but I think I have ended up where I needed to be -

Douglas Adams (1952-2001)

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Summary

On March 4th 2010 the Cocoa Covenant was signed: an agreement between NGO's, the Dutch cocoa industry, supermarkets, and governmental bodies, that aims at 100% certified chocolate in the Netherlands in 2025. However, similar agreements were made before, with similar setups. Most notably the *Energieakkoord voor duurzame groei*, and the *Kip van Morgen*, which were signed in similar times and conditions. Both of these cases were eventually stopped by the ACM for violating competition law; the *Energieakkoord* for not having a significant effect on carbon emissions and health impacts, while the *Kip van Morgen* was primarily stopped because consumers were not willing to pay for the higher costs of the meat.

The main question in this thesis is therefore if the Cocoa Covenant does comply, or whether it is just a matter of time before it shares a similar fate. In order to do this, the previous cases were analysed along with two other cases: the MSC certification of Dutch prawns, and the centralised collection of used batteries in the Netherlands by Stibat.

The results show that, although there are measurable gains in cacao production by using standards, it is unlikely that the agreement complies. The main reason for this is that these gains are not objectively shared with consumers, as the benefits only manifest outside the Netherlands, something the ACM has shown to view as critical in its determination in the case of the *Energieakkoord*.

Preface

Just like Dante's *La Divina Commedia*, this work is a result of a long journey, it is therefore only fitting that it is introduced by a picture made by Dali representing that journey. It is the first part of a double master at Wageningen which was not the original destination at all. The old goal of astronomy has slowly been replaced by a mix of chemistry, environmental sciences, and law, albeit always focussing on food and agriculture.

It was also written in a year that saw many personal changes, not the least of which was dealing with a life after depression.

This means that before starting the journey of reading it, there are several people I owe a debt of gratitude.

First of all, my supervisors Hanna and Harry, who despite several needed pauses, continued to supply valuable feedback.

Secondly, my dear corridor mates at 12B, for always being ready to discuss the daily adventures over tea, or relieving stress with a movie or game.

But most of all, I want to thank my friends and family for always being there when I need them, especially when I needed them the most;

Ewoud, Fenna, Jill, Koen, Margret, Melvin and William, also known as Zuurvlees.

Caro, Dianneke and Wieke, for already living with me for so many years they are like family

my closest colleagues Christian, Joyce, Eric and Marlies

my brothers and sisters Jeroen, Martijn, Sander, Marjolein, Annelies and Geerte, and my parents Frank and Marja

who all might never fully grasp just how much I owe them.

And a special thanks to Alberto, Hidde, Marja, Melvin and Wieke for proofreading and critical remarks.

List of Abbreviations and definitions

Abbreviations

| | |
|------|--|
| ACM | Autoriteit Consument & Markt – Dutch Competition Authority, successor to the NMa, the Nederlandse Mededingingsautoriteit |
| EEC | European Economic Community |
| EC | European Commission |
| ECJ | European Court of Justice |
| ETS | European Emission Trading System |
| EU | European Union |
| ICCO | International Cocoa Organisation |
| LEI | Landbouw Economisch Instituut (now Wageningen Economic Research) |
| MVO | Maatschappelijk Verantwoord Ondernemen, ‘Social-Responsible Entrepreneurship’ |
| Mw | Mededingingswet (Dutch competition act) |
| MT | Metric ton (1000 kg) |
| NGO | Non-Governmental Organisation |
| PBL | Planbureau voor de Leefomgeving |
| SER | Sociaal-economische Raad |
| TEC | Treaty establishing the European Community |
| TEU | Treaty on European Union |
| TFEU | Treaty on the Functioning of the European Union |
| WCF | World Cocoa Foundation |

Definitions

| | |
|----------------------|--|
| Bean-to-bar | Companies that purchase cacao beans and control the entire process up to retail chocolate (vertically integrated companies) |
| Cacao | Refers to the <i>Theobroma Cacao</i> tree, the pod, its seeds, or beans. i.e.: the raw (bulk) product (following the distinction made by Arthur W. Knapp) ¹ |
| Chocolate | Finished cocoa product in retail |
| Cocoa | Product of processing; referring to the powder or butter |
| Couverture chocolate | Industrial chocolate, does not require further processing, merely moulding. Often used by (small) chocolate companies that do not own processing plants |
| Grinders | Companies involved in processing cacao beans into cocoa powder and cocoa butter up to production of industrial chocolate |
| Hardcore agreement | In this thesis <i>hardcore</i> is used according to the definition by the European Commission in article 4 of Regulation 330/2010/EC as <i>restrictions of competition by object</i> : an agreement which directly or indirectly has the goal to fix prices, allocate markets, or restrict levels of produced quantities or services |
| Manufacturers | Companies involved in producing retail chocolate, either from purchased industrial chocolate or from purchased cocoa powder and/or butter |
| Traders | Companies involved in purchasing and selling cacao beans |

¹ Knapp, A. (2013). Cocoa and Chocolate-Their History from Plantation to Consumer, Read Books Ltd.

1. Introduction

Sustainability is a hot topic: many companies focus on it, albeit in different degrees, and consumers are increasingly aware of their influence on the environment. As a result, sustainable production and consumption is increasing rapidly (Logatcheva 2014). Similarly, there is pressure from NGO's and other civil actors towards companies to make their production more sustainable. For example, starting in 2006 Oxfam Novib ran a campaign to have 'fair' chocolate letters in the Netherlands; the Groene Sint (Green Santa). This campaign resulted in all chocolate letter producers to agree to only sell certified chocolate letters, and was one of the foundations of the *Intentieverklaring duurzame cacaoconsumptie en -productie* (hereafter: 'Cocoa Covenant'); an agreement between the government, NGO's, retailers and chocolate processors and producers to only use certified cacao in a roadmap towards 2025.

The agreement has several intermediary goals; by 2012 100% of the chocolate letters should be certified *guaranteed sustainable*, in 2015 50% of all processed cacao beans should be certified, in 2020 80% of all cacao beans should be certified. The end goal is that in 2025 100% of all cacao beans that are processed for the Dutch market are certified. It also listed several key elements by which sustainable cacao is defined, based on the Roundtable for a Sustainable Cacao Economy. More importantly; it defined *guaranteed sustainable* to be compliant with (amongst others): Rainforest Alliance, UTZ Certified, Fairtrade, and Organic (Rijksoverheid 2010). This means although there are different standards, there is a *de facto* standard for cacao beans used in the Netherlands: the minimum requirements for the least strict standard.

Over the years, the government has negotiated several of such agreements in different sectors, partly because of projects like the Green Deals (Rijksoverheid 2011), others due to pressure or cooperation with different actors (NGO's, corporations). This new way of governing through agreements rather than the old 'carrot and stick' approach (implementing law, fining those that exceed the limits, offering subsidies to those that want to enact change), especially in the field of sustainability, is also encouraged by institutes like the SER, which advises the government on social-economic issues (Sociaal-economische Raad 2014).

However, these agreements had various degrees of success; in 2013 an agreement in the energy sector was signed: *Energieakkoord voor duurzame groei* (Energy agreement for sustainable growth, or 'Energieakkoord' in short), it was supported by the government, the energy sector, labour unions, environmental and social NGO's, and financial institutions. Part of the agreement was that by 2017, five old coal-fired power plants would be shut down (3 in 2016, 2 in 2017). However the ACM declared that this part of the agreement was in violation of competition law (ACM 2013). Similarly, an agreement between Dutch retailers and producers of poultry meat was forbidden (ACM 2015).

Clearly there is friction between competition law on the one hand, and sustainability on the other. However, looking at the agreements that were (partially) forbidden by the ACM, and the similarities to the IDH, it begs the question why the agreements in the cocoa sector are not under investigation by the ACM for similar reasons.

1.1 Problem definition

Society in a broad context seems to be in a split between sustainability and competition law. Sustainability often calls for joint action within or between sectors, while competition law makes this illegal to protect market efficiency.

In the meantime, the government seems to move away from the idea of direct *governing*; steering from the state through command and control, and moving more towards *governance*; giving more space for networks and companies to self-regulate. Other institutions like the SER also encourage this move, for example by promoting the use of MVO-covenants as a way to increase sustainable performance of companies and sectors.

Different sectors have tried to use this space to self-regulate, only to be scolded by the ACM on competition law grounds. The ACM in turn points to the government to provide the legal bases for these companies and their plans.

There appears to be a stalemate at the moment, with different actors waiting on others for clarity. For example the clothing industry is calling for the ACM to come with clear rules on what is possible within the legal framework to improve sustainability.

The chocolate industry however seems unaffected by this. And although there is still much work to be done to have fully sustainable chocolate on the market, there are steps being made. But before other sectors could possibly learn something from the agreements in the cocoa sector, it should be investigated if these sustainability agreements are being made in accordance with competition law, or if it is merely a matter of time before the cocoa sector can also expect a visit from the ACM.

1.2 Research Objective

The main objective of this thesis is to investigate if and how competition law affects sustainability agreements between companies, specifically in the Dutch cocoa sector. For competition law both the EU articles (101-109 TFEU, focussing on 101) and the Dutch competition law (art. 6 Mw) will be used; although the Dutch competition law is based on the EU articles, there are small differences that may or may not affect the outcome of the study.

The Dutch cocoa sector was chosen because of several reasons: personal interest, the fact that the agreement on sustainable cacao and chocolate was a result of a large social campaign and is therefore relatively well-known, and the high market concentration within the sector that makes competition law more likely to be restrictive.

The main focus will be on the Cocoa Covenant. Its goals will be compared to the current regulations in competition law. For comparison other agreements on sustainability that did or did not get accepted by the ACM will be investigated.

1.3 Research questions

The main research question is: *Do the agreements made on sustainable cocoa consumption and production in the Dutch cacao sector comply with European competition law?*

If so, then what are the key differences that allow the agreement compared to other sustainability agreements that were stopped?

If not, then what changes in the agreement are required in order to have the agreement comply?

In order to answer this question, there are several sub-questions.

What are the economic characteristics of the cocoa market both in production abroad and processing in the Netherlands?

What are the differences between the standards that are used for chocolate on the Dutch market, and how are they used?

What were the main reasons in other sustainability cases to not being allowed under competition law, and what can be learned from this to prevent similar problems for the cocoa sector?

In what way does the agreement (not) comply with the possible exemptions to article 101(3) TFEU, especially considering that the EU consumer will pay more, while virtually all (environmental and social) benefits occur outside the EU?

1.4 Materials and methods

To answer the research questions, first a literature review will be performed on European and Dutch competition law and the criteria on which cases are judged. For this the main sources will be the Treaty on the Functioning of the European Union and the Dutch Competition Act.

The second part of the literature study will focus on several agreements that were designed to address sustainability issues, but were, at first, (partially) rejected by the ACM. This part will help to test the criteria found in the first part, and to later compare to the Cocoa Covenant. Cases that are examined are relatively well-known from the media attention they received either before or after the ACM decision. Since the ACM is a public body, most data on these cases is readily available.

The third part will use a background study on the Dutch cocoa sector to gather the necessary information to make an analysis of the applicability of the competition laws on the Cocoa Covenant. Sources are both self-reported data from companies and NGO's, as reports from governmental bodies like LEI and PBL and scientific literature.

The combined information on the different agreements will be used to create a matrix in which the different agreements are scored against the criteria in competition law.

1.5 Research Framework

The various steps for this research are depicted in figure 1, showing the different steps in the research framework for the thesis.

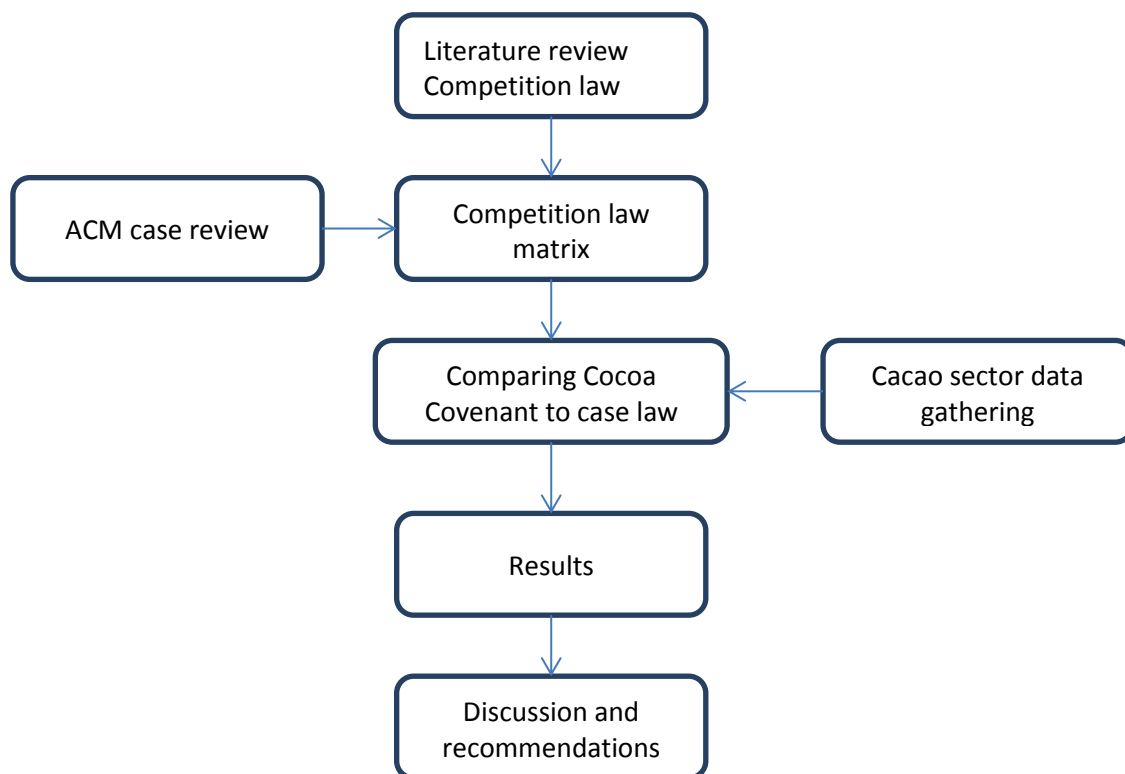
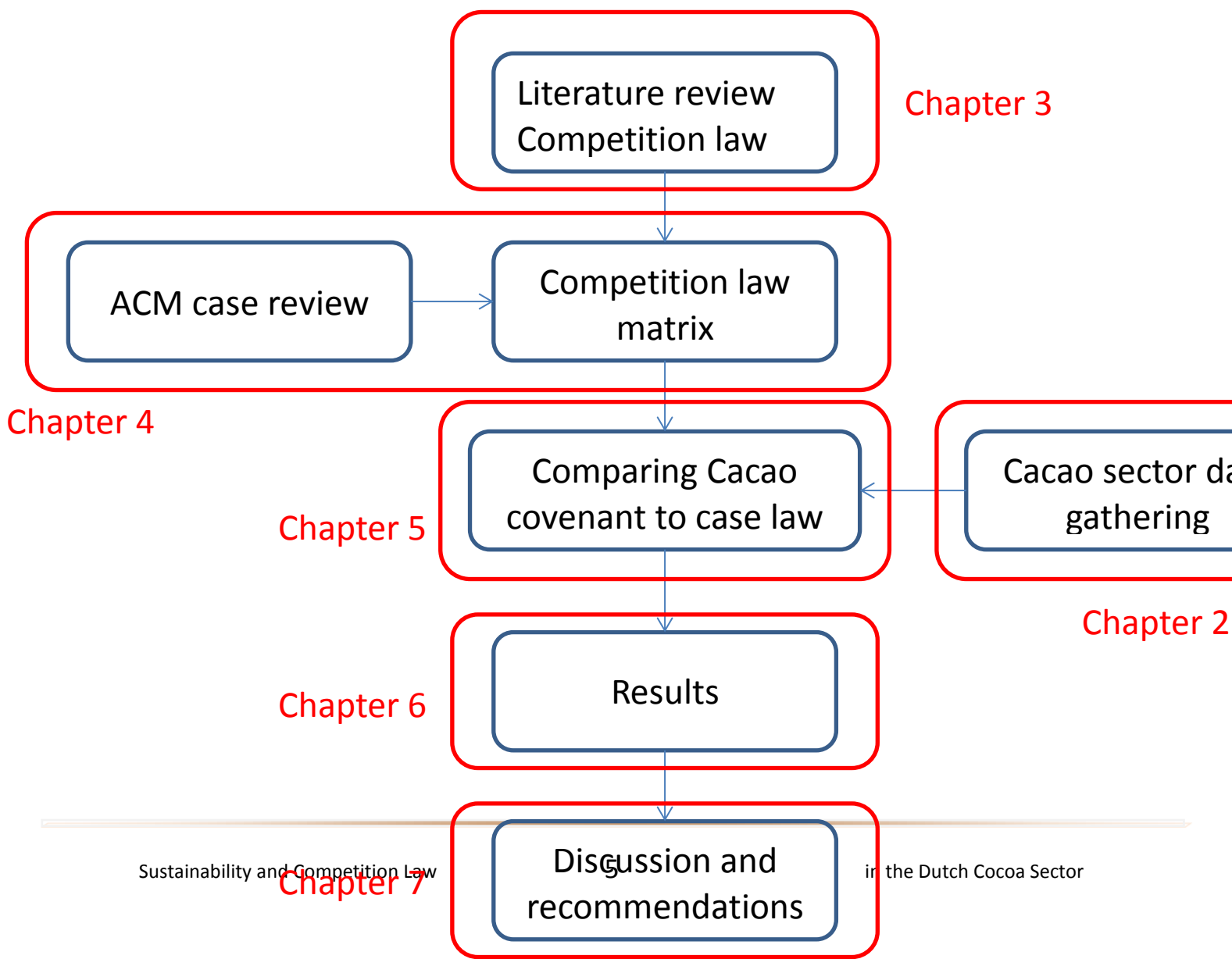


Figure 1: Research framework

In order to come to an analysis of the Cocoa Covenant, the thesis will start with an overview of the Dutch cocoa sector in [Chapter 2](#). Although some of the information will not be used until chapter 5 to be able to answer the questions for the application of article 101 TFEU that depend on market conditions, it is background information that is required to understand the workings of the sector and how the Cocoa Covenant came to be. As the Cocoa Covenant is the primary focus in this thesis, it is deemed too important and too broad to discuss in later chapters. Finally, it will briefly discuss the different standards that are being used in the retail chocolate currently being sold in the Netherlands, and their uptake by companies.

[Chapter 3](#) will introduce the legal part of the research, specifically article 101 TFEU which is the basis of competition law within the European Union (3.1). It will discuss the different criteria on which agreements are judged, and the background of their economic justification (3.2). The link between sustainability and competition law, and sustainability and economics are dealt with separately to illustrate their respective frictions (3.3). The chapter will end with a look at the interpretation of the ACM specifically because it is known that competition authorities throughout Europe have a different interpretation of the application of article 101 TFEU.

[Chapter 4](#) will start the analysis part of the thesis by looking at several historical cases that were investigated by the ACM (or its predecessor, the NMa) and deemed in violation of article 101 TFEU (ex article 81 EC Treaty), and look at the reasons of why they were deemed illegal. Additionally this



analysis is used to determine the interpretation of the ACM in analysing cases that were (partially) based on sustainability issues. This information is used in [Chapter 5](#) to be applied to the Dutch cocoa sector; and specifically the Cocoa Covenant of 2010. It is here that the research question will be answered.

Finally [Chapter 6](#) will discuss the ramifications of the analysis and present the main conclusions. The limitations of the conclusion will be discussed in [Chapter 7](#), along with recommendations for both future research. For a complete overview of how the chapters fit into the Research Framework see figure 2.

Figure 2: Chapter division in Research Framework

2. Introduction to the Dutch cocoa sector

In this chapter the Dutch cocoa sector is introduced to give background information and to give an impression of how the sector works, what problems it is facing and what is already being done to solve them. It also gives a short description on the different standards that are used for (retail) chocolate, their history, and their usage. This information will be used in later chapters to see how competition law might pose a problem for sustainability in the sector.

During the 18th century, cacao trade was almost entirely controlled by Dutch merchants, who shipped it to Amsterdam. Two processing techniques that were developed in the Netherlands helped in securing this position: the ability to separate the fat from the beans to produce cocoa powder using an hydraulic press developed by Casparus van Houten, and the alkalising process developed by his son Coenraad that removes the acidity from the cocoa and gives it a milder flavour.

Although the market share has diminished, the Dutch cocoa sector still has a large influence; about 37% of the global cacao production is grinded in Europe of which about 1/3rd is grinded in the Netherlands (ICCO 2016). In addition Amsterdam also serves as a port for beans that are grinded elsewhere, exporting about 150.000 MT, making it the largest cacao port in the world (Both Ends & CREM 2011).

Of the approximately 600.000-650.000 MT of cacao entering the Netherlands through Amsterdam, between 500.000-550.000 MT is processed in the Netherlands, most of that in the Amsterdam region. The main processors are Olam International (Koog aan de Zaan and Wormer, previously owned by Archer Daniels Midland (ADM)), Cargill Inc. (Wormer, two in Zaandam), Dutch Cacao (Amsterdam, subsidiary of Ecom Agroindustrial), and Jan Schoemaker (Zaandam) (Both Ends & CREM 2011). Crown of Holland also has grinding facilities, and focuses on processing certified and speciality cacao beans on demand. A large part of the processed products, over 350.000 MT of which mainly the cocoa butter and cocoa powder, is exported all over the world, but a large majority is exported to neighbouring countries (Germany, Belgium, UK, France and Switzerland) and is worth over \$3,5 billion (not including the finished product: chocolate) (ICCO 2007/2008 in: Both Ends & CREM 2011; UN Comtrade 2015).

2.1 Economics of the cocoa sector

As many other agricultural sectors, the cocoa sector is a sector with a high degree of market concentration and effectively an oligopsony². Cacao is predominantly produced in Africa (roughly 73%) most of which in Ivory Coast (40% of world production) and Ghana (21% of world production). Smaller producers are Cameroon, Nigeria, Brazil, Ecuador and Indonesia (all around 5% of world production). Almost all of this production (89-90%) consists of a single cultivar: the Forastero (ICCO 2016). 80 to 90% of the world production comes from the large number (+/- 5-6 million) of small farms (2-4 ha) in Africa and Asia, and slightly larger farms in the Americas. Most of this (40% or

² A market structure with many sellers but a limited number of buyers.

1,500,000 MT) is shipped to Europe for grinding (Dorin 2003; Both Ends & CREM 2011).

On the supply side, the large number of small farms makes it difficult to solve the main issues with cacao production: low productivity and low quality. The causes of this are diverse, but often linked: low income prevents investments in required inputs (fertiliser, pesticides, new trees) and lack of labour, this in combination with pests and weeds leads to poor crop management, which leads to low yields and therefore low income, and the circle repeats. As a result, there is both a lack of capital and motivation to increase yields, and few young farmers see a future in cacao: 80% of cacao farmers in Ivory Coast is older than 55 (Dorin 2003; Dormon, Van Huis et al. 2004).

On the processing side, market concentration has significantly increased in the last few years alone, with mergers and takeovers on both vertical (chain integration) and horizontal (competitors) levels, for example: Ecom has taken over Armajaro's commodity trading (Nicholson 2013), Olam and Cargill have taken over ADM's Cocoa processing and Chocolate plants respectively (McFarlane and Hunt 2015), Barry Callebaut's acquisition of Petra Foods' cocoa ingredients division (Revill and Venkat 2012), and Kraft buying Cadbury and later becoming Mondelēz. Although not all these mergers were in the Netherlands, they have a large impact on the cocoa sector in general and on the Dutch market. An example of this would be the market for couverture chocolate: Barry Callebaut and Cargill control 70-80% of the couverture market (Fountain and Hütz-Adams 2015), despite the European Commission stating that Barry Callebaut is a larger competitor and therefore little competition effects were to be expected after the merger of ADM (European Commission 2015). Similar market concentration can be seen with cocoa traders, with 8 companies (Barry Callebaut, ADM, Cargill, Olam, Ecom, Touton, Blommer, and Continaf) controlling 60-80% of the trade and grinding, and 6 chocolate manufacturers (Mars, Mondelēz, Ferrero, Nestlé, Hershey, and Lindt) controlling 40% of the retail market (Fountain and Hütz-Adams 2015).

The undesired competition effects of this market concentration are clear: asymmetric price transmission causes chocolate price increases when cacao beans are more expensive, but less so when bean prices decrease (Araujo Bonjean and Brun 2010), for the Dutch market this can also be seen and for this thesis this has been visualised with data until December 2016, see [Annex I](#). In fact, for a long time chocolate became more expensive while cacao bean prices dropped (Dorin 2003). Of an average chocolate bar, only 5-7% is going to the farmer, and only about 10% of the final retail price goes to the producing country (farmers, transport, exporters, and taxes combined). Most of the turnover and profits go to manufacturers (35%) and retail (44% including tax) (Dorin 2003; Fountain and Hütz-Adams 2015). Part of this problem is that even with high cacao prices, the farmer may not receive an additional income; traders using futures contracts, local traders, and government taxes, can cause a farmer's share of the world price to be from up to +/- 75% to be as low as 34% (Cappelle 2008).

2.2 Cocoa Covenant

On March 4th 2010 the Cocoa Covenant was signed by the Minister of Agriculture, Nature & Food Quality and many other parties: NGO's, certifiers, supermarkets, and the Dutch cocoa industry (a full list of signatories can be found in [Annex II](#)). The agreement was signed because of several reasons. For societal actors these were often the environmental impact of cacao production and the societal

costs, especially in the form of (forced) (child-)labour. In the Netherlands, this problem has been on the social agenda since 2003, when a television programme *Keuringsdienst van Waarde* aired an episode showing the working conditions on the plantations. Lack of political and corporate action led to one of the television makers to turn himself over to the police as an accessory to child labour. When the case was eventually dismissed in court, the television makers decided to change the system from within; by creating their own chocolate bar based on fair working conditions: a 'slave-free' chocolate bar: Tony's Choclonely. This however led to a chocolate importer to start a court case against Tony's Choclonely, arguing that it was impossible to claim that a chocolate bar is slave-free, because of the way the chocolate industry is organised in many countries (for example governmental organisations buying the entire harvest, and then selling it to foreign traders in mixed bags) (Bellissimo v RVU: ECLI:NL:RBAMS:2007:AZ7870).

For corporate actors, a reason to join was the fear that on the long term, there would be a shortage of cacao³. Because of low prices many plantations cannot afford to replant their cacao trees leading to decreased production as trees age, young farmers are switching to other crops that create a better livelihood for their family, and a fungus is sweeping across Africa failing entire harvests (Mars Inc. in: NRC 2012).

This sustainability debate is also part of the Cocoa Covenant that was signed in 2010. The agreement states that by 2025 100% of all cacao beans should be certified. It also listed several key elements by which sustainable cacao is defined, based on the Roundtable for a Sustainable Cacao Economy, and gives the example of standards that qualify to be *guaranteed sustainable*. These standards will be investigated further in the next chapter. The order of the standards is not an indication of their perceived importance or value, but by private standards in alphabetical order (Fair Trade, Rainforest Alliance, UTZ), followed by the Organic standard as it is also codified by the European Union.

³ For example: one of the challenges listed for CocoaLife (Mondelēz, see chapter 2.4) is that '*Without cocoa there is no chocolate. Without the next cocoa farming generation there is no cocoa.*'

2.3 Standards

Ever since the 1980's private standards in the form of Eco-labels have been developed to offer additional requirements on a voluntary basis; today, there are several hundreds of them⁴. Important standard labels for consumers of sustainable chocolate are Fair Trade, Rainforest Alliance, UTZ Certified, and the EU organic agriculture mark (EKO). Additionally, there are labels for business-to-business. All of these both focus on cacao as well as other products (coffee, cotton, etc.). Fair Trade, Rainforest Alliance, and UTZ all have labour values from the International Labour Organization (ILO) incorporated into their standard labour requirements (Rainforest Alliance 2002; World Fair Trade Organisation 2013; UTZ Certified 2016). It should be noted that multiple labels can be used on a product, for example both Organic and Fair Trade, which could distort statistics on certified products and the amounts sold (Giovannucci, Byers et al. 2008; Valkila 2009). The labels all have their own requirements, which are strongly influenced by their original focus and for some standards the product. There is also a strong influence of the national context a standard was developed for, which in turn has an effect on the success of the labels in different countries (Manning, Boons et al. 2012). An example could be a strong focus on environmental requirements for the Rainforest Alliance label. However these differences seem to be decreasing and standards are more and more focussing on similar fields with similar, although still different, requirements (Vermeulen and Kok 2012).

These standards have several benefits for farmers, most notably in the form of premiums to ensure a higher income. This has led to an increase in the amount sustainably produced cacao from 3% in 2008 to 22% in 2012, an increase so large that as a result, only about 33% of the sustainably produced cacao was sold as such, although this greatly varies per standard. The different requirements give rise to differences between standards, in both social, environmental, and economic indicators. To give an indication of the differences between the labels, a short summary is given in table 1 below (Potts, Lynch et al. 2014).

| | | Index | | |
|-------|------------------------------|--------|---------------|----------|
| | | Social | Environmental | Economic |
| Label | Fair Trade | 73% | 60% | 68% |
| | Rainforest Alliance (SAN/RA) | 84% | 74% | 20% |
| | UTZ Certified | 58% | 43% | 40% |
| | Organic (IFOAM) | 51% | 96% | 60% |

Table 1: Scores on different indices of the four different labels used in certified cacao (source: Potts, Lynch et al. (2014))

Finally, to understand these differences and where they come from it is important to understand the background and history of these labels.

⁴ For example: [Ecolabelindex](#) has 465 eco-labels listed, [Standardsmap](#) has 'over 210', and [Milieucentraal](#) lists 'approximately 200' (November 8, 2016).

2.3.1 Fair Trade / Max Havelaar

The Fair Trade initiative (marketed under Max Havelaar in the Netherlands) started in 1988 as a voluntary standard for sustainable coffee and was later expanded to include other crops. An important feature of the standard was to guarantee (poor) farmers a decent income by enforcing a minimum price on their product; partly to increase the market position of the farmers and partly to dampen price fluctuations. On top of this the farmers earn a premium for (social) development projects. In order to be certified, farmers have to meet social and environmental requirements: decent labour conditions, no child labour, and sustainable agricultural land use with limited use of pesticides and synthetic fertilizer. The use of slash-and-burn and similar land claiming techniques is explicitly forbidden. With Fair Trade, every country has a national organisation, which is part of the international umbrella of the FLO (Fair Trade Labelling Organisations). The Fair Trade standard operates on a cooperation level, so no products are bought from individual farmers. The philosophy behind this is that it will stimulate farmers to cooperate, giving them a stronger position in the chain, while at the same time making it easier to reach a large number of small farmers without excessive costs. All premiums are paid to the cooperative, which then divides the income to the farmers, or uses it for common infrastructure and equipment (schools, machinery, healthcare, etc.) (Fairtrade International 2017).



2.3.2 Rainforest Alliance

The Rainforest Alliance label was started by an environmental organisation in the US, and as a result has a focus on protecting the rainforest (as the name indicates) and its biodiversity. Therefore it is used on products that require shade-trees in production, like coffee, cacao and bananas. It has relatively strict standard requirements for labour and environmental criteria, most notable on energy and chemical usage, and sustainable soil and water use. The standards are based on the 10 principles of the Sustainable Agricultural Network (SAN), consisting of several North- and Latin American NGO's. Unlike Fair Trade, the Rainforest Alliance does not pay a minimum price, but it does focus on cooperatives rather than individual farmers. It is allowed to use the label with only a limited amount of certified cacao in the product (minimum 30%), but the exact percentage has to be mentioned and companies will have to submit a timeline that states when the product will contain 100% certified cacao (Rainforest Alliance 2017).



2.3.3 UTZ Certified

UTZ Certified, originally started as Utz Kapeh (Mayan for ‘Good Coffee’) by Ahold and a Guatemalan coffee producer, is a standard that focuses on improving production methods to increase yields and quality. The main philosophy is that by increasing yield and quality, a farmer can increase his income without the need of a minimum price. However, there is a premium to be paid, of which the amount is negotiated between the farmer and the trader. The standard has both social and environmental requirements, but they can vary between products. The environmental criteria are based on the agricultural standards of the GlobalGAP, focussing on better soil management and decreasing the use of pesticides. Social requirements are based on the ILO standards for labour conditions, and require farmers and their families to have access to education, health care and housing. For transparency there are requirements that state that the consumer has to have insight into the origin of the coffee and cacao. A main difference between UTZ vs. Fair Trade and the Rainforest Alliance is that UTZ primarily focusses on medium and large plantations, while the latter two focus on small farmers through cooperatives (UTZ Certified 2016).



2.3.4 Organic

The EU Organic logo is the only standard that has legal requirements set by the European Union. It is regulated by Regulation (EC) 834/2007, which replaced (EEC) 2092/91. It was (partly) adopted as a result of reforms in the European Common Agricultural Policy (which were needed to keep the CAP economically viable), to allow for a system that *“contribute towards the attainment of a better balance between supply of, and demand for, agricultural products, the protection of the environment and the conservation of the countryside”*, while at the same time getting a higher price for these products. Although the regulations are set by the European Union, the requirements are based on the standards of the International Federation of Organic Agriculture Movements (IFOAM) (EEC 1991; IFOAM 2017). Because these standards only focus on environmental factors (such as which chemicals are allowed or not), for sustainability its scope is somewhat limited, but it can be combined with other labels.



2.4 Adoption of standards

In the years following the signing of the Cocoa Covenant, virtually all producers made plans to make their products more sustainable⁵, either with a sustainability programme focussed on cacao farmers, or by setting targets for certified chocolate. An overview of the different brands and their sustainability programmes and/or relevant targets can be seen in table 2 below.

| | | Standard | | | | Cocoa sustainability programme | Certification Target |
|------------------|------------------------------|------------------|-------------------|-----|---------|-------------------------------------|-------------------------------------|
| | | Fair Trade | SAN/RA | UTZ | Organic | | |
| Grinders | Barry Callebaut ⁶ | Yes | Yes | Yes | Yes | HORIZONS (2012) | 100% (2025) |
| | Cargill | Yes | Yes | Yes | Yes | Cocoa Promise (2012) | No |
| | Dutch Cacao | Yes | Yes | Yes | Yes | No ⁷ | No |
| | Olam | Yes | Yes | Yes | Yes | GrowCocoa (2012) | No |
| | Crown of Holland | Yes | Yes | Yes | Yes | No | No |
| | Jan Schoemaker ⁸ | No | No | No | No | No | No |
| Retail chocolate | Baronie ⁹ | N/A | N/A | Yes | N/A | No* | No |
| | Bio+ | Yes | No | No | Yes | No* | 100% |
| | Cloetta | No | No | Yes | No | No* | 100% (2014) |
| | Candy Store | No | No | Yes | No | No* | 100% |
| | Ferrero | Yes | Yes | Yes | No | No ¹⁰ | 100% (2020) |
| | FrieslandCampina | No | No | Yes | No | No* | 100% (2014) |
| | Mars | Yes | Yes | Yes | No | Sustainable Cocoa Initiative (2009) | 100% (2020) |
| | Mondelēz | Yes | Yes ¹¹ | No | No | Cocoa Life (2012) | No |
| | Nestlé | Yes | No | Yes | No | Cocoa Plan (2009) | 175.000 tonnes (2018) ¹² |
| | Tony's Chocolonely | Yes | No | No | No | No* | 100% |
| | Verkade | No ¹³ | No | Yes | No | No | 100% |

Table 2: Overview of different cacao processors and chocolate producers and their use of different certifiers, and the respective targets for using certified chocolate in the future. All data from the companies' main websites.

* These companies do not own any cacao processing facilities.

⁵ A notable exception is Lindt & Sprüngli, which is the only major producer that did not sign the Cocoa Covenant as either a direct signatory nor a member of a signatory, nor makes use of any certifier. Instead it claims to use its own sustainability program and says that no certification scheme can "supply the required volumes, origin and flavo[u]r characteristics" (from website: <http://www.lindt-spruengli.com/sustainability/ask-lindt-spruengli/>)

⁶ Barry Callebaut does have production facilities in the Netherlands, but no grinding facilities.

⁷ Although Dutch Cacao does not have its own sustainability programme, ECOM is involved in several joint ventures with other companies on sustainable cacao, including Mars and Blommer.

⁸ Jan Schoemaker mainly focuses on the pharmaceutical and cosmetic industries.

⁹ According to the website all labels are available for private label production, and all but Rainforest Alliance are available on Baronie products, however only data on UTZ usage could be found with no quantities mentioned.

¹⁰ Ferrero buys its cocoa via the Fair Trade's Cocoa Program, a sustainability programme of Fairtrade International.

¹¹ Used to carry Rainforest Alliance on different brands, now seems to be replaced by Mondelēz's own 'Cocoa Life' label.

¹² +/- 44% of 2015 cacao consumption.

¹³ Verkade used to sell Fair Trade-certified chocolate, but switched to UTZ-certified chocolate in April 2015.

Due to these policies, the usage of certified cacao has greatly increased in recent years. For example, only 1656 MT of cacao was Fair Trade certified in 2002, 5657 MT in 2005, 13898 MT in 2009, and 102,067 MT in 2015. UTZ, which started much later than Fair Trade, sold 17000 MT in 2010, and is now the largest certified cacao label in the world with more than 582,000 MT of certified cacao in 2015. Rainforest Alliance (+/-380,000 MT in 2012) and organic (+/- 84000 MT) make up most of the remainder of the total certified cacao production (FLO 2016; UTZ 2016)¹⁴. The large growth since 2010 can be seen in figure 3 below (Potts, Lynch et al. 2014).

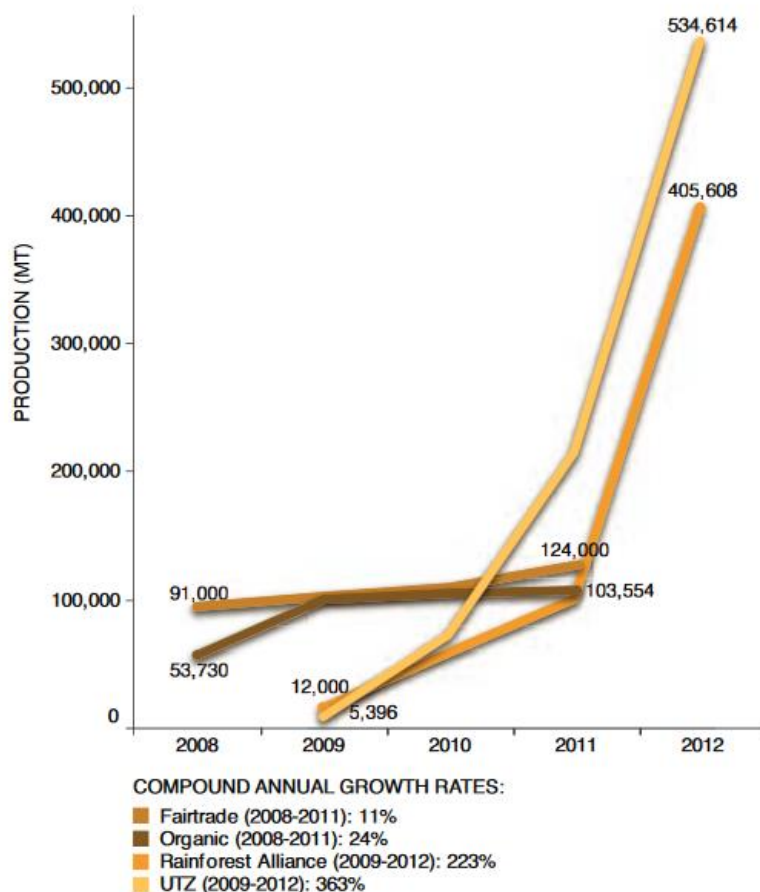


Figure 3: Production levels of the four different large cacao certifications from 2008 to 2012. (Source: Potts, Lynch et al. 2014)

¹⁴ There is very little information on the geographical demand for certified cacao. One source that did disclose this information was the Cargill Cocoa Promise, showing that 93% of the certified cacao was for the European market (EU+Swiss): see <https://www.cargill.com/doc/1432076281206/ccp-progress.pdf>. It should be noted however that European consumption of chocolate is far higher than the rest of the world to begin with, which can introduce a bias in interpreting this data.

2.5 Chapter Summary

The Netherlands has a long tradition of cacao processing, and to this day it is still the largest importer and processor of cacao beans in the world, with Amsterdam being the largest cacao port in the world. Although there is increasing market concentration on all levels, there is also increased cooperation between the different actors to make the whole chain more sustainable. On a national level, these parties joined with governmental bodies and NGO's to sign a letter of intent to only use certified sustainable cacao for products sold on the Dutch market by 2025.

To make this possible, many processors have teamed up with one or more of four labels: Fair Trade, Rainforest Alliance, UTZ, and/or organic, the first three of which are private parties with their own focus, although they all increasingly use similar requirements. As a result, consumption of certified chocolate has been on the rise since 2010, with multiple large companies having set targets to only use certified cacao even before the 2025 deadline.

In the next chapter the legal and economic aspects of competition law and sustainability will be investigated, to see what requirements the Cocoa Covenant has to fulfil in order to be legal.

3. European competition law

This chapter deals with the foundation and application of competition law within the European Union, and by extension the Netherlands. Because one of the problems with the cocoa covenant is the friction between the economic efficiency behind competition law and desired outcomes for sustainability, a short introduction on the economics of both competition law and sustainability is also being discussed. This is done to highlight the difficulty in trying to balance a healthy competitive market whilst trying to avoid the possible detrimental effects on the environment.

In 1957 the European Common Market was created with the Treaty of Rome. In it, the first foundation for a European Competition Law was made with articles 85 and 86 (later article 81 and 82 in the TEC, now articles 101 and 102 TFEU respectively). These articles were among the first that would have a direct effect in member states. In 1962 the European Commission was given the power to directly enforce these rules and to exclusively grant exemptions to those agreements that complied with article 85(3). As such, it shaped the developments of the single market. It also based the idea of European Competition Law on the protection of the economic freedom, rather than the antitrust law in the US that was heavily influenced by the cases against, a.o., Standard Oil to prevent monopolies, while article 37 EEC (also article 37 TFEU) specifically deals with state monopolies (Patel and Schweitzer 2013). As a result, in the US the *rule of reason* is generally strictly applied to the competitive effects, while in the EU an exemption can be applied if sufficient public gains can be demonstrated (Schweitzer 2007).

3.1 Article 101 TFEU and article 6 Dutch Competition Act

Article 101 of the Treaty on the Functioning of the European Union (TFEU) voids any agreements between *undertakings* that limit any practices that are anti-competitive, where an undertaking is a (legal) person taking part in economic activity. In the Dutch Competition Act, article 6 is virtually identical. The full article reads:

1. The following shall be prohibited as incompatible with the internal market all agreements between undertakings, decisions by associations of undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the internal market, and in particular those which:

- (a) directly or indirectly fix purchase or selling prices or any other trading conditions;
- (b) limit or control production, markets, technical development, or investment;
- (c) share markets or sources of supply;
- (d) apply dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;
- (e) make the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts.

2. Any agreements or decisions prohibited pursuant to this article shall be automatically void.

3. The provisions of paragraph 1 may, however, be declared inapplicable in the case of:

- any agreement or category of agreements between undertakings,
- any decision or category of decisions by associations of undertakings,
- any concerted practice or category of concerted practices,

which contributes to improving the production or distribution of goods or to promoting technical or economic progress, while allowing consumers a fair share of the resulting benefit, and which does not:

- (a) impose on the undertakings concerned restrictions which are not indispensable to the attainment of these objectives;
- (b) afford such undertakings the possibility of eliminating competition in respect of a substantial part of the products in question.

This means that it is possible to create a list of different criteria to see if a) article 101 applies to an agreement, and b) if it does apply, whether the agreement is in violation of the article or not.

Firstly, the article states in section 1 that it is applicable to not just companies, but any actor that engages in any economic activity that occurs specifically between EU member states. However, through jurisprudence the European Court of Justice made it clear that this also includes regions of a member state (see for example, *Cementhandelaren*: ECLI:EU:C:1972:84) or even affects companies that are not producing in the EU (for example *Imperial Chemical Industries Ltd*: ECLI:EU:C:1972:70).

An agreement can be exempted if it is not a result of companies themselves, but because it is required by law. If this is the case, article 101 cannot be applied. This creates room for environmental law to play a role in sustainability without violating competition law.

The article forbids agreements concerning those that influence prices (point a), production levels (including those influenced by technical or financial reasons) (point b), division of markets (point c), use different conditions with equivalent trade partners (point d) or include other conditions that are not required for the intended transaction (point e). Any agreements that include one or more of these points are considered *hardcore* and are virtually always illegal, unless specifically exempted (European Commission 2011).

However, there are possible exceptions to the article; specifically those mentioned in section 3 of article 101. This section lists four cumulative requirements an agreement will have to meet in order to qualify for exemption (see box 1).

An agreement can be exempted when *improving the production or distribution of goods or contribute to promoting technical or economic progress*. In other words: companies have to prove that their agreement provides a gain in *efficiency* that is beneficial to society and competition, and that the gain is larger than a potential loss in competition. In the case of sustainability, the ACM (in the form of its precursor the NMa) did approve of the underlying principles of such arrangements (see [Chapter 3.3.3](#)).

The next requirement is that an agreement is *allowing consumers a fair share of the resulting benefit*, for example decrease in price, or increased choice or product quality. This resulting benefit does not necessarily have to be uniform for all consumers, and in some cases it can be justified that a (large) part of consumers will face an increase in price but still share in the benefits on a societal level. After the postal liberalisation in Europe in 1997 (following Directive 97/67/EC) there were several negotiations between the different postal carriers in the European Union to discuss the payments for cross-boundary postal services ('terminal dues'), the so-called Reims-agreement. Although this was technically an agreement on price-fixing and the result increased costs to consumers making use of cross-boundary postal services, the European Commission nonetheless decided that this was justified because consumers would still receive a fair share with several arguments in favour. An important argument for this thesis is the first argument, which states that although consumers will pay more for the service, the cost will actually be closer to the *actual* costs (European Commission 1999). In other words: society as a whole will pay less in subsidising these services. It should be noted that this requirement is flexible in that it should react according with the other requirements; small effects

will only require a small benefit to consumers, while large effects should have a large benefit.

The third requirement is that the agreement does not *impose on the undertakings concerned restrictions which are not indispensable to the attainment of these objectives*; the actions that are being taken should be necessary to achieve the goals, and the goals cannot be reached by other means that have less impact on competition. An example of this can be found in the case of DSD (concerning package recovery) in which the European Commission granted exemption to article 101 (then 81) despite the contracts running for several years on the basis that it was needed to justify investments made for the waste recovery (European Commission 2001).

The final requirement is that companies that sign the agreement may not *afford such undertakings the possibility of eliminating competition in respect of a substantial part of the products in question*. That is, it may not enable companies to affect market access of parties not involved in the agreement. An important note here is that this both applies to *current* competitors and *potential* competition (see for example: Atlantic Container Line AB and Others v Commission of the European Communities: ECLI:EU:T:2003:245).

Apart from this, jurisprudence made clear that there are several other criteria for article 101 to be applied. First of all, the effect on competition from an agreement must be *significant*; the parties involved must control enough of the market to make an actual difference. In the case of *Völk v Vervaeke* it was made clear that if parties make an agreement, but are only '*weak*' actors in that market, the agreement cannot be considered to be significant enough to have a preventive, restricted or distortive effect on competition in the common market (*Völk v Vervaecke*: ECLI:EU:C:1969:35).

The European Commission later clarified this in a Commission Notice, stating that article 101(1) TFEU (then article 81(1) TEC) does not apply if a) the combined market share of parties does not exceed 10% in the relevant markets between competitors, or b) the combined market share of parties does not exceed 15% in the relevant markets between non-competitors¹⁵, or c) the combined market share of parties when market competition is restricted by multiple agreements does not exceed 5%. However these exemptions cannot be applied to agreements that are considered *hardcore* (European Commission 2001).

For Dutch competition law there is a similar exemption in article 7 of the Dutch Competition Act, with the first section stating that article 6(1) is not applicable to agreements that do not include more than eight parties, when their combined turnover is less than €5.500.000 when in a sector supplying goods, or € 1.100.000 in all other cases. Article 7(2) exempts agreements when the parties do not have a combined market share of more than 10%, or if the agreement does not have a significant effect on member state trade (Mededingingswet 1997).

The second criterion from jurisprudence comes from the *Gøttrup-Klim* case; in this case an agreement included the prohibition of members of a cooperative purchasing organisation to acquire

¹⁵ If all members have an individual turnover of less than €50 million, both supplier and buyer have less than 30% of the relevant markets a vertical agreement can be exempted under Regulation 330/2010/EC, but this is not the case for any of the cases in Chapter 4 nor the Cocoa Covenant.

goods elsewhere, which would violate point 4 of article 101(3). However the court decided that such provisions may be allowed when they are *necessary to ensure that the cooperative functions properly and maintains its contractual power in relation to producers* (Gøttrup-Klim v Dansk Landbrugs Grovareselskab: ECLI:EU:C:1994:413), which was specifically in the field of agriculture.

Using all these requirements coming, a flowchart can be made to see if cases can be exempted from article 101 and if not, what should be done in order to qualify. This flowchart can be seen in figure 4 below.

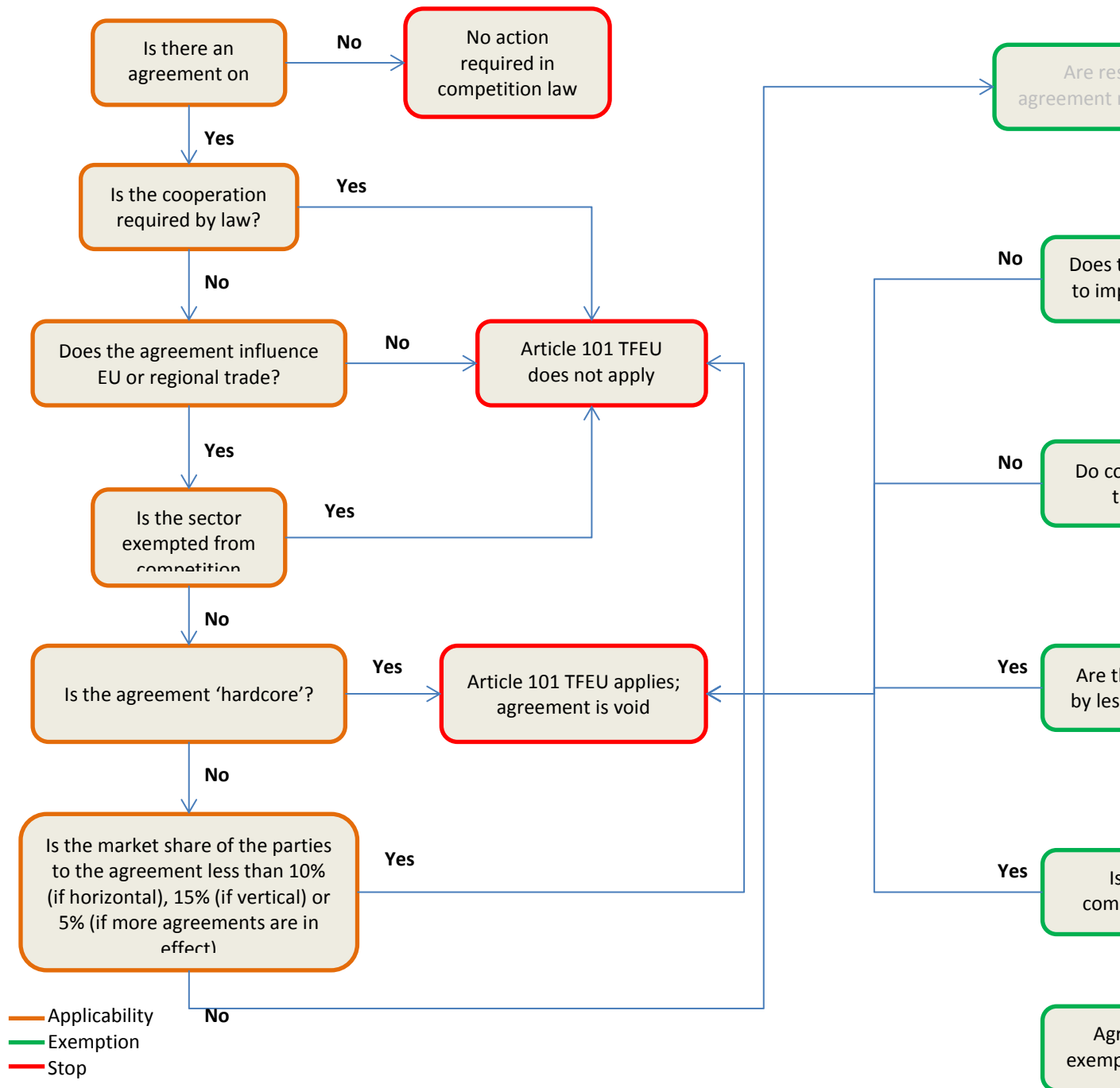


Figure 4: Flowchart for Competition Law applicability

3.2 Economics of Competition Law

"People of the same trade seldom meet together, even for merriment and diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices". - Adam Smith (Wealth of Nations, 1776, p. 128)

According to Neo-Classical Economics (NCE), prices are established on the market in which both consumers and producers maximise their utility and profit respectively. In order for the model of the market to work, there are several important requirements:

- 1) *Product homogeneity*: products are perfect substitutes without differences in quality, so that competition is a result of prices.
- 2) There are so many buyers and sellers that nobody has *market power*; no one on the market can influence prices by either influencing inputs or outputs.
- 3) There is *perfect information* about quality and prices, so that only 1 final price results.
- 4) There are *no barriers to entry or exit* to the market; actors are free to move from one market to another in case of losses or higher profitability.
- 5) There are no *public goods*, nor *externalities*.

When these requirements are met, the final price will be determined by the competition between different producers, with the firm that has the lowest marginal costs producing the most units, and buyers maximising their utility, i.e.: if the utility gained is lower than the costs, people stop buying. In general this means that if there is a perfect market, the price P is the price at which there is maximum welfare for society, with the highest gains for both consumer and producers. This allocative efficient outcome is also optimal for society as a whole because it prevents society from spending resources on products with a lower utility gain than other products. It is *also Pareto efficient* because nobody can gain anything without making anyone worse off (Perman 2003).

Limited competition will affect the final price in different ways. Probably the most well-known one is the increased *market power* of actors in sectors with limited competition, especially in the case of mono- or oligopolies (for limited suppliers) or -psonies (for limited consumers), for the remainder of this chapter, a monopoly is assumed. Market power enables a monopolist to no longer base prices on the set price on the market and the marginal costs (costs per additional unit produced) to create it, but instead optimises for profit maximisation and will produce less units for a higher price. A similar effect can occur on the inputs for the monopolist, where the market power can be used to force a lower price on inputs. The economy of scale will prevent (new) competitors from being able to survive. This can also result in lower quality products, as consumers will have little choice in what to buy, affecting product homogeneity (Robinson 1969). It is this market power that gives parties the ability to perform the actions that are addressed in article 101(1) TFEU.

The way in which market imperfection is caused and can be solved gave rise to different schools of economics in the 1970's. Within the 'mainstream' economics, two are especially noticeable: the Saltwater school and the Freshwater school (also known as the Chicago school), named after the

location of the different universities in the United States that played a major role in their development, and their respective locations; either near the Great Lakes, or at the coast. A main difference between the two was the assumption on market structure: the Saltwater economists assumed that market imperfection arose from monopolistic elements, and theorised that the role of the government was to enforce strict anti-trust and regulation policies in order to ensure healthy competition. Meanwhile the Chicago school posed that such a monopolistic element does not exist, and that in reality the market did more or less act as if competition was perfect, and proposed a more *laissez-faire* approach.

Eventually elements from both the classical economics that started with Adam Smith, and later economic models based on Keynes, were combined to form the present day mainstream paradigm of neoclassical synthesis (Tsoulfidis 2010).

3.3 Sustainability

One of the most famous quotes on sustainability comes from *Our Common Future*, written in 1989 and also known as the *Brundtland Report*, after Gro Harlem Brundtland who at the time was chair of the World Commission on Environment and Development. The report defined sustainability as "*development that meets the needs of the present without compromising the ability of future generations to meet their own needs*". Since then, sustainability has become a core concept in many fields of study, including law. In fact, the report scolded the disconnections between various fields of law, most notably environmental law and development law when it comes to addressing problems: "*[t]hese are not separate crises: an environmental crisis, a development crisis, an energy crisis. They are all one*". (WCED 1987).

3.3.1 ... and Law

In order to tackle such problems, law is suggested to take both social and ecological factors into account in a broader sense of sustainable development law (see for example: Segger, Khalfan et al. 2003). This can be achieved in three ways: 1) substantive rules, 2) the provision of exceptions, or 3) enhanced application of competition rules. The first would include additional regulations to include social and/or ecological goals in law. For example: in South Africa agreements can be stopped not just on grounds of pure economic competition, but even if a small enterprise owned by a "*historically disadvantaged person*" is no longer deemed to be able to be competitive. The second way is similar to the approach in Europe, where certain conditions could be grounds for exemption (article 101(3) TFEU). Similarly the Common Market Organisation exempted several agricultural actions, such as producer organisations, from competition law. The third way can include the need for social and/or ecological indicators in assessments, so that competition is no longer just based on economic factors (Gehring 2006).

In a broad sense, sustainability is increasingly incorporated into law, especially in the EU, despite still being a relatively vague concept. However this is still mostly focussed on public health and environmental law (Malloy 2014). This leaves the question that even if sustainability is part of the legal system as a whole, if it is not included in a competition law analysis what would the overall impact be? Up until 2003, the European Commission would evaluate any exemptions to article 101

TFEU (then article 81 EC). With regulation 1/2003 EC this power was decentralised back to the member states, and with it guidelines were formulated to help the national competition authorities harmonise their views. These views state two things that are important for an analysis: first, other goals may be a valid reason for exemption (par 42), and second, these should be economic in nature. This creates both an opportunity for sustainability and poses a problem; the question now remains if sustainability is an economic efficiency goal. If it is, it can be used to justify an exemption, although there are plenty that interpret this as a narrow economic approach that does not include sustainability issues like environmental protection (Lavrijssen 2010). On the other hand there has been legal argumentation indicating that non-economic factors can be sufficient grounds for exemption, including those of social concern and public interest as could be seen in the judgement of the Wouters-case: *"... the wording of Article 85(3) makes it possible to take account of the particular nature of different branches of the economy, social concerns and, to a certain extent, considerations connected with the pursuit of the public interest."* (Wouters v Algemene Raad van de Nederlandse Orde van Advocaten: ECLI:EU:C:2001:390).

A main question to investigate the role of sustainability in competition law would be: what is the main goal of competition law; is it a purely economic tool to restore the functioning of the market, or is it applicable in broader sense to include all consumer wealth? Although article 101(3) TFEU refers to consumers explicitly, for now the focus only seems to be on monetary benefits, or at least those that can be expressed in a monetary value (Claassen and Gerbrandy 2016). Kingston (2010) also points to the developments in EU policy that, on a whole, increasingly incorporates environmental performance and standards of living. Especially article 3(3) TEU stating that the EU will *"... work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment"* combined with article 11 TFEU stating that *"Environmental protection requirements must be integrated into the definition and implementation of the Union's policies and activities, in particular with a view to promoting sustainable development"* means that environmental protection is an integral part of all EU policy and regulations. As a result, competition as such should not take prevalence over sustainable development goals, or in the words of Kingston: *"competition isn't special"* (Kingston 2010). However, the European Commission itself already created some tension between the goal of environmental protection and competition law. While in the early 2000's several cases were investigated and eventually granted exemption on basis of environmental benefits, later decisions prevent just such benefits from being included in competition law applicability (Casey 2009).

Such tension can also arise with the present day focus on switching from direct *governing* to *governance*. More and more governments make the choice to let markets come up with solutions, with governments merely supporting these actions with regulatory frameworks and/or economic benefits. For example the Sociaal-economische Raad (SER, Social Economic Council) suggests that the government works together with NGO's and companies to reach certain social and/or environmental goals through IMVO (*"internationaal maatschappelijk verantwoord ondernemen"*) covenants (Sociaal-economische Raad 2014).

3.3.2 ... and Economics

One of the goals of competition law is to ensure a healthy competitive market. It does so to ensure that no actor gains enough market power to affect the market in such a way that consumers are negatively impacted. This is based on the rationale that increased competition is always better for consumers. However this does assume a perfect market (Groenewegen, Spithoven et al. 2010).

Sustainability is often about the last assumption mentioned in chapter 2.2: *there are no public goods nor externalities*. In reality, public goods and externalities do exist; a well-known example comes from Hardin (1968) which is about the "*Tragedy of the Commons*" (although he cited William Forster Lloyd to come up with the idea in 1833). In medieval times cattle would graze on fields around the village, with everyone having access to these *commons*. Such fields will have a maximum amount of animals that can graze the field without exceeding the *carrying capacity*, after which the field will start to be overexploited and will start to be depleted. As long as the benefits are for the individual while the detrimental effects are shared with everyone, everyone will have the incentive to overexploit the resource. Although Hardin was not the first to use this example, he pointed out that some problems cannot be fixed through technical means alone, most notably the growth of human population, which at the time was against the *zeitgeist* (Hardin 1968). A possible solution for such problems was to assign property rights, so that the owner of the field has an incentive to prevent overexploitation in order to keep his income (Coase 1960). But not all problems are so easy to solve, and, as Hardin noticed: it is easy to prohibit, but it will be harder to enforce, and almost impossible to legislate temperance (Hardin 1968).

Property rights are not possible for all cases; it would be very hard to stop someone from using the air. Such externalities can be internalised through economic tools, such as pollution rights that are auctioned, or with fines, but in the end the amount of options is limited to borders and controls. There are clear borders in which countries can exert their exclusive economic rights (up to 200 nautical miles) making property rights (at least on an international scale) well defined, however there is nothing to prevent fish stocks from swimming to another country. In international waters even such property rights do not exist. The economic incentive to catch these fish becomes even larger when considering that fish stocks are a rivalrous good; if someone else catches them, you cannot. Without proper instruments in place to prevent overexploitation there is a risk of a "*race to the bottom*"; in which actors will try to deplete a resource themselves before others get the chance to do it before them. This is one of the foundations of the European Common Fisheries Policy (Perman 2003).

In most economic analyses there is a goal of social optimum; if the benefits outweigh the costs, then society as a whole will benefit from the action being taken. The problem for most sustainability issues is that some things are hard to put in monetary values. Poor people living in an area that is a possible location for a factory can be asked what their Willingness to pay (WTP) is to prevent construction, but considering their financial capabilities this will be quite low: instead of having an action that could become *Pareto efficient*, a group might find itself *Pareto irrelevant* (Bromley 2007). Especially considering that the goal of sustainability is to remove or compensate for externalities, and the most urgent ones are often negative externalities, it is logical to conclude that even ignoring the

increase in transaction and monitoring costs¹⁶, sustainability initiatives will increase the costs for a product. The (in)ability to monetise certain issues has had a big impact in bridging the gap between environmental sciences and economics, and has led to a variety of systems to (try to) solve this. One example of this was the development of the concept of *Ecosystem services*, which tries to internalise the (positive) externality of some environment factors (see for example: Farley 2012). Another influential report was the *Stern Review on the Economics of Climate Change*, which tried to internalise the costs of Climate Change (Stern, Peters et al. 2006).

The economic incentive of companies to hold to a 'business as usual' approach can be strong, after all; if your company is the only one to internalise costs, your competitors will effectively have a competitive advantage because of lower marginal costs. This has often been compared to the known example of the prisoners dilemma, in which two parties are incentivised to take an action that is sub-optimal based on the uncertainty of the actions of the other party. If you cooperate, but the other party does not, you will face the burden while the other one benefits, which usually results in neither party cooperating even though if both did cooperate they would both be better off. With enough parties and factors, this in turn will change into the previously mentioned tragedy of the commons (Lozano 2007).

Finally, it should be noted that not everyone agrees on companies having to take up any social responsibility; for example Milton Friedman once said that the only function of a company is to “... *increase profits for itself and for its shareholders [...] and that the shareholders in their private capacity are the ones with the social responsibility*” (Friedman 2009).

¹⁶ For further reading on the economic aspects of these factors, the reader is forwarded to the paper of Oliver Williamson from 1981: “The Economics of Organization: The Transaction Cost Approach,” *The American Journal of Sociology*, 87(3), pp. [548-577](#).

3.3.3 ... and the Competition Authority

The cooperation that is required to solve these kinds of sustainability issues is, by default, suspicious behaviour in the eyes of competition law. In the Netherlands, the ACM has released a *position paper* on their interpretation of sustainability in the context of competition law, in which they stress that there is no special status for sustainability in competition law, but that some of the sustainable initiatives can still be exempted through article 101(3) TFEU. The main concept will be consumer preference, as an indicator for social wealth (ACM 2014). The document followed after the new chairman, Chris Fonteijn, voiced his desire to bring clarity to what can be done in terms of sustainability and competition law, rather than just strictly enforcing competition law. This clarity was requested by companies after the large fines imposed on the prawn fishing industry, paralysing the sector and its desire to introduce more sustainable management (Banning 2012).

However, there are those that think using consumer preference, or even consumer welfare as a main goal, can lead to problems. For example Claassen and Gerbrandy (2016) propose to use a more *inclusive welfare standard* to include non-economic interests (Claassen and Gerbrandy 2016). As mentioned earlier in [Chapter 3.3.1](#), since 2003 there has been a generally narrow approach to consumer welfare where only economic factors are taken into consideration. With the jurisprudence from the Wouters-case however, there is the possibility of taking a broader interpretation to include non-economic factors.

With its position paper, the ACM stresses that in their view, the narrow view is still the leading interpretation and it explicitly states that there is no special status for sustainability (ACM 2014). It does however not address the issue raised in the Wouters-case. The problem is that, although not explicitly, this interpretation implies that competition law is based on an individualistic worldview of profits and growth, while sustainability often focuses on the necessity of cooperation. The ACM also takes the stance that its interpretation of article 6 Mw also applies to an interpretation of article 101 TFEU (Gerbrandy 2013).

However, as mentioned in chapter 3.3, Kingston (2010) already points out that competition as a purely economic concept is not defined in article 101, and that in that sense, *competition* is not any more special than sustainability, and a definite goal of European Competition Law cannot be derived from the text on its own (Kingston 2010). On the level that consumer welfare was mentioned as the goal for competition law by the European Commission, the European Court of Justice explicitly does not share this interpretation. This leaves the interpretation open to include the sustainability and other non-consumer welfare related goals following article 3(3) TEU (Kingston 2010; Gerbrandy 2013).

3.4 Chapter Summary

The core of European and Dutch competition law is article 101 TFEU, with its origins already in the Treaty of Rome of 1957. It states that any agreement between undertakings that may affect trade between the different member states can be prohibited when distorting the market, and includes several requirements to which an agreement must comply in order for the agreement to be exempted. The very notion that it includes any trade between member states, includes the possibility for companies from outside the European Union to still be faced with legal consequences should they impact this trade.

The reason such laws are required is because markets generally are not *perfect*, that is: they do not fulfil the five requirements for a perfect market and therefore have a market failure. Competition law exists to deal with market power of actors, and to prevent barriers to entry or exit that can be made by actors that are active within the market. In order to prevent this market power, competition law prevents the actors on making agreements that influence the market.

Another market failure arises when the actions of actors influence other actors (both other companies and society) without this being part of the price of a product, even if this is a positive externality. Negative externalities can impact the environment; one of the reasons for sustainability. Within the application of competition law, there is a debate on whether or not the goal is purely consumer welfare, or that other factors can also be taken into consideration. For now, the interpretation of both the European Commission and the ACM is that this is not the case.

In the next chapter several cases that the ACM already investigated are being examined. All these cases have one similarity: they were all (partially) based on sustainability issues.

4. Case analysis

In this chapter, the background information on both competition law and economics are used to explore several cases that were investigated by the ACM on the basis of not complying with competition law, and all of which had links with sustainability. The information that comes from the analysis of these cases can be used in determining a likely outcome for the cocoa covenant in the next chapter.

As mentioned in chapter 1, in the last 10 years there have been several agreements in the Netherlands that had a focus on sustainability, but were deemed illegal by the ACM due to their conflict with competition law. In the following chapter, four of these cases will be analysed on their focus, their economic impact, and the conflict with competition law as investigated by the ACM. The four cases are:

- *Energieakkoord voor duurzame groei*, which focused on a.o. shutting down coal fired power plants in the Netherlands
- *Kip van Morgen*, focusing on more sustainable chicken meat
- *MSC certification of Dutch prawns*
- *Stibat*, on setting up a system to collect used batteries

In order to analyse the case of the Cocoa Covenant in competition law, several different analyses will have to be performed.

The first analysis is a legal analysis on the agreement itself and whether article 101 of the Treaty on the Functioning of the European Union can be applied. For this the most important data is the scope of the agreement and the parties involved; which actors are involved, what is their position in the chain and what is their market share. Because of the nature of the covenant, two factors are already assumed to be in agreement to apply article 101:

- 1) The agreement is facilitated by the government, but not compulsory by law
- 2) The agreement does not directly dictate price increases, restrict production, divide markets, treat other actors differently, or include additional requirements and can therefore not be considered *hardcore*.

The covenant specifically states that by 2025 100% of all beans or chocolate intended for the Dutch market should be certified. As such, the covenant is assumed to influence trade between member states, for example by buying couverture chocolate from other member states, most notably from Barry Callebaut, which is a major supplier for the Dutch chocolate market without having any production sites within the Netherlands.

The remaining factor to have article 101 be applied is the market share of the actors involved, but because of the 100% description in the covenant ("*100% gegarandeerd duurzame cacaoconsumptie in 2025*"), this will without doubt be more than the 10% required for horizontal and 15% for vertical agreements (Rijksoverheid 2010).

For the first criterion information will be gathered on the benefits of using certified cacao, and especially whether or not there is any technical efficiency gain in using these standards. This will be compared to the benefits for consumers, and, following the normal procedure of the ACM, compare this with the willingness of consumers to pay for the efficiency gains if there are any.

The final two criteria for exemption will be less emphasised, as there are limited options for alternatives to the covenant from a governmental point of view, and the desire of both government and SER to use these agreements for governance, and because remaining competition should be unaffected if there is a level-playing field for the entire sector with only niche-players remaining. These cases were selected because they had a relatively high media impact and are therefore relatively well known, they all defended their position with the social and governmental desire for increased sustainability, and finally they all continued after making the necessary changes which makes them useful for other sectors to learn from.

4.1 Energieakkoord voor duurzame groei

On September 6th 2013 the Sociaal-economische Raad presented the *Energieakkoord voor duurzame groei* (Energy agreement for sustainable growth). It was a result of a long negotiation between many different actors that are involved in energy production, including: energy transporters (e.g. TenneT), energy producers, energy consumers (including big consumers like NS (Dutch Railways), and the metal sector), but also other actors including the government, consumer organisations and environmental NGO's.

The goal of the agreement was to invest in changing the energy sector to decrease energy consumption, increase the production of renewable energy and create new long-term jobs, by focussing on ten 'pillars'. Decreasing energy consumption, the first pillar, would decrease the environmental impact, lower the costs for consumers, and increase the competitiveness of Dutch companies (as lower energy use would decrease marginal costs). Together with the second pillar, increasing renewable energy production, it would contribute to lower CO₂ emissions and more job potential. The third pillar focussed on decentralised production to decrease costs for consumers and cooperatives, which requires the fourth pillar, the networks, to be improved to better balance supply and demand. The fifth pillar, a good functioning European Emission Trading System (ETS) is required for a level playing field between fossil fuels and renewable energy and is tied to the sixth pillar. The sixth pillar acknowledges that fossil fuels will be required in the transition but that CO₂ reduction is essential, and therefore that several coal fired power plants will have to be shut down. It is this pillar where the ACM comes in, as it could influence prices and constitutes a production agreement between major players in the market. The seventh pillar focuses on transportation and mobility, including fuel mixing with bio-ethanol and electric vehicles. The increased demand in construction and installation employment (short-term) and in the sustainable energy sector (long-term) is the eighth pillar. Additional jobs will be generated by the ninth pillar, which aims to increase investments in energy innovation and energy exports. Finally, the tenth pillar creates the financial possibilities for all the required investments.

As mentioned, the sixth pillar is the one the ACM focussed on, foremost because at first glance it is

an agreement to restrict production, and could therefore be considered hardcore as discussed in chapter 3.2. As a result the study of the ACM mostly focussed on the economic effects of shutting down the coal fired power plants¹⁷.

The report of the ACM consists of two separate parts: firstly an economic analysis performed by ECN, and secondly an application of article 6 Mw and article 101 TFEU by the ACM itself based on the ECN report.

4.1.1. Economic analysis

The economic analysis is based on several goals that are mentioned in the *Energieakkoord*; such as the expectations for the years 2020 and 2023 in the roadmap. The analysis calculates the effects of closing the coal fired power plants on the price of electricity (the main concern for the ACM) and the effects on emissions (the main reason for closing the plants). The main conclusions of the analysis are that prices of electricity will rise by 0.8-0.9% on average between 2016 and 2023. From 2021 the difference is 0, as the power plants in question were already planned to be closed by then regardless of the *Energieakkoord*, and will probably even have been closed earlier anyhow because new power plants will have come online with a higher efficiency. The price differences fluctuate a bit through the years due to modelled fluctuations in fuel prices, CO₂ emission costs, installed renewable capacity, etc.

The ACM does agree that there are positive effects for consumers, most notably from an environmental point of view: a decrease in SO₂, NO_x¹⁸ and particulate matter increase the air quality in the Netherlands or at least save on costs that would be made if the air quality would be increased by other means. However for CO₂ emissions the ACM concludes that no benefits for consumers will be made, as carbon emissions are part of the ETS (Emission Trading System) which means that, if the coal fired power plants are closed and therefore less CO₂ is emitted, a lower carbon price leads to higher emissions within the ETS. Even if this means that the agreement causes lower CO₂ reduction costs elsewhere, the benefits will spread within the ETS due to the price effects and will therefore barely influence Dutch energy consumers. As such, the CO₂ effects will not be used in the calculations of the positive effects.

The total benefits for consumers is calculated to be €180 million for the entire period 2016-2021, based on the health benefits of lower SO₂, NO_x and particulate matter emissions. The total costs for consumers is €450 million for the entire period, based on a growth in electricity demand of 1.15% per year, and a 0.9% increase in average price increase.

¹⁷ These coal fired power plants in question are: Gelderland-13 (owned by GdF Nederland), Borssele (owned by Delta), Amer-8 (owned by Essent) to be closed on 1-1-2016, and Maasvlakte I and II (both owned by E.on) to be closed on 1-1-2017.

¹⁸ Collective term for nitrous-oxides, mainly NO, NO₂ and NO₃

4.1.2. Competition Law analysis

Following the economic analysis, the ACM also looked at the applicability of art 6(1) Mw and art 101(1) TFEU, it should be noted here that the ACM itself already states that these articles are only being applied to the specific agreement of closing the coal fired power plants, not the entire *Energieakkoord*.

For the analysis itself there are several key elements mentioned to see if the articles do apply:

- According to the producers their combined market share is only 7% of the North-western European Energy Market
- There is a significant overcapacity in the Netherlands and this is expected to increase
- Electricity producers experience low profitability which is not expected to improve.

However, according to the ACM these are not sufficient reasons to warrant exemption; the first point is ignored due to the fact that although it might be true that the combined market share is only 7% on the whole North-western European energy market, the connectivity between countries is not yet sufficient to consider them a single market. Therefore the market share of the companies involved on the Dutch energy market is considered to be significantly higher (with estimates between 65-85%) and cannot be exempted on this basis. The other two points were dismissed on the basis that even if true, these facts do not influence the *applicability* of the articles, but at most can influence the possible exemption.

Because of the net negative effects of €270 million the ACM concludes that, although the agreement contributes to an improvement in production, there is no net benefit for Dutch consumers. As the exemption requirements are cumulative, the ACM did not look at the two negative requirements; investigating if the agreement could be reached with less competition-restricting results (ACM 2013).

It should be noted though, that one of the points of the *Energieakkoord* was that the ETS (the European Emission Trade System, by which companies can trade emission rights on a 'carbon market') would be improved. An early critique on the ETS was that it was bound to fail without the removal of surplus carbon credits and the removal of carbon reductions. If this was the case, the net benefit would far outweigh the costs even assuming a low carbon price.

4.2 Kip van Morgen

The *Kip van Morgen* ('Chicken of tomorrow') is an agreement between the poultry sector, the processing industry and supermarkets from 2013 with the goal of making the chicken meat sold in Dutch supermarkets more sustainable. It is linked to a broader meat sector initiative *Ander Vlees 2020* that aims to make the whole Dutch meat industry more sustainable by 2020. As such, the *Kip van Morgen* envisioned to completely phase out conventionally produced chicken meat from supermarkets by 2020.

There were several key points that were agreed on to make the meat more sustainable in terms of environmental impact and animal welfare:

- Lower growth rates to decrease health issues and antibiotic usage
- Less chickens per m²
- Various changes to decrease injuries
- 100% use of sustainable soy in feed
- Environmental requirements such as lowering carbon footprint, sustainable energy use and decreasing emissions.

4.2.1. Economic analysis

The economic effects of the *Kip van Morgen* are mostly based on the monetary value of the different effects. The higher costs for the chicken meat come from higher costs for housing (less turnover per m² because of less chickens and more days required to reach the slaughter weight), higher feed costs (more expensive feed, more feed required until slaughter), and costs for emission reduction techniques. These costs combined amount to €22.2 cents per kilogram live weight, or €1,46 per kg fillet.

The economic effects were split into three main benefits: animal welfare, environmental gains, and public health.

No study was performed on the influence of the proposed changes on animal welfare, although it is expected that there will be a small positive effect on animal welfare. The willingness to pay by consumers for this increase in animal welfare was calculated to be €0,22 for a standard package of 500 grams of fillet. It should be noted here that for conventionally produced chicken this value is negative: -€0,12 per 500 grams. The total benefit would be €0,34 per 500 grams. For comparison: for 1-star *Beter Leven* chicken this value is €5,99, and for organic chicken €6,54 per 500 grams.

The environmental gains are focussed on the reduction of two emissions: ammonia and particulate matter. The combined reduction, corrected for slaughter weight and fillet yield, amounts to €0,07 per 500 grams. This assumes a cost of €12,98 per kg of ammonia and €45,49 per kg of particulate matter. Results can vary because these costs can be based on cost-prevention (how much would it cost to prevent it in a different way) or on shadow costs (costs to society due to health impacts, etc.).

Finally the health gains are based on the usage of antibiotics, as health benefits of emission reductions are already included in the environmental gains. However, due to earlier targets, antibiotic usage in the poultry industry already had been reduced greatly since 2009. In fact, in 2012 the amount of antibiotic shots was already below the target for the *Kip van Morgen*, with lower dosages even being planned. As a result, no significant health effects are expected.

Depending on the used methodology, the final consumer surplus varies between -€0,40 and -€0,64 /kg. This means that there is no benefit for society as a result of the actions taken in the *Kip van Morgen* agreements.

4.2.2. Competition Law analysis

The ACM concluded that competition was affected by limiting the choice consumers have at supermarkets, by removing the choice for conventionally produced chicken. Because most chicken meat in the Netherlands is sold in supermarkets, the agreement has a large potential effect on competition. Additionally, the ACM concludes that because Dutch supermarkets also buy meat from other member states of the European Union, there are economic effects in other member states, so that article 101 TFEU also applies.

According to the ACM, the environmental, animal welfare and health effects are only beneficial to consumers if they are willing to pay for it. Because the additional costs are higher than the willingness to pay of consumers, there are no net benefits for consumers, so the first exemption criterion of article 101 TFEU(3) is not met. The second criterion is therefore also not met, because there is no net benefit for consumers.

The third criterion is also not met, because there is already more sustainably produced chicken meat on the Dutch market, for which consumers have a higher willingness to pay. The ACM recommends supermarkets to distinguish themselves from the competition by focussing more on these alternatives, including raising awareness on these topics.

The final criterion, remaining competition, is also not met due to the large number of supermarkets involved in this agreement, which together comprise about 95% of the market. This means that in practice the only remaining competition is on meat sold with labels with even higher standards (ACM 2015).

4.3 MSC certification of Dutch prawns

In 2010 the Dutch prawn fishing sector (united in both the Producer Organisation Prawn (GPO Garnaal) and the Dutch Fishery Union (Nederlandse Vissersbond) requested an opinion from the NMa on their management plan for the MSC (Marine Stewardship Council) certification of Dutch prawns (*Crangon crangon*).

Part of the reason they requested this opinion was that the plan included steps for which the prawn fishing industry was already scalded for in the early 2000's. In that time, the abundance of prawns caused the industry to take steps to limit fishing; more fishing would result in lower prices, and processing capacity was limited. The NMa considered such actions in conflict with competition law, as it constitutes a hardcore action: limiting supply (ACM 2011). However, the case is interesting in the light of sustainability as it deals with a public good, which are prone to overexploitation (tragedy of the commons), and a sector that imposes self-regulation to prevent this (as mentioned in chapter 2.2).

The MSC label has three principles by which fishery is supposed to operate:

- 1) Protecting fish stocks
- 2) Minimal effect on the ecosystem
- 3) Effective management

These principles should make sustainable fishing possible by not depleting fish stocks, minimizing the effect on other fish species, while still adhering to the law and scientific developments (Marine Stewardship Council 2016). Most of the measures taken in the management plan will not have an effect on competition according to the NMa.

Three measures are expected to have an effect on competition, but are deemed beneficial and will probably be allowed by article 6(3) Mw and/or 101(3) TFEU: measures regulating pressures on stocks, technical requirements for nets, limiting bycatch, and special requirements for landing.

However, one measure was deemed illegal: regulating fishing times. According to the NMa any regulation will constitute a limit on supply, which will lead to higher prices and limited competition and is considered hardcore. Any such measures could be allowed if deemed necessary to achieve the goal, but this would only be the case if there was a threat to prawn stocks which, according to the NMa, was not proven (ACM 2011).

At this moment the industry is working on an application for the MSC label along with German and Danish fishermen, where the fishing times are limited based on the amount of prawns caught in the time spent: the LPUE (Landings Per Unit of Effort). Fishing is restricted to 72 hours of fishing per 7 days when it falls below 70% (compared to previous seasons), and to 24 hours per 7 days below 50%. It is expected that the certification will take until the end of 2016 (Brown Shrimp Cooperative MSC Group 2015).

4.4 Stibat

On March 18th 1991 the European Commission adopted Directive 91/157/EEC on *batteries and accumulators containing certain dangerous substances*. With this directive member states became responsible for making sure that batteries were collected and, if possible, encourage recycling of these products (article 7). It also became mandatory that batteries were *readily replaceable* by consumers, limiting the environmental impact of having to buy new products merely to replace faulty batteries (article 5)(European Commission 1991).

Up until May 1st of 2004 undertakings could request an exemption to antitrust laws based on the four conditions still mentioned in article 101 TFEU. Although it is now the task of the *undertaking* to see if these conditions apply, and it is no longer possible to request an exemption, the conditions themselves have not changed (site ACM: <https://www.acm.nl/nl/onderwerpen/concurrentie-en-marktwerking/duurzaamheid-en-mededinging/relevante-besluiten-random-duurzaamheid-en-mededinging-van-de-ec-en-de-nma/>).

On May 9th 1996 the Stichting Batterijen (hereafter: Stibat) requested an exemption on the antitrust laws on horizontal price agreements at the Dutch Ministry of Economic Affairs. This request was forwarded to the NMa on January 1st 1998, and after several requests for additional information it was published in the *Staatscourant* on July 6th 1998. The request was rejected on December 18th 1998, after which Stibat challenged this decision.

The case was split into several different factors, which were all judged separately, based on the effects of different aspects on the market:

- The market for the production and import of new batteries
- The market for the collection and removal of used batteries

The conclusion was that for the latter there are no effects on competition, and the exemption was granted for this. However the first market was affected due to the fact that there was a mandatory charge (the '*verwijderingsbijdrage*') for the next actor in the distribution chain, with this amount mentioned in the invoice. One of the main arguments of Stibat against this was that Directive 91/157/EEC requires parties to come with a collective approach, and as such is not a voluntary agreement but one required by law. This claim was refuted on the basis that, although a single collection system is far more efficient than several competing systems, and that there is a significant environmental benefit to this collection system, there is no legal basis for the compulsory charge to the next actor in the chain and the compulsory notification of this amount on the invoice. This is seen as a violation of the *polluter pays* principle and limits competition by not allowing competitors to pay the fee from their profit margin rather than charging the full amount to their customer. Finally the compulsory mentioning on the invoice could be interpreted as a requirement by law, rather than an amount agreed upon by a separate collective body (ACM 1999). In the end the exemption was given for the centralised collection. The request for an exemption was renewed in 2002 and was valid until 2008, but by that time requesting an exemption was no longer required.

4.5 Chapter Summary

All four examined cases: the *Energieakkoord voor duurzame groei*, the *Kip van Morgen*, the *MSC certification of Dutch prawns*, and *Stibat*, had problems with getting exempted from article 6 Mw/article 101 TFEU, although for some cases this could be rectified. A summary of all the effects and whether or not they conform to the requirements can be seen in table 3 (page 36).

The *Energieakkoord* already failed exemption at the first hurdle: increasing efficiency in the sector. This is because of the common market organisation for energy in the European Union, which results in energy simply being generated outside of the Netherlands when power plants are closed, and the ETS, which does not remove the reduced carbon emissions from the carbon market, so the agreement does not result in lower CO₂ emissions. Because the rules for exemption are cumulative, this already means that the agreement cannot be exempted.

The *Kip van Morgen* did show an increased efficiency, however it was not deemed worth the costs by consumers. Furthermore, the agreement is too restrictive as there are already similar alternatives on the market.

The *MSC Garnalen* agreement was deemed hardcore due to its inclusion of quota, although the agreement is being updated so that it can still comply with MSC regulations, without violating competition law due to a quota.

The *Stibat* was eventually successful in getting exempted, after removing the charge to other links in the chain to pay for collection.

Several important conclusions can be drawn from the different cases:

- From the *Energieakkoord* an important notion that is made by the ACM is that the focus is on the Dutch consumer, in both the analysis on the resulting electricity prices, and in the analysis on the health benefits
- In the *Kip van Morgen* there is the notion that, as far as the ACM is concerned, the benefits do not outweigh the costs if the consumer is not willing to pay for it
- In the *Stibat*-case the issue was raised that following the polluter-pays principle includes not charging the next link in the chain for the incurred costs.

An interesting notion is that in none of the cases the fact that a large number of parties representing almost the entire sector, was a problem for the ACM. For the cocoa covenant this means that the large number of parties involved does not have to be a problem. However it will need to demonstrate that the agreement leads to lower environmental impacts than conventional cacao does at the moment, that any extra costs are deemed worthwhile by consumers, and that the agreement does not impose any restrictions that are not required in order to achieve its goals.

In the next chapter the data from the cocoa sector as discussed in [Chapter 2](#) will be applied to these requirements to see if the Cocoa Covenant can be exempted as meant in article 101(3) TFEU.

| | Source | Indicator | criterion | value | Energieakkoord | Kip van Morgen | MSC Garnalen | Stibat |
|---------------------------|---|---|---|----------------------------------|--|--|---|---|
| Applicability | 101 TFEU | Required by law | If yes, not applicable | | No | No | No | No |
| | 101 TFEU (1) | Hardcore | If yes, agreement is void | | No | No | Yes* | No |
| | EC notice on 101 TFEU (<i>de minimis</i>) | Market share of agreement | If horizontal if vertical if subject to more agreements | <10% <15% <5% | 75-80% (Natuur & Milieu) | >95% | >95% | >99% |
| | Art. 6 Dutch competition law | Number of parties in agreement Combined turnover | (n) if supplying sector if non-supplying sector | <8 <€5.500.000 <€1.100.000 | 47 (2013) (original report) | >19 | 397 +/- €138m (LEI, 2014) | 893 (2015) (Stibat jaarverslag) |
| | ECLI:EU:C:1972:84 | Affects trade between member states (or regions within member states) | If no, national law applies | | Yes | Yes | Yes, non-Dutch members | No |
| | | | | | | | | |
| Exemption (should be yes) | | | | | | | | |
| | 101 TFEU (3) | Improves production or distribution | Producer surplus | > 0 | No, as production will shift to different member states and CO ₂ emissions are not removed from the ETS | Yes, animal welfare is improved, costs are covered by increase in sale price | Depending on effect of management | Yes, efficiency and environmental gains through single collection system |
| | 101 TFEU (3) | Consumers share of resulting benefit | Consumer surplus | > 0 | Yes on local scale, no on larger scale; air pollution is reduced where plants are closed but increased elsewhere, European CO ₂ output remains the same | No, willingness to pay is lower than the increase in costs | Unknown, hardcore action might lead to higher prices, but more stable too | Yes, by prevention of environmental damage and cost reduction |
| | 101 TFEU (3) | Goals not attainable by other means | | | Possible, but unlikely if depending on single actor (first move disadvantage) | No, other sustainable meat already on market | *For the MSC label there should be a management system to prevent over-fishing. The proposed quota is deemed hardcore by the ACM. | Yes, goal is to collect batteries as requested by EEC directive |
| | 101 TFEU (3) | Competition not affected | | | Competition affected in various areas, including other member states | No, choice limitation and inter-member state trade affected | No significant competition not involved in agreement | No, competition affected by compulsory charge to next actor, otherwise no competition influence |

Table 3: Summary of the different effects of the *Energieakkoord*, *Kip van Morgen*, *MSC Garnalen*, and *Stibat* cases and their compliance with the different requirements set in European Competition Law

5. Dutch cacao sector analysis

In this chapter the cocoa covenant is investigated on its compliance with article 101 TFEU, and its possible exemption from it as follows from article 101(3) TFEU.

As of May 1st 2004, after Regulation 1/2003 came into force, it is no longer required to notify the European Commission for an exemption to article 101 TFEU (then article 81 EC), this means that not all agreements are being investigated when requesting exemption, but rather when either requested (as with the MSC Prawn fishing case, [Chapter 4.3](#)) or when investigated by the ACM itself after implementation.

In order to qualify for exemption, as mentioned earlier, an agreement must fulfil several requirements. In this chapter the various points are investigated separately for compliance. However before seeing if the agreement can be exempted, first it needs to be established that article 101 TFEU can be applied.

Going back to the flowchart in [Chapter 3.1](#), the obvious first question would be if there is an agreement on cooperation. Although there are very little specifics in the agreement between actors, there is an agreement on certain steps that have to be taken; and a limited number of options that can be used to achieve the different goals that are set are given. This is similar to the case of the *Kip van Morgen*, in which the ACM already argued that this complied with the definition of an agreement as meant in article 101(1) TFEU. And although in both the *Kip van Morgen* and the Cocoa Covenant agreement were made in cooperation with governmental bodies, both are not mandatory by law.

The Cocoa Covenant is argued to affect regional trade, as some of the chocolate destined for the Dutch market is not produced within the Netherlands, most notably industrial chocolate produced by Barry Callebaut, which is used by several different manufacturers, for example Tony's Chocolonely, which had a major influence in the Cocoa Covenant debate.

Within the context of European competition law, several sectors can be exempted from being subject to application of article 101¹⁹, however, the cocoa sector is not part of this. And as was already mentioned in [Chapter 1.6](#), because there are no specified details on price, producing or supplying quantities, or market allocation between parties, the agreement is not hardcore.

Finally, the market share of the parties involved is far greater than possible for exemption. Even if only the supermarkets are considered, they already control an estimated 72% of the Dutch market for chocolate (Logatcheva 2014). Including the different manufacturers (of which most is sold through supermarkets and of which most have committed themselves to targets) and grinders does not make it more feasible that the market share is low enough for article 101(1) TFEU not to apply.

¹⁹ Regulation 1308/2013; specifically for cereals, rice, sugar, dried fodder, seeds, hops, olive oil and table olives, flex and hemp, fruit and vegetables, processed fruit and vegetable products, bananas, wine, live trees and other plants, tobacco, beef and veal, milk and milk products, pigmeat, sheepmeat and goatmeat, eggs, poultry meat, ethyl alcohol of agricultural origin, apiculture products, and silkworms.

Taking this all into consideration, it is deemed justified that article 101(1) TFEU can be applied. The next step will therefore be to see if an exemption as meant in article 101(3) can be made.

5.1 Improving the production or distribution of goods or to promoting technical or economic progress

The first point can be focussed on different production stages: the production (and transport) of cacao beans, the production (and transport) of cocoa derivatives, or the production and sales of chocolate. For the Cocoa Covenant, all three steps can be considered relevant but the focus will be on bean production as the certification has little effect on the latter steps, and it specifically states that the *beans* used in production should be sustainably sourced for all products aimed on the Dutch (chocolate) market. This does mean that chocolate for foreign markets will be exempted.

The first step for a possible exemption could come from production improvement, so the question would be, does certification improve the production of cacao beans? There is a large array of different aspects in production that is being affected by certification, and the Second Roundtable for Sustainable Cocoa Economy (RSCE) proposed ten principles to which any certification should comply in order to qualify as sustainable:

1. Transparency
2. Compliance with applicable laws and regulations
3. Remuneration for quality cocoa and improved farmers income
4. Access to credit and rural development services
5. Access to markets and market information
6. Decent working conditions
7. Support of farmers and workers organization
8. Clear land use planning, secure access to land and proper infrastructure
9. Natural resource management
10. Conservation and wise-use of biodiversity (ICCO 2009)

Various studies do show that certification does increase aspects like production, income and environmental factors. This is true in various degrees for all used certifications like UTZ (see for example: Ingram, Waarts et al. 2014), Rainforest Alliance (see for example: Ochieng, Hughey et al. 2013), and Fair Trade and Organic (Valkila 2009)²⁰. However the positive effects vary greatly between countries (for example depending on fertiliser subsidies, tax levels, etc.), and often only indicate the benefits per MT of certified cacao, while only a part of the harvest is actually sold as certified (KPMG 2012).

However, on a larger scale it is uncertain to what extend this is due to the Cocoa Covenant in the Netherlands. Just like in other sectors like coffee, which is quite similar in many ways, sustainability in the sense of labour conditions (specifically child labour) and production levels were already present before the covenant. In the case of the cocoa sector already since the early 2000's, and these were part of the reasons the WCF was founded in 2000. One of the main differences of the cocoa

²⁰ Although most studies are done on coffee, it is assumed that because many factors are similar for cacao bean production when compared to coffee, the same will hold true for cacao.

sector when compared to similar sectors, is that where in the coffee and forestry sectors the different standards were in competition, in the cocoa sector they are often used alongside each other; with companies using multiple standards for different products, or even using multiple standards on the same product. The partnerships that arose in the cocoa sector strengthen the bonds between the different actors, resulting in overlapping memberships, which can also be seen in signatories of the Cocoa Covenant also being member of other signatories (for the full list, see [Annex I](#)) (Bitzer, Glasbergen et al. 2012). It is true however, that since the signing of the covenant and the start of the IDH, demand for certified cacao has shown significant growth, as shown before in [Chapter 2.4](#) (Fountain and Hütz-Adams 2015).

5.2 While allowing consumers a fair share of the resulting benefit

The second criterion for exemption is the fair share of the resulting benefits. This point will be somewhat harder to investigate, as the previous case of the coal-fired power plants (chapter 4.1) has shown that in order to qualify for this criterion, the interpretation is that the *Dutch* consumer will have to receive a fair share of the resulting benefit. Considering that only non-European farmers benefit from the certifications economically, and any ecological benefits will be limited to production sites and employees, at first glance this would seem not to hold true.

An additional hurdle to this will be that an often used tool is the willingness to pay. Studies using this on chocolate(-products) have been executed. As an example: in Belgium a study found that people are willing to pay up to €0,84 extra per 100 grams of chocolate with a Fair Trade-label (Vlaeminck and Vranken 2015). A similar study performed in southern Italy found much lower values, ranging up to €0,20 for a 80 grams chocolate bar (Vecchio and Annunziata 2015). Depending on what value is used, different net benefits or losses will dictate the outcome of an analysis. Several different values from literature can be found in table 4 below.

| Author(s) | Year | Certification | Highest WTP added (€) |
|--------------------------|------|----------------------|--------------------------|
| (Vlaeminck and Vranken) | 2015 | Fair Trade | €0.84 |
| (Vecchio and Annunziata) | 2015 | Fair Trade | €0,14 |
| (Didier and Lucie) | 2008 | Organic & Fair Trade | €0,33 |
| (Rousseau) | 2015 | Organic & Fair Trade | €-0,37 (Org), €2,03 (FT) |

Table 4: Different studies for the Willingness to pay for certified chocolate and their respective WTP-values.

As can be seen in the table, the estimated willingness to pay varies greatly per group, with values depending on geographical origin, average income and age in the groups, etc. Most of the willingness to pay comes from the branding, which can be a major problem as Didier & Lucie (2008) point out: *“without branding, consumers’ WTP for organic and Fair Trade chocolates is inferior to the actual prices”* (Didier and Lucie 2008). This does not even include the odd result that Rousseau found that organic production can actually *decrease* the WTP of consumers (Rousseau 2015).

The chosen value for the WTP will even be of a higher importance when calculating the net benefits for consumers, as the current pricing still does not include all externalities in cacao production. A result from IDH and True Price show that, at least in the case of cacao from Ivory Coast, the price being paid for the beans is still not enough to cover all externalities: with an average price of €1.35 per kilogram of beans, while the real costs are €7.10/kg. As a result, a chocolate bar costing €1.20 should cost €1.60 just to cover the cacao externalities alone. However there is a large difference between conventional cacao (externalities cost €5,75/kg) and certified cacao (€4.85/kg) (IDH and True Price 2016).

Concluding it can be said that when comparing the WTP for certified chocolate, increased prices due to certification can constitute a fair benefit, as long as the increased prices are lower than the WTP, and the externalities are indeed reduced more than paid for when compared to conventional chocolate. However this is contingent on the assumption that non-EU benefits on the environment can be taken into consideration.

5.3 Which does not: impose on the undertakings concerned restrictions which are not indispensable to the attainment of these objectives

In the Cocoa Covenant the only requirement is that all cacao must be *guaranteed sustainable*. In the clarification it states that *guaranteed* in this context means that on an international and externally verifiable level the principles of the RSCE are upheld (Rijksoverheid 2010). Although this does not by definition rule out other ways of producing sustainable cacao without certification, in the last part it is implied that certifications should be used (*“Daarvoor komen in principe onder andere de keurmerken Rainforest Alliance, UTZ Certified, Fairtrade en biologisch in aanmerking”*).

The first part of the test for exemption is that the efficiency gain from certification cannot be attained in another, less restrictive manner. Secondly, the restrictions themselves must be reasonable. From an industry point of view, a law stating minimum requirements for cocoa might be less restrictive, however this is impossible to impose as the farmers are not within the boundary of the European Union or the Netherlands, and would probably be challenged in the WTO if it were possible, something private standards (for now) still are unaffected by (WTO 2007; WTO 2015). Another option would be to not make certification mandatory, but to have adoption on a voluntary basis. However considering the higher costs of certification, especially when combined with premiums such as with Fair Trade, it is unlikely this adoption will be high except under *“conscious”* buyers: compare for example the WTP of chapter 5.2 with that of the WTP of €44/kg of ‘chocolate lovers’ (Poelmans and Rousseau 2016).

The freedom to choose the certification does make it somewhat less restrictive, but introduces new issues with sustainability. The problem is that the different certifications have different requirements which can increase costs, making some certifications significantly more advantageous from an economical point of view. For example: while UTZ does allow Mass Balance Accounting²¹, Fair Trade and Rainforest Alliance do not. There are also different requirements for farmers, making it difficult to consider all certifications as equally sustainable, despite the fact that labels have become more uniform and comparable over time (Vermeulen and Kok 2012). This creates an incentive for companies for *Forum Shopping*: adopting the least restrictive label that still complies with the principles to count as sustainable cacao (see for a similar example on biofuels: Haugen 2015).

With so many different labels in use, consumers also lose track of what a label entails (Hoogland, de Boer et al. 2007). This freedom of choice does make it reasonable to assume that there are few less-restrictive ways to reach the goal of sustainable cacao production; after all, if the only requirement is that cacao is certified, companies are free to develop their own label if they want (for example the Cocoa Life label of Mondelez International, which used to use Rainforest Alliance-certified cacao).

²¹ Mass Balance Accounting means that companies are able to buy a quantity of certified beans, mix it with conventional beans, and sell the same quantity in processed beans as certified. This makes it easier for companies to buy large volumes and still sell certified cocoa products without the need for a separate production facility.

5.4 Does not afford such undertakings the possibility of eliminating competition in respect of a substantial part of the products in question

The last criterion for exemption is that companies should not be able to use an agreement to prevent competitors from staying (or becoming) active on the market.

First it should be noted that full certification of the cocoa chain will affect multiple levels, which will all be affected differently, depending on the chosen certification.

The first parts of the chain will be relatively unaffected by adopting certification; farmers will not be able to use certification to knock out competition directly because smaller farms can also comply with the requirements, especially with certifications like Fair Trade targeting smaller farms, and the economics of certification seems to be either neutral or positive (Ochieng, Hughey et al. 2013; van Rijsbergen, Elbers et al. 2015).

However actors further up the chain will be more affected; transportation and export firms will have to implement measures to comply with the requirements of the different certifications that will increase costs. For example because mixing with non-certified cacao is not allowed, transportation companies will have to incur extra costs to make sure this does not happen.

In practice this means that only certified chocolate will comply, which means that smaller grinders will either have to comply with the regulations of the various certification schemes, or only export their products so these do not end up on the Dutch market.

6. Conclusion

In this report there was one central question: is the Cocoa Covenant compliant with current European (and Dutch) competition law? It has been determined that it is not a hardcore agreement, because there are no specific agreements on anything that would limit supply. Therefore either the Dutch article 6 Mw or the European article 101 TFEU was applicable. Because of the international nature of the cacao trade, with Amsterdam being a prime port for both direct export of beans, and the export of processed goods, article 101 TFEU would seem most appropriate.

The analysis of the cases that were previously dismissed by the ACM show that in order to qualify for exemption, there has to be a measurable increase in production efficiency, that consumers either do not have to pay extra or at least are willing to pay for the difference, and that the agreement is the only way this can be achieved.

In order to be allowed, the agreement will have to comply with the criteria for exemption as listed in article 101(3) TFEU. The first requirement is one of the easiest as both cacao processors and NGO's agree that cacao production is in danger, and that certification is at least *a* way (but not necessarily *the* way) of making sure that future cocoa production is safeguarded. Furthermore, studies have shown that certified farms do indeed produce more cacao, with equal or higher profits and with social benefits for the community. Considering that already a large part of the chocolate on the Dutch market is certified, the claim that the cocoa covenant increases production efficiency in the chain does seem to hold, although it is hard to say how much of this is due to the covenant, as the amount of certified chocolate was already on the rise before the covenant was signed.

The third criterion, that of necessity of the details of the agreement, is already less certain; although the agreement does not impose any restrictions other than cocoa having to be certified by any of the compliant standards, it is unclear if this is really the least restrictive way, if that is even determinable. If anything it is at least less restrictive than for example the fixed certification and minimum price of the *Kip van Morgen* case, or entail agreements on volumes or quota's like the *MSC Prawns* case. However, the movement towards more certification was already in progress before the agreement was made, and considering the willingness to pay from consumers it is likely that even without the agreement, more chocolate would be certified than before. Additionally, a large part of the certified harvest is already sold without premiums, as supply already exceeds demand.

The most problems are expected with point two and four: the consumer benefits and the effect on competition. To start with, there is no consumer surplus in the way that it is often calculated by the ACM; the consumer will arguably pay extra for no direct benefits, as any benefits on the environment, health, etc., will be outside of the EU as most cacao comes from Africa and South America. As seen in the *Energieakkoord* case, at least following the reasoning of the ACM this is of great importance, as the consumer benefits have to be in the Netherlands in order to be exempted. Even if the interpretation is expanded to include other member states in accordance with a broad interpretation of article 3(3) TEU, which would have made a difference in the *Energieakkoord* case, it would be hard to argue for an interpretation that would include non-EU regions in this assessment. It is therefore unlikely that this point can be used for exemption of article 101 TFEU.

As for the effect on competition: with virtually the entire Dutch sector participating, it will be almost impossible for signatories to sell non-certified cacao and chocolate on the Dutch market, as producers are bound to not supply uncertified chocolate, and supermarkets will not sell uncertified chocolate.

Taking all things into consideration, it seems that as it is now, the Cocoa Covenant does not comply with article 101 TFEU, and does not qualify for exemption as specified in article 101(3) TFEU.

7. Discussion and recommendations

In its most basic form, economics shows the final price of a product to be the result of a supply and a demand function. Competition law looks at the result of agreements on this price; if an agreement raises the price without good reason, it is deemed undesirable for the consumer according to the narrow interpretation the ACM has used so far. From a sustainability point of view this has two problems. 1) Only the consumer price is often taken into account. This is a problem because it often does not include externalities which the cause of the price increase is trying to resolve. If child labour makes a good less expensive for the consumer, but at the same time raises the costs to society, making this child labour illegal is not a good reason to stop this merely because of a possible price increase for the consumer. In fact for child labour this is already the case in most countries. This is not to say all agreements that are made under the banner of sustainability are to be taken this way, but there should be more emphasis on the avoided costs for society and future generations (for example with land management policies) than competition law currently permits.

2) The used tool Willingness to pay states that an increase in price is deemed undesirable if people are not willing to pay for the increase based on its effect. This has an important premise: that the current price is the correct price. For example in the *Kip van Morgen*, the price increase was found to be too high for the (calculated) health benefits and willingness to pay by consumers. However, internalising costs makes a product more expensive by definition, at least on a consumer-side basis (again, not necessarily so for society, as pointed out in the Reims II case, chapter 3.1), and the fact that at a certain price level I am unwilling to buy a product as a consumer does not mean that the price is too high, merely that my perceived utility is too low to merit purchase at the costs that are closer to the true costs of the product.

Although the scope of this thesis is relatively limited, the fact that EU consumers pay extra without benefits occurring within the Union is arguably enough to say that the agreement is probably in violation of article 101 TFEU. Which makes the question: now what?

The route of making this mandatory through law would seem improbable as the cacao farmers are not EU citizens, and any action taken to stop non-certified cacao from being imported will surely be protested against in the WTO.

A solution would be that either the European Commission (and by extension the ACM) will switch to a broader view of consumer welfare to include other factors that are beneficial to society, even if those are merely ethical. Alternatively the European Court of Justice can be consulted for an interpretation, and to see whether or not this can be linked to, for example, article 3(3) TEU. This view is, at least partially, slowly being adopted by the ACM. Although the vision document from 2014 is still linked as the primary source, in December 2016 the ACM also added a decision tree for sustainable agreements²². In this tree there are some points that, depending on the actual interpretation, can lead to a broader acceptance of sustainability agreements.

²² <https://www.acm.nl/download/documenten/acm/mogen-bedrijven-afspraken-maken-over-duurzaamheid-interactieve-beslisboom.pdf>

For the requirement on production efficiency, future gains are also possible to be included in the analysis, although those benefits do have to be shown. Following a similar reasoning as the Reims-agreement, the second criterion states that not all individual consumers will have to benefit, as long as consumers as a whole do benefit. The third criterion includes that prices are allowed to rise, as long it does not outweigh the benefits to consumers. Finally, the fourth criterion now states that competition may be reduced in a single topic, for example minimum quality. This last addition would apply to the case of certified cacao, however this was not much of a problem for the covenant to begin with.

One factor that was assumed to be true to begin the analysis was the necessity for the agreement. Partly this will be very hard to establish, as it is unknown what the amount of certified chocolate on the Dutch market would have been without the agreement. However, the agreement does solve various issues that impede sustainability; for example the first-mover-disadvantage, which describes that the first company that moves to more sustainable production puts itself in a competitive disadvantage as its costs will be higher. In this sense the agreement certainly helps to get the entire sector to cooperate. Ironically it also highlights the friction that sustainability has with competition; the first wants transparency and cooperation in order to work, the second wants to avoid collusion and agreements affecting competition. The debate on which is more important will probably have to be settled on a European or even WTO level to avoid fragmentation.

In the end, one final question can be important for further study: in the *Kip van Morgen* case, consumers were unwilling to pay for measurable health benefits, and therefore it was deemed as not letting the consumer benefit from the taken measures. With this case it would seem to be the opposite, which begs the question: is an increase in price due to an agreement still legal if consumers are willing to pay, even if there are no objective benefits for them...?

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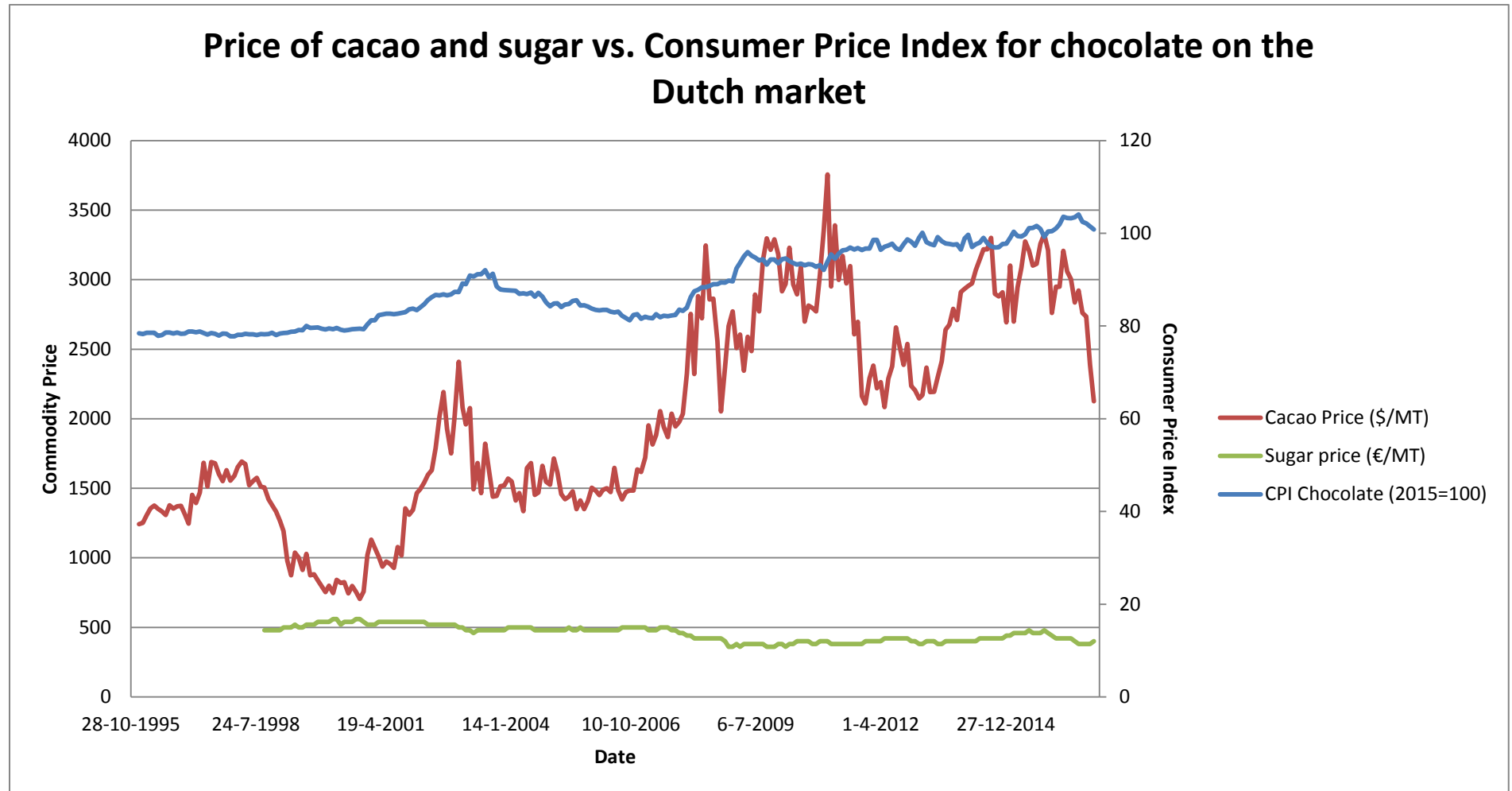
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Annex I: Price of cacao and sugar compared to the Consumer Price Index for retail chocolate on the Dutch market

Only the price of cacao and sugar are used as these are the two most important basic ingredients for chocolate.



Raw data:

Source for CPI: CBS statline (statline.cbs.nl)

Source for Cacao Price: investing.com

Source for Sugar Price: indexmundi.com

| | CPI Chocolate | Cacao Price (\$/MT) | Sugar price (€/pound) | | | | |
|-----------|------------------|------------------------|-----------------------------|-----------|-------|------|------|
| 1-1-1996 | 78,46 | 1242 | no data | 1-3-1999 | 78,47 | 1192 | 0,25 |
| 1-2-1996 | 78,25 | 1252 | | 1-4-1999 | 78,57 | 978 | 0,25 |
| 1-3-1996 | 78,54 | 1306 | | 1-5-1999 | 78,75 | 874 | 0,25 |
| 1-4-1996 | 78,54 | 1355 | | 1-6-1999 | 78,84 | 1038 | 0,26 |
| 1-5-1996 | 78,53 | 1376 | | 1-7-1999 | 79,14 | 1001 | 0,25 |
| 1-6-1996 | 77,91 | 1352 | | 1-8-1999 | 79,07 | 913 | 0,25 |
| 1-7-1996 | 78,04 | 1333 | | 1-9-1999 | 80,03 | 1029 | 0,26 |
| 1-8-1996 | 78,61 | 1308 | | 1-10-1999 | 79,57 | 874 | 0,26 |
| 1-9-1996 | 78,6 | 1377 | | 1-11-1999 | 79,63 | 881 | 0,26 |
| 1-10-1996 | 78,37 | 1353 | | 1-12-1999 | 79,71 | 837 | 0,27 |
| 1-11-1996 | 78,58 | 1371 | | 1-1-2000 | 79,41 | 795 | 0,27 |
| 1-12-1996 | 78,34 | 1374 | | 1-2-2000 | 79,28 | 753 | 0,27 |
| 1-1-1997 | 78,4 | 1314 | | 1-3-2000 | 79,47 | 800 | 0,27 |
| 1-2-1997 | 78,84 | 1246 | | 1-4-2000 | 79,3 | 747 | 0,28 |
| 1-3-1997 | 78,81 | 1453 | | 1-5-2000 | 79,6 | 842 | 0,28 |
| 1-4-1997 | 78,67 | 1394 | | 1-6-2000 | 79,23 | 820 | 0,26 |
| 1-5-1997 | 78,81 | 1469 | | 1-7-2000 | 79,04 | 825 | 0,27 |
| 1-6-1997 | 78,51 | 1684 | | 1-8-2000 | 79,17 | 745 | 0,27 |
| 1-7-1997 | 78,15 | 1513 | | 1-9-2000 | 79,33 | 797 | 0,27 |
| 1-8-1997 | 78,5 | 1688 | | 1-10-2000 | 79,39 | 755 | 0,28 |
| 1-9-1997 | 78,31 | 1679 | | 1-11-2000 | 79,45 | 704 | 0,28 |
| 1-10-1997 | 77,94 | 1603 | | 1-12-2000 | 79,34 | 758 | 0,27 |
| 1-11-1997 | 78,39 | 1552 | | 1-1-2001 | 80,37 | 1020 | 0,26 |
| 1-12-1997 | 78,31 | 1630 | | 1-2-2001 | 81,26 | 1131 | 0,26 |
| 1-1-1998 | 77,76 | 1556 | | 1-3-2001 | 81,21 | 1073 | 0,26 |
| 1-2-1998 | 77,8 | 1590 | | 1-4-2001 | 82,31 | 1010 | 0,27 |
| 1-3-1998 | 78,12 | 1652 | | 1-5-2001 | 82,52 | 936 | 0,27 |
| 1-4-1998 | 78,1 | 1692 | | 1-6-2001 | 82,64 | 974 | 0,27 |
| 1-5-1998 | 78,3 | 1674 | | 1-7-2001 | 82,65 | 957 | 0,27 |
| 1-6-1998 | 78,22 | 1523 | | 1-8-2001 | 82,56 | 927 | 0,27 |
| 1-7-1998 | 78,21 | 1552 | | 1-9-2001 | 82,65 | 1077 | 0,27 |
| 1-8-1998 | 78,06 | 1575 | | 1-10-2001 | 82,81 | 1017 | 0,27 |
| 1-9-1998 | 78,28 | 1512 | no data | 1-11-2001 | 82,99 | 1355 | 0,27 |
| 1-10-1998 | 78,24 | 1506 | 0,24 | 1-12-2001 | 83,59 | 1310 | 0,27 |
| 1-11-1998 | 78,27 | 1422 | 0,24 | 1-1-2002 | 83,78 | 1344 | 0,27 |
| 1-12-1998 | 78,54 | 1379 | 0,24 | 1-2-2002 | 83,43 | 1466 | 0,27 |
| 1-1-1999 | 78,05 | 1331 | 0,24 | 1-3-2002 | 84,01 | 1494 | 0,27 |
| 1-2-1999 | 78,38 | 1266 | 0,24 | 1-4-2002 | 84,7 | 1540 | 0,27 |
| | | | | 1-5-2002 | 85,6 | 1598 | 0,26 |
| | | | | 1-6-2002 | 86,22 | 1630 | 0,26 |
| | | | | 1-7-2002 | 86,7 | 1787 | 0,26 |
| | | | | 1-8-2002 | 86,63 | 2012 | 0,26 |
| | | | | 1-9-2002 | 86,81 | 2191 | 0,26 |
| | | | | 1-10-2002 | 86,64 | 1927 | 0,26 |
| | | | | 1-11-2002 | 86,84 | 1750 | 0,26 |
| | | | | 1-12-2002 | 87,36 | 2021 | 0,26 |

| | | | | | | | |
|-----------|-------|------|------|-----------|-------|------|------|
| 1-1-2003 | 87,33 | 2409 | 0,25 | 1-11-2006 | 82,38 | 1483 | 0,25 |
| 1-2-2003 | 89,17 | 2080 | 0,25 | 1-12-2006 | 82,56 | 1635 | 0,25 |
| 1-3-2003 | 89,01 | 1960 | 0,24 | 1-1-2007 | 81,54 | 1617 | 0,25 |
| 1-4-2003 | 90,89 | 2076 | 0,24 | 1-2-2007 | 82,03 | 1720 | 0,25 |
| 1-5-2003 | 90,65 | 1493 | 0,23 | 1-3-2007 | 81,78 | 1953 | 0,24 |
| 1-6-2003 | 91,18 | 1681 | 0,24 | 1-4-2007 | 81,7 | 1815 | 0,24 |
| 1-7-2003 | 91,17 | 1465 | 0,24 | 1-5-2007 | 82,56 | 1883 | 0,24 |
| 1-8-2003 | 92,07 | 1820 | 0,24 | 1-6-2007 | 81,88 | 2054 | 0,25 |
| 1-9-2003 | 90,49 | 1626 | 0,24 | 1-7-2007 | 82,21 | 1942 | 0,25 |
| 1-10-2003 | 91,29 | 1440 | 0,24 | 1-8-2007 | 82,14 | 1868 | 0,25 |
| 1-11-2003 | 88,54 | 1446 | 0,24 | 1-9-2007 | 82,29 | 2036 | 0,24 |
| 1-12-2003 | 87,87 | 1515 | 0,24 | 1-10-2007 | 82,37 | 1945 | 0,24 |
| 1-1-2004 | 87,79 | 1520 | 0,24 | 1-11-2007 | 83,53 | 1978 | 0,23 |
| 1-2-2004 | 87,69 | 1570 | 0,25 | 1-12-2007 | 83,29 | 2035 | 0,23 |
| 1-3-2004 | 87,65 | 1549 | 0,25 | 1-1-2008 | 83,98 | 2326 | 0,22 |
| 1-4-2004 | 87,58 | 1413 | 0,25 | 1-2-2008 | 86,24 | 2754 | 0,22 |
| 1-5-2004 | 86,94 | 1465 | 0,25 | 1-3-2008 | 87,47 | 2321 | 0,21 |
| 1-6-2004 | 87,06 | 1336 | 0,25 | 1-4-2008 | 87,83 | 2882 | 0,21 |
| 1-7-2004 | 86,89 | 1645 | 0,25 | 1-5-2008 | 88,36 | 2723 | 0,21 |
| 1-8-2004 | 87,24 | 1682 | 0,25 | 1-6-2008 | 88,37 | 3245 | 0,21 |
| 1-9-2004 | 86,33 | 1453 | 0,24 | 1-7-2008 | 88,62 | 2858 | 0,21 |
| 1-10-2004 | 87,15 | 1469 | 0,24 | 1-8-2008 | 89,02 | 2864 | 0,21 |
| 1-11-2004 | 86,32 | 1661 | 0,24 | 1-9-2008 | 89,03 | 2558 | 0,21 |
| 1-12-2004 | 85,15 | 1547 | 0,24 | 1-10-2008 | 89,42 | 2053 | 0,21 |
| 1-1-2005 | 84,24 | 1525 | 0,24 | 1-11-2008 | 89,34 | 2372 | 0,20 |
| 1-2-2005 | 84,87 | 1715 | 0,24 | 1-12-2008 | 89,8 | 2665 | 0,18 |
| 1-3-2005 | 84,92 | 1613 | 0,24 | 1-1-2009 | 89,65 | 2771 | 0,18 |
| 1-4-2005 | 84,1 | 1459 | 0,24 | 1-2-2009 | 92,45 | 2508 | 0,19 |
| 1-5-2005 | 84,62 | 1422 | 0,24 | 1-3-2009 | 93,62 | 2605 | 0,18 |
| 1-6-2005 | 84,73 | 1440 | 0,25 | 1-4-2009 | 95,01 | 2345 | 0,19 |
| 1-7-2005 | 85,39 | 1479 | 0,24 | 1-5-2009 | 95,97 | 2588 | 0,19 |
| 1-8-2005 | 85,56 | 1350 | 0,24 | 1-6-2009 | 95,2 | 2487 | 0,19 |
| 1-9-2005 | 84,41 | 1413 | 0,25 | 1-7-2009 | 94,81 | 2892 | 0,19 |
| 1-10-2005 | 84,46 | 1351 | 0,24 | 1-8-2009 | 94,16 | 2772 | 0,19 |
| 1-11-2005 | 84,2 | 1408 | 0,24 | 1-9-2009 | 94,42 | 3140 | 0,19 |
| 1-12-2005 | 83,75 | 1504 | 0,24 | 1-10-2009 | 93,23 | 3297 | 0,18 |
| 1-1-2006 | 83,47 | 1484 | 0,24 | 1-11-2009 | 94,34 | 3214 | 0,18 |
| 1-2-2006 | 83,38 | 1450 | 0,24 | 1-12-2009 | 94,36 | 3289 | 0,18 |
| 1-3-2006 | 83,46 | 1489 | 0,24 | 1-1-2010 | 93,51 | 3184 | 0,19 |
| 1-4-2006 | 83,51 | 1501 | 0,24 | 1-2-2010 | 94,43 | 2917 | 0,19 |
| 1-5-2006 | 83,1 | 1473 | 0,24 | 1-3-2010 | 94,58 | 2969 | 0,18 |
| 1-6-2006 | 82,96 | 1646 | 0,24 | 1-4-2010 | 94,03 | 3229 | 0,19 |
| 1-7-2006 | 83,11 | 1486 | 0,24 | 1-5-2010 | 93,6 | 2965 | 0,19 |
| 1-8-2006 | 82,21 | 1420 | 0,25 | 1-6-2010 | 93,23 | 2894 | 0,20 |
| 1-9-2006 | 81,75 | 1472 | 0,25 | 1-7-2010 | 93,49 | 3091 | 0,20 |
| 1-10-2006 | 81,24 | 1484 | 0,25 | 1-8-2010 | 93,09 | 2698 | 0,20 |

| | | | | | | | |
|-----------|--------|------|------|-----------|--------|------|------|
| 1-9-2010 | 93,37 | 2814 | 0,20 | 1-7-2014 | 99,01 | 3219 | 0,21 |
| 1-10-2010 | 93,27 | 2797 | 0,19 | 1-8-2014 | 97,89 | 3219 | 0,21 |
| 1-11-2010 | 92,76 | 2772 | 0,19 | 1-9-2014 | 97,23 | 3300 | 0,21 |
| 1-12-2010 | 93,16 | 3035 | 0,20 | 1-10-2014 | 96,93 | 2899 | 0,21 |
| 1-1-2011 | 92,1 | 3352 | 0,20 | 1-11-2014 | 96,97 | 2880 | 0,21 |
| 1-2-2011 | 93,91 | 3757 | 0,20 | 1-12-2014 | 97,68 | 2910 | 0,21 |
| 1-3-2011 | 95,46 | 2952 | 0,19 | 1-1-2015 | 97,73 | 2693 | 0,22 |
| 1-4-2011 | 94,54 | 3390 | 0,19 | 1-2-2015 | 99,03 | 3102 | 0,22 |
| 1-5-2011 | 95,63 | 2999 | 0,19 | 1-3-2015 | 100,35 | 2699 | 0,23 |
| 1-6-2011 | 96,32 | 3170 | 0,19 | 1-4-2015 | 99,38 | 2943 | 0,23 |
| 1-7-2011 | 96,42 | 2974 | 0,19 | 1-5-2015 | 99,3 | 3085 | 0,23 |
| 1-8-2011 | 96,95 | 3098 | 0,19 | 1-6-2015 | 99,77 | 3275 | 0,23 |
| 1-9-2011 | 96,52 | 2608 | 0,19 | 1-7-2015 | 101,11 | 3209 | 0,24 |
| 1-10-2011 | 96,82 | 2696 | 0,19 | 1-8-2015 | 101,15 | 3102 | 0,23 |
| 1-11-2011 | 96,4 | 2162 | 0,19 | 1-9-2015 | 101,59 | 3114 | 0,23 |
| 1-12-2011 | 96,69 | 2109 | 0,20 | 1-10-2015 | 100,95 | 3259 | 0,23 |
| 1-1-2012 | 96,72 | 2291 | 0,20 | 1-11-2015 | 99,23 | 3327 | 0,24 |
| 1-2-2012 | 98,57 | 2383 | 0,20 | 1-12-2015 | 100,41 | 3211 | 0,23 |
| 1-3-2012 | 98,6 | 2219 | 0,20 | 1-1-2016 | 100,44 | 2761 | 0,22 |
| 1-4-2012 | 96,44 | 2263 | 0,20 | 1-2-2016 | 101,05 | 2949 | 0,21 |
| 1-5-2012 | 97,09 | 2083 | 0,21 | 1-3-2016 | 101,94 | 2950 | 0,21 |
| 1-6-2012 | 97,36 | 2289 | 0,21 | 1-4-2016 | 103,59 | 3207 | 0,21 |
| 1-7-2012 | 97,74 | 2376 | 0,21 | 1-5-2016 | 103,28 | 3059 | 0,21 |
| 1-8-2012 | 96,78 | 2656 | 0,21 | 1-6-2016 | 103,22 | 3004 | 0,21 |
| 1-9-2012 | 96,45 | 2516 | 0,21 | 1-7-2016 | 103,47 | 2835 | 0,20 |
| 1-10-2012 | 97,66 | 2388 | 0,21 | 1-8-2016 | 104,05 | 2921 | 0,19 |
| 1-11-2012 | 98,69 | 2538 | 0,21 | 1-9-2016 | 102,45 | 2761 | 0,19 |
| 1-12-2012 | 98,21 | 2236 | 0,20 | 1-10-2016 | 102,13 | 2735 | 0,19 |
| 1-1-2013 | 97,33 | 2205 | 0,20 | 1-11-2016 | 101,49 | 2387 | 0,19 |
| 1-2-2013 | 99,05 | 2146 | 0,19 | 1-12-2016 | 100,85 | 2126 | 0,20 |
| 1-3-2013 | 100,09 | 2170 | 0,19 | | | | |
| 1-4-2013 | 98,1 | 2368 | 0,20 | | | | |
| 1-5-2013 | 97,68 | 2191 | 0,20 | | | | |
| 1-6-2013 | 97,44 | 2194 | 0,20 | | | | |
| 1-7-2013 | 99,19 | 2298 | 0,19 | | | | |
| 1-8-2013 | 98,32 | 2413 | 0,19 | | | | |
| 1-9-2013 | 97,83 | 2640 | 0,20 | | | | |
| 1-10-2013 | 97,71 | 2677 | 0,20 | | | | |
| 1-11-2013 | 97,51 | 2791 | 0,20 | | | | |
| 1-12-2013 | 97,62 | 2709 | 0,20 | | | | |
| 1-1-2014 | 96,49 | 2911 | 0,20 | | | | |
| 1-2-2014 | 98,92 | 2935 | 0,20 | | | | |
| 1-3-2014 | 99,69 | 2955 | 0,20 | | | | |
| 1-4-2014 | 97,06 | 2974 | 0,20 | | | | |
| 1-5-2014 | 97,63 | 3071 | 0,20 | | | | |
| 1-6-2014 | 97,97 | 3143 | 0,21 | | | | |

Annex II: Signatories to Cocoa Covenant in 2010

Where applicable, only relevant members are listed (only those involved in cocoa and/or chocolate processing).

| Direct Signatory/ Member | Sector |
|--------------------------------|--------|
| Ahold | Retail |
| Centraal Bureau Levensmiddelen | |
| Agrimarkt | Retail |
| Albert Heijn | Retail |
| Aldi | Retail |
| Attent | Retail |
| Boni | Retail |
| C1000 ²³ | Retail |
| Coop | Retail |
| Dagwinkel | Retail |
| Deen | Retail |
| Dekamarkt | Retail |
| Dirk | Retail |
| Ekoplaza | Retail |
| EMTÉ | Retail |
| Hoogvliet | Retail |
| Jan Linders | Retail |
| Jumbo | Retail |
| Kingsalmarkt | Retail |
| Lidl | Retail |
| MCD | Retail |
| Nettorama | Retail |

²³ Taken over by Jumbo in 2015.

| | |
|--|------------------------|
| Plus | Retail |
| Poiesz | Retail |
| Spar | Retail |
| Supercoop | Retail |
| Troefmarkt | Retail |
| Vomar | Retail |
| FrieslandCampina | Manufacturer |
| FNV Bondgenoten | Labour Union |
| Hema | Retail |
| Initiatief Duurzame Handel | |
| Ahold | Retail |
| Archer Daniels Midland (ADM) ²⁴ | Trading/Grinding |
| Armajaro ²⁵ | Trading |
| Barry Callebaut | Trading/Grinding |
| BT Cocoa | Grinding |
| Cargill | Trading/Grinding |
| Continaf ²⁶ | Trading |
| Ecom | Trading/Grinding |
| Ferrero | Manufacturer |
| FrieslandCampina | Manufacturer |
| Mars | Bean-to-Bar |
| Heinz | Manufacturer |
| ICCO | NGO |
| Nestlé | Bean-to-Bar |
| Solidaridad | NGO |
| Swisscontact | NGO |
| Oxfam Novib | NGO |
| Petra Foods | Grinding ²⁷ |

²⁴ Cocoa division sold to Olam International in 2014, chocolate division sold to Cargill in 2014.

²⁵ Commodity trading division sold to ECOM Agroindustrial in 2013.

²⁶ Part of Amtrada Group.

| | |
|--|------------------|
| Utz Certified | Certifier |
| UNDP | NGO |
| WCF | NGO |
| WWF | NGO |
| Haven van Amsterdam | Port Authority |
| Amsterdamse Ondernemersvereniging | |
| Cargill | Trading/Grinding |
| Chocolatemakers | Bean-to-Bar |
| Commodity Center Netherlands | Cocoa Storage |
| Cordaid | NGO |
| Katoen Natie Amsterdam | Cocoa Storage |
| Jamin | Retail |
| Mars | Bean-to-Bar |
| Max Havelaar | Certifier |
| Oxfam Novib | NGO |
| Rainforest Alliance | Certifier |
| Solidaridad | NGO |
| Superunie | Retail |
| Tropical Commodity Coalition ²⁸ | |
| Hivos | NGO |
| Oxfam Novib | NGO |
| Solidaridad | NGO |
| FNV Bondgenoten | Labour Union |
| Fairfood International | NGO |
| Landelijke India Werkgroep | NGO |
| SOMO | NGO |
| GoedeWaar.nl | NGO |
| Stop the Traffik | NGO |

²⁷ Cocoa Ingredients division sold to Barry Callebaut in 2013.

²⁸ Ceased operations 2012.

| Both Ends | NGO |
|--|------------------|
| Vereniging Biologische Producenten en Handel | |
| Bonvita BV | Manufacturer |
| Stichting Demeter | NGO/Certifier |
| Bio+ | Manufacturer |
| Unilever | Manufacturer |
| Kruidvat | Retail |
| UTZ Certified | Certifier |
| V&D La Place ²⁹ | Retail |
| Verkade ³⁰ | Bean-to-Bar |
| Vereniging voor Bakkerijen en Zoetwaren | |
| Chocolaterie Albèrt BV | Manufacturer |
| Barry Callebaut | Bean-to-Bar |
| Baronie-de Heer | Manufacturer |
| Becky's | Manufacturer |
| De Beemster | Manufacturer |
| Chocolaterie Boulanger Breda | Manufacturer |
| Cargill Cacao & Chocolate | Trading/Grinding |
| Cerisette Oisterwijk | Manufacturer |
| Choconut | Manufacturer |
| Cloetta | Manufacturer |
| De Eurofij | Manufacturer |
| Ferrero | Manufacturer |
| Van Ham Chocolaterie | Manufacturer |
| Lagosse Chocolaterie | Manufacturer |
| Mars | Bean-to-Bar |
| Kraft Foods ³¹ | Bean-to-Bar |
| Nestlé Nederland | Bean-to-Bar |

²⁹ V&D went bankrupt in 2016, selling La Place to Jumbo.

³⁰ Part of United Biscuits, which was taken over by Yildiz Holding in 2014.

³¹ Split to form Mondelēz International in 2012.

| | |
|-------------------------------|--------------|
| Penotti | Manufacturer |
| Rijkenberg | Manufacturer |
| Steenland Chocolate | Manufacturer |
| Trianon | Manufacturer |
| Verkade ³² | Bean-to-Bar |
| Visser Chocolate | Manufacturer |
| Weber Chocolate ³³ | Manufacturer |

³² See 11.

³³ Now the Candy Store.