

Living in a Society without Cash
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The Establishment of a Cash-Free Society in Germany and the Netherlands

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Bachelor Thesis

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Abstract

Within the last years the payment behavior of the Dutch and German citizens has changed. In both countries the use of cash decreased, whereas the use of cards payments and innovative payment methods increased. Nonetheless, these developments happened at a different speed. The Dutch society seems to be closer to the establishment of a cash-free society than the German society. This phenomenon leads to the question: How can it be explained that a cash-free society in the near future is more likely in the Netherlands than in Germany? One potential explanation appears to be the political attitude of the ruling coalition toward the abolishment of cash. Accordingly, the German ruling coalition is not in favor of the cash-free society while, the Dutch ruling coalition favors the cash-free society. However, the findings of this bachelor thesis show that the ruling coalitions do not position differently towards the issue. Hence the disparities cannot be explained by the attitude of the ruling ideology in the countries of interest.

Table of Contents

1. Introduction	5
2. The Rate of Change in Payment Behavior in the Two Countries	9
2.1 Introduction	9
2.2 The Use of Cash in Germany	10
2.3 The Use of Card Payments in Germany	12
2.4 The Use of Innovative Payment Methods in Germany	14
2.5 The Use of Cash in the Netherlands	15
2.6 The Use of Card Payments in the Netherlands	17
2.7 The Use of Innovative Payment Methods in the Netherlands	19
2.8 Comparison of Payment Behavior in Germany and the Netherlands	19
3. Theory	23
4. Methodology	28
4.1 Research Design	28
4.2 Case Selection and Sampling	29
4.3 Operationalization	30
4.4 Data Collection and Analysis	31
4.4.1 Prevailing Ideology	31
4.4.2 Payment Behavior in Germany and the Netherlands	34
5. Analysis	36
5.1 Executive Branch	36
5.2 Legislative Branch	39
5.3 Comparison	44
6. Conclusion	45

List of Figures

<i>Figure 1</i>	11
<i>Figure 2</i>	13
<i>Figure 3</i>	16
<i>Figure 4</i>	18

List of Tables

<i>Table 1</i>	9
<i>Table 2</i>	32
<i>Table 3</i>	35
<i>Table 4</i>	39
<i>Table 5</i>	43

1. Introduction

According to Arvidsson (2019), Money is “one of the most important innovations in the history of humanity” and one reason why society works as it works today (Arvidsson, 2019, pp. 1). It provides safety for transactions and also makes it possible to pursue a transaction in real-time which was not always the case when trade was still based on goods only. Other scholars emphasize that money is a tool of communication that provides social rules and structures within society (Hodgson, 2006; Smithin, 2000)

“Money” or “cash” are two terms which imply in many cases the same. Hence, they are often used in an identical context. Generally, the terms are often referred to physical money and in particular coins and banknotes (Danish Payment Council, 2016). In this bachelor thesis both terms are used referring to the same definition.

The origin of money can be traced back to Mesopotamia and Egypt, where it existed already five thousand years ago. Ever since it went around the world and through different monetary systems (Arvidsson, 2019). Additionally to the coins and paper currency, which was the predominant payment method, card payment emerged in the past century (Gracia-Schwartz, Hahn, & Layne-Farrar, 2006). With the development of credit and debit cards, cash became less used in the past decades. Additionally, new payment technologies and services emerged. Contactless payments and online shopping have become a natural payment procedure without cash. Consequently, we see the development of the so-called “cashless society” (Fabris, 2018).

The terms “cashless” or “cash-free” society, which will be used in the following research are defined by different researchers. Arvidsson (2019) writes that within a cash-free society cash will disappear and be replaced by other payment tools. Referring to Fabris (2018), a cashless society implies that within society a digital version of cash will exist. Thus “legal tender money exists, is recorded, and is exchanged only in electronic digital form” (Fabris, 2018, pp. 55). Other scholars suggest that cash, in terms of paper money and coins, is replaced by virtual money and that so-called physical money does not exist within the society anymore (Sajter, 2013; Warwick, 1992). The cash-free society is a community wherein everything is paid electronically by tools such as debit and credit cards. A cashless society is established when “No one uses cash” within this community and all purchases are made electronically (Akinola, 2012, pp. 49). Consequently, a development towards a cash-free society implies that the use of cash is going to change. Reder (1982) analyzes in his article “Chicago economics: Permanence and change” what changed and what stayed permanent in Chicago during the last fifty years. Accordingly, “permanence” implicates that nothing

changes. “Change” on the other hand shifts something over time (Reder, 1982). Therefore it can be argued that the development of a cash-free society is the rate of change in payment behavior that takes place over time. The establishment of a cash-free society thus requires that payment behavior changes. In order to achieve a cash-free society, other payment methods need to become predominant over the use of cash. These can be in the scope of electronic or mobile payments. If the use of cash remains and in general does not change, the development towards a cash-free society will be rather unlikely.

If a cashless society were to be established within the near future, some advantages and disadvantages would come along. There are ongoing discussions on what it will imply for society if cash disappears. Scholars argue that it would stimulate economic growth and that it also would provide more transparency, accountability and less cash related fraud (Hasan, Renzis, & Schmiedel, 2013, Mieseigha & Ogbodo, 2013). However, it also poses threats to society. Research shows that the social costs of a cashless society are high especially in regards to vulnerable groups and the intrusion of privacy (Ceneey, 2019; Farbis 2018). Beyond it would be threatened by technological issues such as a failure of the device that is used for cash-free payment. This comparison of pros and cons of an emerging cashless society is also part of political discussions as this research will show at a later stage.

An intriguing question therefore is: How likely is the establishment of a cash-free society? For the establishment of a cashless society, the use of cash has to stop. We can observe that this process is already taking place in some countries but that other countries do not follow this development at the same speed. Looking at a few countries in Europe we can observe that the amount of cashless payments is raising and subsequently the likelihood of the establishment of a cash-free society is raising. In Sweden, for example, this development is faster than in other countries. Within the last twelve years, the circulation of cash diminished by about 47 percent and only 20 percent of the payments are made by cash. Countries like the Netherlands, Denmark, and Norway follow this trend (Christou, 2018). In 2015, the Dutch pursued more payments by card than by cash (Jonker, Hernandez, Vrees, & Zwaan, 2018). According to the World Cash Report of 2018, the number of cash transactions was 45 percent in the Netherlands measured at the point of sale, which represents the lowest amount among the Euro countries (van der Knaap & Vries, 2018). Other European countries such as Italy, Austria, and Germany show a slower development. In 2017 the German Bundesbank stated that the number of cash transactions measured at the point of sale decreased by about 8 percentage points compared to a study in 2011. Yet, compared to the frontrunners, it remains high with 74 percent (Deutsche Bundesbank, 2011).

It is therefore interesting to investigate why these developments are different to some extent and what it implies for the establishment of a cash-free society in the respective countries. This study aims to identify what makes a country more prone to go cash-free and which factors stimulate its reluctance. For the realization, a case study with two diverse cases will be conducted in this bachelor thesis. A country that has a high rate of change in payment behavior is selected, namely the Netherlands and one which does not seem to change that fast, namely Germany. To find an answer to the outlined issue this research is structured around the following research question:

RQ: How can it be explained that a cash-free society in the near future is more likely in the Netherlands than in Germany?

The research question will be answered by means of answering two sub-questions:

- 1. How did a cash-free society in Germany and the Netherlands develop thus far?*
- 2. Which factors explain the disparities in the rate of change in payment behavior in Germany and the Netherlands?*

The following chapter, “The rate of change in Payment Behavior”, describes the developments regarding a cash-free society in the Netherlands and in Germany. A closer investigation of the development of the use of cash in the two countries of interest is conducted. This eventually results in the answer to the first sub-question. The second sub-question is answered in chapter three. This chapter explores the factors that might explain the differences in the rate of change in developing a cash-free society. This is carried out by using the policy termination literature. The literature suggests that terminating a certain practice is not easy and that certain barriers can occur when terminating a policy or an institution (DeLeon, 1978; Bardach, 1976; Zhang, 2009). Such barriers may explain why countries develop at a different speed with regard to the concerned issue. Which of these barriers is most likely to be influential is found in the answer to the second sub-question. Based on the outcomes of chapter three, which examines the possible barriers that may occur when terminating a certain policy or practice, the development in the two countries of interest are analyzed. It is expected that in Germany some barriers will exist more than in the Netherlands. The outcomes of this analysis are presented in chapter 5. Prior to that, in chapter 4, the methodology that is used in this research is described.

The cash-free society is a societal relevant issue which became more and more present in the last decade. In China, the cash-free society might already be a reality in the next few years. The mobile payment services WeChat Pay and AliPay are already used by one billion Chinese citizens. Worldwide the number of people that will be able to use non-cash payment methods is estimated at 5.9 billion in 2025. This implies a percentage of 71 percent of the world population (Döderlein, 2019). This large amount stimulates the expectation that the cash-free society will be a no-brainer. Yet others argue that this will not be the case, as the payment method cash remains popular. Additionally, a society without cash would simply entail too many risks and would therefore not be established within the next years (Fleming, 2019). Thus, this research is societal relevant due to the fact that it analyzes factors that might restrict the establishment of a cash-free society in the two countries of interest, the Netherlands and Germany.

Besides addressing social relevance, this bachelor thesis also aims to fulfill scientific relevance. As the policy termination literature poses, previous studies were missing cross country comparison or multiple case study design and development of concepts (Bauer, 2009). These limitations are going to be approached in this bachelor thesis. The following four chapters of this bachelor thesis entail a literature review that summarizes the most important theories and arguments concerning the policy termination literature. Deriving from these arguments one relevant barrier of termination is selected for this study. Subsequently, the applied methodology is introduced wherein the chosen barrier of termination is operationalized. Further, the data collection and analysis will be conducted and eventually, the answer to the research question will be given in the conclusion.

2. The Rate of Change in Payment Behavior in the Two Countries

2.1 Introduction

The previous chapter already outlined that there are prevailing differences between Germany and the Netherlands considering the rate of change in payment behavior. While the Netherlands belongs to one of the countries that seem to phase out cash, the traditional payment method remains popular in Germany. This chapter serves the purpose of investigating in more detail how the payment behavior changed over time in the countries of interest and to what extent this change rate differs. By means of that the first sub-question is answered.

The following units of analysis are selected to analyze the change rate in payment behavior: use of cash, use of card payment and use of innovative payment method. A clear differentiation of payment methods is depicted in table 1 below. This differentiation of payment methods is used to describe the development of payment behavior in the two countries. The respective data that is used for the analysis is derived from documents of de Nederlandsche Bank and the Deutsche Bundesbank.¹

Table 1
Categorization of Payment Methods

Payment System	Payment Method
Non-cash payments	Electronic Payments
	Debit card
	Credit card
Cash payments	Innovative Payment Methods
	Contactless payments
	Mobile payments
Cash payments	Coins
	Banknotes

¹ A specific description of the selected document will follow in chapter 4.2.2, the methodology part of this bachelor thesis

2.2 The Use of Cash in Germany²

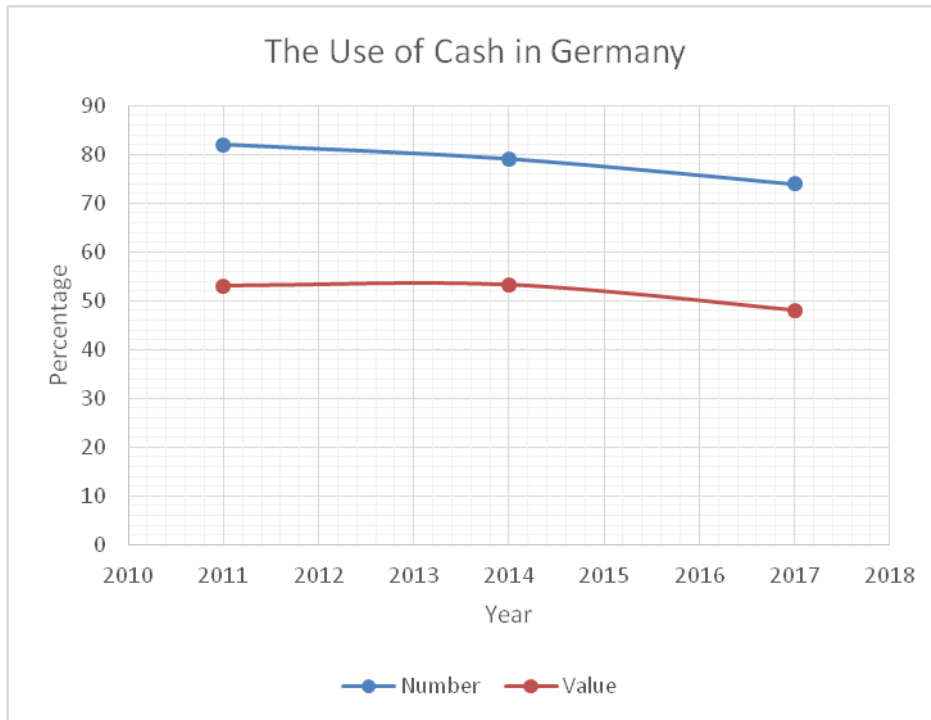
The data for the use of cash in Germany is derived from three studies of the Deutsche Bundesbank in 2011, 2014 and 2017. The studies provide different data on payment behavior in Germany, which was measured at the point of sale (POS). As table 1, “the categorization of payment methods” has shown cash payments are categorized in banknotes and coins in this research. For the use of cash it has particularly been looked at (1) how cash use developed in terms of number and value of transactions, (2) the development of the use of cash broken down into various transaction categories (“below 5 euros” and “50 to 100 euros”) and (3) how the amount of cash that is carried around by citizens progressed over the three respective studies.

In the study of 2011, the number of cash transactions was 82 percent and the value 53.1 percent. While the number of transaction describes how many times cash transactions have been conducted, the value of transaction targets the amount of cash that is transferred. Accordingly, it can be assumed that low amounts were often paid by cash and high amounts transferred by other payment methods. In 2014 the study demonstrated that the number of transactions decreased and a slight increase in the value of the transaction was visible compared to the previous study in 2011. The number of transactions was 79.1 percent and the value of the transaction amounted to 53.2 percent. This indicates that fewer payments were pursued by cash but that the amounts paid by cash increased slightly. In 2017, the last conducted study revealed that the number and value of transactions at the POS decreased both, compared to 2014. The number of transactions alleviated to 74 percent while the value of transaction decreased to 48 percent. These developments of cash use in Germany between 2011 and 2017 are depicted in figure 1 below .

² The Data of chapter 2.2 are based on reports of the Deutsche Bundesbank in 2011, 2014 and 2017 (Deutsche Bundesbank 2011, Deutsche Bundesbank, 2014, Deutsche Bundesbank, 2017)

Figure 1

The use of cash in terms of number and value of transactions in Germany in percentage of total transactions from 2011-2017



Further, the development of the use of cash broken down into various transaction categories (“below 5 euros” and “50 to 100 euro” and above) is demonstrated. In 2011, 98.3 percent of the payments in the transaction category “below 5 euros” were settled by cash. These findings emphasize that almost all small payments were transferred via the payment method cash. However, the preference for cash payments remained up to the transaction category “50 to 100 euros”. From 50 euros onwards, only 46 percent of the consumers decided to pay the due amount by cash. Three years later, in 2014, the findings of the study show that the amount of transaction that is transferred by cash below 5 euros remained high. 96 percent of the German consumers settled these small amounts by cash. The preference in payment behavior up to the transaction category “50 to 100 euros” decreased to some degree. Only 41.9 percent of the German citizens maintained to pay these amounts by cash. In 2017 the amount of payments below 5 euros transferred by cash equaled the amount of 2014, namely 96 percent. Once again the preference for cash payments remained up to the transaction category of 50 to 100 euros. Nonetheless, a further decrease of cash payments in the respective transaction category was recorded since 39 percent of these amounts were paid by cash.

Moreover, an illustration of the average carried amount of cash in 2011, 2014 and 2017 can be given. In 2011 on average, the German consumers carried 103 euros of cash in their wallets. Herein, the share of euros coins was 5.90 euros. The research of 2014 showed that the carried amount of cash did not change. Thus again, on average 103 euros of cash were carried. Moreover, the share of coins slightly decreased to 5.73 euros. Surprisingly the last study in 2017 showed an increase in the overall amount of cash that was found in the consumer's wallet as well as the share of coins. On average 107 euros have been carried of which 6.29 were euro coins.

2.3 The Use of Card Payments in Germany³

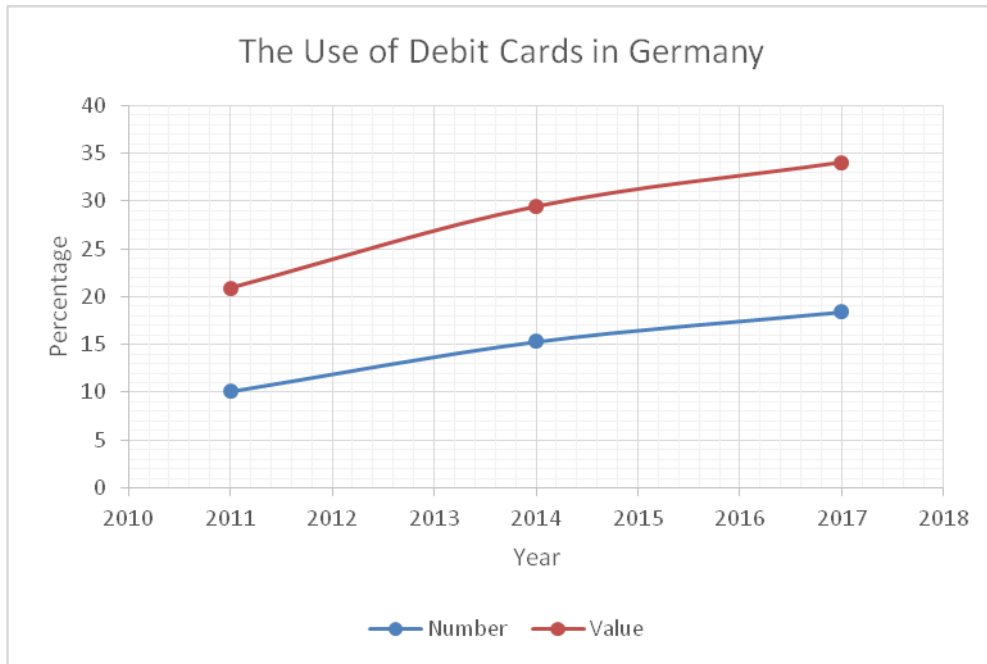
The studies of the Deutsche Bundesbank further provide data on the use of card payments in Germany. Referring to table 1, this bachelor thesis categorizes card payments into debit and credit cards. This research focuses on (1) how the use of card payments developed in terms of number and value of transactions, (2) the development of the share of card payments in the transaction categories ("below 5 euros" until "500 euro and above") and (3) if the ownership of cards decreased or increased over the years 2011, 2014 and 2017.

First, the changes in the number and value of transactions are demonstrated. In 2011 the number and value of transactions were recorded for the use of debit cards and credit cards. The number of debit card transactions was 13.4 percent and the value of transactions represented 28.3 percents. These numbers indicate that relatively few card payments were made compared to cash payments. In contrast to the use of debit cards, the use of credit cards was low. Credit cards were used 1.8 percent in terms of number and 7.4 percent in terms of value by the German residents. In 2014 the Deutsche Bundesbank recorded an increase in the value and number of transactions recorded for debit cards, while it decreased for credit cards. For debit cards, the number of the transactions was subsequently 15.3 percent and the value 29.4 percent. Credit cards, on the other hand, were used 1.3 percent according to the number of transactions and 3.9 percent in terms of the value. In 2017 the study emphasized that once again, the use of debit cards but this time also the use of credit cards increased. Accordingly, debit cards were used 18.4 percent, looking at the numbers of transactions, and 34 percent in terms of the value of transactions. For credit cards, the value increased to 4.4 percent and the number to 1.5 percent. The respective developments for the use of debit cards in Germany between 2011 and 2017 are illustrated in figure 2 below.

³ The Data of chapter 2.3 is based on reports of the Deutsche Bundesbank in 2011, 2014 and 2017 (Deutsche Bundesbank 2011, Deutsche Bundesbank, 2014, Deutsche Bundesbank, 2017)

Figure 2

The use of debit cards in term of number and value of transaction in percentage in Germany from 2011-2017



Further, the development of the share of card payments in the transaction categories can be determined. In 2011, transactions in the amount category “below 5 euros” were rarely settled by card. Only 0.6 percent of the German consumers made use of debit cards and 0.2 percent of credit cards. Most debit card payments, namely 43 percent, were pursued in the transaction category “100 to 500 euros”. Credit card transactions, on the other hand, were mainly settled in the transaction category “500 euros and more” by 24 percent. In 2014 the research of the Deutsche Bundesbank stresses that the payments made by card in the transaction category “below 5 euros” increased in regards to the previous study. Thus debit card payments below 5 euros represented 2.7 percent of the transactions, whereas the amount for credit card payments was not indicated. While the greatest number of debit card payments was still settled in the amount category “500 euros and more” by 43 percent, the transaction category “100 to 500 euros” showed the same amount of debit card payments. In this category were most of the credit card payments were settled as well, namely 12 percent. In 2017 the payments that were made in the transaction amount category “below 5 euros” decreased compared to the study in 2014. 2 percent of these transaction amounts were paid by debit cards while once again the number for credit cards was not given. The transaction category wherein most of the debit card payments are transferred was “100 to 500 euros”

which compared to the previous study to increased 46 percent. The majority of the credit card payments, 9 percent in fact were found in the category “500 euros and more”.

Lastly, the development of debit and credit card ownership is outlined. In 2011, 94 percent of the Germans indicated that they own a debit card. Hence debit cards were widely known and therefore also the most owned type of payment card among the German citizens. If people did not use debit cards, the second choice of card payment method was the credit card. Yet, approximately only one-third of the German citizens owned a credit card in 2011, namely 33 percent. The study of 2014 showed that the number of people that owned a debit card increased, since 97 percent of the German residents owned a debit card. However, the ownership of credit cards decreased to 32 percent. Consequently, debit cards maintained the dominant mean of card payments. The data of the last study in 2017 depicted that both, the ownership of debit and credit cards, increased. Accordingly, 98 percent of the German citizens owned a debit card and 36 percent a credit card.

2.4 The Use of Innovative Payment Methods in Germany⁴

The Deutsche Bundesbank also looked at the use of innovative payment methods in the three selected studies. As table 1 showed, the bachelor thesis looks at innovative payment methods in terms of contactless payment methods and mobile payment methods. Herein it focuses (1) on the number and value of transactions by innovative payment methods, (2) the familiarity of innovative payment methods and (3) the use of innovative payment methods.

In 2011 the number and value of transactions made by contactless payment methods were low. No shares of transactions were recorded in terms of the number and only 0.1 percent regarding the value. Additionally, no shares of transactions were recorded for mobile payment methods. In 2014 the value of transactions made by contactless payments remained 0.1 percent while the use in terms of number increased to 0.1 percent. Once again, no share of transactions was pursued by mobile payment methods. The study of 2017 demonstrates that the share of contactless payments was 0.7 percent regarding the number and 1.1 percent regarding the value. For the first time the share of mobile payments was also recorded. These were settled by 0.1 percent measured in terms of the numbers of transactions.

Looking at the familiarity of innovative payment methods, the findings of 2011 show that 53 percent of the German citizens did not know what contactless payment is and 48

⁴ The Data of chapter 2.4 is based on reports of the Deutsche Bundesbank in 2011, 2014 and 2017 (Deutsche Bundesbank 2011, Deutsche Bundesbank, 2014, Deutsche Bundesbank, 2017)

percent did not know what mobile payments implies. Three years later, the awareness with contactless payment was higher than in 2011. The number of German citizens that were not familiar with contactless payments decreased to 46 percent while the number of people that were not familiar with mobile payments decreased to 41 percent. According to the last study in 2017, the familiarity with contactless payments increased once again. Contrasting to the studies before, the study of 2017 indicated if the German citizens were already familiar with contactless payments methods. Already 60 percent of the German citizens did know what the payment method comprised of. The same applied for mobile payments whereas already 50 percent were aware of it.

Moreover, the indicated use of innovative payment methods is outlined in two studies of the Deutsche Bundesbank. In 2011 a very small amount, in fact, 6 percent of the German citizens, stated that they have used contactless payments before and only 1 percent said that they transferred money through mobile payments. In 2014 already 9 percent indicated that they used contactless payments before, which was 2 percent for mobile payments.

2.5 The Use of Cash in the Netherlands⁵

To demonstrate the development of the use of cash in the Netherlands, a long-term study of de Nederlandsche Bank (DNB) is analyzed. For this bachelor thesis, the years 2010, 2014 and 2016 of the long-term studies are examined. Here again, the author looks at (1) how the cash use developed in terms of number and value of transactions, (2) the development of the use of cash broken down into various transaction categories (“below 5 euros “until “100 euros and above”) and (3) how the amount of cash that is carried around by citizens progressed over the three respective studies.

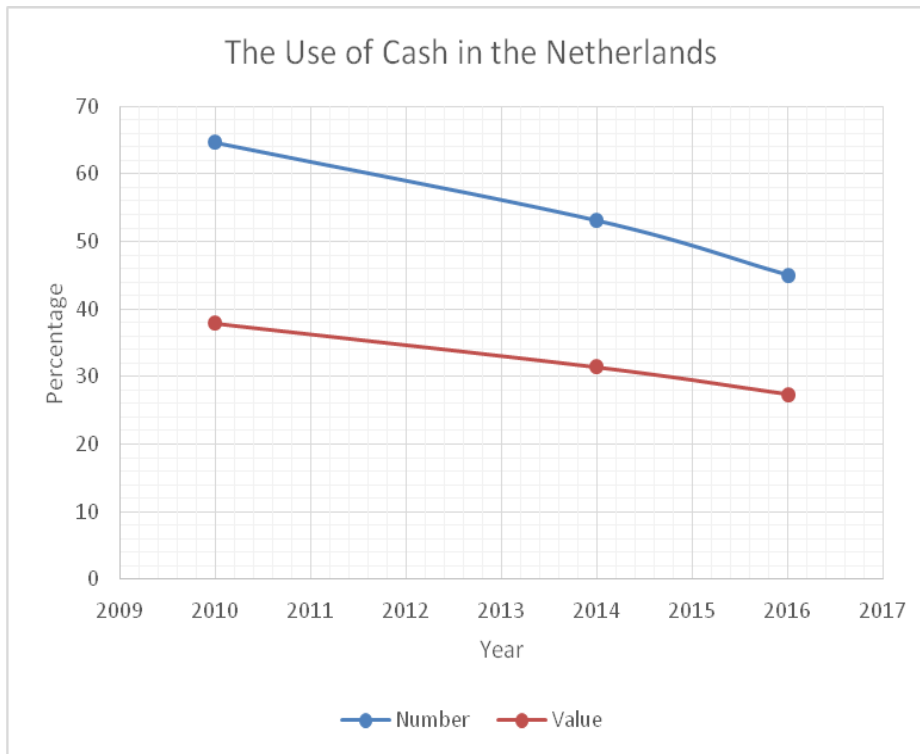
First, it is shown how the use of cash developed in terms of number and value in the Netherlands in analyzed. In 2010 the DNB researched that number of cash transactions was 64.7 percent while the value of transactions amounted to 37.9 percent in the Netherlands. This points out that small amounts were rather paid by cash than by other means of payment. In the year 2014, the use of cash transactions decreased in terms of number and value of transactions. The study of the DNB reveals that the relative number amounted to 53.1 percent, while the value entailed 31.4 percent. Two years later, in 2016, the study shows that the number and value of cash transactions decreased again in both cases. The number of transactions decreased to 45 percent while the value of transactions decreased to 45 percent.

⁵ The Data of chapter 2.5 are based on a report of de Nederlandsche Bank in 2018 (Jonker, Hernandez, de Vrees & Zwaan, 2018)

These results emphasize that in 2016 the Dutch citizens paid more with other transaction methods than they used cash regarding the total number and value. The development of the use of cash in the Netherlands is illustrated in figure 3.

Figure 3

The use of cash in terms of number and value of transaction In the Netherlands in percentage from 2010-2016



Further, the development of the use of cash broken down into transaction categories is demonstrated. However, the long term study of the DNB only provides data for the years 2010 and 2016. In 2010, small amounts were mainly settled by cash out of the payments below 5 euros, 81 percent were conducted in cash. This preference for cash payment changed from the transaction category “50 to 100 euros” the transaction category “20 to 50 euros”, in which only 42 percent still paid the due amount by cash. The data of 2016 indicates that fewer small amounts were settled by cash, namely 64 percent in the amount category “below 5 euros”. Moreover, the amount category wherein the Dutch citizen paid less by cash than by other payment methods, shifted to a lower one. By a transaction that amounted to 10 to 15 euros only 43 percent were transferred by cash.

Additionally, the development of the average amount of cash that is carried around by Dutch citizens is depicted. In doing so, the socio-demographic variable “age” is taken into

account. In 2010 the amount of cash that has been carried on person was an average of 40 euros, although a significant gap between the youngest group (25-34) and the oldest (75 plus) group was noticed. In general, the youngest group carried around 33.9 euros of cash with them, while this was about 56.1 euros for the oldest group. In 2014 the research demonstrates that the amount of cash that was carried within the Dutch wallets remained the same, that is to say, 40 euros. Yet, the youngest age group carried less cash namely, 27.9 euros, while the amount for the oldest age group increased to 61.5 Euros. Two years later, in 2016, the data of the DNB shows that more cash is carried again compared to 2014. Accordingly, the overall amount increased to 40.59 euros. Both, the youngest and the oldest age group carried slightly more money with them as well, respectively 32.4 euros and 66.8 euros.

2.6 The Use of Card Payments in the Netherlands⁶

The DNB further examined how the use of card payments in the Netherlands progressed over the years. This bachelor thesis focuses on (1) how the use of card payments developed in terms of number and value of transactions in the Netherlands and (2) the development of the share of card payments in the transaction categories below 5 euros until 100 euros.

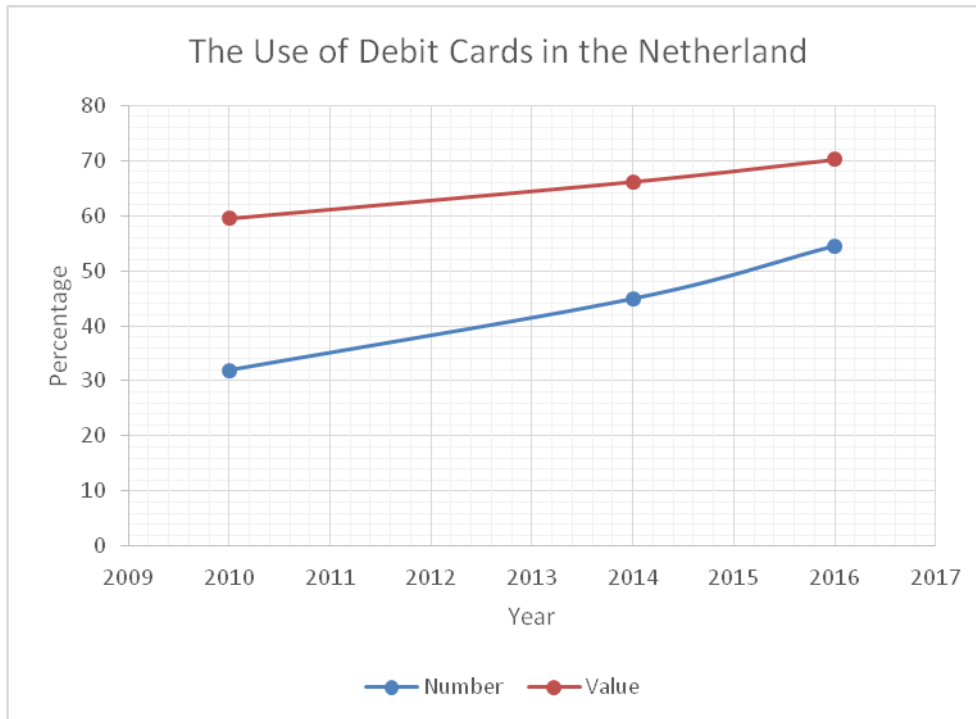
Firstly, this research describes how the value and number of transactions developed in the years 2010, 2014 and 2016. In 2010 the study of the DNB researched the number of transactions for debit and credit cards. While the number of debit card payment was 31.9 percent, the value amounted to 59.5 percent. Therefore it can be stated that the Dutch citizens made few payments by debit card but if they did the value of the payment was relatively high. The number and value of transactions for credit cards were in the respective year less than 1 percent in regards to the number of transactions and 2.2 in regards to the value. Thus the respective data shows that debit cards were the dominant payment method when it comes to card payments. In 2014, the Nederlandsche Bank found out that the use of card payments and in particular debit cards increased. In this year the value of transaction of the debit card was 66.2 percent. The number increased as well to 44.9 percent. Regarding the credit card, the number of transactions remained relatively low with 2.2 percent in value and below 1 percent in value of transactions. In 2016, once again, the use of debit cards increased in number and value while the use of credit cards remained the same as in the previous years. In this year the number of transactions was 54.5 percent and the value 70.2 percent in 2016. It is striking that even the number of transactions was over 50 percent, which implies that more people paid by

⁶ The Data of chapter 2.6 are based on a report of de Nederlandsche Bankin 2018 (Jonker et. al, 2018)

card than with any other payment method. The respective developments for the use of debit cards in the Netherlands are illustrated in figure 4 below.

Figure 4

The use of debit cards in term of number and value of transaction in percentage in the Netherlands from 2010-2016



Following, the developments of the share of card payments in the transaction categories “below 5 euros until 100 euros” are shown. Since no data is provided for the year 2014 by the DNB, the years 2010 and 2016 are of special interest here. The data of 2010 shows that card payments were usually not conducted when the value of transactions was high. Only 13 percent of the Dutch citizens indicated that they would pay by debit card if the amount was in the transaction category “below 5 euros”. None of them indicated that they would use a credit card for this amount. This payment behavior shifted from cash to debit card within the transaction category “20 to 50 euros”. Here, already 57 percent of the Dutch citizens used debit cards to settle the due payment. Credit cards were mainly used within the transaction category “50 to 100 euros” by 5 percent. The report of the DNB emphasized that in 2016 smaller amounts were increasingly paid by debit card than in 2010. To be specific, 36 percent of the Dutch transferred payment in the transaction category “below 5 euros” by debit cards. The majority of the Dutch consumers, namely 57 percent, already pursued debit card

payments within the amount category “10 to 15 euros”, which is, therefore, two amount categories lower than in 2010. Credit cards, on the other hand, were generally less used compared to the data of 2010. While the transaction category with the most credit card payments remained the same, namely “50 to 100 euros”, the overall amount of credit card payments in this category decreased to 3 percent.

2.7 The Use of Innovative Payment Methods in the Netherlands

The DNB further focused on the development of innovative payment methods in the Netherlands. Herein, only the payment method of “contactless payments” was addressed. As contactless payments were only introduced in the Netherlands in 2014, solely data from 2015 and 2016 is available. Generally speaking contactless payment methods were adapted fast by the Dutch citizens .

While in the year of introduction 8 million transactions were made, this number already increased to 135 million in 2015. The number of contactless payments rose again up to 630 million in 2016. The relative use of contactless payments was one percent in 2015 as well as in 2016. However, the socio-demographic variable “age” played another crucial role in this. Accordingly, young people from ages 19 to 34 made most of the contactless transactions. These comprised in 2015 of 1.8 percent and in 2016 of 2.1 percent. Striking in regards to the results form 2016 was that one-third of this payment method was used to perform transactions within the amount category “below 5 euros” (Jonker, Hernandez, de Vrees & Zwaan, 2016).

2.8 Comparison of Payment Behavior in Germany and the Netherlands ⁷

The following comparison entails three parts. First, the use of cash payments is compared followed by the use of card payment and finally the use of innovative payment methods. The comparison enables the author of this thesis to answer the first sub-question.

In both countries of interest, this research looked at three aspects that demonstrated the development of cash use. Starting with the first aspect, the findings emphasized that both countries showed a decrease in the use of cash. However, these developments have to be put into perspective. In Germany, the use of cash decreased by number and value of transactions from 2011 until 2017. The use of cash was still high, especially when looking at the number

⁷ The data of chapter 2.8 are based on reports of the Deutsche Bundesbank in 2011, 2014 and 2017 (Deutsche Bundesbank 2011, Deutsche Bundesbank, 2014, Deutsche Bundesbank, 2017) and a report of de Nederlandsche Bank in 2016 (Jonker et. al, 2018)

of transactions. In 2017 the number was 74 percent which implicates that still a great number of payments were still made by cash. Comparing the data to the Netherlands differences can be observed. There, the number of transactions was compared to the year before lower with 45 percent. Thus the Dutch citizens pursued more card and other payment methods than cash transactions measured in terms of the number of transactions. Looking at the value of transactions the cash usage in the respective countries a gap is shown as well. Accordingly, this is in total 20.6 percent compared by the years 2017 in Germany and 2016 in the Netherlands. While the cash use first falls under 50 percent in Germany in 2017, the Netherlands already reached that already in 2016.

Further, the development of the use of cash broken down into various transaction categories was shown in Germany and the Netherlands. Here, differences in development were recorded as well. In general, the transactions made by cash in the amount categories “below 5 euros” decreased in both countries. Nonetheless, in 2017 most of the payments were settled by cash with 96 percent in Germany. In the Netherlands it decreased to 64 percent in 2016. Besides, cash was more used for a small amount in Germany than in the Netherlands. While the majority of the German citizens switched from cash to other payment methods in the transaction category “50 to 100 euros” in 2017, the Dutch citizens already showed this payment behavior in 2016 the amount category “15 to 20 euros”.

Moreover, the amount of cash that is carried by the Dutch and German citizens differs. In Germany, the average of cash that was carried within the wallets was around 109 euros in 2011, whereas this was only 40 euros in the Netherlands in 2010. These numbers only changed slightly over the next couple of years. As in Germany the amount decreased slightly to 107 euros in 2017, in the Netherlands this even increased little to 40, 59 euros. Thus, it can be argued that the Germans perceive it more important to have cash ready by hand than the Dutch.

Furthermore, the use of card payments in Germany and the Netherlands can be compared. For this comparison, two aspects can be taken into account. Referring to the first aspect, the development in terms of value and number of transactions, the comparison shows that, even though both countries recorded an increase in the use of debit cards within the analyzed time frame, the Dutch citizens made more use of it than the German citizens. As in Germany the number of debit card transactions increased steadily by 8 percentage points, in the Netherlands an increase of 22.6 percentage points was shown within the time frame of six years. In 2017 the number of transactions was 18.4 percent in Germany, while in the Netherlands the share of the number of transactions by debit cards was already 54 percent in

2016. The high disparities in development also become clear concerning the value of transactions. While in 2017 the value of transactions was 34 percent in Germany, 70.2 percent was recorded in the Netherlands in 2016. Noticeable in both countries is that the use of credit cards was relatively low and only slightly increased over the measured time. Therefore the German citizens and the Dutch citizens rely heavily on debit cards when it comes to card payments.

The second aspect, which addressed the development of the share of card payments in the transaction categories shows that in both countries the use of debit cards in the transaction category “below 5 euros” increased. However this increase was only slightly in Germany compared to the Netherlands. In Germany the transaction settled by debit card increased from 2011 to 2017 from 0.6 percent to 2 percent while in the Netherlands it increased from 2010 to 2016 from 13 percent to 36 percent. Hence the number of small payments transferred by debit cards is higher in Netherlands than in Germany.

In regards to innovative payment methods, no structural comparison can be drawn since the measurement for this payment method are different in the two studies of interest. Yet it can be said that familiarity with contactless and mobile payments increased over the years in Germany.

In the Netherlands, the use of contactless payments increased from 8 million transactions in 2014 to 630 million transactions in 2016. This is regarding the relative use of all payment methods 1 percent which almost equals the number of contactless payments in Germany in 2017 which entailed 1.1 percent. Thus, the use of innovative payment methods shows a small increase in both countries of interest.

Deriving from the comparison above it can be concluded that Germany and the Netherlands differ in their rate of change in payment behavior. In Germany, the use of cash decreased over the measured time frame of six years. However, we see a greater decrease in the Netherlands. The use of cards did increase in Germany but also only slightly in comparison with the Netherlands. Innovative payment methods are used, but not to a great extent in both countries of interest. The outlined data reveals that cash is still predominant as a payment method in Germany but not in the Netherlands. Therefore, the change of payment behavior happens more rapidly in the Netherlands compared to Germany. Summarized it can be said that the Netherlands developed a cash-free society to a greater extent than Germany.

It leads to the question of how these differences can be explained. In the next chapter of this bachelor thesis, barriers for termination are discussed, which may serve an explanation to the differences in development towards a cash-free society. Since for the establishment of a

cash-free society the use of cash has to stop, it is expected that more termination barriers for the use of cash exists in Germany than in the Netherlands.

3. Theory

The previous chapter has shown that there are differences in the rate of change in payment behavior and that this behavior has changed over time more in the Netherlands than in Germany. This raises the questions which factors enable or block change of an institution. The policy termination literature offers an insight into why certain institutions do not easily change or eventually cancels a certain practice. Additionally, it provides an answer to the second sub-question that interrogated the factor, which explains the disparities in the rate of change in payment behavior in Germany and the Netherlands.

In general, the policy termination literature is divided by two prevailing groups of policy termination researchers: the early and later termination scholars. The early termination literature suggests that institutions, policies, and programs are hard to terminate due to different termination obstacles (DeLeon, 1978; Daniels, 1995; Zhang; 2009). Kaufman's work (1976) provides an initial foundation for policy termination research and generally argues that institutions are not terminated even though they do not fulfill their original purpose anymore.

Kaufman (1976), drew attention to the topic of policy termination and the fact that it is rarely researched (Kaufman, 1976). Based on Kaufman's work the early termination scholars investigated barriers that can emerge in a termination process. Bardach (1976) for instance examines why the termination of a policy is rarely attempted and what actually stimulates termination. He defines five reasons that hinder policy termination, namely a policy is (1) made to endure, (2) politicians want to avoid conflicts over termination and (3) they do not want to be blamed for remaining a useless policy for too long. Moreover (4) the fear of damage is too high and (5) incentives for termination are missing. Thus, a policy termination is not naturally following at the end of the policy cycle but needs certain conditions to actually be considered (Bardach, 1976). DeLeon (1978) builds upon on Bardach's research and posed six obstacles of policy termination which are in fact (1) intellectual reluctance, (2) institutional permanence (3) dynamic conservatism (4) anti-termination coalitions (5) legal obstacles and (6) high start-up costs (DeLeon, 1978). Over time these obstacles have been tested and redefined (Daniels, 1995; Frantz, 1992; Zhang, 2009). Focusing on another aspect, Biller (1976) suggests that one should look not only at the political but also economic conditions in regards to policy termination. These can stimulate certain mechanisms which promote termination (Biller, 1976). Another reason why termination is not pursued is outlined by Brewer (1978). Accordingly "(...) termination demands prior guarantees that changes-to programs, institutions, and affected publics-will leave the aggregate or net situation better of" (Brewer, 1978 pp. 339). And even if termination promises an improvement of the former

situation, it often just implies a substitution rather than a termination. Generally, policy termination is also avoided due to its poor rates of success and low rewards. Therefore the difficulties of termination require a strategic approach (Behn, 1978). In his research, he provides “A dozen hints for the would-be terminator” which mainly focuses on advice that concerns the political sphere (Behn, 1978, pp. 1).

Later policy termination scholars use the present knowledge and conducted research on how the theoretical framework for policy termination analysis can be improved. Herein, political ideology seems particularly important (Frantz, 1992; Bauer, 2009; Kirkpatrick, Lester, & Peterson, 1999). Moreover, the question of the early termination scholars, why policies and institutions are not terminated, remained. According to Geva-May (2004), the rare termination is also a matter of stability of the institution, as these are likely to maintain on this premise that the focus from termination shall shift to succession. This also explains that with low stability over time the likelihood of a termination decreases (Geva-May, 2004). Greenwood (1997) elaborates on the termination of institutions and emphasizes that rather than terminating an institution or policy, a succession happens (Greenwood, 1997). Moreover, the later policy termination researcher Frantz (1997) adds reasons why policies and institutions are unlikely to be terminated. In his study, he focused on several institutions in the health sector and in particular on the role of costs. The findings revealed that termination indeed has considerable costs, which is hence one factor why it is not applied. He further suggests that future termination researchers should draw their attention on existing policy termination models and develops an elaborate and more distinct model (Frantz, 1997).

As Frantz (1997) suggested, over time scholars developed policy termination models to explain why a policy is terminated and to make it more theoretically approachable. These models build upon deLeon's widely known model: six obstacles of termination, which have been explained before. Yet, some barriers of deLeon were beneath criticism. In particular, the obstacle psychological reluctance has been discussed and labeled as “outdated”. Frantz (1992) concluded that it could be replaced by the ideology of the existing political environment and also deLeon (2002) emphasizes later that it should be replaced by the factor “Ideology” of the political environment (Frantz, 1992; deLeon & deLeon, 2002). Even though deLeons model (1978) is generally accepted in policy termination research and its patterns have been verified (Frantz, 1992; Daniels, 1995; Birchall, 2014), a few scholars studied the model and developed their own policy termination model. Exemplary scholars are Bauer (2009) and Kirpatrick et al. (1999).

Bauer (2009) takes the termination approach “a modest step forward” and develops the so-called “isolation thesis”. Herein he tackled the issue of ideology and the political environment and proposes a concept that measures the embeddedness of a policy within ideology and clientele support. Two aspects are relevant to consider for his model, namely the profile and clientele aspect. These are depicted within a matrix. The profile aspect implies that, when the content of a policy is close to the ideology of the ruling coalition, there is a diminished risk of termination. The matrix proposes that a policy is either close to the “core” of a political ideology or in the “periphery”. The clientele aspect includes the supporting interest groups of the ruling coalition and to what extent they are affected by the existing policy. Thus the chance of termination is rather low when the policy has high clientele support. Within the matrix, it is referred to as “minor” or “major” clientele support (Bauer, 2009).

Building on this premise Kirkpatrick et al. (1999) developed a process model for the termination of public goods. He designed a heuristic model which covers three factors that might be activated when terminating a policy. These are in the scope of (1) inherent characteristics, (2) political environment and (3) constraints. Firstly the scholar determines the inherent characteristics of an institution that may support the maintenance of an institution. Among others, the longevity which is comparable to deLeons institutional permanence plays a role. However, invisibility and complexity are also important to look at. Furthermore, the political environment is taken into account which is particularly influenced by the prevailing ideology. Kirkpatrick et al. (1999) emphasize that it has a major impact on whether political ideology favors the termination of an institution or not. Herein also the “size, strength and determination” of the ruling coalition is important to consider (Kirkpatrick et al., 1999, pp.215). Besides, the political environment is also influenced by powerful allies, compromise possibilities, and speed. Lastly, constraints are examined that will hinder an institution from terminating. The researcher emphasizes that anti-termination coalition, dynamic conservatism, fear and uncertainties, startup costs and legal obstacles may be in the scope of these constraints. These are concurrent with deLeon obstacles of termination (Kirkpatrick et al., 1999).

Despite the emergence of new models and approaches, the policy termination research is beneath contempt. It mainly targets the weaknesses and limitations of the research field. Bauer (2009) examines these as “five major deficits”. Policy termination research has to be improved in terms of cross country comparison, development of concepts, overcoming only single case study designs, communication with other researchers and an elaboration of the

methodology (Bauer, 2009). This bachelor thesis aims to overcome two of these five limitations. First, a cross country comparison is conducted. Since the field is biased by American researchers, cross country comparisons are rare. This bachelor thesis attempts to overcome the named limitation by pursuing a systematical comparison between two European countries, namely the Netherlands and Germany. Further, a multiple case study design is carried out and on account of this, the limitations of solely single case studies overcome.

The literature shows that barriers can occur and might even hinder an institution from being terminated. Subsequently, the termination of cash and hence the establishment of a cash-free society may be influenced by certain barriers in Germany which do not occur in the Netherlands and therefore explains the difference in development.

One considerable barrier is institutional permanence or the longevity of an institution, which entails that an institution is more difficult to terminate the longer it exists. As for Kirkpatrick et al. (1999), it is an inherent characteristic that hinders the termination of institutions. DeLeon (1978) argues that institutions are designed to last over time and have the advantage to be imperishable towards change and thus termination. If a termination may be considered the institution is able to flow with the change and adapts. Yet, it should be taken into account that money already exists for a long time in Germany and the Netherlands and that it, therefore, will probably not explain the disparities in the development of cash use.

Another notable barrier is high start-up costs. DeLeon defines start-up costs as the costs of “initiating a termination action” (DeLeon, 1978, pp. 385). Since the two countries of interest are not as contrasting, the author assumes that the initiation costs of abolishing cash will not be disparate. This underlines the presumption that it is not relevant in terms of explaining why the payment behavior is different in the Netherlands and Germany.

However, one barrier that strikes the researchers attention and which might explain the disparities in development could be the “prevailing ideology”. It is a factor which is considered to be influential on institutional termination by several scholars (Bauer, 2009; Kirkpatrick, 1999; deLeon, 1978). Prevailing ideology signifies in the termination literature that the ruling coalition either favors or does not favor the termination. If it is not favored by the ruling coalition a barrier could be posed (Bauer, 2009). Kirkpatrick et al. (1999) support the argument that the likelihood of a termination increases when the political environment is in favor. Subsequently, the working hypothesis of this bachelor thesis can be drawn, which reads as follows:

H1:

H1: The differences in the prevailing ideology explain the disparities in the rate of change in payment behavior in Germany and the Netherlands

According to this working hypothesis, the researcher expects that the German ruling coalition would not favor the abolishment of cash and the establishment of a cash-free society in Germany. In the Netherlands it would imply that the ruling coalition favors the termination of cash and therefore the establishment of a cash-free society. This termination barrier would explain why Germany is lagging behind. With this expectation, the author intends to answer the second sub-question that entailed: Which factors explain the disparities in the rate of change in payment behavior in Germany and the Netherlands?

Prior to the investigation of this expectation, the operationalization of prevailing ideology is presented in the next chapter, which entails the methodology of this bachelor thesis.

4. Methodology

In the following section of this bachelor thesis, the research methods are explained. The selected research approach is a qualitative content analysis of existing documents. A “document analysis is a systematic procedure for reviewing or evaluating documents” (Bowen, 2009, pp.1). The chapter is divided into four parts. First, the operationalization of the variable “prevailing ideology” is conducted. This is followed by the data collection and analysis. Subsequently, the chosen research design and case selection/sampling are explained.

4.1 Research Design

The research design that is chosen for this bachelor thesis is a multiple case study design. A case study design “provides tools for researchers to study complex phenomena within their contexts.” (Baxter & Jack, 2008, pp. 544). In this research, the case study concerns the phenomena of establishing a cash-free society within Germany and the Netherlands, which is subsequently the context of it. Moreover, the research design can be considered as a multiple case study design. A multiple case study design is coherent with the approach of a single case study design since it deviates “within the same methodological framework” (Anderson, Leahy, DelValle, Sherman, & Tansey, 2014, pp. 89). Anderson et al. (2014) also emphasize that it enables the researcher to find out more about different or similar aspects of the investigated phenomenon in various settings. Accordingly, a multiple case study design is appropriate for this research since the aspect of the phenomenon “prevailing ideology” is analyzed in two different settings, the Netherlands and Germany (Anderson et al., 2014).

Case studies are either of exploratory, explanatory or descriptive nature (Anderson et. al, 2014). As the research question targets to describe the phenomena “establishment of a cash-free society”, this case study can be considered as a descriptive one. Moreover not only one case needs to be analyzed to answer the research question, but two cases are relevant.

Due to the choice of the multiple case study design the researcher has the opportunity to look beyond one single case and can, therefore, understand how a phenomenon across settings occurs differently. It will thus add to the literature by stating to what extent incoherence of the cases is influential. A multiple case study generally presents reliable and strong evidence and also the researcher can draw a concrete conclusion about valuable results. Yet there also occur potential threats and disadvantages when using this approach. The research design cannot

provide an in-depth understanding as a single case study would do and it can also not give a description of the phenomena to the extent of a single case study. Beyond, the chosen approach is, as one may assume, more time consuming (Gustafsson, 2017).

To overcome threats of invalid inferences Green and David (1984) outline four features by which a multiple case study should be characterized. They examine that (1) a conceptual framework is given on which the case analysis can be orientated on, (2) the sample must be representative which can be assured by a sampling plan, (3) the conducted procedures of the single cases must be comparable and (4) a “cross-site analysis strategy” should be provided (Green&David, 1984). Consequently, the author of this thesis took these features into account to assure that the threats of the research design are encountered.

4.2 Case Selection and Sampling

The cases “Dutch society” and “German society” have been selected after the criteria of diverse cases. Diverse cases “objective the achievement of maximum variance along relevant dimension” (Seawright & Gerring, 2008, pp. 300). For the cases of the Dutch and German society in regards to the establishment of a cash-free society, it is expected that on case scores high on the dimension of interest “prevailing ideology” while the other one scores lower. This means that the German society is predicted to have a “prevailing ideology” that is not in favor of the cash-free society while the Dutch society is expected to have a “prevailing ideology” that is in favor of a cash-free society.

Moreover, the cases have been selected due to the convenience of language. As the researcher is able to examine Dutch and German documents, a language barrier can be avoided.

For this bachelor thesis, the strategy of purposive sampling is used. Purposive sampling objectifies a sample that is logical in its nature to represent the population (“Encyclopedia of survey research methods,” 2008). This is also the case for this research, as the Dutch and German parliament implicate to be representative of the population in the respective country.

4.3 Operationalization

As the policy termination literature emphasized, the “prevailing ideology” is measured by the position on the issue of the cash-free society of the ruling coalition. Hence the political parties in power in the respective countries are of special interest and not the parties in the opposition. The parties in power are represented in the two branches of government, namely the executive and legislative branches. This research will subsequently focus on both, the opinion of the ruling coalition in Parliament (legislative branch) and the current government (executive branch). Considering the legislative branch, opinions of the respective ruling coalition parties in Germany and the Netherlands regarding the termination of cash and the cash-free society are gathered. This investigation focuses on general party opinions and opinions of selected delegates on the issue of establishing a cash-free society.

In Germany, the ruling coalition consists of the social democratic party SPD and the conservative fraction of the parties CDU/CSU since 2017. In total the two coalition parties obtain 399 seats out of 709 (ARD-aktuell, 2017). In the Netherlands the current ruling coalition comprises of four parties. The biggest party VVD, which also poses the Prime-Minister, claims 33 seats, followed by the D66 and CDA with each 19 seats. The CU is the smallest coalition party with 5 seats (the Economist, 2017).

The executive branch on the other hand is analyzed in terms of the opinions of the government and certain Ministers in the countries of interest. The executive branch in Germany is the “Bundesregierung”. The Bundesregierung comprises of the current chancellor, Angela Merkel, and fifteen Ministers. This composition is also referred to as the “Bundeskabinett”. At the time of writing this thesis, the Bundeskabinett has six Ministers of the Sozialdemokratische Partei Deutschlands (SPD), six Ministers of the Christliche Demokratische Union (CDU) and three Ministers of the Christliche Soziale Union (CSU). The chancellor herself serves the party CDU (Presse- und Informationsamt der Bundesregierung, 2019). In the Netherlands, the Prime-Minister and its cabinet shape the executive power (Ramkema, Hesselink, & Parren, 2008). At the point of writing this bachelor thesis, Mark Rutte is leading the Dutch cabinet as the Prime-Minister. The cabinet itself is governed by sixteen Ministers whereas six Ministers are from the party VVD, four from the CDA as well as four from the D66 and two from the ChristenUnie (de Telegraaf, 2017).

The encountered opinions of the executive and legislative branch in Germany and the Netherlands are categorized into “In favor” or “Not in favor” of a cash-free society. By the means of this, the researcher is enabled to determine whether the prevailing ideology is in favor or not of a cash-free society in the Netherlands and Germany.

4.4 Data Collection and Analysis

Since this bachelor thesis is of qualitative nature, a document collection of primary and secondary data was conducted. This has been pursued throughout desk research, more specifically online desk research since all of the documents were collected online. For the variable prevailing ideology different documents that vary in the content have been collected. The collected documents comprise of policy document, newspaper articles and election programs. The content of these documents is analyzed, which generally speaking is considered as a content analysis. A qualitative content analysis signifies that specific and relevant aspects for the research are gathered under certain keywords and word clusters and consequently screened to identify their existence within the analyzed documents. This enables the researcher to conduct a systematic analysis (Flick, 2004). Moreover, this chapter emphasizes how the documents for chapter two, “the rate of change in payment behavior”, have been collected and analyzed.

4.4.1 Prevailing Ideology

The collection of data for prevailing ideology has been pursued within a time frame. Since in both countries of interest the national election took place in 2017, the data collection concentrated on documents from 2016 onwards. The year 2016 was still included due to the fact that in the years before the election, the political discussions about relevant election issues begin. The selection of the documents was focused on newspaper articles and both, Dutch and German policy documents as well as party programs. Party programs gave a concrete insight on the party’s position towards the abolishment of cash, whereas policy documents provided an overview of the political discussion within the political sphere on the cash-free society and termination of cash. Lastly, newspaper articles entailed information on the specific standpoint of certain politicians and parties. The selected documents are illustrated in table 2.

For each country, different keywords and word clusters were chosen to systematically derive content from these specific documents. However, the Dutch and German documents have been analyzed in terms of different keywords and word clusters due to the difference in the languages. The German documents have been selected after the criteria that they (1) have to be in the timeframe of 2016 until 2019 and (2) need to include the following keywords or word clusters: “Bargeld Abschaffen”, “Bargeldlose Gesellschaft”, “Partein Position Bargeld“, “Cash-free society Germany” or “German government and cash”.

To investigate the content of party programs, policy documents and newspaper articles in the Netherlands, the same time frame has been used. Yet the keywords and word cluster based on which the content has been derived differ. The Dutch version of keywords and word clusters are in fact: “geldloze samenleving”, “contant geld afschaffen”, “partijen gezichtspunt contant”, “Cash-free society Netherland”, “Dutch government and cash”.

Both, the German and the Dutch documents have been screened for the existence of these keywords and word clusters. Subsequently, the author of this thesis was able to systematically identify whether the documents contain the researched data and in which context it is presented.

Table 2
Selection of documents for the variable “prevailing ideology”

Kind of Document (Source)	Document	Executive /Legislative	Country
Newspaper Article (Steltzner, 2016)	“Kampf für das Bargeld”	Legislative	Germany
Press Release (Fechner, 2016)	“Recht auf Bargeld”	Legislative	Germany
Press Release (Zimmerman, 2016)	“Bekämpfung von Geldwäsche und Terrorismusfinanzierung”	Legislative	Germany
Policy Document (Bundesregierung, 2017)	“Antwort der Bundesregierung auf die Kleine Anfrage der Abgeordneten Nicole Maisch, Dr. Gerhard Schick, Dr. Konstantin von Notz, weiterer Abgeordneter und der Fraktion BÜNDNIS 90/DIE GRÜNEN: Bargeldversorgung – Status quo und Entwicklung”.	Executive	Germany

Policy Document (Hoekstra, 2017)	“Beantwoording Kamervragen van de leden Ronnes en Slootweg (beiden CDA) en van het lid Leijten (SP) over het verdwijnen van pinautomaten en de verminderende toegankelijkheid tot contant geld”	Executive	Netherlands
Election Program (SPD, 2017)	“Zeit für mehr Gerechtigkeit - SPD”	Legislative	Germany
Newspaper Article (Dpa/hib, 2017)	“Obergrenze für Bargeld schafft den gläsernen Bürger”	Legislative	Germany
Election Program (CDU, 2017)	“Für ein Deutschland in dem wir gut und gerne leben”	Legislative	Germany
Newspaper Article (Ami./mas., F.A.Z., 2017)	“Mit Recht auf Bargeld gegen Martin Schulz”	Legislativ	Germany
Policy Document (Bundesregierung, 2018)	“Antwort der Bundesregierung auf die Kleine Anfrage des Abgeordneten Dr. Anton Friesen und der Fraktion der AfD: Die UN und die Abschaffung des Bargeldes.”	Executive	Germany
Policy Document (Ollogren, & Hoekstra, 2018)	“Beantwoording Kamervragen gemeenten en acceptatie contant geld”	Executive	Netherlands
Newspaper Article (Knopers, 2018)	“VVD wil maximum van €500 voor contante betaling”	Legislative	Netherlands

Newspaper Article (Vaessen, 2018)	“VVD will verplicht pinnen bij aankopen boven 500 euros”	Legislative	Netherlands
Policy Document (Tweede Kamer, 2019)	“Gebruik van contant geld in de samenleving”	Legislative/Executive	Netherlands

4.4.2. Payment behavior in Germany and the Netherlands

In chapter two of this research, “The Rate of Change in Payment Behavior in the Two Countries”, documents from De Nederlandsche Bank (Dutch central bank) and the Deutsche Bundesbank (German central bank) have been analyzed to demonstrate why a cash-free society in the near future is more likely in the Netherlands than in Germany. Both central banks conducted long-term studies that were based on payment diaries. While the Deutsche Bundesbank published the studies separately every three years, in 2008, 2011, 2014 and 2017, de Nederlandsche Bank issued one long term study in 2016 that entailed data from the years 2009 until 2016.

For this bachelor thesis, the Dutch long-term study of de Nederlandsche Bank was analyzed particularly in the years 2010, 2014 and 2016. The German documents were analyzed concerning the years 2011, 2014 and 2016. A further description of the documents is illustrated in table 3, which can be found at the bottom of this page. Even though the years are not conforming, except for the year 2014, they are coherent regarding their research design and hence provide a good base for comparison. Thus his bachelor thesis could show why a cash-free society in the near future is more likely in the Netherlands than in Germany. As already outlined, the analysis of the documents comprised of a content analysis. Here keywords and word clusters play again an important role to categorize and systematically analyze the content of the documents. The documents of the Dutch and German central bank are both published in the English language and can thus be screened for the same following keywords and word clusters: “Cash”, “use of cash” “cash development”, “card use” , “card payments” , “innovative payment method”, “contactless payments” and “mobile payments”.

Table 3
Selected documents for the rate of change in payment behavior

Kind of Document (Source)	Document	Country
Research (Deutsche Bundesbank, 2011)	“Payment behaviour in Germany in 2011”	Germany
Research (Deutsche Bundesbank, 2014)	“Payment behaviour in Germany in 2014”	Germany
Research (Deutsche Bundesbank, 2017)	“Payment behaviour in Germany in 2017”	Germany
Research (Jonker et. al., 2018)	“From Cash to Card”	The Netherlands

5. Analysis

In this part of the bachelor thesis the findings of the prevailing ideology in the respective countries are presented. These findings are derived from policy papers, political discussions in parliament and newspaper articles, which referred to the point of views of the executive and legislative branch in Germany and the Netherlands. These executive and legislative powers are considered as two of the three branches of government, whereas the third one is the judicial branch. While the legislative branch is among other tasks responsible for the initiation of laws, the task of the executive branch is it to implement these laws (Duhaime, n.y.). A further explanation of these branches in the respective countries is followed.

5.1 Executive Branch

Germany

The position of the current German government towards the use of cash in Germany can be derived from the answers to two different parliamentary questions that were asked by the party Alternative Für Deutschland (AFD) and Die Grünen (the green party). By means of analyzing these documents, two main standpoints of the German government become clear.

Firstly, the freedom and the right of self-determination that cash provides are crucial for the German government. In the policy document which entailed the answer to the parliamentary question of the green party on June 18, 2017, the German government wrote that freedom and the right to self-determination of the German citizens are beyond important to the government. However, these rights cannot be guaranteed if cash would not be a payment method anymore. Within the answer, the government emphasized that, if any decisions would be taken on a European level that would lead towards the termination of cash, the government would only consider an implementation if it would be meaningful and justifiable (Bundesregierung, 2017).

Secondly, the documents show that the intrusion of privacy is associated with cash-free payments, since these cannot provide the degree of privacy as cash payments do. This is emphasized in the answer to the parliamentary discussion of the green party, as the government stated that it is conscious of the intrusion of privacy that would come along with the termination of cash payments (Bundesregierung, 2017). Additionally, the government wrote in the answer to the parliamentary question of the AFD on January 18, 2018, that it aims to protect the use of data in the scope of online payments (Bundesregierung, 2018).

Furthermore, the answer to the parliamentary question of the AFD emphasized that cash has a future in Germany. Regarding the question whether the government sees the use of cash as a long term vision, the answer “yes” was given (Bundesregierung, 2018).

Based on the examination of these two selected policy documents, the point of view of the German government towards the cash-free society can be determined. As the government sees disadvantages in cash-free payment (intrusion of privacy) and the abolishment of cash (right of freedom and self-determination), it can be argued that it disapproves the idea of abolishing cash. Referring to these findings, the opinion of the German executive is categorized into “Not in favor” of a cash-free society. The summary of the respective arguments and the categorization are depicted in table 4.

The Netherlands

For the analysis of the position of the executive power in regards to the abolishment of cash, answers of the finance Minister Wopke Hoekstra to “Kamervragen” (parliamentary questions) on December 13, 2017 and May 30, 2018 are presented. Moreover, a discussion of the Tweede Kamer (second chamber) and the respective position of the current Minister of Finance Wopke Hoekstra are examined. This discussion took place on January 15, 2019.

Deriving from these three documents, one main point of view of the executive branch towards the abolishing of cash and the cash-free society becomes clear. This is in particular that cash has an important societal function, namely the inclusion and participation within the Dutch society.

This is emphasized by the Dutch policy document of December 13, 2017 wherein the finance Minister gives an answer to the parliamentary question of the delegate Renske Leijten from the socialist party. The politician asked if the financial infrastructure of the payment system is a necessary public infrastructure for everyone who wants to participate in society. In turn the minister Hoekstra pointed out that it is necessary for the financial infrastructure that cash remains available. Hereby he used the argument that it is crucial for the Dutch society since everyday millions of transactions are still settled by cash (Hoekstra, 2017).

Another Dutch policy document from May 13, 2018 stresses this point of view. The document comprises of a letter written by the finance Minister Hoekstra and the Minister of the Interior and Kingdom Relations, Kajsa Ollongren, in reaction to the questions from the political party 50PLUS. The party requested a standpoint of the government towards cash in society. In turn the Ministers wrote that cash plays an important role within society due to the fact that it has a societal function that cannot be replaced by cashless payment methods.

Therefore the access to cash has to be in balance with the societal advantages and disadvantages, as Hoekstra called them. In particular, he pointed out that vulnerable groups, such as disabled or elderly groups, have to be protected from being excluded of the Dutch society. Moreover, if it seems that certain groups will be excluded from some transaction methods, the Ministers stated that they will initiate certain steps to prevent that case. (Ollogren & Hoekstra, 2018).

The argument of societal inclusion is mentioned again in the Dutch policy document from January 15, 2019. In a parliamentary discussion of the Tweede Kamer, the finance Minister Hoekstra argued that cash has an important societal function within the Dutch society and therefore, the access to it needs to be remained. Once again, the Minister named vulnerable groups as an example which would be prone to exclusion if cash will be abolished. Therefore, in cooperation with de Nederlandsche Bank, the government stated to maintain the acceptance of cash in the next years (Tweede Kamer, 2019).

Besides the one main position that can be examined for the Dutch executive branch, the same policy document of January 15, 2019 shows that the finance Minister Hoekstra also appreciated the advantages of cash-free payments. According to his words in the parliamentary discussion, cash-free payment methods cause fewer costs and are safer and faster in regards to the transactions (Tweede Kamer, 2019).

By means of the previous documents, the opinion of the Dutch executive branch towards the cash-free society becomes clear. Even though the finance Minister outlines the advantages of cash-free payments, the documents show that the importance of cash outweighs these benefits. All three policy documents stress that cash has an essential societal function and therefore has to be maintained in the near future. Based on the selected documents for this analysis, it can be reasoned that the opinion of the Dutch government towards the cash-free society is categorized into “Not in favor”. A summary of the arguments and the categorization is depicted in table 4 below.

Table 4
Executive branch: Categorization of Opinions

Government	Position	In favor/ Not in favor
Dutch Government	Cash has societal function Significant role for vulnerable groups	Not in favor
German Government	Cash has a long term future Provides freedom and self-determination	Not in favor

5.2 Legislative Branch

Germany

In regards to the position of the SPD, press releases of the party and the official election program are analyzed. The documents show that the coalition party presents several standpoints towards the abolishment of cash and a cash-free society.

On the one hand, the party aims for a decrease in cash payments which is stated in the press release of January 26, 2016. The document shows that the SPD advocated for the abolishment of the 500 euro bill and a limit of 5000 euros of cash transactions. The party explains these plans stating that the abolishment of the 500 euro bill and a limit for cash payments would help to counter terrorism and fraud, by decreasing the amount of cash on the market in Germany. This argument is stimulated by the fact that Germany is a central point for money laundering (Zimmermann, 2016).

On the other hand, the party stated several reasons why they do not support the abolishment of cash. First, it is emphasized that a termination of cash would exclude certain groups of society. A press release of February 2, 2016 pointed out that a cash-free society would, in particular, entail risks for older people and might even exclude elderly groups as these are more prone to get abused by online payment methods (Fechner, 2016).

Moreover, the party sees privacy as an issue that could not be guaranteed for the German citizens if only cash-free payment methods are available. In the same press release mentioned above it is emphasized that a cash-free society could not protect the sphere of

privacy as every transaction can be documented (Fechner, 2016). In the official election program for the general elections in 2017, the party aimed therefore for more privacy in regards to cash-less payments and anonymous cash-less transactions in the scope of legal possibilities (SPD, 2017).

Finally, the abolishment of cash would violate certain laws according to the SPD. Deriving from the press release of February 2, 2016, the party pointed out that terminating cash infringes the freedom of contract as well as the right of property (Fechner, 2016). Within the general election program, the party wrote that it is the right of every citizen to possess and use cash (SPD, 2017).

All of the arguments mentioned above may have stimulated the party to write in the official election program that they will reject any aspiration of abolishing cash.

Apart from the standpoint of the SPD, the points of view of the fraction CDU/CSU towards the issue of cash-free society can be found in several documents. The examination of the parties' opinion is based on newspaper articles and the general election program of the CDU/CSU.

Considering the selected documents, the arguments that were stated by the CDU/CSU comply with the ones of the coalition parties SPD. However, some disagreements within the party towards the issue are.

Similar to the SPD, the CDU delegate and former finance Minister, Wolfgang Schäuble, stated to be in favor of the reduction of cash and cash payments. On December 19, 2016 the German newspaper, "FAZ" published an article that emphasizes Schäuble's attitude towards the issue. Accordingly, the politician advocated for a limit of 5000 cash transactions, to decrease money laundering in Germany and also potential terroristic activities that come along. However, this opinion was opposed by the general member's assembly of the CDU in Essen on December 7, 2016. There, the party stated that it is clearly against a limit of cash payments as well as the abolishment of the 500 euro bill (Steltzner, 2016).

Further documents emphasized that the fraction CDU/CSU generally positions against the abolishment of cash and a cash-free society, by reason of two arguments. These are the issue of privacy and the right of freedom, which both would be targeted by the abolishment of cash.

According to an article published on February 24, 2017 by the newspaper "WELT", the CDU Minister-President of Bavaria, Markus Söder, argued that a cash-free society would not protect the freedom of the citizens and their privacy rights (dpa/hib, 2017). The draft of the official election program followed these arguments and stated that the possibility to pay with

cash is an indispensable characteristic of a free and civil society (ami.mas., 2017). Moreover, the official election program of the CDU/CSU for the general election in 2017 announced that despite the prevailing digitalization, cash will maintain an important payment method which the CDU/CSU will support (CDU, 2017).

As has become clear in the previous paragraphs, different points of view of the German ruling coalition were analyzed. The SPD stated that they want to phase out of cash to some extent to decrease criminal activities. However, the party listed several arguments why they do not want to abolish cash completely and even emphasized within the election program that the termination of cash is not an option for the party. The coalition fraction CDU/CSU described similar points of view. As the CDU is not in favor of the abolishment of the 500 euro bill and a limited for cash transactions, one could argue that the party opposes the termination of cash even stronger. The analyzed standpoints of the parties consequently show that the ruling coalition in Germany does not fully support the abolishment of cash and can therefore be categorized into “Not in favor” of a cash-free society. Below, table 5 summarizes the standpoints of the German ruling coalition and depicts the respective categorization.

The Netherlands

The respective standpoints of the parties are derived from the parliamentary discussion on January 15, 2019 and multiple newspaper articles. The documents showed that various points of view are represented by the current ruling coalition.

First, the documents showed that the VVD partly aims to phase out of big cash payments by prohibiting to settle amounts over 500 euros in cash. The analyzed article on the news website “marketupdate”, written on November 6, 2018, stated that the delegate Foort van Oosten of the VVD endorsed the idea of card payments being the only possible payment method for amounts over 500 euros. According to the delegate, this regulation could decrease the amount of money laundering and counter criminal activities (Knopers, 2018). In another newspaper article that was analyzed, van Oosten elucidated his standpoint and added that it has to become a recognized standard to transfer these amounts by electronic payment methods and not by cash anymore. The document indicated that the VVD behaves supportively towards him and his standpoint (Vaessen, 2018).

Yet, in a Dutch policy document of January 15, 2019 that entailed a parliamentary discussion in the Tweede Kamer on the respective issue, all of the coalition parties provided several arguments that oppose the termination of cash and the cash-free society.

First, in this document the argument is stated that the abolishment of cash would lead to an exclusion of certain groups in society. This is supported by three respective coalition parties. The first of these is the CDA, which emphasized to represent the opinion that the abolishment of cash would exclude certain groups in society and leave them behind. The VVD, the second party that supported this, stated within the discussion that this would particularly target elderly groups as it is harder for them to keep up with new developments. In turn the D66 stressed the points of the CDA and VVD within the discussion and said that the party aims for an access to the monetary transaction which is available for every group of society. Accordingly, cash is the monetary transaction method that makes this possible (Tweede Kamer, 2019).

Moreover, two coalition parties emphasized that cash provides a good monetary overview within the same discussion in the Tweede Kamer. The CDA mentioned that it provides a good overview of what you possess and what not. The CU elaborated on this standpoint and added that fewer cash payments lead to more debts among young people. Therefore according to the party, the maintenance of cash will help young people and the following generations to being educated about their finances and therefore prevent debts (Tweede Kamer, 2019).

Further, the parliamentary discussion emphasized that two coalition parties appreciate the current monetary infrastructure and see advantages in both cash-free payments as well as in maintaining cash as a payment method. To be specific, the VVD emphasized within the discussion that the party is content with the current situation as the payment infrastructure digitalizes. However, the party said that they aim to remain the possibility of cash payments. The CDA argued that the advantages of cash-free payments cannot be denied since these are faster, cheaper and relatively safe. Nonetheless, the party perceived it as essential that cash maintains a possible legal payment method which includes both euro bills and coins (Tweede Kamer, 2019).

Overall, disparities in the point of view of the Dutch coalition parties were found. The VVD is the only of the four coalition parties that support the prohibition of paying amounts over 500 euros in cash and therefore the phasing out of cash to some extent. Yet this point of view is not found by the other three coalition parties referring to the analyzed documents. However, all four parties of the ruling coalition pointed out arguments that oppose the termination of cash. While the analyzed standpoints of the CDA, D66 and the VVD are stimulated by the argument of societal exclusion, the CU perceived cash particularly important as a monetary overview. Lastly in the parliamentary discussion, the VVD and CDA

specifically mentioned that the maintenance of cash is important. Considering the examined points of view of the ruling coalition in the Netherlands, the abolishment of cash is, to a great extent, not supported. Therefore the opinion of the ruling coalition can be categorized as “Not in favor” of the cash-free society. The summarized standpoints and respective categorization of the ruling coalition in the Netherlands are depicted in table 5 as well.

Table 5
Legislative Branch: Categorization of Opinions

Party	Position	In favor/Not in favor
CDU/CSU (Germany)	Cash is an important payment method, which the party will support Cash is an indispensable characteristic of a free and civil society	Not in favor
SPD (Germany)	In favor of the abolishment of the 500 Euro bill and a cash limit of 5000 euros Rejects any aspiration of abolishing cash	
VVD (The Netherlands)	In favor of the abolishment of the 50 Euro bill For maintenance of infrastructure for cash payments	Not in favor
D66 (The Netherlands)	Aims for an access to the monetary transaction which is available for every group of society	
CDA (The Netherlands)	See advantages in cash-free payments since it is fast, relatively safe and cheaper. Essential that cash will maintain possible as legal payment method	
CU (The Netherlands)	Cash is an important payment method, especially for the education of young people	

5.3 Comparison

Following, the standpoints of the ruling coalitions that have been presented so far are compared among the two countries of interest. Generally, two parts are addressed in this comparison. First, the views of the executive branch in the Netherlands and Germany are contrasted, followed by the standpoints of the legislative branch. This comparison shows whether or not the findings comply with the working hypothesis.

The previous analysis has shown that the executive branch in both countries of interest does not favor the abolishment of cash and neither the establishment of a cash-free society. The Dutch and the German government name similar arguments that reason their position against the termination of cash. Whereas the German government emphasizes the importance of freedom that cash serves, the Dutch government points out the significance of inclusion for vulnerable groups. According to both governments in each instance, the society is not ready for the change towards a cash-free society. Likewise, the legislative branch and to be specific the ruling coalition of Germany and the Netherlands position against the change towards a cash-free society. The Dutch coalition parties emphasized that they do not aim for the abolishment of cash due to the societal relevance of cash. Besides this social relevance, the German coalition parties see the intrusion of privacy as an issue that would come along with the abolishment of cash. These arguments stimulate both ruling coalitions to not be in favor of a cash termination.

Referring back to the working hypothesis, an expectation was stated based on the theory of the policy termination literature. This hypothesis reads as follows:

H1: The differences in the prevailing ideology explain the disparities in the rate of change in payment behavior in Germany and the Netherlands

As the prevailing ideology in both countries of interest does not favor the abolishment of cash, the disparities in the rate of change in payment behavior cannot be explained by the factor ideology. Based on the policy termination literature it was suggested that prevailing ideology poses a barrier in regards to the termination of cash in Germany and the Netherlands. In this analysis, no evidence was found for this suggestion. Hence in this case the factor cannot explain the differences in developments towards a cash-free society. These findings stimulate the assumption that there must be other factors or reasons which explain the disparities in development.

6. Conclusion

This bachelor thesis investigated the development of a cash-free society in Germany and the Netherlands. In chapter one, two sub-questions were posed, namely:

1. *How did a cash-free society in Germany and the Netherlands develop thus far?*
2. *Which factors explain the disparities in the rate of change in payment behavior in Germany and the Netherlands?*

The answer to the first sub-question demonstrated that there are disparities in the development towards a cash-free society in the countries of interest and that establishment in the near future is more likely in the Netherlands than in Germany. Hence in the Netherlands other payment methods, to be specific, the use of debit cards took over the use of cash, while in Germany it still remains the predominant transaction method. The author of this research, therefore, wondered how these differences emerged. Subsequently, the following research question was posed:

RQ: How can we explain that a cash-free society in the near future is more likely in the Netherlands than in Germany?

Deriving from the theory, the second sub-question has been answered with the expectation that the termination barrier “prevailing ideology” explains the differences in development. Subsequently, the ruling coalition of the Netherlands would have to favor the abolishment of cash and therefore a cash-free society and the ruling coalition in Germany would have to oppose the idea of cash termination and hence the establishment of a cash-free society. However, the study showed that the ruling coalitions of both countries are not in favor of cash termination. Consequently the author is not able to explain why a cash-free society in the near future is more likely in the Netherlands than in Germany, as the differences could not be explained by the variable “prevailing ideology”. Based on these findings it can also not be indicated that the establishment of a cash-free society is more likely in the near future in the Netherlands. The investigated development in the two countries of interest might be depended on other factors which will change the respective trends in development towards a cash-free society in the near future.

The findings of the research stimulate the author to pose different speculations for alternative explanations.

First, the termination literature may not be suitable for the selected cases. The literature suggested that “prevailing ideology” is an influential factor in regards to the termination of an institution. Several scholars outlined the relevance of the termination barrier and that it is significant that the ruling coalition supports the termination (DeLeon, 1978; Kirckpatrick et. al, 1999, Bauer, 2009). Yet “prevailing ideology” does not seem to be as influential in the Netherlands even though the country is further ahead. Both, the government and the ruling coalition were in both countries of interest categorized to be not in favor of a cash-free society. Nonetheless, the research showed that the Netherlands is decreasing the use of cash and getting closer to a termination.

Moreover a wrong measurement of the variable “prevailing ideology” might explain the unexpected outcomes. In this research the prevailing ideology was measured in terms of the opinion of the ruling coalitions. However, the political systems as a whole have not been taken into account. Hence, the opinions of the opposition parties as well as the federal government in Germany and the provincial councils in the Netherlands might have brought the researcher to a different outcome.

Another speculation is that “prevailing ideology” might not be the right explanatory variable for the varieties in development. As already outlined in the theory section the barriers institutional permanence and high start-up costs could already be excluded from potential explanatory variables. Due to the limited time and resources of this study, not all barriers could be taken into consideration. Referring back to the termination literature, Bauer’s (2009) clientele support appears to be a termination barrier that could explain the difference. The scholar emphasized that it matters to what extent interest groups are affected by and if they support the termination. In this matter, the banking and retail sector could be of special interest. A potential explanation for the emerging differences between Germany and the Netherlands could thus be that the sectors in the Netherlands support the phasing out of cash to a greater extent than they do so in Germany up to this day.

Lastly, the speculation is made that “prevailing ideology” is influential in a broader sense. The study only researched the prevailing ideology in terms of the ruling coalition. However, the general public attitude and opinion towards the issue may also be an explanation for the discrepancy between the two countries of interest. According to the global innovation index, the Netherlands is the second most innovative country in the world. Meanwhile, Germany can only be found in place nine (Innovation Quarter, 2018). This could be explained by the prevailing term that supposedly describes the German character traits, namely “German Angst”. The expression signifies that the German citizens are generally

hesitating when it comes to political and societal changes (dpa/Vennenbernd, 2017). Hence one may assume that the German citizens like to remain the status quo and that the German society has difficulties to embrace change. The Dutch citizens, on the other hand, seem to be more innovative and open towards change, of which new payment methods and the change towards a cash-free society can be examples. This emphasizes that prevailing ideology in respect to the opinion of the ruling coalition might be too narrow in terms of a change or termination of an institution is taking place.

In respect to this bachelor thesis following strength and limitation could be distinguished. Referring to the strength the societal and scientific relevance can particularly be stressed. The research could overcome the limitation in policy termination literature of only addressing one country and solely conducting single case studies. This research could with the comparison of two European countries not only address the outlined limitations but also target the American bias that is prevailing within the research field. Hence it emphasizes the scientific relevance of this bachelor thesis. Second, the research emphasizes social relevance. Due to its increasing discussion of a cash-free society, this bachelor thesis provides an insight where the two investigated societies stand and how the political sphere deals with the respective issue.

Moreover, suggestions for further research can be made. The countries of interest have been selected due to the convenience of language since the author was able to read and analyze Dutch and German documents. Yet the issue of a cash-free society is a phenomenon that happens around the world. Subsequently, further research could concern and compare more than two countries. Beyond a comparison between countries with different political systems, though this comparison could not target the variable ideology, seems to be meaningful.

Furthermore the applied research approach of a document analysis may be changed in further research. The approach served the purpose to present the respective position towards cash termination of the executive and legislative branch in Germany and the Netherlands. Additional interviews with party or government representatives could have contributed to a more in-depth investigation of the respective attitudes in terms of the issue. This could have helped the researcher to more distinctively examine the parties' position and eventually to give a more precise answer to the research question.

Another potential approach to answer the research question and therefore explain why the countries of interest developed in a different speed could be surveys. By means of surveys reason could have been investigated why the payment behavior differs in the countries of

interest to a great extent. This bottom-up approach could be therefore a suggestion for further researches that aim to examine the issue.

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