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Buy Now, Pay Later: A critical review of the system and its implementation based on an analysis on currently working countries and based on a consumer survey.

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Abstract:

Even though the Buy Now, Pay Later system is strongly criticized by several researchers on several aspects. The concept has many advantages and has a significant growth curve. This thesis will seek to understand what the underlying drivers of this payment method are. This is addressed following three steps. (i) Presenting a theoretical review on the topic, (ii) a study case clustered on five countries, (iii) a consumer preference survey. The conclusions of the research are (i) a lack of theoretical framework when assessing its global implementation (ii) effect of stress period and shifting trend in payment methods driving the attraction towards the BNPL system. (iii) a product specific attraction.

Foreword:

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Chapter 1: Introduction

The economy has largely evolved during the last few years. The financial crisis and financial markets destabilizations have forced the appearance of financial products' regulations, such as Basel III¹, Comprehensive Credit Act², CRR³,...

Furthermore, the emergence and development of technologies played an important role in global economic development. This has led to a deep shift in the structure itself (scope of different stakeholders, new platforms, new currencies, new means of payments, ...). Those changes redesigned the way consumers behave in the market.

Among all these developments, one of them attracts more and more analyst's attention, the 'Buy Now, Pay Later' (BNPL). A brand-new concept started 10 years ago, which allows customers to make a purchase with incremental payments and without any interest. Resellers with the support of a third-party creditor (such as Klarna or Afterpay), adds this new system of payments into their checkout process. Nevertheless, a late fee will be asked if the payment is overdue.

This system has various benefits. Indeed, it allows a range of customers to enter the credit market. As a result of this new type of consumers the income of merchants will increase

The system naturally exploded (table 1.1 in the appendix), mainly in the US, UK and Sweden, especially since the beginning of COVID-19, at a time when a handy and low-cost method of payment was needed. Indeed, the lockdown forced consumers to use online purchases. Furthermore, since almost every business was stopped, it left most people with less source of income and therefore forced them to reduce their spending. The concept seems to be very attractive, as much as it has one of the highest increase expectations in the global e-commerce market. Every country around the globe seems to be impacted by this payment method. (Worldpay/Fidelity National Information Services (FIS), 2022)

Based on classical economist theories, Rolf Nugent (1939), have condemned the whole consumer credit market because of its effect on wealth. Indeed, he claimed that such product is

¹ "Basel III is an internationally agreed set of measures developed by the Basel Committee on Banking Supervision in response to the financial crisis of 2007-09. The measures aim to strengthen the regulation, supervision and risk management of bank in Europe" (BIS, 2010)

² "This bill provides for additional consumer credit protections, sets forth requirements for credit reporting agencies, and prohibits the inclusion of specified information on credit reports in USA". (Congress.gov, 2021)

³ "The Capital Requirements Regulation (CRR) (575/2013) establishes the minimum standards to ensure the financial soundness of banks in Europe(i.e. capital requirements, liquidity buffers and leverage ratios)"(eurolex, 2013)

essentially consumptive and “spendthrift”⁴. According to R. Nugent, consumer credit market facilitated the consumption of capital in extravagant living, and it contributed nothing to production. In addition, through the lens of “life-cycle model for consumption smoothing” developed by Ando and Modigliani in 1963, it appears that consumption at zero interest rate improves slightly the well-being of consumers. Furthermore, based on analysis made by several analysts such as O’Donoghue and Rabin in 1999 or Campbell et al, in 2011⁵ the system pushes customers which are financially weak, over-optimistic, overconfident and naïve to overconsume, and this will lead them towards a decrease of their welfare.

When we consider deeply the system itself, it appears that in some cases this way of payment presents major risks and concerns. As I said before, Clients will be granted additional fees if they miss a repayment. This can turn out to be very dangerous knowing that financially weak consumers are using BNPL. As a matter of fact, in the next 30 months, it is a total €13 Billion in late fees to be paid by the most vulnerable consumers in Europe. (I.Ionescu, *The Paypers*, 2022) Such revenue type represents an average of 40% of the total income of BNPL providers. (AFM, 2022)

These elements raise important questions and increase doubts about the validity of the system in the current state of affairs. Indeed, one of the main sources of BNPL’s profit comes from the late fees charged. If the business plan is built around this kind of income, it is assumed that Buy Now Pay Later providers are aware that some users will not be able to repay. Knowing these clients will not have the opportunity to access the traditional credit market (because they will not be able to repay), are BNPL providers intentionally targeting this specific type of consumer? if so, it is interesting to determine why the BNPL providers put these consumers in an difficult financial situation? (Uktech, 2022)

Despite the risk of default, reports present the rapid growth of Buy Now, Pay Later services. B. Guttman, C. Firth and J. Gathergood (2022) has found throughout the UK credit market analysis that the value of BNPL transaction between the period of their analysis (January 2019 – December 2021) has been multiplied by twenty times. Even more, they have found that the market is still increasing even after their research. In the US a similar situation is observable. Indeed, the number of BNPL users has risen by 300 per cent per year since 2018. (Federal Reserve Bank of Kansas City, 2021).

⁴ Term developed in Rolf Nugent analysis, 1939.

⁵ Grubb, 2015 Campbell, 2016, Gathergood and Weber, 2017; Allcott et al. ,2021

From a global perspective the same pattern is observable. Indeed, the overall Buy Now, Pay Later market is expected to reach \$680 Billion by 2025, which represents 12% of the total e-commerce market. (M.Lux and B.Epps, 2022)

Therefore, this contrast makes me wonder about the validity of this system and what the underlying drivers of its growth are. It is legitimate to ask what can drive consumers to use this system when it has been widely criticized on several grounds.

To respond to this interrogation, I will perform a three-step methodology. A theoretical view will be the first element I will take an interest in. With the help of multiple articles and papers, I will assess its practical use as well as the reasons for its development and its main audience. A comparative analysis will also be made on other instalment options. Finally, this first section will cover the multiple risks that represent the BNPL system.

Secondly, a practical analysis of the different countries where BNPL operates will be conducted. This will allow me to build an analytical framework to have a better view of the reasons for its development in the most successful countries. I will assess those countries given the way global consultancies agencies⁶ are assessing the analyze of payment system cross countries, as well as given the guidelines provided by global public organization such as European Central Bank (ECB) or Committees on Payment and Settlement Systems (CPSS).

Finally, a practical analysis of the behavior preference will be conducted via an online survey, allowing to test correlation between variables that may explain the use of the BNPL system.

Therefore, the aim is to find some theoretical insights, allowing me to have a better understanding of the multiple facets of this payment method. Then, having a solid basis of this payment procedure, I will seek to take an interest in practical aspects of the system on the current market. Ultimately, the quantitative analysis will allow to highlight the customer preferences about this payment method and to explain the interest people could have towards it.

⁶ The agencies referred are explained in chapter 3

Chapter 2: Theoretical explanation of the BNPL system

2.1: Main concepts

Our society is increasingly reliant on ways of mass consumption, easy transaction, and easily desires access. To reach these desires, all obstacles must be removed or overcome.

In 2012, Affirm, one of the Buy Now Pay Later pioneer companies, started its activity with the core mission to build a reliable financial product that improves lives. The following years oversaw the creation of numerous fintech companies that also offer the Buy Now Pay Later (hereafter, BNPL) system.

The growth of e-commerce has enabled the emergence of several fintech companies, which in turn have enabled the development of a new type of market for merchants. BNPL is one of the few forms of fintech with double-digit growth over the past 10 years. Among various providers, the system differs according to customer requirements, credit limit and merchant partnership. Nevertheless, the mechanism on which all fintech agree is that the use of BNPL tends to improve consumer's e-commerce financing experience. (M.Lux and B.Epps, 2022)

The working mechanism of all these firms is based on the same main principles.

As its name suggests, this new payment system allows customers to make the purchase of a good but to pay for it later, typically through incremental payment. BNPL is perceived as a type of instalment loan, which allows one to split the sum of a purchase and pay for it over a longer period in instalments. The first refund can occur after the first week of the purchase.

At the top of the stakeholder's hierarchy, we naturally find consumers. Without a doubt, they bear the most important position in this organization, simply because it is up to them to decide whether to use this process or not.

Then comes the resellers, who decide on implementing that procedure within their checkout arrangement. For the time being, brands can only use this mechanism on their website. Indeed, the actual structure of payment does not allow these firms to use it in shops. Nevertheless, any future development of this method in stores will be certainly a major challenge for BNPL growth.

Lastly, the numerous fintechs that offer BNPL as part of their merchandise form the bottom part of the pyramid.

Depending on the region of use, the fintech used is different (table 2.1 in the appendix). This is due to the way these fintechs have been able to make themselves known in these regions but also depends on how much of these companies share the same marketing values as the targeted

region. Nevertheless, some firms have succeeded in establishing themselves in almost all regions of the world, thus occupying a major part of the global market share. (S.Sekhar Pani, 2022)

When we consider the players of the market, more and more fintech are entering the market with niche offering products. (I. Draganov; L. Chiavarini, 2022) The leaders of the global market are Afterpay, Klarna, Scalapay and Paypal. Those four-e-commerce giants have totalized an average of \$ 90 billion in 2021 (WSJ, 2022; Klarna, 2022; growjo, 2022; emarketer, 2022).

The rise of BNPL can be perceived as a hidden gem. Therefore, more and more firms and new fintech want to follow the wave. While Klarna, Afterpay and Scalapay are pure BNPL players and new entrants in the credit market, a giant like Paypal is operating for many years in the electronic payment market. As explained in the below section, regulations are not yet enough to cover this product. Indeed, BNPL services are just below the rules that define consumer credits. This quasi-legal vacuum allows many fintech to access this market without any hindrance. This effect is even more striking when we consider that firms that had no connection with consumer credit are also seeking to enter the market. Indeed, during its keynote last October, Apple unveiled the implementation of their BNPL system, called Apple Pay Later. (Apple, 2022) They will collaborate with Goldman Sachs to create and implement this system. It is obvious that apple is not betting everything on this new process, or even more globally on their digital wallet (Apple Pay). This type of product has been designed primarily to push the consumption of their flagship products (iPhone, Mac, etc). However, their need is to allow their customers to have the most optimal experience possible, the convenience offered by this payment system is therefore to consider. (R.Shevlin, *Forbes*, 2022)

The introduction of such huge companies demonstrates the growth potential of the BNPL market. These giants could have a strategic advantage over new fintech, as they have been operating for more than 20 years. Indeed, a firm like Paypal has accumulated massive data about consumer and retailers' preferences. (D.Cag, *Fintech*, 2022)

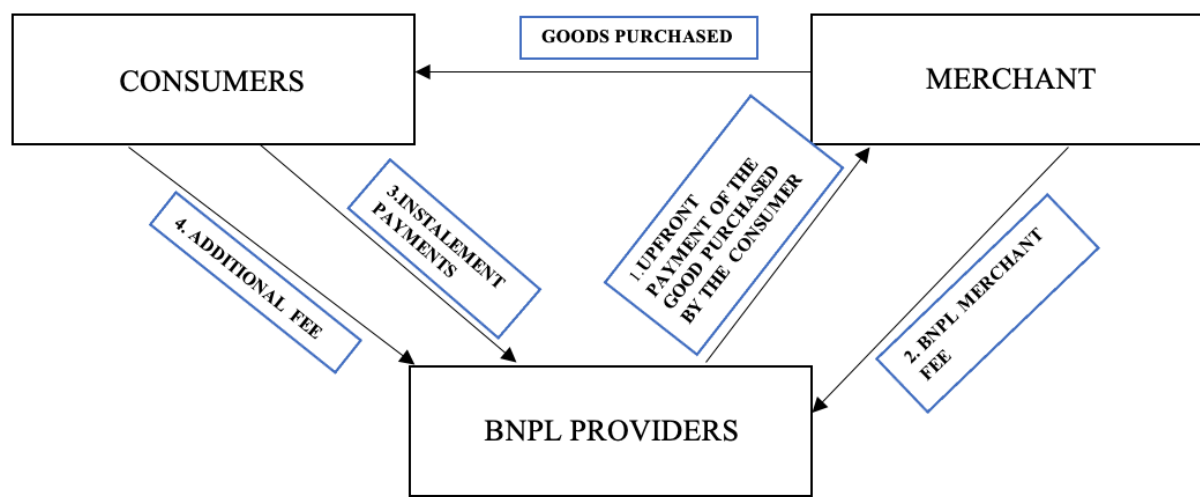
The following parts will focus on how companies implement this means of payment and how it works daily. I will also focus on the reasons for the expansion of this system as well as on the persons that use this method of payment the most.

2.2. Practical usage

2.2.1 BNPL pyramid

In its most basic form, BNPL can be defined as an agreement between three parties in a three steps procedure with interaction between the three parties.

Figure 2.1: Buy Now, Pay Later mechanism if a consumer purchases a good



(C.Fisher, C.Holland and T.West, 2021)

As this figure shows, consumer buys and receives goods or services from the merchant. Then (1) BNPL provider will pay upfront the full price at the time of the purchase. (2) The merchant will pay the fee aggreded on each transaction made by the use of the BNPL system. (3) The customer pays back its due in a series of instalments payments pays. (4) If the customer misses' payments he will receive additional fees.

I will consider the perspective of Consumers and Merchants to understand how they act with this pyramid.

First, customers interact in two correlated ways. They will choose a BNPL provider by creating an account. As we can guess, like any other market with multiple players in there, competition is the main element of the market. Therefore, one BNPL provider will not have any interest to offer a similar product as the other providers. The differentiation comes with the instalments plan proposed.

As we can observe in table 2.2 in the appendix (J.Veling, *Nerdwallet*, 2022) each firm tends to have a different offer. From the percentage rate (APR) to the number of late fees any element is useful for differentiation. Nevertheless, a BNPL provider selection needs to be aligned with the products these clients want to buy. Indeed, some providers have agreed with demanded brands which will allow them to attract targeted customers. (M.Chilingaryan, *nogood*, 2021)

Furthermore, as observable in table 2.2 in the appendix, most providers ask for late fees. The impact on consumers' financial health is variable, we will discuss this in a subsequent section. Nevertheless, they are present and represent a higher proportion than the ones of other financial products, such as credit cards, which can be three times higher for 30 days overdue and two times higher for 90 days overdue. (M.Lux and B. Epps, 2022) As an example, a 10\$ late fee on a good that costs 150\$ represents an interest of 6.67%. (Nicole Heales Financial, 2022)

Considering the retailer perspective, as observed in figure 2.1 above, there is a double interaction with BNPL providers. Indeed, they receive the total payment of the goods bought by a given consumer. In return, the merchant will have to pay a merchant fee agreed upon. The amount due depends on the provider. However, generally speaking, these merchants' fees are around 4-8% of the amount of the purchase, which is higher than the fees charged by Credit Card companies. (M. Di Maggio; J. Katz; E. Williams, 2022). The reserve bank of Australia has conducted a deep analysis of the development of Buy Now Later in Australia (C. Fisher; C. Hollander; T. West, 2021), from their rapport published in March 2021, they illustrate that BNPL providers charge higher fees than the market does. (table 2.3 in the Appendix)

Nevertheless, merchants have also advantages to partner with BNPL fintechs.

A reason to use BNPL is that the customer will not pay directly for the product as they will start the refunding after one or two weeks (depending on the agreement), while BNPL lenders will pay the full amount upfront to merchants. Therefore, fintechs will take full responsibility for the rest of the payment and eventual default, leaving the merchant with no risks. (D. Malka, *retail touchpoints network*, 2021)

A second reason to use BNPL is to attract new customers. Indeed, the zero interest fees and the few instalments will attract a new range of clients who would not have had the opportunity to purchase their products otherwise. (D.Malka, *retail touchpoints network*, 2021)

Finally, BNPL also provides the opportunity to have better conversion rates. Indeed, since the payments can be spread out and do not need to be done on a total, the customers will be able to buy any products which they usually wouldn't. (D. Malka, *retail touchpoints network*, 2021)

Still considering figure 2.1 above, something important to notice is that BNPL fintechs are taking the full risk of this payment structure. Indeed, by paying upfront the full amount of the purchase and waiting for the customers to repay by incremental payment they are exposed to the risk of non-payment. (K. Peterdy, CFI, 2022)

2.2.2 Business model example: Klarna

As seen in the previous section, both consumers and merchants interact with BNPL providers in different ways. This part will take an interest in the ways these fintechs are organized. Therefore, I will assess the business model analysis of the market leader, Klarna. To make a precise analysis, I will use the Business Model Canvas of Osterwalder and Pigneur (2010). According to them, the purpose of a business model is to describe and present the rationality of how organizations create, deliver and capture value. Therefore, they created a nine-steps framework. These nine-dimensions are interconnected, and work together to provide insights about a firm. Given the fact that I want to have the best overview of this firm, the nine components provided by this model allow me to study each area of Klarna.

Customer segment:

The first dimension of analysis concerns the different customers a firm reach or serves, or as Osterwalder and Pigneur(2010) call it, the Customer segment. According to them, customers are central elements in business, and the goal of any firm is to satisfy them. Therefore, a firm must be able to group its customers into distinct segments with common needs.

Concerning Klarna, they are dealing with a two-sided customer relationship. Indeed they do a B2B(Business To Business) with merchants and B2C(Business To Clients) with the customers.(S.Yu,*Forbes*,2020) Therefore, they segment their customers into two areas. First, clients, the ones that subscribe to an account. The common needs of clients are convenience and flexibility (Klarna, 2022)

Secondly, merchants. Businesses and brands collaborate with Klarna because of multiple advantages such as upscaling possibilities and upfront payment. Also, a given brand will partner with another because of the advantages this brand will bring, such as more visibility, better conversion rates, etc. (D. Malka, *retail touchpoints network*, 2021; N.Varma Rajesh,*Endless Gain*, 2019)

Customer relationship:

The second-dimension deal with the type of relationship a firm establishes with its clients. This section looks at the way a form interacts with its customers, which can be both personal and automated. The way in which firms interact varies according to the motivation sought by the firm, it can be for customer acquisition, retention or to boost selling. (Osterwilder, Pigneur, 2010).

There are three ways Klarna interact with their customers.

First, via automated services. It is a type of self-service where customer does not have a direct link with the firm but where the firm provides information via a portal or a platform. In the case of Klarna, both customers and merchants have this type of communication.

There is a platform for merchant that allows them to have a view of the products sold, the status of the balance, etc.(Klarna, 2022) As far as customers are concerned, a similar platform is set up, which gives them the opportunity to see the status of their order and to have personalized offers according to their previous purchases and the status of their balance. (Klarna, 2022)

Secondly, personal assistance. Klarna has an assistance channel which allows both customers and merchants to reach the brand if they struggle with any process. (Klarna, 2022)

Thirdly, email and social media. This plays an important role in the attraction and retention of customers. Such a communication channels have proven for many years their benefits as it allows to create awareness and enable transactions. (I.Schulting, *Digital Marketing (LLSMS2008)*,2022) By analyzing Klarna's customer acquisition and retention report (Klarna, 2022) it is clear that online media is a key element.

Values:

The third-dimension deals with the value proposed. Indeed, to differentiate from other competitors, a firm must offer specific values that are shared with the targeted customers. (Osterwilder, Pigneur, 2010).

Firstly, the convenience. Such value is the key driver of the BNPL system, naturally it is also a central element in Klarna's policy. Indeed, since the foundation of this brand, they have always had the desire to simplify the consumption of customers. (R.Wang, 2022)

Secondly, newness. Both in terms of partnerships and innovations, the brand tries to meet the needs of its consumers in the best possible way by offering new brands and new features.

(S.Babcock, *The Current Media*, 2022)

Some of those are exclusive to Klarna, making them unique to their competitors. (L.Huffman, *Investopedia*,2022; S.Edelson, *Forbes*,2022)

Thirdly, Performance. Since its creation in 2017, Klarna Bank AB has helped merchant to increase their conversion rate by 40% (Klarna, 2022)

Channel:

The fourth dimension concerns the channel used by a firm to provide its services. Channels are customer liaison, which is important in the customer experience. (Osterwilder, Pigneur, 2010).

Klarna has two main channels. Online platform. This one describes the majority of the BNPL transactions. Secondly, since its introduction in 2017, Klarna has also created an offering via a physical card. (Klarna, 2022)

Revenue:

The fifth-dimension deals with the revenue streams of a company. An important element to consider when it comes to analyzing the business model of a firm as it allows to know for what value a customer is ready to buy a product. (Osterwilder, Pigneur, 2010).

Klara has four main revenue channels.

First, payment fees. This is most of their revenue. Indeed, they will charge merchants a fixed transaction fee (which corresponds to the partnership with the merchant) as well as a variable percentage fee (which corresponds to a percentage of the goods sold via Klarna channels).

Such a fee varies by country and product. For example, Klarna charges \$0,30 transaction fee and from 3,29% to 5,99% as variable fee. (N.Sheth, *Finty*, 2022) In addition to the BNPL system, Klarna have also an instant shopping portal option, which allows customers to pay up within seconds using pre-filled data. To use such a service, Klarna asks a \$30 monthly membership fee from merchants as well as a fixed transaction fee of \$0,30 and a variable transaction fee from 3,29 to 3,79%. (N.Sheth, *Finty*, 2022)

The second stream of revenue comes from the “interchange” fees. Indeed, Klarna has recently launched a card service, with the cooperation of Visa. (Klarna, 2022) Such card works like the traditional ones, it allows customers to store savings, conduct transfers. (Klarna, 2022) Therefore, when you will pay with this debit or credit card an “interchange” fee will be applied to the merchants. Typically, such fee represents 1% of the good’s price and it goes to Visa. Afterwards, Klarna will receive a portion of these fees. (N.Sheth, *Finty*, 2022)

Thirdly, interest on cash. Since Klarna received a bank license. (Klarna, 2017) They can act as a traditional bank, and therefore grant loans, from which they collect margins. (N.Sheth, *Finty*, 2022)

Lastly, late payment fees. Indeed, the customer will receive a late payment fee if they do not manage to pay on time their installment. Typically, a fee of \$7 will be asked per instalment or 25% of the total loan (it depends on the good’s price). (Klarna, 2022) There is no evidence of the proportion of such revenue stream on the total revenue. Nevertheless, for one of its main competitors, Afterpay, such revenue represents an average of 10% of the total revenue. (N.Sheth, *Finty*, 2022) We can assume a similar proportion for Klarna.

Key activity:

The sixth dimension concerns the key activities of a firm. This section describes the most important actions a company must do to make its business successful. (Osterwilder, Pigneur, 2010). Klarna’s business model is driven by an activity that is set up around their platform. Indeed, the Swedish brand is set up on their loan transactions made on their platforms and apps. They also tend to promote the most their platform to increase their sales. (Klarna, 2022)

Key resources:

The sixth dimension concerns the key resources of a firm. This section describes the most important assets which will make the business model works. (Osterwilder, Pigneur, 2010).

The main resource of Klarna is its software platform. The latter is the strongest asset, it gathers more than 65,000 retails and 45 million consumers. (Klarna, 2022) It is the cornerstone to maintaining their activity.

The second important resource of Klarna is their partnership with merchants. Indeed, the capacity to partner with keep retailers allows them to attract even more customers. (M.Chilingaryan, *nogood*, 2021) Currently, they manage to have the most merchants on their platform with almost 250 000 in 2021 (D.Curry, *Business of App*, 2022) In comparison one of their competitor, Afterpay, have 98 000 merchants on their website in 2022. (Afterpay, 2021)

Key partner:

The seventh dimension concerns the partner a company manages to form in order to create a strong network. (Osterwilder, Pigneur, 2010).

First, the numerous of partnerships that Klarna managed to make with important merchant such as IBM, Nike and H&M have allowed to optimize their visibility and awareness. (Klarna, 2022) Secondly, the partnership made with visa has allowed them to pursue their new banking model. (Klarna, 2017)

Cost:

The final dimension deals with the cost structure of a firm. Creating and delivering products comes with a cost. Such cost is influenced by the key activities, key resources and key partnerships. (Osterwilder, Pigneur, 2010). According to Osterwilder and Pigneur, there are six types of costs. Cost-driven, value-driven, fixed costs, variable costs, economies of scale and economies of scope. Regarding the business model of Klarna it appears that two types of costs are the most important ones. First, cost-driven type. The aims of such expenses tend to minimize the cost structure by maximizing elements such as automation, which is pursued by Klarna with their automated platform. Secondly, they face costs linked to the credit and loans risks. Indeed, as explained above (Figure2.1), BNPL providers bear the risk of a loan by paying upfront merchant and waiting the installment to be made. Therefore, they face the responsibility if a customer is unable to pay.

Conclusion:

Through this analysis based on the Business model canvas established by Osterwilder and Pigneur in 2010, we are able to highlight some important elements characterizing Klarna.

First, revenue structure. Klarna generates income from various sources, nevertheless, the company is merchant oriented as most of their revenue comes from this source. (J.Hughes, *business chronicler*,2022)

Secondly, two elements seem to be key to maintaining their business upgrowing. First, the partnerships. The brand partners with a huge number of dealers, about 250 000. The aim is to maximize the appeal to potential customers by offering desired brands. In addition, the recent partnership with Visa has allowed to diversify from an online channel to an in-store channel. Secondly, Klarna's platform is also a key resource in their business model.

Indeed, it is their main showcase for the sale of products. Therefore, the ability to maintain it and make it attractive is a strong asset. Finally, their ability to do B2B and B2C gave them the opportunity to serve both customers and resellers. They are using the B2B experience they have gained since 2005 to expand their B2C offering. (S.Yu,*Forbes*,2020)

2.3: Context of emergence

2.3.1. Comfort increasing

The reasons for BNPL's emergence are multiple. From employment contracts to deliberate choices, there is a wide range of sources that can explain the usage of this system. Indeed, analysts, through a scientific approach have underlined a different kind of source which can be seen as a driving force in the development of the Buy Now, Pay Later system.

S. Sekhar Pani (2022) from the University of Mumbai made research to examine the strengths, opportunities and challenges from the perspective of all BNPL stakeholders, including consumers, providers, regulators, etc. To do so, he builds a microeconomic model which tends to explain what the key drivers of this payment method are by capturing the core interest of customers and providers. From the customer's perspective, he builds a mathematical model based on basic variables, which are income, saving and borrowing in the short-term period, actually quasi the same variable as Modigliani model (1963)⁷ where the period is different.

Figure 2.2: result of mathematical construction about BNPL customer's behavior

Consumer state	Relationship in n months	Remarks
Z_1	$n * I = \sum_1^n C_i = n * C^a$	where C^a is the average monthly consumption under Z_1
Z_2	$n * I = \sum_1^n (C_i + S_i) = n * (C^b + S^b)$	where C^b is the average monthly consumption under Z_2 and S^b is the average monthly saving under Z_2
Z_3	$n * I = \sum_1^n (C_i - S_i) = n * (C^c - S^c)$	where C^c is the average monthly consumption under Z_3 and $-S^c$ is the average monthly borrowing under Z_3

(S. Sekhar Pani 2022)

He describes three states of the customer, Z_1 = a customer that consumes all his income; Z_2 = a customer than saves more that he consumes; Z_3 = a customer that consumes more than he saves.S. Sekhar Pani (2022) analyzed the consumer habits by setting that consumption defines “the quality of life” and the consumer will tend to maximize this quantity.

⁷ For sure, the theory of Ando and Modigliani, “The "Life Cycle" Hypothesis of Saving: Aggregate Implications and Tests” (1963), is built on much more assumptions (Retirement, Remaining time of life, Wealth, ...). Nevertheless, as their goal was to find the relationship between income, saving and borrowing, their core assumptions were the latter. Therefore, it offers a good relationship with the research of S. Sekhar Pani (2022)

Linking to the BNPL system, the concept of “quality of life” is increased only if the consumer imputes a utility in the terms that this means of payment offers (availability of cash, the convenience of multiple payments, etc) Therefore, if the firm is built mainly on the merchant fees revenue, then Z1 and Z3 are the most important consumers for a firm. A fintech will indeed, rather position on the richest (Z1) or on the poorest (Z3) before attempting to reach the middle consumer (Z2). (P. Ghosh; B. Valle; Y. Zeng, 2021). Actually, it makes sense for providers to develop the market by targeting such clients. Indeed, the richest clients are looking for more convenience, it has been shown that for a firm like Affirm, 80% of their clients have sufficient resources on their credit cards to buy a given good upfront. (M.Lux and B. Epps, 2022)

Therefore, the use of BNPL is perceived as a deliberate choice rather than a choice of last resort. (Seeking alpha, 2020) Concerning the poorest consumer, given the formulation of S. Sekhar Pani (2022), either the existence of BNPL solutions or not, they will in any case borrow, therefore lending at zero interest is much more profitable for them than other loans with interest rates. (B. Guttman-Kenney; C. Firth; J. Gathergood, 2022)

On a more behavioural level, a shifting dynamic in credit habits has been observed. (M.lux, 2016) For a long time, credit cards became increasingly popular, mainly due to the network effect, which increased merchant adoption. This led the market to capitalize on a total of \$ 1 Trillion of lending. (Seeking alpha, 2020)

Nevertheless, this leader status puts the credit card merchant in a comfort zone, and those merchants have stopped trying to meet the consumer needs, whereas the BNPL system does. Indeed, US issuers could experience a loss of 15% to new forms of financing by 2025

(A. Garg; D. Goldshtein; U. Kaura; R. Varadarajan; *Mckinsey*, 2022)

Furthermore, the global trend has shown a significant increase in the usage of debit cards, especially among young consumers. This trend is also illustrated by the usage of Visa and Mastercard, where a clear preference for the debit option can be seen for both providers. (Seeking alpha, 2020).

2.3.2 Network effect

As explained just before, the network effect played a huge role in the development of credit cards. Actually, such effects received more and more traction since the 80 to explain economic effects. Literature is not missing, such as David and Greenstein (1990) or Shy (2001). Both have recognized the network tends to bring a certain equilibrium within the market. Based on the expansion of the fax market, Economides and Himmelberg (1995) have shown the strong effect of networks.

Indeed, according to them, the value of joining a network depends directly on the number of other consumers who join by adopting the same technology. For the credit card example, the worth of it depends on the number of merchants that accept this method and not on the number of customers that possess a credit card. Since more cardholders conduct to more merchants accepting such payments, growth in the number of cardholders creates an increase in the credit card market value. (J. Gottefried leibbrandt, 2004)

Therefore, payment is a network industry, in which providers must build up a strong relationship with both sides, customers and merchants. (C. Fisher; C. Hollander; T. West, 2021) Seeing the numerous partnership that BNPL providers are agreeing with merchants (M.Chilingaryan, *nogood*, 2021) and the growth expected (Worldpay/Fidelity National Information Services (FIS), 2022) , without a doubt the development of the BNPL market is also empowered by a network effect.

2.3.3 Covid effect

The covid period has totally disrupted our habits. Financially speaking, it has forced us to rethink the way we manage our savings. In this context, e-commerce has been able to make the most of the situation. The covid period generated a 20% increase in e-commerce, with BNPL having the same increase. (M.Lux and B. Epps, 2022) Indeed, while UK and US aggregate consumption has felt in March-April 2020 (Chetty et al., 2020; J. Gathergood and B. Guttman-Kenney, 2021), the consumption of BNPL services have experienced growth (B. Guttman-Kenney; C. Firth; J. Gathergood, 2022), surely explained by the consumer shift towards spending online. (J.Gathergood and B. Guttman-Kenney, 2021)

As a matter of fact, 35% of consumers using BNPL services claimed their usage has changed during the Covid period. (Quantilope, 2020)

Furthermore, 50% of BNPL's users whose employment status has changed (positively or negatively) during Covid 19 admit their usage has even increased. It suggests that in any situation (difficult or not), consumers are increasingly concerned about what they pay for. (Quantilope, 2020) Even if the long-term effects of Covid on e-commerce are still unknown, it's clear that this period has favoured the growth and visibility of this payment system, which it might not have had without Covid.

2.3.4 User Characteristics

Throughout several reports, I will focus now on the BNPL users' behaviour. Indeed, knowing the target audience and motivation will explain what the drivers are and explain its possible future market growth.

First of all, M. Di Maggio; J. Katz and E. Williams (2022) have conducted a transaction-level data analysis in order to capture the character of users and usage patterns.

According to their results, consumers use BNPL products to increase their spending as well as to decouple spending and income.

According to their findings, this system is not easily explained by classical theories of consumption smoothing. Indeed, they think that a model such as a standard life cycle model⁸ cannot fit with the BNPL system. Indeed, they believe that this payment method increases the likelihood that consumers face negative outcomes from low liquidity, which is in contradiction towards the "life cycle model". In addition, they are pledging that BNPL reduces the price elasticity on a given item and increases the near-term spending at the expense of long-run liquidity.

BNPL is a short-term-oriented product, the simple fact that it gains traction means that many people are not long-term-oriented, as they are less likely to save but more likely to spend a higher fraction of income on spending. (M. Di Maggio; J. Katz; E. Williams 2022)

Concerning the target audience, it appears (B. Guttman-Kenney; C. Firth; J. Gathergood, 2022; M. Lux and B. Epps, 2022) that Millennials and Gen-Z are the dominant users of this means of payment. Indeed, they have the particularity to be raised in an era where interest in technology is important. Also, as said before, with the crisis of 2008, they also have a greater reluctance for traditional institutions.

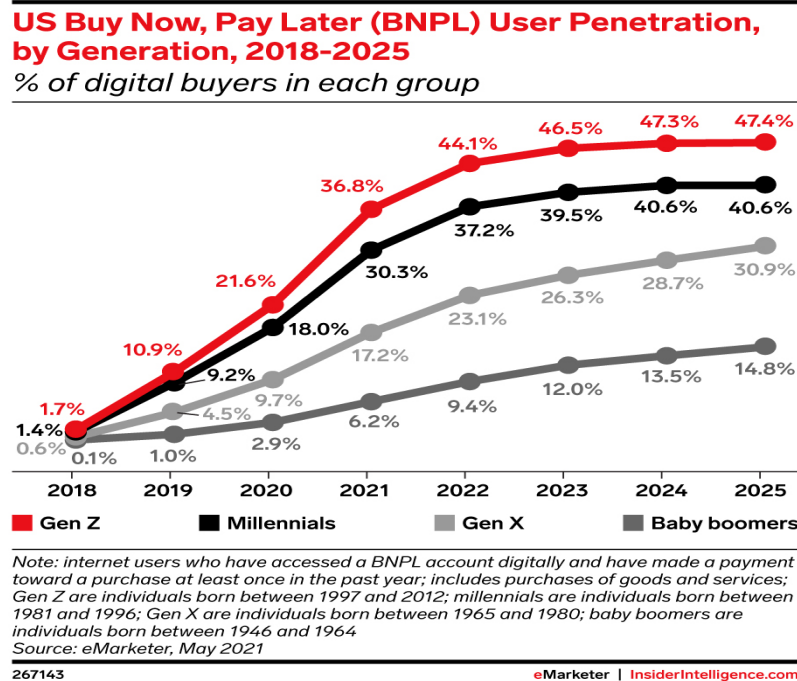
Knowing also that they are entering into their prime spending years since many enter the workforce or start a household, it's natural that those two generations are the one that uses the most BNPL services. (emarketer, 2021)

The figure 2.3 below illustrates the main actors in this system and how they will evolve over the next few years. Please note that this graph illustrates data from the USA, nevertheless, we can apply a similar observation to the rest of the world as it presents the same assumptions as elsewhere. (S. Sekhar Pani ,2022; B. Guttman-Kenney; C. Firth; J. Gathergood, 2022)

⁸ Modigliani (1963) estimated that an agent who wants to smooth consumption over a lifetime will borrow when income is low and save when income is high. Therefore, his main decision will depend on his income and wealth.

Therefore, since BNPL is becoming more and more mainstream, Generation Z buyers are expected to be the next biggest users. As matter of fact, in the US, by the end of 2022, 44% of Gen Z will use the BNPL services compared with 37% of millennials.

Figure2.3: Buy Now Pay Later market penetration



(emarketer, 2021)

The last element we can highlight from figure 2.3 above is the fact that the global trend of users is expected to increase for the following years regardless of age group. Surely, such trend is projected because of the future development and investment planned by fintech. This will be covered in the following part.

2.4. Comparison between BNPL and other instalment products.

BNPL products are not new, they share similarities with existing instalment options, such as layaway or credit cards.

First, Layaway. This is a pay-over-time option offered by a merchant that allows a client to reserve a given product by making several predefined instalments. Once the item is fully paid for, the client can take possession of the product. (W.Kenton, *Investopia*, 2021) Genially customers who use this type of payment have a bad credit score of a limited income. (Federal Reserve Bank of Kansas City, 2021). In fact, layaway is low risk for both consumers and merchants. Indeed, customers may be charged a nonrefundable service fee and incur a cancellation fee if they are not able to repay. For a merchant, this payment system allows sales that might not occur otherwise. (Federal Reserve Bank of Kansas City, 2021).

However, since the 1980s, this system has started a decrease as the omnipresence of credit cards has reduced their utility. Given the increase in popularity of BNPL solutions, merchants have almost removed layaway services. (W.Kenton, 2020; B.Bruce, 2021)

Secondly, credit cards. BNPL products are quite similar to credit cards. on the contrary to layaway solutions, both enable customers to take immediate possession of a good and offer convenience. Nevertheless, a customer's ability to subscribe for a credit card requires a creditworthiness check (D.Weliver, 2021), while BNPL providers do not. (N. Hendy, *Forbes*, 2022). Even more, among the ones that pass the credit check, it has been proven that young consumers are less likely to use credit cards (T.Rossman, 2021), confirming the shifting trend from credit cards towards different means of payment. (Seeking alpha, 2020).

Therefore, compared to one of its direct competitors (credit cards), the BNPL system is a more easily accessible procedure for a range of customers, especially the ones who are in a bad financial situation. (Federal Reserve Bank of Kansas City, 2021) As we will observe in the next section, such practices could end up with serious bad effects.

However, being opposed in a market, this does not allow customers to use both. Indeed, Guttman-Kenney, Firth and Gathergood (2022), while analyzing the effect of BNPL in the UK, have shown that 19,5% of credit card holders have at least one BNPL transaction registered on their credit line. Therefore, they suggest that the mean customer is prone to maximize his gain from all kinds of financial products he has access to, which will limit his default risk.

2.5. Risks and BNPL

So far, I have presented several positive sides of this system. I have explained the advantages of using this method, what it brings to the users, and also why this means of payment has been developed.

Nevertheless, any financial instrument linked to the credit market is, undoubtedly, exposed to multiple risks. Whether on the side of consumers, lenders, or merchants, every side of the BNPL pyramid has its own source of risks.

2.5.1 Overconsumption

One of the main risks in this system comes from what makes it attractive to consumers. Indeed, in a very opposite way, what could attract many users to pick this method instead of another could impact badly these same users. As said before, the BNPL system allure clients by being so user-friendly and by offering no interest fees for multiple instalments, which will induce users to increase their spending and could end up creating strong negative impacts. (J. DuPlessis, *credit union times*, 2022; M.Lux and B. Epps, 2022)

As an interview made by CNBC suggests, many young consumers have the impression that BNPL payment sounds cheaper, and so, they are attracted by using this more and more. (R.J. Cross, *Pirg*, 2022)

A general feeling that is accentuated by the rising cost of living. Indeed, initially conceived as a convenient way to buy costly goods, such as TV, fridge or sofas, the new economical outcome forces many users to purchase essentials such as food or toiletries instead. (L.Appleyard, *The Conversation*, 2022).

This brings us to the first major risk of this system. The accumulation of BNPL contracts, in addition to the current economic situation, will make payments much more difficult. As every fintech has its refunding plan many users can mix it all up and will therefore not be able to make their payments on time. Those payment delays will therefore create late fees which will transform the BNPL contract into a full credit contract. (K.A.Renzulli, *Newsweek*, 2022) A survey from DebtHammer showed that 30 per cent of users find it difficult to make their payments on time, moreover, 32 per cent of them admit skipping rent, utilities, or child support costs to prioritize their BNPL payment. (E.Roth, *The Verge*, 2022)

Public authorities in OECD countries (OECD, 2019) have unveiled a report in which they have identified a few drivers of risk in the short term. (S. Sekhar Pani, 2022) Firstly, they judge that low-interest rates can push overleveraging. Secondly, low and irregular levels of income are relatively vulnerable to short-term loans. Thirdly, a behavioural bias tends to create gratification and over-confidence which will lead to an increase in the recurrence of short-term loan consumptions.

What is even more concerning is that some customers charge their BNPL transactions on their credit cards. According to a recent report (B. Guttman-Kenney; C. Firth; J. Gathergood, 2022) based on UK consumer habits, it has been proven that 19,5% of active BNPL credit cards users, they have at least one transaction made by a BNPL firm. Charging BNPL debt on a credit card is raising concerns about the ability of these customers to pay for a BNPL service. Even worst, some customers may enter the market with a zero-interest BNPL debt but end up with a credit card debt that implies a 20% credit card interest rate and has a long amortization schedule. (B. Guttman-Kenney; C. Firth; J. Gathergood, 2022)

Even though, the cost to users of short-term loans may result in financial distress in the long-term, with quantitatively the same outcome as they experience today, the actual real concern is in which way this distress will impact the global market dynamics. (M.Lux and B. Epps, 2022) A recent article in the Wall Street Journal has raised concerns about the impact of inflation, slowing growth on bonds backed by consumer debt.

The article shows a higher return expected for a such bond, a sign higher risk expected on consumer debt. (in table 2.4 in the appendix) For example, shares for Afirm and Upstart have both lose 75% since November 2021, when late payment proportion starts to rise. To a lesser extent but giving loans to people unable to pay back is reminiscent of Subprime failure and the subsequent crisis. (M. Grossman; M. Wirz; *The Wall Street Journal*, 2022)

2.5.2. Credit assessment

For several years, the credit market is regulated, strongly over the years. One crucial element that remains over the years is the credit score. Its use as a rating system is strongly deployed in the US, UK and Australia. This system is employed to rate the reliability of customers in repaying their debts. It is based on credit histories, such as the number of accounts opened, total debts, repayment history and other elements. This score will affect the financial life of every consumer. If the score is too low, the client will not be granted credit (T.Brock, *Investopedia*, 2022). In other countries such as Belgium, France or Germany the system is not far away. They do not use a score but register information about credit and loans. For example, in Belgium, they use the *Central Individual Credit Register*. This file gathers information about consumer credit and mortgage loans. All lenders must consult this file before granting a loan. (NBB,2004)

While traditional lenders do not grant loans regularly, BNPL needs to assess a consumer's creditworthiness more frequently and in a shorter term. The current structure of these actions is questionable. First, there is not yet any centralized information-sharing process. Indeed, BNPL firms are working independently. (S. Sekhar Pani, 2022) Therefore, a customer struggling to refund given providers could contract a new one with another BNPL firm. Secondly, while in some countries regulation force BNPL providers to do credit checks (Australian Finance Industry Association, 2022), most of them do not proceed to any financial health. (N. Hendy, *Forbes*, 2022) Therefore any customer without having a view on their ability to repay can contract a loan and therefore fall in a negative spiral. Tijssen and Garner (2021) (Bain & Co, inc) reported that in the UK huge providers report a very limited default rate, while smaller firms have a much bigger default proportion.

One solution that takes more and more traction is the development of footprint-based credit assessment. These footprints are information clients leave when they are on a specific website. These informations have enough power that can match with credit bureau assessment and with other assessment method, BNPL providers can reduce default rate (Berg et al., 2019; Jacobsson and Siemiatkowski, 2007)

2.7. Conclusions and next steps.

To conclude this first chapter, quite few findings has shed light on the reasons for the growth of the BNPL system.

Indeed, the research made by M. Di Maggio; J. Katz and E. Williams (2022) has shown that consumers use BNPL products to increase their spending as well as to decouple spending and income. According to their findings, this system is not easily explained by classical theories of consumption smoothing. Indeed, they think that a model such as a standard life cycle model cannot fit with the BNPL system as this payment method increases the likelihood that consumers face negative outcomes from low liquidity, which is in contradiction towards the “life cycle model”.

In addition, A. Deaton (2005) analyzed Modigliani’s work in the light of current topics. One of his findings was the challenges of the model to uncertainties, something that Modigliani recognized as an unsolved issue. Thus, since we know from B. Guttman-Kenney; C. Firth; J. Gathergood (2022) in UK and by M. Lux and B. Epps (2022) in US, that Covid period has played a large role in the evolution of this system, a period marked by uncertainty. Therefore, this confirms the inability of classical models such as the life cycle model to provide theoretical basis to analyze BNPL system.

Secondly, as explained by C. Fisher; C. Hollander; T. West (2021) this payment system has taken advantages of network effect to expand. According to Economides and Himmelberg (1995) the value of joining a network depends directly on the number of other consumers who join by adopting the same technology. Any payment system is based on a network effect. The increasing adoption by consumers of a method force merchant to also take an interest on it. Seeing the case of Klarna, totalizing on average 45 million users, it is not a surprising to see 65 000 merchants joining the system.

Thirdly, through the research of S. Sekhar Pani (2022), we understand that consumption is defined by the concept of “quality of life” and the consumer will tend to maximize this quantity. Linking to BNPL method, he explained that this concept is increased only if the consumer imputes a utility in the terms that this means of payment offers.

S. Sekhar Pani (2022), M. Lux & B. Epps (2022) and B. Guttman-Kenney; C. Firth; J. Gathergood (2022) allowed also to highlight the type of consumer of this payment system. According to them, the average users are economically strong and weak users, not the middle consumers.

Finally, when assessing the Business model of Klarna, throughout their revenue structure and the merchant fees, we understand that sales repetition is a key element in the evolution of fintechs. The maturity of loans is on average three weeks, meaning that, if a client only makes one purchase at a time, provider can renew their refunding cycle 17 times a year for a single client. (Suadfakih, *Medium*, 2021) Therefore, the occurrence of use is primordial to maintain growth and high Capital velocity⁹.

In conclusion, it appears that researches are mainly descriptive and are mainly focused on a particular country. The analysis of the BNPL solutions is still at an early stage. There is not yet any global research nor any concrete theory about the development of the system. It results that piece of information being scattered all over the place it becomes difficult to judge the functioning of the system.

This is why I think a more practical vision will be interesting to adopt in order to understand the underlying conditions of BNPL system implementation.

⁹ This imply having a high ROIC (return on invested capital)

Chapter 3: Study Case: An assessment of different countries where Buy Now, Pay Later system operates.

3.1 Introduction

3.1.1 Objectives

So far, I have presented the system in a very theoretical way, outlining its general characteristic. This chapter will focus more on a practical aspect by looking at the utilization of this new means of payment in some precise countries. The objective is to draw criteria allowing to have a better view of the way the system is used but also to establish patterns between different countries. Therefore, I will first analyze countries where the system is present according to four dimensions. The market size overview, the customer preferences of the market, the comparison between the BNPL system and other instalment solutions and finally existing and future regulation. Thereafter, I will draw up patterns between these different countries.

Two assumptions will remain the same regardless of the country analyzed.

Firstly, fintechs present in different markets. Indeed, to date, five main fintech dominate the market, therefore any analysis will be based on the results of Affirm, Afterpay, Klarna, PayPal and Seezle.

Secondly the target audience. Indeed, the appeal of this system is globally carried out by the same groups of people (Gen Z and millennials) whatever the area.

It is also important to note that for some key countries, the amount of research carried out is greater than for others, therefore, the amount and accuracy of information will vary from country to country.

3.1.2. Methodology

3.1.2.1. Evaluation grid.

As explained, I have decided to assess the situation in different countries based on four dimensions. Market overview, Customer preferences, Comparison with other instalment procedures and Regulation's overview.

First, there are not plenty of sources about a cross countries comparative valuation grid on BNPL solutions, or at least not one that serves the objective of this thesis.

Worldpay conducted a cross-country analysis via their "Global Payment Report" (2022).

This British payment service provider specializing in internet payment solutions, has published for the seventh consecutive year a report in which they offer an overview of the current online payment landscape. The report is based on real-time payment schemas, the overlay services offered on real-time payment and on the new payment products.

They have gathered real-time payment data from payment scheme operators and central banks from 60 markets. (FIS/Worldpay, 2022)

Their analysis method is based on a three-step approach, an overview of the market, an assessment of the preferences and the comparison between the various payment method available in a given region, which allows them to present the key drivers of each country as well as the future expectation.

Therefore, as my goal throughout this study case is to have a better overview of BNPL in countries where it operates, it appears that the three-step approach is relevant for me.

However, while Worldpay's report (2022) analyses consumer preferences based on their predilection towards a specific method, I have decided to include as well the customer's predilected products for a BNPL purchase.

Secondly, I have consulted the Committees on Payment and Settlement Systems (CPSS)¹⁰ periodical publications (2003) as well as the European Central Bank (ECB) methodology for payments system (2013) in order to have a broader view of how public organizations evaluate the payment market.

Both organizations have different approaches. While ECB is giving mainly regulatory directives to assess payment systems in Europe, CPSS tend to provide an overall situation of countries subjected to analysis. Therefore, as the CPSS provides a better analysis of the payment market situation, I decided to take into consideration only their model of analysis.

The CPSS sought to understand how payments work in 14 different countries. For most regions, as Worldpay did, they analyzed the market and compared payment methods, but CPSS add a huge part about the regulation present in these countries analyzed.

My analyses will be based on the fourth dimensions (Market overview, Customer preferences, Comparison with other instalment procedures and Regulation's overview) and will be completed by current and future regulations in different countries. The fact that both ECB (2013) and CPSS (2003) are presenting regulatory criteria to assess the payment market shows the importance to incorporate such dimensions to assess the validity and evolution prospect of a system. (Dr. P Lowe, 2006)

¹⁰ Who operates under the aegis of bank for international settlements (BIS)

3.1.2.2. Countries selection

I conducted the countries' selections based on two criteria, the penetration level of BNPL within the e-commerce market and the number of studies available.

First, as my goal is to build the best overview of the different countries where BNPL operates and to understand the reason for its success, I naturally turned to the countries where the penetration rate of BNPL is the highest. The top three countries are Sweden with an e-commerce market share of 25%, Germany with a market share of 20% and Norway with 18%. (FIS/ Worldpay, 2022)

In my view, it will be a mistake to have only European companies in my comparative analyses, the goal is to assess the reason for the global BNPL growth and not only in European market. Therefore, I decided to choose the country with the highest penetration per Regio.

As a result, I chose the USA (local BNPL e-commerce market share of 4%), the UK (local BNPL e-commerce market share of 6%), Australia (local BNPL e-commerce market share of 11%), Singapore (local BNPL e-commerce market share of 4%) and finally Sweden (local BNPL e-commerce market share of 25%). (FIS/ Worldpay, 2022)

Secondly, to provide information I need to be supplied with reports and analyses. As a result, after defining these countries on the basis of their market share, I went to check the number of papers done on each country on the BNPL topic. For the first four, the sources available allow me to provide relevant analysis of the four dimensions of my evaluation grid.

Sweden appears to be the leader market in terms of highest penetration per Regio, unfortunately there are not enough varied sources to present the Swedish market. In order to analyse the Sweden market with appropriate sources I had analysed the Europe market. However, the European market is compound by countries¹¹ with different market share scale¹², so I had to observe the whole market, which will not reflect the real situation of Sweden.

¹¹ In other Regio, the countries chosen have slightly the same market share as its neighbors

¹² Sweden and Germany with respectively 25 and 20% compared to Poland and Russia with respectively 2 and 1%

3.2. USA Situation

3.1.1. US market

The evolution of the US e-commerce market is significant. An increase of 10% for year 21 has been observed. (M.Lux & B. Epps, 2022) Indeed, consumers of this region have a great affinity with such a type of instalment loan. Approximately 56% (PrecedentResearch, 2022) of Americans have used a BNPL solution this year, compared to 38% last year. On an upper scale, the USA dominate the global market with 30% of the global sales. (PrecedentResearch, 2022) Two main reasons can explain this dominance. First, in addition to the natural appeal of these customers to such credit services, (GlobalEconomy, 2022) many of the major companies are present in this market. (FIS/ Worldpay, 2022) This creates competition and pushes to evolve and thus offer more and better. Collaborating with entertainment companies helps also to create an increase in this market. (FintechFutures,2022) Indeed, it allows to offer a BNPL service to book hotels or airline tickets. (Airport Technology, 2022)

In the end, all these innovations pushed US consumers to use this system even more and explain the strong growth in this market.

The market share of BNPL in the e-commerce market has risen from 1.6% in 2020 to 3,8% in 2021. This increase is not likely to stop, as many analysts have estimated that it will reach 9% of the market by 2025. (FIS/ Worldpay, 2022)

3.1.2. US Customer Preferences

The US market is one of the largest in the world and several reports have sought to analyze this market. The most recent is a study released in 2022 by the ‘Consumer Financial Protection Bureau’, here are the main elements highlighted about the consumer’s behavior.

In 2021, the five top lenders in America ¹³ provided more than 180 million BNPL loans, for a total of \$24,4 Billion, this means an average of \$135 per BNPL loan. (Table 3.1 in the appendix)

As already discussed in the chapter 2 conclusion (2.7), BNPL lenders enjoy high capital velocity by multiplying the loans of a single borrower. Therefore, repetition is one of the key factors in the success and growth of BNPL fintech.

¹³ Affirm, Afterpay, Klarna, Paypal, Sezzle

Table 3.2 in the appendix shows the average level at which a borrower uses the product of a lender.¹⁴

The last quarter was the highest registered during the last years with a usage rate of 2.8.¹⁵ In addition, the table 3.3 in the appendix highlights the share of BNPL borrowers with more than 5 BPNL loans or more than 10 BPNL loans.

As we can observe from the last three graphs, consumers are increasingly attracted to this new means of payment, as evidenced by the increase in BNPL loans taken out and the repetition of these.

Finally, table 3.4 in the appendix shows the preferred products for which Americans use the BNPL system. As we can observe in USA, the top products this system is used for are, apparel¹⁶, personal effects¹⁷ and mass market¹⁸.

3.1.3. US Comparison between BNPL and other option

As illustrated by figure 3.1 bellow, the main players in the US e-commerce market are credit and debit cards. This is not a shocking finding, as it has been part of the collective consciousness of Americans for many years. (M.Lux & B. Epps, 2022) When we look closely at the data, we observe that credit cards (30% in 2021) are much more used than debit cards (21% in 2021). This illustrates the tendency of American consumers to favor credit to finance their purchases. Consequently, the integration of a system such as BNPL seems natural.

Digital wallets are also very popular in the US (30% in 2021). Due to the user-friendliness of the new payment facilities, peoples are more and more attracted by digital wallets, e.g., the bank card is no more needed to do a purchase as long as you have your smartphone. (Daly.L, *The Ascent*2021) knowing the fact that our phone has become an extension of our hand, having your means of payment on your phone is not surprising. Therefore, it is obvious that for the coming years, digital wallets are expected to overtake credit and debit cards to become the number one system in the e-commerce market. (L.Daly, *The Ascent*2021)

¹⁴ This is not an aggregation of the total usage of a specific borrower across all BNPL lenders but the view of a unique borrower on his frequency to use the product of a unique lender per quarter.

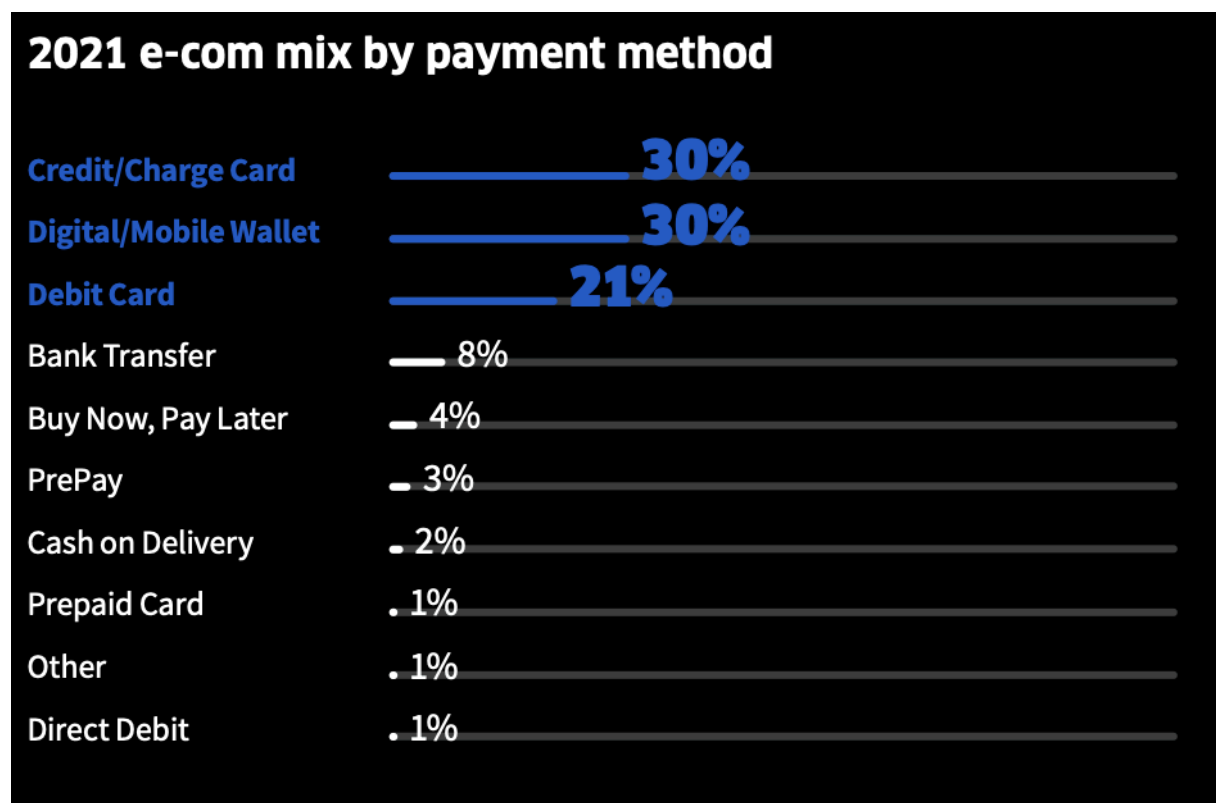
¹⁵ 2.8 usage rate means that the average BNPL borrowers use the product of a given lenders 2.8 times in a quarter.

¹⁶ Meaning clothing.

¹⁷ This includes Electronics, Fitness, Game/Hobbies and Jewelries.

¹⁸ This includes Department stores, Wholesale, General goods and General merchandise.

Figure 3.1: e-commerce overview of the US



(FIS/ Worldpay, 2022)

3.1.4. US Regulations

As explained in chapter 2 (2.6), the risks for consumers are multiple. The lack of a clear regulation led many users to fall into a negative debit spiral. Therefore, concerns have arisen from State and Federal level in order to bring a clear structure to this means of payment.

For that purpose, the US Consumer Financial Protection Bureau (CFPB) released in September 2022 a report gathering information about the current situation of BNPL in the US.

The report is based on an inquiry, where CFPB orders the top five lenders¹⁹ in the market to share information about their activities.

The result of this report showed the effective lack of regulation. Especially, regarding the fact that the BNPL system does not involve loans charge or do not imply credit cards. Some major US regulations cannot be applicable to BNPL lenders; like Truth in Lending Act (TILA, 1968) and Regulation Z (1968).

¹⁹ Affirm, Afterpay, Klarna, Paypal, Sezzle

Nevertheless, other legal guidelines are applicable to this system, such as UDAAPSs (2022), EFTA (1978), FCRA (1970), Graham-Leach-Bliley Act (1999). (S.M.Kaplan, C.B.Leach, O.Lev, E.T.Mitzenmacher, C.L.Bieker, J.C.Dawson, *Mayer Brown*, 2022)

In some state, local government ask for license to lenders to allow them to sell BNPL product. (M.Lux & B. Epps, 2022) The further steps of CFPB will be to introduce new guidance and rules to make sure BNPL lenders are subjected to equivalent regulation as credit cards firms. Therefore, a strong attention to US-BNPL market is expected as those new regulations will change its outlook. (CFPB, 2022) The way the market will be impacted is not yet predictable as those rules could make the BNPL system less attractive or, in contrary, a better and a safer structure could attract more people.

3.2. UK Situation

3.2.1. UK market

Being one of the European financial hubs for many years, the United Kingdom has undoubtedly almost every financial product and innovation within their market. For some years now, E-commerce is in constant evolution in almost every country. (A.Nogoev, R.Yazdanifard, B.Samadi, S.Mohseni, 2011) The UK does not break the rules, as the country is provided by a wide range of e-products. It is important to notice that the UK has one of the most advanced e-commerce markets in Europe. (Statista, 2022) The revenue of this e-market is expected to reach £ 110 Billion pounds, as well as almost 60 million users in 2022. (Statista, 2022) Among them we find obviously the Buy Now, Pay Later system. In the UK, this system has increased exponentially for many years and especially since the pandemic. (B. Guttman-Kenney; C. Firth; J. Gathergood, 2022) Besides of the BNPL fintechs, major retailers and banks joined the market to propose their own BNPL products. As an example, in 2021, the e-commerce giant Amazon joined forces with Barclay to create “Instalement”, the BNPL of Amazon available in UK. (Amazon, 2021) The medium- and long-term growth of BNPL in the UK is on the right track. Indeed, one out of eight people have used BNPL products in 2021, meaning 12% of Britons. (UK finance, 2022) The trend will remain relatively optimistic for the coming years. It is expected that the adoption of this system will grow with a CAGR of 24% between 2022 and 2028, reaching a total Gross merchandise value of £ 90 312,8 Million pounds. (Business Wire, 2022)

3.2.2. UK Customer Preferences

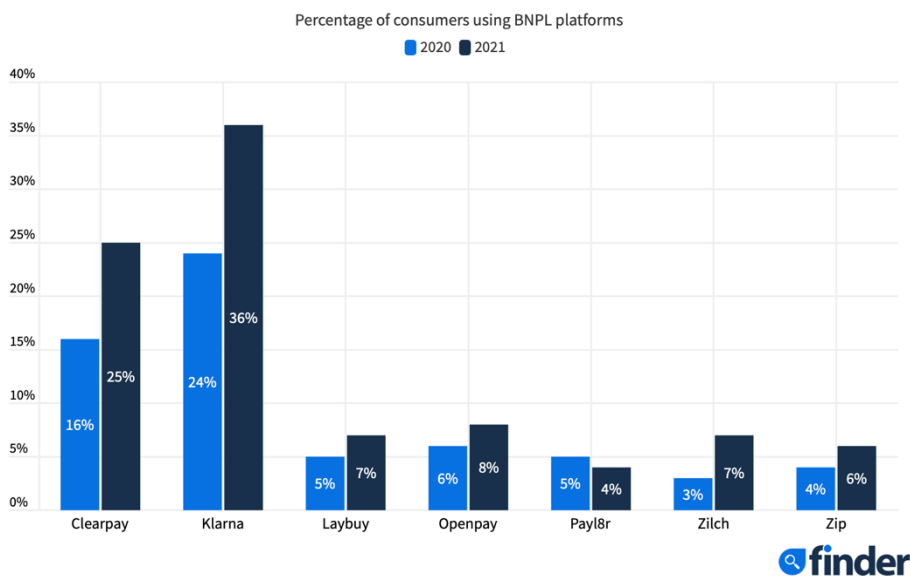
Britons have increasingly raised their interest in this new means of payment. For multiple years and for the ones to come. Many providers have seen the potential of UK market and need to be part of it.

The leader of the market is Klarna, with 36% of the BNPL market share. Since 2019 the growth of this brand is exponential, we estimate a total user of 194 388 in 2021. (Table 3.5 in appendix) (G.R.Johnson, *Finder*, 2022)

The second largest provider is Clearpay (which is Afterpay but has been renamed for the UK market). The brand has a 25% market share in 2021, which is much higher than the 16% of 2020. (G.R.Johnson, *Finder*, 2022)

The figure 3.2 highlights the most important brand present on the British market.

Figure 3.2 overview of the most used providers in UK



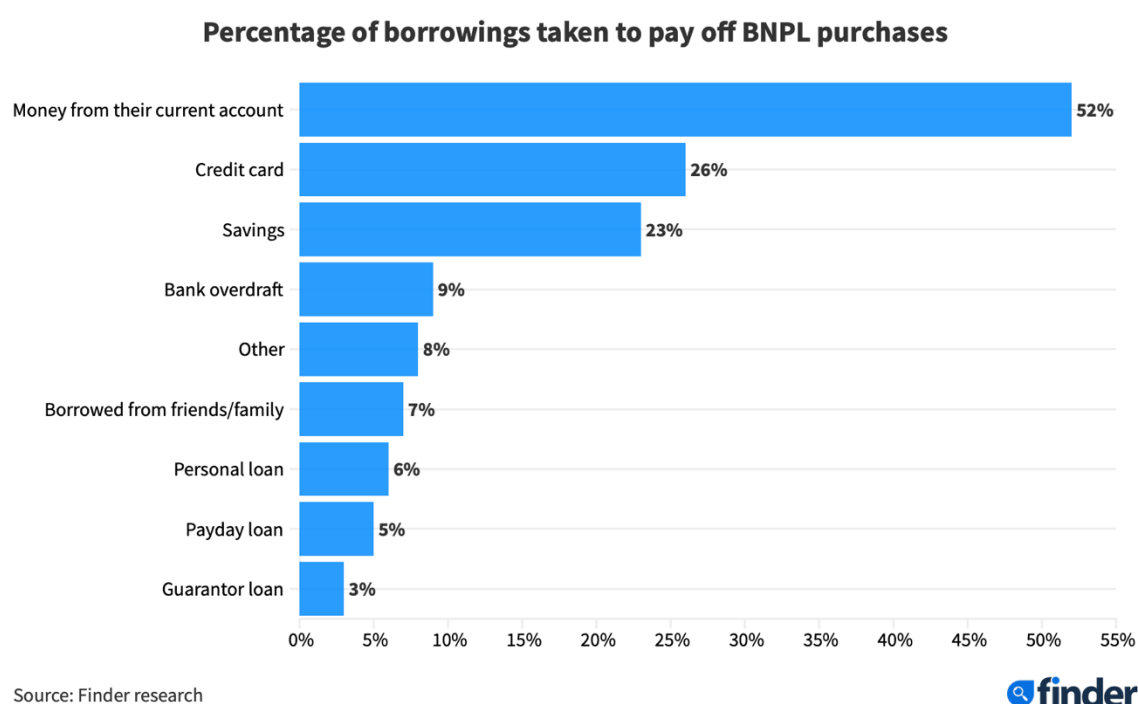
(G.R.Johnson, *Finder*, 2022)

This market creates a first limitation to my first assumption when assessing the situation in different countries. As the figure 3.2 shows, the structure of the market itself is interesting. As observed, there are many players in the market, nevertheless, the market is mostly dominated by Clearpay and Klarna. No research and analyze have been made yet to explain this, but as explained in the first part, network effect seems to be the main reason. These two-brand share 61% of the business. There are indeed, several fintech present in there, the sector is in a monopoly situation.

As these two companies have a strong position in the business, it will be hard to push consumers to turn away from Clearpay and Klarna towards new alternatives. Changing on habits is difficult, this is true for most people and Britons are no exception. (UK Gov, 2020)

The way in which Britons pay their BNPL purchase relates to one of the problems cited in the risk section (2.5.1). Indeed, as the figure 3.3 shows, on an aggregate basis, it is an average of 21% of users of BNPL that must borrow money to repay their purchase loan. (G.R.Johnson, *Finder*, 2022) In this 21%, it is more than half of the young shoppers who are likely to use an additional loan to repay their BNPL purchase. (G.R.Johnson, *Finder*, 2022) As said in a previous section, this accumulation of debt put consumers into a negative spiral, especially, given their age, these young consumers are not in a situation of financial stability.

Figure 3.3 payment method used to pay off a BNPL loan in UK



(Finder, 2021)

However, the figure 3.3 illustrates that British consumers are very conscious of their purchasing power. Indeed, the decision to purchase via a BNPL product seems to be a conscious one as the majority (52%) of consumers use the funds they have in their current account to pay for their purchase. (G.R.Johnson, *Finder*, 2022)

Finally, I will consider the products prioritized by Britons. (Table 3.6 in Appendix) The main source of use of this system is casual wear (33%). (G.R.Johnson, *Finder*, 2022)

Several retailers in UK such as Asos, Boohoo or Shein offer this service on their website.

As this kind of brand is very popular with young shoppers, it is not a surprise to see them at the top of the ranking of BNPL user in the UK. The second and third largest sector are respectively eating out (tips to restaurants) and beauty products. (G.R.Johnson, *Finder*, 2022)

3.2.3. UK Comparison between BNPL and other option

As explained in the previous section, e-commerce in UK has a huge place. Despite the fact that BNPL attract Britain consumer, it does not rank first.

Indeed, in 2020, BNPL represent 5% of the total e-commerce market (A.Rolfe, Payments industry intelligence, 2021), as observed in figure 3.4 below it represent, 12% of the total market in 2021. (UK finance, 2022)

As highlighted by the figure 3.4 bellow, Britons are debit-cards oriented. For many years now and for the next 10 years this system will outperform any other. (UK finance, 2022) A trend than can be mostly observed in the UK. According to UK ministry of finance, this dominance is explained for two reasons. First, the increasing development of contactless payments has favored the massive use of debit cards. Secondly, debit card is the most common method of making online purchases, an effect that has been further accentuated during Covid 19.

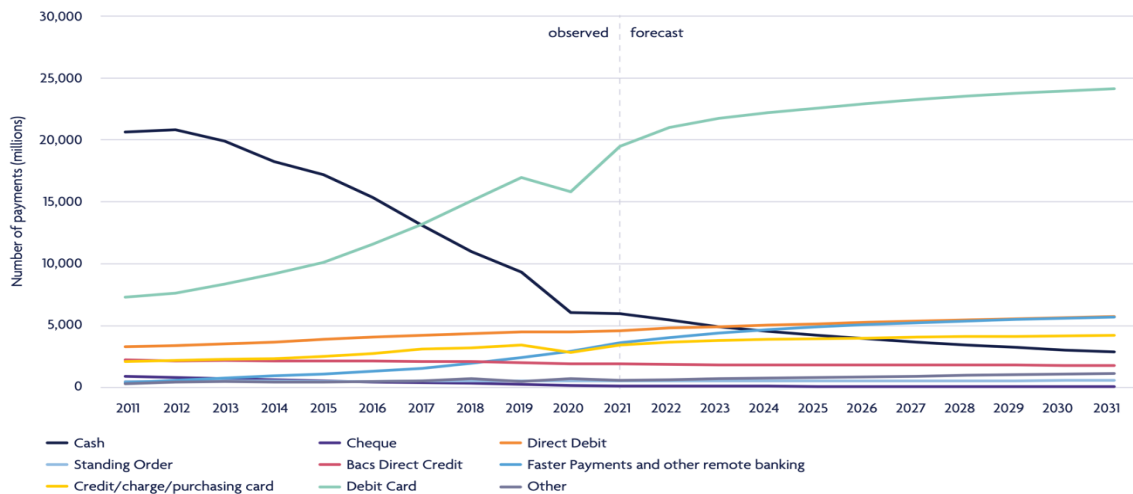
This trend is expected to increase due to the continuous growth of contactless payments, the growth of e-commerce and the fact that more and more small shops are accepting mainly debit cards. (UK finance, 2022)

Concerning, credit cards, currently it is the third most used method of payment in the UK, and it's expected to growth slowly. The forecasts are not optimistic. Pandemic has had a detrimental effect on this system, an effect which has been exacerbated by the current energy crisis. The confidence of consumers has been damaged as they have seen the riskiness of the credit cards method. (UK finance, 2022)

One of the fastest growing payment methods will be digital wallets. (FIS/ Worldpay, 2022) As they become more and more important in a society that is more digital oriented than the previous generations, the increase of this method seems natural and obvious.

Figure 3.4 overview of the e-commerce trend in UK:

Chart 1.3 Payment volumes (millions) 2011 to 2031



(UK finance, 2022)

3.2.4. UK Regulations

As in other countries, the recent arrival of the system has not allowed government to promulgate clear and precise regulations. This legal vacuum has pushed several fintech to enter the market. In the case of UK, the addition of these players does not allow Financial Conduct Authority (FCA) to have a control over the actions of all of them. In a study conducted in 2021, this organism has raised concerns that can harm consumers. The main areas of concern are 1) contract cancellation term, including late payment fees; 2) the firm's ability to terminate or suspend accounts; 3) continuous payment authority terms.

As in the US, the FCA and UK government will work on a same page to establish a legal framework. However, the advantage the British have over Americans is that they have taken these actions earlier and are therefore on an earlier stage. Indeed, on 20th June 2022, UK government has drawn action plans to regulate BNPL as well as other forms of unsecured short-term interest free credit.

The plan outline of the government will follow these 4 dimensions. 1) providers will be required to carry out credit checks to ensure that loans are affordable for consumers; 2) the need to ensure that any BNPL adds are faire, clear and not misleading; 3) the providers need to be approved by the FCA; 4) the fact that consumers will be able to take complaint to the Financial Ombudsman Service.

Given the complexity of the regulating this system in the most optimal way, UK government will publish a consultation on draft legislation by the end of the year. Following this, they aim to publish a second legislation by mid-2023.

3.3 European Situation

3.3.1. EU Market

The expectation for BNPL market in Europe is high when it comes to analyze its performance. According to the Global Newswire research (2022), latest figures of BNPL in Europe, the gross merchandise value has reached \$ 111046,3 Million in 2021, and it's still expected to increase by 54,7% to reach a total value of \$ 171794,2 Million in 2022. The medium- and long-term perspective of BNPL looks also strong. Between 2022 and 2028, the adoption of this new payment system is expected to increase steadily recording an expected CAGR of 30,8% and reach a gross merchandise value of \$ 860409,8 Million. (Globe Newswire, 2022)

If we consider only fintech perspective, the market seems viable and expanding. However, unlike in the US and the UK, where some banks are trying to position themselves in the market, in most of European countries, banks are missing the wave.

Flagship, a payment and fintech consultancy partner company has conducted a survey in 2021 in order to analyze the penetration of banks in BNPL market. The survey was conducted on 5 major banks (ranked by assets) in 10 leading European market.

On these 50 banks analyzed, only 2 (4% of the total) offers BNPL products, one of them is Santander in Poland. 17 (34% of the total) banks proposed a sort of installment on credit cards, via non digital channels. 31 (62% of the total) only propose traditional credit cards. (Table 3.7 in appendix) (E.Howell, Z.Krulisova, *Flagship*, 2021)

As a result, the EU market can be even more supplied by new players, and therefore increase the utilization in this market. There are multiple advantages for banks to look into BNPL market. First, the Swedish giant, Klarna, has set up a physical card in the UK and so obtain the status of a bank. By seeing this fintech development leave an open door for other BNPL market leaders to follow in its footsteps, the traditional banks will find themselves in a weak position. Especially firms such as Revolut, who are also looking to target young people.

In addition, BNPL have driven a change in the customer preferences as PCM's digital and Card Payment yearbooks 2021-2022 highlight, a decrease in the utilization of credit cards has been started since the introduction of this mean of payment, decreasing in the meantime the retails bank source of revenue. (Nets, 2022)

Finally, due to their numerous clients, banks have already a strong database about its client's credit historic, therefore it will be easier for banks than for any other providers to tailor a financial plan for potential users.

3.3.2. EU Customer preference

When we look at the proportion of BNPL users among e-commerce the top 10 is dominated by 8 European countries (Table 3.8 in appendix). (A.Rolfe, Payments industry intelligence, 2021) It appears that the appeal of BNPL to European consumers is more pronounced than in other regions. This is not surprising given that e-commerce is a booming sector in Europe. (Fedeva, 2022) Indeed, the interest of European customers is notable, allowing the EU to dominate the global market. (Unctad, 2019)

3.3.3. EU Comparison between BNPL and other e-commerce option

To compare the BNPL system with other type of methods used across Europe, I will first have a per region view and then taking into account the overall European trend.

First, the Nordic countries. E-commerce has a strong presence in these countries. Indeed, the average proportion of utilization of e-commerce in those 3 counties is 23%. This trend is strongly driven by digital wallet. This payment method represents 21% of the e-commerce market. Explained by the development of local brand such as Swish in Sweden, Vipps in Norway and Mobilpay in Denmark. The rising interest and development of new types of payment will allow digital wallets to further consolidate their dominance in these countries. BNPL solutions also have an important position in this region. They occupy the second position in the e-commerce market share with 18,5%. Sweden has the highest usage of BNPL in the world with almost 25% of market share in e-commerce. (FIS/ Worldpay, 2022)

In Germany a similar trend is observed. As in the Nordic countries, the digital wallet dominates the e-commerce market with almost 29% of the market share. In second position we found the BNPL solutions, with almost 20% of the market share. These two methods are extremely popular in this country, representing almost half of the online transactions. Regarding the so-called traditional methods, credit and debit cards represent respectively 13% and 3% of the e-commerce market. Therefore, they are far from being attractive in this country. (FIS/ Worldpay, 2022)

In Italy, Belgium and Turkey another dynamic is present. First, in Italy, the mobile wallets still dominate the e-commerce market with almost 34% of the market share, while credit cards are in the second place with 24%. Therefore, we can observe that Italians are divided between traditional methods and new methods, even if a preference is given to the new ones. The BNPL solutions are not of the preferred methods with 4% of the market share. (FIS/ Worldpay, 2022)

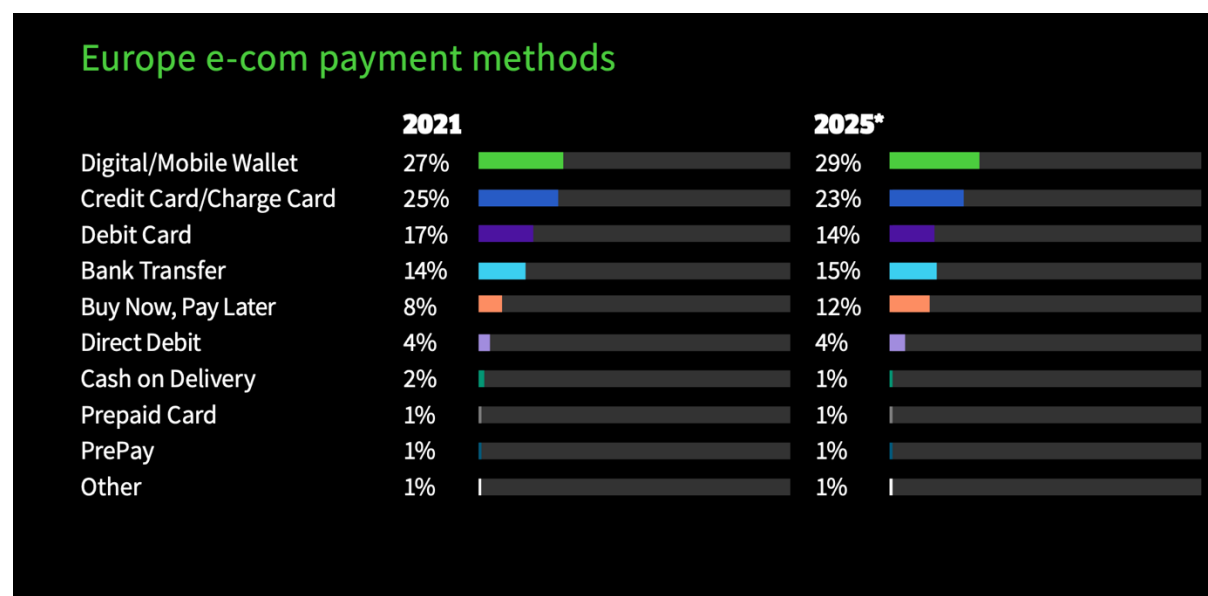
In Belgium, the e-commerce leader is totally different. Indeed, it is the traditional methods (credit and debit cards) that dominate this market with an aggregate market share of 52%. Digital wallets and BNPL solutions come respectively in third and fourth place with a market share of 15 and 9 %. (FIS/ Worldpay, 2022)

Finally, in Turkey, the e-commerce market is dominated by credit cards with a market share of 57. Other payment methods are marginal. Concerning the new payment methods, digital wallets are in the fifth place in the e-commerce market with 6% of the market share. As for BNPL, it is not present in significant numbers so that WorldPay have not included in their 2022 report.

As analyzed trends in e-commerce in Europe are heading in many directions, however digital wallets are very popular. As we can observe on the figure 3.5 mobile wallet dominates the e-commerce payment method system, followed by credit cards. BNPL system is the 5th most used method with 8% of the European e-commerce payment method market.

The outlook of e-commerce is interesting, especially from the BNPL perspective. Indeed, by 2025, this payment will catch up with the popularity of debit cards and will directly challenge it. The banks will be the first affected by the growth of BNPL in Europe if they still not offer such of payment method.

Figure 3.5: Overview of e-commerce in Europe



(FIS/ Worldpay, 2022)

3.3.4. EU regulation

Europe has one of the most regulated credit markets in the world. Introduced in 2008, the Consumer Credit Directive (CCD) both on EU and local level. These directives had the core mission to harmonize the European framework for consumer credit with 2 guidelines, a) strengthen consumer protection which will boost consumer confidence, 2) facilitating the emergence of a well-functioning internal market in consumer credit. (A. Delivorias, *Euro-parliament*, 2021) *Nonetheless*, even though these European directives are applied to all member countries, they are only similar in a limited number of cases. Indeed, everything that concerns licenses, players, sanctions, or conditions remains outside the legislative scope. This leaves the door open to different interpretation and allows lenders to operate in different countries with different rules. (M.De Muynck & J.Van Poelgeest, 2012)

This is the reason why EU parliament has decided to review the CCD, magnified by the recent evolution of the market. Indeed, the development of digitalization financial services, the market new trends and of course Covid-19 impact have led EU to revise the CCD by new directives. In June 2021, the EU commission have released a report which present concerns about new products, such as BNPL.

For BNPL the main concerns were raised around two dimensions. First regarding the price of a credit. The current form of the directive only regulates consumer credit from 200 EUR to 75000EUR. The main issue is that some BNPL installment are created for a value below than 2000 EUR and therefore not in the regulation. Second, the clarification of the terms and conditions. Many users are not fully aware of the they are subscribing for.

The CCD II main scope will be to extend the following directives: (Council of European Union, 2021)

- Revision of the agreement under 200EUR and up to 100000 EUR.
- Revision of leading agreements that have an option to purchase goods or services
- Revision of credit agreement where the credit is granted free of interest and without any charge
- credit agreements under the terms of which the credit has to be repaid within three months and only insignificant charges are payable, capturing buy-now pay-later (BNPL) products.

EU parliament has announced they will publish these new regulations by 2024.

3.4. Australian situation

3.4.1. Australian market

The technology sector has always been fertile in Australia. (Australian Government, 2021) Therefore, any new development is welcome in the Australian e-commerce payment market. When looking at the payment market, we can see that the use of traditional means of payment (cash and cheque) as well as credit cards are decreasing. Indeed, the reserve banks of Australia published a report which shows a fall of 2% between March 2021 and March 2022, and even a decrease of 9% between 2020 and 2022.

On the other hand, according to the report of the reserve bank of Australia, digital payment methods have seen significant growth in recent years. Reserve bank data has seen an 8% increase in the use of digital wallet in 2021.

The needs for Australian customers for more secure and faster payment methods, as well as the rapid technological transition, have driven the adoption of digital payment methods, an effect magnified with the effect of covid. This generalized growth of digital payments has obviously benefited the BNPL system. Indeed, in 2022 the Australian Finance Industry Association (AFIA) have registered more than 5,9 Million active accounts in platforms proposing BNPL way of payment Australia for a total value of transaction equal to AUS\$ 11,9 Billion. It has allowed merchant to register AUS\$ 2,13 Billion of net revenue. The medium- and long-term perspective of Australian market appears to be flourishing as an average CAGR of 32,4% is expected from 2022 to 2028.

3.4.2. Customer preference.

As explained before, Australian have a strong interest in digital payment system, which obviously includes BNPL system. According to the AFIA, the total number of users is 5,9 Million active accounts with an average purchase of AUS\$ 151. In addition, 8% of users say they prefer to use BNPL system instead of credit cards.

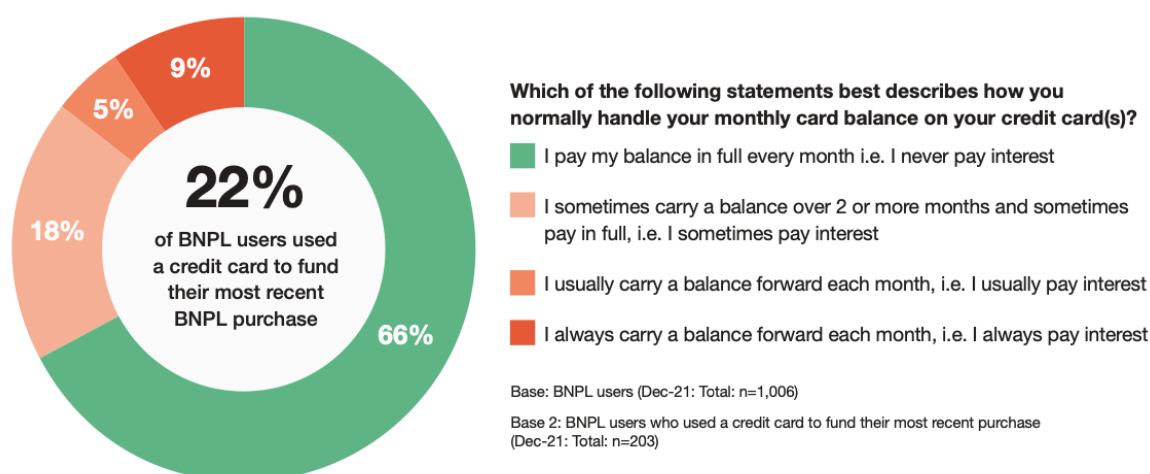
As explained in the conclusion of the first part, the capital velocity is a key element when evaluating the success of this system. The more client uses BNPL services in a single year the more effective BNPL market will be. In Australia, the AFIA report illustrated that there is an average of 16,6 usage per year. If we assume that the average length of a BNPL installment is 3 weeks (which is usually the case), this means on average Australia users take on BNPL option every 3,5 weeks.

According to AFIA report, many reasons explain such a success in this market. First, 57% of users chose BNPL because it allows to avoid interest costs when they buy products online.

Secondly, 49% of users believe this payment method allow to feel in control of their spending, as it allows to have a view on the repayment timing and support for budgeting and cashflow management.

The AFIA report highlights that when it comes to repay these installments, 48% of users don't have a credit card and therefore chose debit cards or bank account to refund their repayments. Nevertheless, as illustrated by the figure 3.6, 22% of users admit they use their credit cards to pay their BNPL installments. However, the figure 3.6 shows that out of these 22%, 66% admit they are able to repay on time avoiding any late fee charge and 34% have paid at least once late fee interest. This is a significant number which, as a matter of urgency, should not be underestimated. As explained in the risk section (2.5) the accumulation of late fees and credit card charges can put some consumers in a delicate situation.

Figure 3.6 Proportion of credit card usage



(AFIA, 2022)

Finally, the figure 3.7 present the purchase preference of Australian consumers. AFIA noticed that the product preferred when using BNPL is Clothing and shoes with 42% of the total use, electronic comes in second with an average usage of 29% and thirdly comes household and appliances with an average use of 28%.

Figure 3.7 Australian products preferences

	18-24	25-34	35-44	45-54	55-64	65-80	Total
1	Clothing and shoes (47%)	Clothing and shoes (50%)	Clothing and shoes (39%)	Clothing and shoes (42%)	Clothing and shoes (39%)	Household Appliances (34%)	Clothing and shoes (42%)
2	Electronics (24%)	Electronics (34%)	Electronics (31%)	Household Appliances (26%)	Household Appliances (35%)	Clothing and shoes (33%)	Electronics (29%)
3	Games & toys (24%)	Household Appliances (28%)	Household Appliances (26%)	Furniture and homewares (26%)	Furniture and homewares (27%)	Electronics (29%)	Household Appliances (28%)
4	Jewellery and accessories (22%)	Furniture and homewares (26%)	Furniture and homewares (21%)	Electronics (25%)	Electronics (25%)	Furniture and homewares (21%)	Furniture and homewares (24%)
5	Beauty & cosmetics (20%)	Games & toys (26%)	Games & toys (21%)	Games & toys (22%)	Jewellery and accessories (16%)	Jewellery and accessories (11%)	Games & toys (19%)

(AFIA, 2022)

3.4.3. Comparison between BNPL and other method.

Figure 3.8 below highlights the Australian e-market overview. We clearly observe that it is dominated with a market share of 55,13% by debit cards, a common trend as in UK. Digital solutions only represent 5% of the market. Nevertheless, as explained in before, analysts have noticed a shifting in the consumption habits. Where a decrease in the use of traditional methods will be observed at the expense of digital products. (AFIA, 2022)

Figure 3.8 Proportion of payment type chosen

Payment type	Volume of Transactions (billions)	Share of Total Transaction Volume (percent)
Credit card	3.09	19.15%
Debit card	8.89	55.13%
Cheques	0.04	0.23%
Credit transfer	2.31	14.35%
Debit transfer	0.96	5.94%
New Payments Platform	0.76	4.72%
BNPL*	0.08	0.48%

(AFIA, 2022)

3.4.4. Regulation

In contrast to the other countries, BNPL in Australia is already well regulated. Indeed, there are many directives and code of conduct operating to ensure a safe use. This system is regulated under the “Australian Securities and Investment Commission act 2001 (“the ASIC act”). Providers must also meet requirement in terms of obligations with the oversight from ACC, AUSTRAC, OAIC and the courts. (ASIC, 2020)

In contrast to other market, Australian BNPL market is self-regulated through AFIA’s Buy Now Pay Later code of practice (“the Code”), which operates from 1 March 2021.

Nevertheless, even with such numerous regulations, Australian Government judge there are still areas to be improved. The authority rate that there are situations that are disruptive to customers. For example, they judge that some lending is unaffordable and leads users to cut on essentials to pay BNPL debt. In addition, the Government judge there are excessive fees and charge, including default fees. The fact that these BNPL installment are not part of credit reporting is something that needs also an improvement.

In an effort to ensure that these changes benefits both customers and providers, the government has formulated three ways in which these regulations can be formulated. All stakeholders are invited to consult these options and discuss them with the authorities. On the basis of that the government will decide which option to implement.

First option will be to strength the BNPL industry code and add an affordability test.

Second option to limit the BNPL regulation under the credit act, which include license and scalable unsuitability test. This option proposes to apply some element of the credit Act to BNPL providers.

Third option, to regulate BNPL under the credit act. This option proposes to consider BNPL as any other credit product regulated under credit Act. (Australian Government Treasury, 2022)

3.5 BNPL in Singapore

3.5.1. BNPL market.

For many years now, Singapore and Asia as a whole have been known for its technological advances. In general, the e-commerce market in this city-state has a great influence. (Morgan Stanley, 2022) In 2021, this sector has a value of US\$ 5,9 Billion and it’s expected to reach US\$ 10 Billion in 2026. This success is due to the high penetration of internet in this market with almost 98% and the high use of smartphones with almost 93% of the population.

(International Trade Administration, 2022) In recent years, they have always had the latest innovations in their market. Buy Now, Pay Later is not an exception. Indeed, this product has a high growth expectation especially in Singapore. (FIS/ Worldpay, 2022)

In 2022, this payment system has an expected growth of 37,3% and will reach US\$ 1105,2 million. The medium and long term of this product also appears to be positive, with an expected CAGR growth of 19,1% between 2022 and 2028. (Research and Markets, 2022)

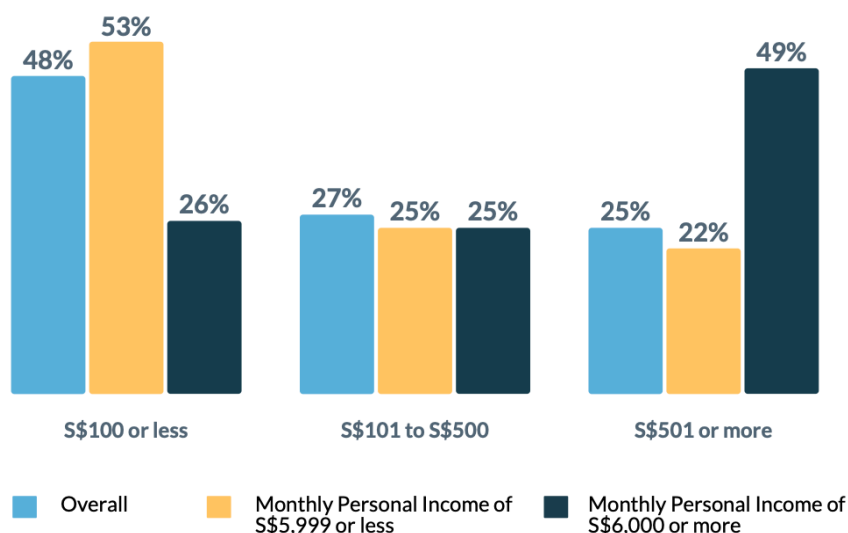
3.5.2. Customer preferences

In 2021, Milieu, the consumer research and analytics company has conducted a survey on the payment structure in Singapore. Out of 1737 respondent, 19% have claimed they have used at least once BNPL system. Out of these 19%, 73% claimed they will use again this service.

More than the half of the purchase are S\$ 100.

Furthermore, figure 3.9 bellow allow to compare the average basket of a consumer and the income of these consumer, we noticed that the more the income is, the more the average purchase is high.

Figure 3.9: Average basket of customer in Singapore given the income

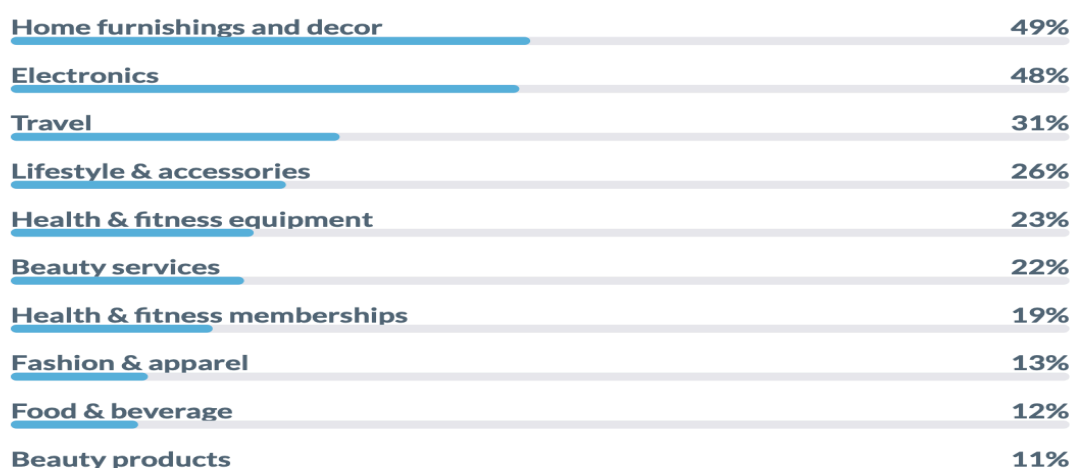


(Milieu, 2021)

Finally, Figure 3.10 highlights the preferred products bought by Singaporeans. With equal height, the two preferred products on the market are home furnishings and Electronics with an average market share of 48%. The place occupied by electronics is interesting. In fact, some suppliers have integrated an offer for the purchase of smartphones via BNPL system.

Given the very pronounced attraction for this type of product by Singaporeans, it is quite normal to see this category of product at the top of the ranking. Indeed, a purchase via a BNPL product offers an alternative to the one-time purchase or the long-term subscription contracts. (Milieu, 2021)

Figure 3.10: Product preferences in Singapore when using BNPL system



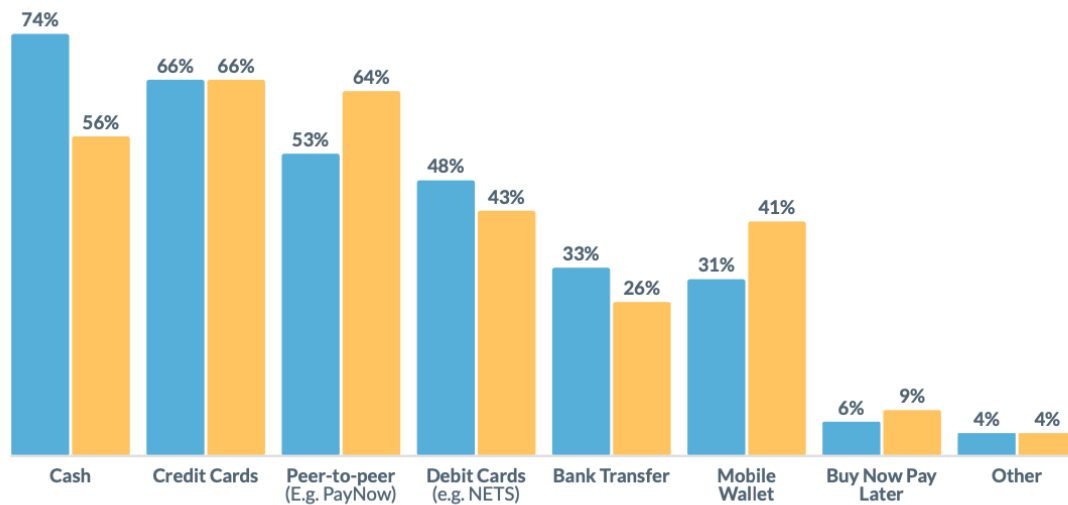
Question asked to: All respondents (n=1,737)

(Milieu, 2021)

3.5.3. Compared to other products.

As elsewhere, Covid had an impact on the payment mechanism. The general trend is a switch to much more digital methods. Given the natural appeal of Singaporeans to technological products, this transition has been quite natural. Figure 3.11 shows the payment method preferred in Singapore. Digital wallets and peer to peer have benefited the most from this pandemic where they have taken almost 10% of the market. (HSBC, 2022) Regarding Buy Now, Pay Later, the report of Milieu has noticed an increase from 6% to 9% in the market. Even with the loss of momentum of non-digital methods, it is still credit cards that remain in first place with 66% of the market share. Nevertheless, in view of the increasingly pronounced growth of digital products, this position is not assured.

Figure 3.11: Payment alternatives in Singapore



(Milieu, 2021)

3.5.4. Regulation

In Singapore, the Monetary Authority of Singapore (MAS) was concerned about the dangers of over-indebtedness, so they have conducted an investigation to determine how this problem was being managed. In its day-to-day use, there are already supplier specific measures that prevent debt accumulation, such as credit limits, which vary from supplier to supplier. However, in view of the announced strong growth, the MAS intends to introduce new guidelines.

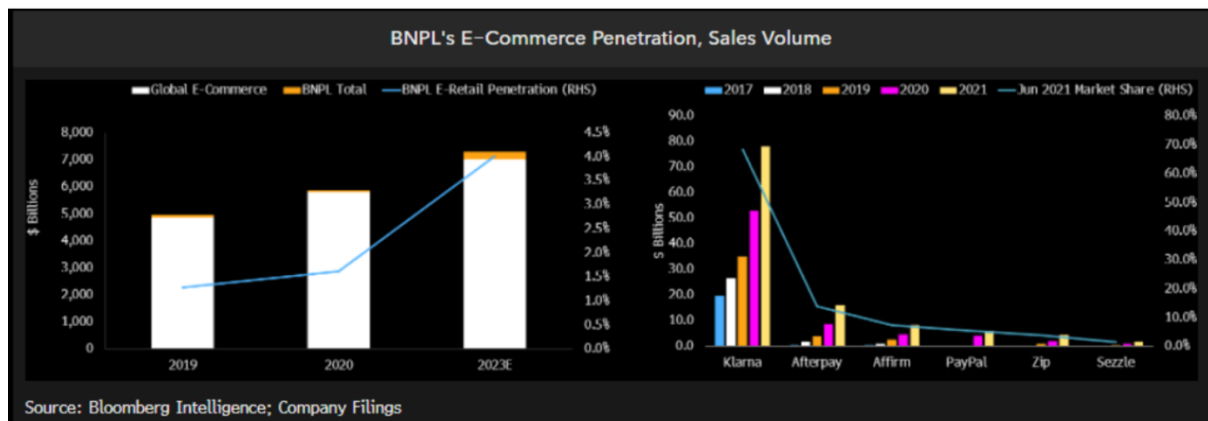
In that perspective, on the 20th of October 2021, MAS with the support of the Singapore Fintech Association (SFA) have announced a Code of Conduct, aiming to fight more effectively against over-indebtedness (with a maximum usage cap of S\$ 2000 at once), as well as to provide ethical marketing practices and allow customers to voluntarily exclude themselves from BNPL services. In its current form, the authority is still in discussion with different stakeholders to design the best code possible. Its final form is expected to be released as from end of 2023.

3.6. Conclusion

3.6.1. Market overview:

The evolution of e-commerce is growing in all the countries analyzed. This effect had already been present for some years but was further exacerbated by the pandemic. (M. Abd Elrhim, (2020), H. Chaudhary, (2020) As we have observed through the various countries selected, the BNPL market seems to have taken advantage of the situation to grow as well. (B. Guttman-Kenney; C. Firth; J. Gathergood, 2022). As we can observe on figure 3.12 based on Bloomberg analysis (2021), the start of the pandemic shows a drastic increase in sales volume and penetration.

Figure 3.12: BNPL evolution since Covid



(M.Ingram, J.Chariell, *Bloomberg*, 2021)

Therefore, it appears that several elements explain the growth of the BNPL solutions. Firstly, the period of uncertainty created by the corona virus pushed a large number of consumers to choose this kind of product. (B. Guttman-Kenney; C. Firth; J. Gathergood, 2022) As described in chapter two, this system allows for increasing their spending as well as decoupling spending and income. (M. Di Maggio; J. Katz and E. Williams, 2022) These advantages allow the lowest- and highest- income earners to buy any type of product they want as well as to consume more cheaply than other types of credit products. (B. Guttman-Kenney; C. Firth; J. Gathergood, 2022) Therefore, it is legitimate to wonder whether this same behavior is generalized to all uncertain situations or whether it is only verified for the corona virus.

Secondly, E-commerce has experienced significant growth over the past few years. It has made selling easier, more personal, and faster. (C.Ferrera, E. Kessedjian, 2019) Moreover, the changes initiated by the corona crisis have changed the way we interact. (M.Akat; K.Karatas, 2020) For almost two years, the norm has been homeworking.(A.Bick; A.Blandin; K.Mertens, 2021)

Economically speaking, this distancing implies a change in our habits. (N.Jonker; C.Van der Crujisen; M.Bijlsma; W.Bolt, 2020) Nowadays, when it comes to making purchases, making payments or even investing, everything is done remotely. It is therefore logical to expect e-commerce to grow.

As observed across the analyzed countries, the growth of e-commerce matches with a growth of a similar magnitude in the BNPL market. Therefore, it is expected that if e-commerce experiences significant growth in the future years, the same growth will be observed in the BNPL market. However, no link has yet been scientifically proven through research. Showing once again the theoretical flaw in the BNPL system.

Lastly, the general trend that emerged from the countries analysis shows a decline in the use of traditional financial products to the detriment of innovative products. This shows the failure of the so-called traditional methods to meet the payment needs of consumers. It appears that digital wallet is a method that will gradually take the place of credit cards for online transactions. The drivers of the so-called m-commerce are mainly due to its convenience as well as the comfort this method allows. (Shahariari, S, Shahriari, M, 2017) People are looking for more confrontable payment methods. (Shahariari, S, Shahriari, M, 2017) As largely explained in chapter 2, so does the BNPL system. We can therefore expect to see this negative relationship between the so-called traditional method and the BNPL method. However, again no precise relation has been yet proven.

3.6.2. Customer preferences and comparison with other service

The preferred products when using this system seem to be the same in different geographical areas. In Europe, Australia and USA, the system is mostly used to buy clothing and electronic products. Such a result is not surprising given that the target audience for this system is young people. Indeed, the biggest users of this process are Gen Z and Millennials. (S. Sekhar Pani ,2022; B. Guttman-Kenney; C. Firth; J. Gathergood, 2022)

The environment in which they grew up has given them a natural interest in electronics. (J.Chu, 1997; D.Tapscott, 1999) As far as clothing is concerned, many suppliers have teamed up with brand that are popular for this group of customers. (M.Chilingaryan, *nogood*, 2021) Therefore, if they have the possibility to buy their favorite products and feel they are paying less, it is natural that clothes are one of the most bought products on the BNPL market. It can be concluded that suppliers are aware of their target audience as well as how to reach them.

In addition, it appears that the fintechs used are almost the same in each area. I have stated in the introduction on chapter 3 that the top five providers are present in almost every country, and it is the case. Nevertheless, only one or two are occupying a strong position on the market.

Therefore, this confirms the network effect and pushes for the dominance of one or two firms in the market.

3.6.3 Regulation

Concerning regulations, we can observe a similar situation in most countries. Even if some countries have a regulated BNPL market, this increasing market pushes the most government to review the rules. The mission being to harden the existing ones, or simply to create a clear and precise framework. The main element of concern is the over-indebtedness. As mentioned in the general introduction, the amount of debt charges to be paid is alarming. In Europe alone, it's about € 13 Billions to be paid this year. (I.Ionescu, *The Paypers*, 2022)

Also, some conditions offered by BNPL do not fit into the existing regulations, either for the one created directly for BNPL or for the one created to regulate consumer credit. This is also a concern for the authorities. Indeed, potential consumers are not protected from these practices. This may leave the door open for providers to engage in illegal practices.

Chapter 4. Survey of consumer's attitude towards the Buy Now, Pay Later system.

4.1. Introduction and objective of the survey

Chapter 3 presents some interesting elements such as e-commerce and covid impact, as well as the current payment method shifting trend. However, as interesting as they are, these elements lack a clear link with the BNPL system. It has appeared that the growth of e-commerce is followed by growth in BNPL, but there is no research to support these results. It will be interesting to analyze consumers' behavior towards online shopping and to test the link with BNPL solutions. Also, some research has shown that uncertainties of covid have pushed to overconsume this system, however, is the tendency generalized to any period of uncertainty? To verify this, I will test the link between the current uncertainties (inflation and energy crisis) with the BNPL solutions. Finally, a negative relationship between the so-called traditional and modern methods such as the digital wallet has been observed, is this also the case for the BNPL solutions?

I will also test whether the appeal of a particular product drives the use of this payment system, as well as how consumers react to a weakly regulated product.

To meet these purposes, I will now consider the consumers' point of view. To achieve this task, I have carried out a quantitative analysis survey via Google forms, as well as an analysis²⁰ of the results obtained.

The questionnaire is composed of four parts with a total of 29 questions. I) the Socio-demographic dimension of the respondent, II) Economical concerns and attitude of the respondent, III) the familiarity with the BNPL system and the perception of the other payment solution, IV) the interest and probability towards some practical solution.

This survey aims to test the relationship between these five dimensions. Indeed, I will test the current economic concerns towards the attitude on the current payment methods, then I will test this attitude towards the interest in some BNPL real solutions and finally, I will test this interest towards the probability to use these real solutions. The socio-demographic relations are held constant during the test. Therefore, they are considered as control variables and will be systematically tested in each case. Figure 4.1 illustrate the model I will test through statistical analysis, the blue arrows being the main relationship tested.

²⁰ These analyses are carried out by the program RStudio

```
graph LR; SD[Socio demographic dimension] --> EC[Economical concerns and attitude]; SD --> FP[Familiarity of BNPL and perception of payment methods]; SD --> IS[Interest in BNPL solution]; SD --> P[Probability to use BNPL solution]; EC --> FP; FP --> IS; IS --> P
```

The flowchart illustrates the proposed model. At the bottom, a box labeled "Socio demographic dimension" has four upward-pointing arrows leading to four boxes in a row above it. These boxes are: "Economical concerns and attitude", "Familiarity of BNPL and perception of payment methods", "Interest in BNPL solution", and "Probability to use BNPL solution". Horizontal blue arrows connect these four boxes in sequence from left to right. Additionally, a line from the top of the "Socio demographic dimension" box branches into four lines, each ending in an arrow pointing to the top of one of the four boxes in the row above.

To construct this analysis explanation, I will first develop the methodology I used to create, distribute and analyze the survey. Then I will develop the statistical model obtained and present my conclusions.

4.2.1. Question Structure

As explained above, this survey is composed of four categories. I) the Socio-demographic dimension of the respondent, II) Economical concerns and attitude of the respondent, III) the familiarity with the BNPL system and the perception of the other payment solution, IV) the interest and probability towards some practical solution. The structure of the survey is made based on a funnel approach; it means that the questionnaire starts with some general questions to move towards more precise ones.

4.2.2. Questionnaire development

The questionnaire contains a total of 29 questions. The socio-demographic section was built based on the research of J.L.Hughes, A.Camden and T.Yangchen (2016) on how to rethink the socio-demographic study. I have therefore taken the results from this study and adapted them to the needs of my survey.

The questions on the economic concerns and attitudes are based on the current trends and issues. The section about BNPL system familiarity and payment methods perception is based on previous findings and is seeking to analyze the attitude towards current payment methods. Lastly, the interest and probability to use BNPL solutions are made according to real-life products.

Expect for the socio-demographic dimension and some question in dimension III, the main part of the questionnaire is based on the Likert scale. I choose a symmetric scale with the position of neutral attitude being exactly in between two extremes' choices. (A.Joshi, S.Kale, S.Chandel, D.K.Pal, (2015).

4.2.3. Choice of the respondent

First of all, my sample is composed of English and French speaker, mainly at a young age. Then, I have shared this questionnaire with people who are in my contact list. In addition, I also sought to reach people I didn't know, allowing to have a better socio-demographic mix. Finally, the questionnaire lasted one month. I launched it on the 31 October until the 30 November. Regarding the sample size expected from this survey, I expected a minimum of 100 usable responses.

4.2.4. Sending and follow-up

To share this questionnaire, I have created two versions, one in English and one in French. The aim is to allow all respondents to be able to answer in the desired language and therefore not be limited by problems of understanding.

For the people in my contact list, I share the survey via a URL link. The expedition was done in four phases, one per week.

During my studies I had the chance to work for multiple shops. Therefore, to share the survey to people not in my contact list, I created a QR code and placed it in these shops.

Finally, I knew that privacy is primordial in such research, therefore I have made the survey anonymous.

4.2.5. Limits of the methodology

Given the limited means at my disposal to create this survey, certain boundaries are present.

First of all, the multiple-choice questions are not easily assessable by the program used. Indeed, it only recognizes numerical values to carry out statistical studies. Therefore, I had to give binary values to this kind of question and thus divide the answers into two parts. Therefore, some of the information collected by these questions may be missing.

Secondly, the sample selection. I decided to study young people's attitudes. Given the results of the precedent chapters, the target audience of the BNPL system was people aged from 18 to 30 years old. Therefore, I clustered this analysis on this age group as much as possible. Consequently, the number of older people that responded is small, which may lead to a loss of information. Indeed, this older generation could provide a different view of the situation.

Lastly, the sample size. The expected sample was a minimum of 100. Nevertheless, I only manage to collect 96 responses. The selection of this sample size was not made on a specific rule but aimed to collect a sufficiently large number of responses to conduct my analysis. Even if the number of collected answers is almost equal to the minimum requested, this number is still small and may not provide the best overview.

4.2.6. A quick presentation of the questionnaire.

As described above, the questionnaire consists of 29 questions divided into 4 dimensions. The entire questionnaire will be available in table 4.18 in appendix, nevertheless, I will provide a quick overview of each part.

First, the questions about the socio-demographic background are structured around five questions respectively covered by gender, age, education, current employment status and living situation.

Secondly, the economic concerns dimension has been assessed by seven questions. The main goal of these questions was to assess the feelings and attitudes when confronted with an uncertain situation. Therefore, I have asked questions about their attitude and vision of the Covid 19's effect, inflation's effect and energetic crisis effect. I also end up asking if the current payment structure fits well with their current economic situation.

Thirdly, the familiarity with the BNPL system and the perception of the payment method dimension. First, I explained what the BNPL system was by giving a definition and then wondering if this system was known. This definition is based on the various scientific works I have presented in chapter 2. To allow a clear comprehension, I preferred not to take entirely a definition but to take the parts which served best to explain the system. Then, I asked questions about their attitude to BNPL alternatives such as credit and debit cards. I also wonder if the respondents were familiar with the use of e-commerce.

Finally, the last part concerns the attitude towards real solutions. These solutions were all found on merchant websites. The aim was to find out if consumers were interested in this type of solution but also if they were ready to use Buy Now, Pay Later solutions to buy such products.

4.3 Results of the survey

4.3.1. Socio demographic variables

This first line of study focuses on socio-demographic characteristics.

Figure 4.2 shows the results. Firstly, the sample is composed of almost the same number of men and women. Also, as described above, the target audience for this questionnaire was young people. As can be seen from the figure, 84% of the respondents are between 21 to 30 years old. Furthermore, the sample appears to be highly educated. 89% of the respondents have at least a university degree. Also, regarding the level of employment, there are majoritarly employees in the private sector.

In conclusion, it appears that the mean person in this questionnaire is employed, young and highly educated.

Figure 4.2.1 will present the variables' names as well as a description of this first dimension.

Figure 4.2: The socio demographic attribute of the sample

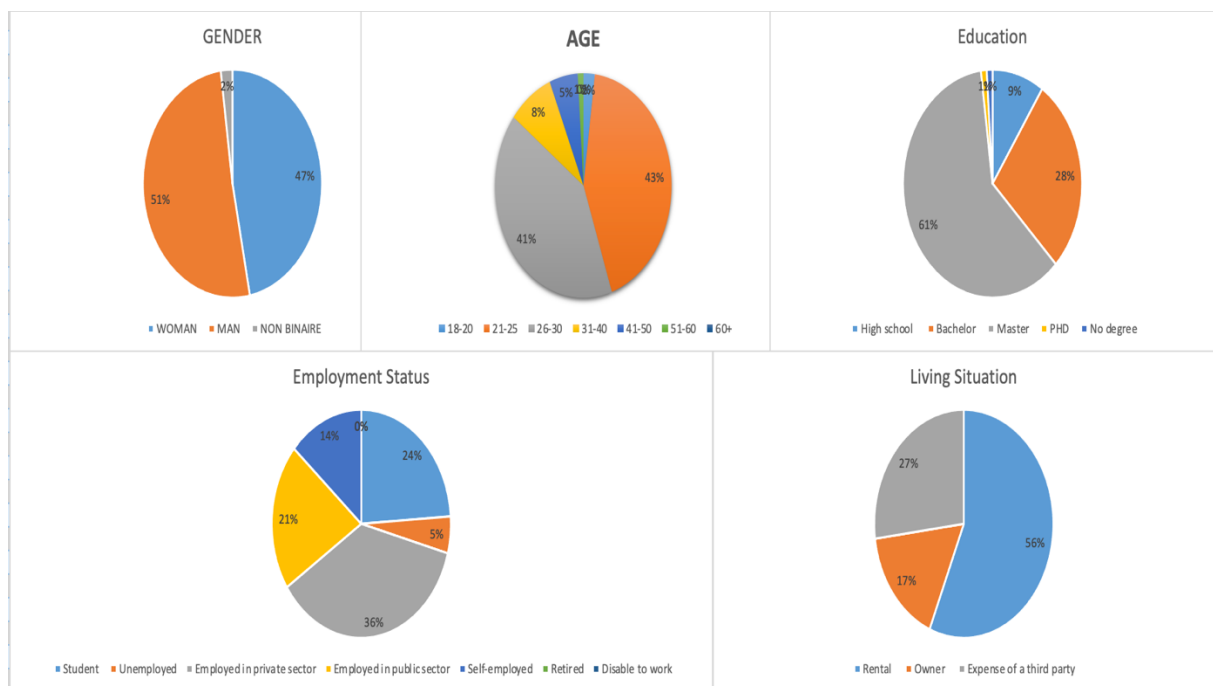


Figure 4.2.1 Description of Socio-demographic variables

<u>Description</u>	<u>Variable Name</u>
Gender: Variable equal to 1 if the respondent is a man and 0 if female	GEN
Age: Variable equal to 1 if the respondent age is between 18 and 30 years old and 0 if above	AGE
Education: Variable equal to 1 if the respondent is highly educated (bachelor or master's degree) and 0 if not	DIPLOMA
Actual situation: Variable equal to 1 if the respondent is a student and 0 if not	ACTU1
Actual situation: Variable equal to 1 if the respondent is employed and 0 if unemployed	ACTU2
Actual situation: Variable equal to 1 if the respondent is self-employed and 0 if not	ACTU3
Home: Variable equal to 1 if the respondent lives by its own found and 0 if live on the expense of someone else.	HOME

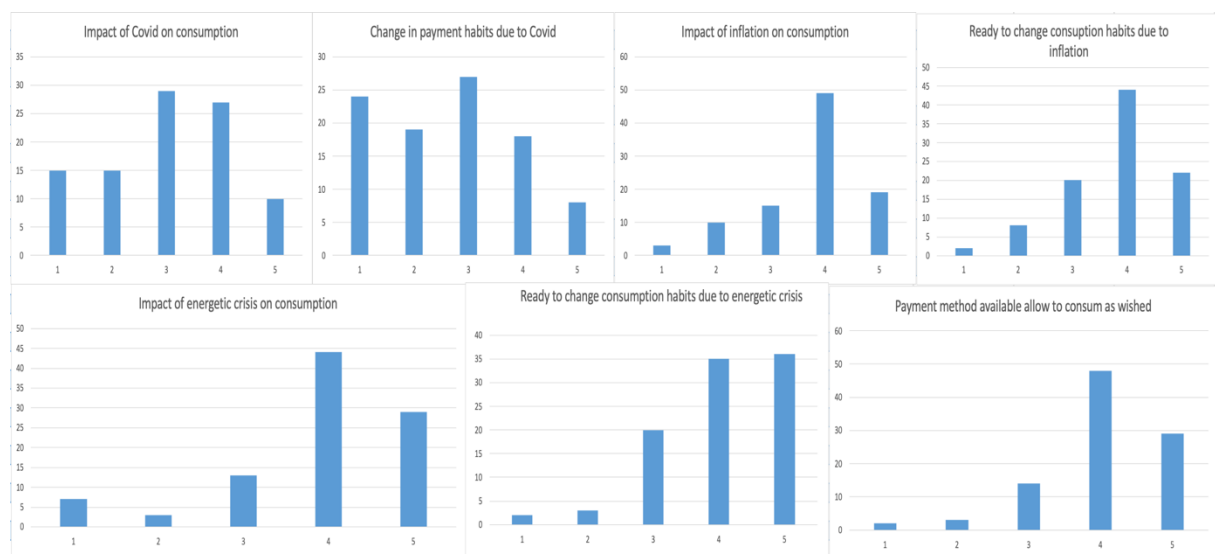
4.3.2. Economical concerns and attitude variables

In this second aspect of the survey, I sought to gain insight into the respondents' attitudes towards the current economic constraints. As already discussed in the conclusion of chapter 3, one of the elements that promoted the use of BNPL was the period of instability created by the Corona virus. Thus, I looked to understand what the impact of Covid was on respondents' consumption, as well as if Covid changed their payment habits. In addition, I wanted to understand how the current uncertain situation impacts the behavior.

Thus, I first sought to find out the respondent's views about the pandemic's consequences in terms of consumption. Then I looked at two current economic concerns. On the one hand inflation and on the other hand the energetic crisis. Finally, I wanted to understand how well the actual payment methods are adapted to the needs of consumers. The results are observable below in figure 4.3, as well as via some descriptive statistics in table 4.2 in the appendix. Table 4.1 in the appendix presents the naming of each variable.

Firstly, the impact of covid seems to be noticeable in the sample, however, the changes in consumption habits are not very pronounced. It seems that the sample felt the effects on their consumption in a negative way, but these effects were not strong enough to push them to adopt important changes in their habits. Indeed, most of the respondents have chosen a nuanced opinion Concerning the effects of the current economic concerns, the general opinion seems to be heading in the same direction. Indeed, most respondents seem to be concerned about inflation and the energetic crisis's impact on their consumption. Also, these events create a desire to change consumption habits.

Figure 4.3: Score of the Seven economical concerns and attitude (1= Low; 5=High)



The average profile of respondents tends to show concerns about uncertain events' effects, such as inflation or energetic crisis. Also, responded tend to adopt different purchasing behavior. These results provide some clues to the initial interrogations. Indeed, these uncertain periods influence the ways consumers evaluate payments.

Given this finding, I will look to what extent socio-demographic elements influence such a consideration.

To do this, I have performed a multiple linear regression using the program Rstudio. The results of this regression can be found in table 4.3 in the appendix.

The impact of socio-demographic dimensions seems to be quite limited. Nevertheless, it provides some observation. Indeed, it appears that men and persons aged from 18 to 30 years old are less concerned by the effects of Covid and the potential changes brought by this pandemic. In addition, people highly educated seem to be more concerned about current economic concerns and they are willing to accept a change in their habits.

To use the information provided by this section in subsequent analyses, I have also sought to summarize the seven questions. This can be done in two manners, first, I can simply construct a variable (called Eco_Attitude) which corresponds to the average of each individual on the seven variables. Secondly, Using the knowledge gained from the LINGE 1222 course, given by N.Uyttendaele in 2020, I can perform a Principal Components Analysis (PCA)²¹. To get a more complete picture, I decided to use both methods. Table 4.4 in the appendix presents the results obtained by the PCA, provided with a technical note on the calculation made.²² It seems that three factors explain the seven variables. Factor 1 corresponds to the variable ENERGI; Factor 2 corresponds to the variable COVID2; Factor 3 corresponds to the variable BUY. Therefore, I will call these factors as follows; FACTOR1ENEG, FACTOR2COVID and FACTOR3BUY. These three factors explain 71,34% of the seven variables.

4.3.3. Familiarity of BNPL system and the perception of the credit and consumer credit

In this third dimension, I wanted to find out how consumers behave when faced with current payment methods, as well as their attraction to online sales. Table 4.5 in the appendix will present the naming of the variables and table 4.6 will present additional descriptive statistics. In the first step, I tried to understand the awareness of the sample towards the BNPL system. Therefore, I have defined the system via the numerous scientific sources found in Chapter 2. Figure 4.4 below shows the results of this first question.

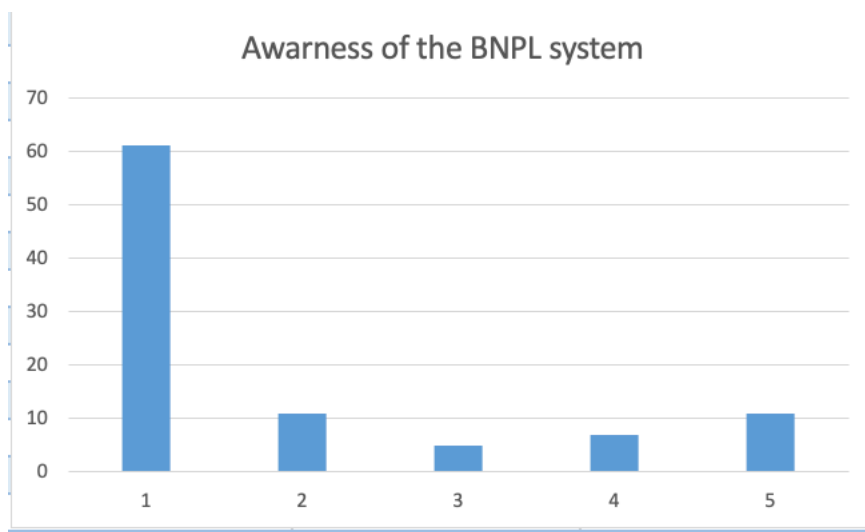
This payment method seems to be relatively new and unknown to most of the respondents. The average score of 1,92/5 (table 4.6 in the appendix) confirms this result.

The following ten questions deal in detail with the attitude and opinion towards the available payment methods, as well as the attraction toward online purchases. Some of the questions have been directly inspired by the theoretical and practical analysis made respectively in Chapter 2 and Chapter 3. Figure 4.5 below shows the results.

²¹ PCA is a multivariate data analysis method that allows the study of multidimensional data (of P dimension) projected onto quantitative variables (of M dimensions, where $M < P$)

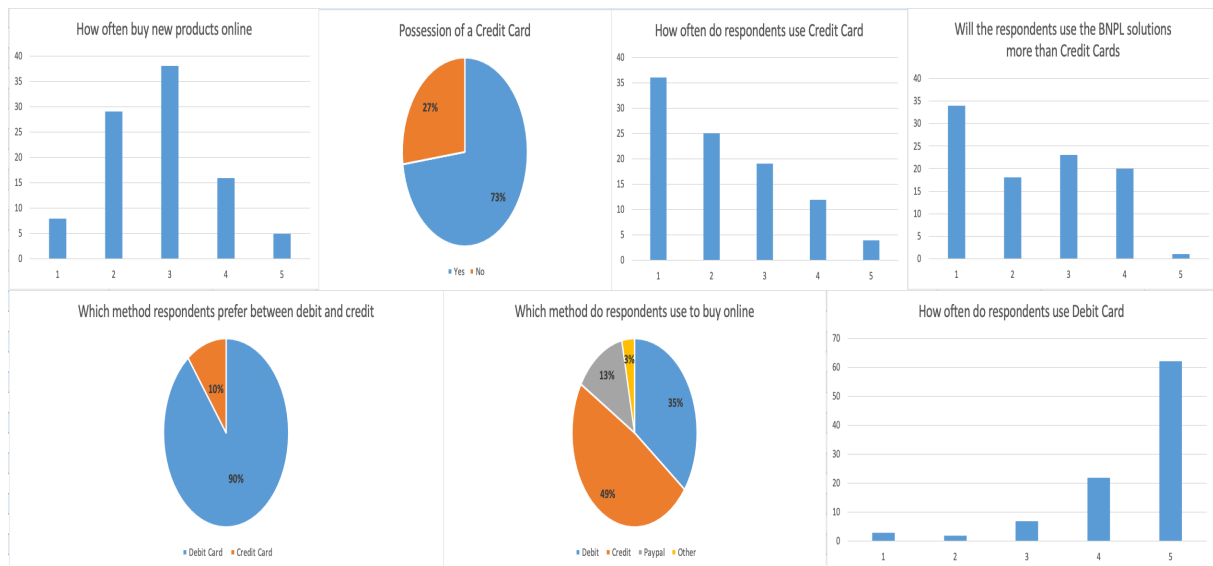
²² I will use a similar method to analyze any further PCA.

Figure 4.4: Score of the awareness about the BNPL system. (1=Low; 5=High)



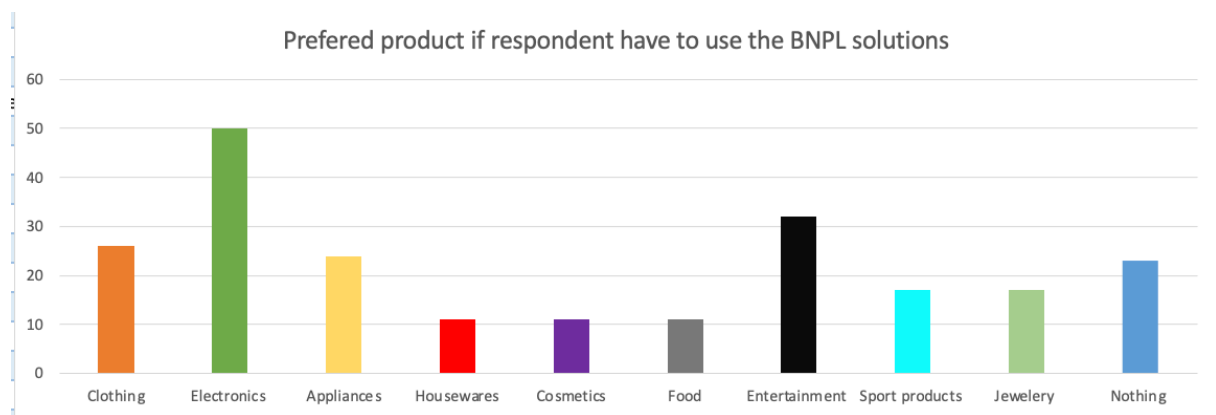
Firstly, the most striking finding is that the sample prefers the use of debit cards. Also, the frequency at which they use debit is much higher than the use of credit cards. Also, respondents seem to be divided regarding the frequency of online shopping, with most having average behavior.

Figure 4.5: Score of the Familiarity of BNPL system and the perception of the credit and consumer credit dimension (1=Low; 5=High)



Furthermore, via figure 4.6, it appears that the respondents prefer to use the BNPL system to purchase electronic products as well as clothes. In addition, it seems that the sample also tends to choose entertainment products if they must use BNPL solutions.

Figure 4.6: Preferred product if the sample must use the BNPL system



Finally, when asked for which reason the sample will use this payment method, it seems that for the majority, the convenience offered by the instalment and the zero interest fees are the main drivers. Concerning, the reluctance towards the method, it appears consumer credit do not motivate the sample to use BNPL solutions.

Figure 4.7: Reason to use or not to use the BNPL system



The results in section 4.3.2. have illustrated that economic concerns lead to reconsider the usage of payment methods. To investigate this relation, I have carried out a linear regression taking into account the link between these eleven questions and the economic concerns.

Previously, I had used two methods to summarize the information contained in the economic concerns variables, therefore I will perform two linear regressions, one per method.

First, regarding the regression via the average of each individual (called Eco_Attitude), it appears that the economic considerations are not strongly correlated with the attitude towards payment methods. Only certain social factors such as current employment status, age or education level explain this. The results are available in table 4.7 in the appendix.

However, the regression via Principal Components Analysis presents more interesting results. Indeed, it appears that uncertain events have an impact on payment decisions, but the direction of these are not on the same page.

First, it appears that the more the effects of the energy crisis are felt, the more consumers will tend to abandon credit cards. However, the more the effects of the corona virus have pushed a change in payment habits, the more the use of credit cards has been important. Showing therefore that uncertain event does impact payment habits but not in the same way.

This regression also leads to interesting findings about the payment-shifting trend. Indeed, the variable BNPL_CR is positively correlated with the variable FACTOR2COVID. This means that the more consumers have been encouraged to change their payment habits because of the covid, the more a tendency to deviate from traditional payment methods appears. In addition, the FACTOR1BUY being negative to the factor BNPL_CR, indicate that the more a consumer feels uncomfortable with the current means of payment, the more he will need to deviate from traditional payment methods. The results are available in table 4.8 in the appendix.

Additionally, I have tried to summarize the information provided by the eleven variables to use it in a subsequent section. I have therefore used the same methods as before. I have constructed a variable called BNPL_Attitude which corresponds to the average of each individual on the eleven variables. Then I performed a PCA. The results indicate that three factors explain the eleven variables. Factor 1 corresponds to the variable CRD2; Factor 2 corresponds to the variable BNPL_CR; Factor 3 corresponds to the variable BNPL_P1. Therefore, I will call these factors as follows; FACTOR1CRD, FACTOR2BNPL_CR, FACTOR3BNPL_P1. These three factors explain 54,75% of the seven variables. Details of the results as well as a technical note are available in table 4.9 in the appendix.

4.3.4 Three case studies

In this last part, I think it is important to analyze the behavior of the sample when faced with real-life cases. Indeed, asking the opinion of consumers on concrete products would allow identifying the trends concerning BNPL solutions.

The first case focuses on the purchase of sports equipment. The company BuyBestGear offers to purchase several bikes and scooters produced with reliable materials.

I chose an electric bike. It is particularly fashionable at the moment, and I thought this popularity might be a reason enough to attract naturally interest from the sample.

As you can see in table 4.10 in the appendix, the supplier offers different payment methods, including Klarna. To have a clearer view of the payment process I first had to create a Klarna account and then purchase the bike. This is why, I have applied the most common payment process, i.e., payment of an equal amount, without interest for a period of three to four weeks.

The second case focuses on the clothing shop Kenzo. This French luxury brand offers high-quality products. This brand has partnered with Klarna to offer different types of payment. In Belgium, they offer the Klarna Pay Later service, which means that the buyer can pay for a product within 30 days. To ensure consistency between the cases, I have decided to propose the same type of payment. Therefore, for the study case context, I will assume that Kenzo also offers the Klarna Pay Overtime service in Belgium. Therefore, consumers can buy this luxury product by dividing the payment between equal amounts for a period of three to four weeks and without interest. Table 4.11 in the appendix presents this study case.

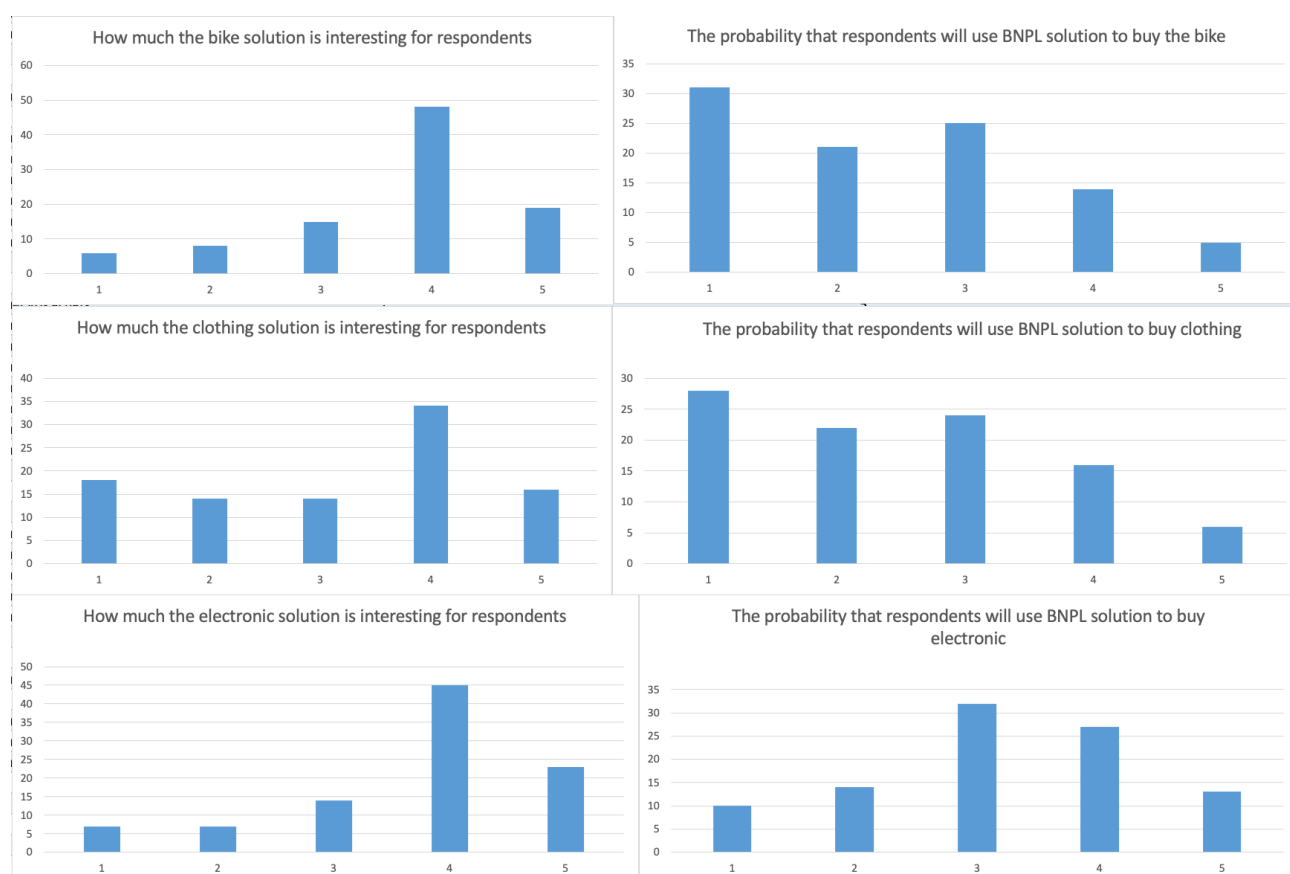
Finally, the last study case will concern the electronics and household appliance seller, Krëfel. This brand has been popular in Belgium for many years. They have decided to partner with fintech Klarna to offer an alternative payment option. Just like Kenzo, in Belgium, they only offer payment within 30 days. For the sake of consistency, I will also assume that they offer a payment divided into equal amounts for a period of three to four weeks without interest. Table 4.12 in the appendix presents this study case.

Figure 34 below presents the interest of the sample as well as the probability to use such products. Table 4.13 in the appendix presents some descriptive statistics of these questions.

As can be seen in Figure 4.8, all three concepts seem to be catchy. It can be assumed that the BNPL concept seems to interest the sample. It is also interesting that there is a greater interest in expensive products such as electric bicycles or electrotonic products.

Nevertheless, the probability of using the BNPL service seems to be lower. Only the case of electronics encourages consumers to use this method.

Figure 4.8: Interest and probability to use some study case (1=Low; 5=High)



Now, I will wonder to what extent economic concerns as well as the choice in payment method make consumers interested in the BNPL system. Previously, I had used two methods to summarize the information contained in the payment method variables, therefore I will perform two linear regressions, one per method.

The regression via the average of each individual (called Eco_Attitude and BNPL_Attitude) gave a quite straightforward indication. Indeed, it appears that attitudes towards payment methods is the only correlated factor with the interest toward practical solutions. Therefore, based on this analysis, we can pledge that economic concerns do not influence interest at all, either directly or through a link with the attitude toward the payment methods. In addition, the Socio-demographic dimension does not seem to have a bigger role. The results are available in table 4.14 in the appendix.

Here again, the regression via Principal Components Analysis provides much more insight. Indeed, the shifting trend towards BNPL solutions is confirmed. Indeed, it appears that the variable FACTOR2BNPL_CR is positively correlated with the interest variables. This shows

that consumers' tendency to drop traditional methods has an impact on their interest towards modern methods, such as BNPL.

In addition, FCATOR2COVID is positively correlated with the interest variables. This indicates that the more the effects of covid have led to a change, the more consumers will adopt this system. Thus, confirming the impact of uncertain periods with regard to the BNPL method. However, the variable FACTOR1ENERG does not seem to be linked with one of the interest variables. Therefore, it is not possible to ascertain whether other uncertain periods than the pandemic have a real impact on the BNPL system.

Finally, FACTOR1CRD seems to explain the behavioral link of the consumer. Indeed, since it is positively associated with interest variables, it is assumed that the more an individual is comfortable with using a credit card, the more interested he will be in this new payment method and possibly use it instead of credit cards. The results are available in table 4.15 in the appendix.

Finally, I turned my attention to the probability that the sample will buy such a product.

Previously, I had used two methods to summarize the information contained in the payment method variables, therefore I will perform two linear regressions, one per method.

The regression via the average of each individual (called Eco_Attitude and BNPL_Attitude) provided some predictable elements. Indeed, it seems logical that the interest in one of the products proposed is the main driver explaining the probability of buying this product. The marginal effect of an additional one-unit score on the interest scale always translates into an increase of less than one-unit score in the probability of buying the product, therefore it is not a perfect relationship²³. However, it does help to explain the reason for using a BNPL solution. Nevertheless, other results are relatively surprising. Indeed, it appears that economic concerns are related to the likelihood of buying these products but are not related to the interest in these products. It is surprising to think that a person, given a certain economic concern, will want to buy a product without being interested in it. However, we can look at this situation from a different perspective and see that such a person may not be interested in the proposed items but interested in the payment method itself. Table 4.16 in the appendix presents the results.

Secondly, the regression via Principal Components Analysis confirms the analysis carried out with the first method. It appears that the interest variables explain the probability of using this system.

²³ A perfect relationship appears when the coefficient is equal to one

This regression also confirms that certain economic concerns variables, as well as certain variables about the attitude towards payment method, explain the probability of using this system. As can be seen in Table 4.17 in the appendix, the variable FACTOR2BNPL_CR is correlated. This implies that the tendency to move away from traditional methods reflects on the probability to use the BNPL solutions.

Also, it appears that the variable FACTOR2COVID is correlated with the likelihood of using this method. This means that the corona period has indeed an effect on the choice toward this payment procedure. In addition, the variable FCATOR1ENERG is also correlated with the probability of using the BNPL solutions. Even if it was not initially related to the interest towards the solutions proposed, it can therefore be assumed that uncertain circumstances tend to explain the choice toward this type of payment.

4.4. Conclusions

The objective of this section was to have a better overview of consumer behavior towards this new payment method. Out of the 96 responses collected, some elements have been lit up by the statistical analysis conducted.

First, throughout the seven questions about the attitude towards economic concerns, it appears that the sample takes an interest in his behavior faced to uncertain situations. Even more, the respondents have the will to adopt different purchasing behavior in such events. Nevertheless, these impacts occur in opposite ways. Indeed, it appears that the more the effects of the energy crisis are felt, the more consumers will tend to abandon credit cards. However, the more the effects of the corona virus have pushed a change in payment habits, the more the use of credit cards has been important. It can be assumed that each of these periods prompts the consumer to question himself, but the choices made subsequently are not the same. Therefore, it cannot be assumed that each uncertain period will have the same effect on consumption and payment choices. Nevertheless, no matter the uncertain situation or its direction, it appears that the effect on BNPL is real.

On the other hand, the shifting trend towards modern payment methods is confirmed. In fact, it appears that the effects of the uncertain period have led consumers to move towards new payment procedures, and thus to delay so-called traditional methods. The conclusion in chapter three indicated that this negative relationship has been observed for products like mobile wallets, this statistical analysis confirms this tendency for BNPL products as well.

Finally, it appears that consumers have an interest in using this system, but this interest depends on the products offered. Indeed, as seen via the last two regressions, the economic concerns variables are correlated with the probability of buying one of the proposed practical solutions, but not correlated with the interest towards these products. Therefore, it can be argued that economic stress situations do cause consumers to turn towards this system, but this interest is only true for very specific products.

Chapter 5. Conclusion

This thesis aimed to understand what the main drivers of the BNPL growth are despite the criticisms that can be heard in much research.

This questioning led me to explore several papers, all dealing with different aspects of the system. Through these, I was able to discover some of the reasons behind the growth of the system. In particular, M. Di Maggio; J. Katz and E. Williams (2022) have shown that consumers use BNPL products to increase their spending as well as to decouple spending and income. Moreover, as already described several times, and just like any other payment method, BNPL solutions have also taken advantage of the network effect to grow. (C. Fisher; C. Hollander; T. West, 2021).

However, these researches were mainly descriptive and were mainly focused on a particular country. The analysis of the BNPL solutions is still at an early stage. There is not yet any global research nor any concrete theory about the development of the system. It results that the information being scattered all over the place it becomes difficult to judge the functioning of the system.

In order to have a clearer view of the development reasons of this payment method, as well as to understand the underlying effects. I focused on case analysis. By case analysis I mean the assessment of the current situation in certain countries. Then I created an evaluation grid based on four criteria and selected five countries, one per geographical area. The aim was to identify certain recurrent characteristics that demonstrated the attributes of the growth as well as the common behavior tendencies. The results of this analysis were quite interesting. They are articulated around three axes. Firstly, it is clear from the different countries analyzed that there is significant growth in e-commerce, which has apparently been reflected in the BNPL market. Indeed, the growth of e-commerce matches with a growth of a similar magnitude in the BNPL market. Therefore, it is expected that if e-commerce experiences significant growth in the future years, the same growth will be observed in the BNPL market. However, no link has yet been scientifically proven through research.

In addition, according to the research of M. Abd Elrhim (2020) and H. Chaudhary (2020), it appears that the catalyst for e-commerce growth was the corona virus crisis, explained by the uncertainties present at that moment. As illustrated by B. Guttman-Kenney, C. Firth and J. Gathergood (2022) the pandemic had also a positive impact on the BNPL market. Nonetheless, one could wonder if such impact is only explained by the effect of corona virus or if any other uncertain situation can explain the attraction towards the BNPL system.

In addition, the situation in each country shows a tendency to move away from traditional payment methods, such as credit and debit cards towards more innovative methods, such as digital wallets. Nevertheless, nothing proves that this negative relation is verified, especially for BNPL.

Secondly, the preferences of the consumers in the analyzed areas show the important presence of the fintech Klarna. This confirms the network theory introduced above. Indeed, Klarna is a particularly active fintech on the market. It has many partnerships as well as the largest number of consumers with almost 45 million people.

This second axis also demonstrates that the usage of BNPL solutions is specifically targeted towards some products, such as electronic products or clothing products.

This last axis gave insights about the regulations. As explained above, the system is relatively new. Even though a legal basis exists, the authorities have not yet had the time to put in place a clear and precise regulation. As a result, many fintech has taken advantage of the legal vacuum to offer their products. This type of freedom has allowed the BNPL providers to enjoy a consequence privilege. However, the situation is not going to last. In fact, all the governments are taking the legal shortcomings very seriously and have undertaken vast legislative changes in order to force the BNPL product to be controlled by the same rules as other consumer credit products.

Since I draw the general trend, it appears that some consideration needs further explanation. For example, the shifting toward new payment as well as the effect of uncertain periods is analyzed descriptively but not in a scientific way.

This led me to build in November 2022 a survey to capture consumer behavior and then perform a statistical analysis. The results tend to confirm some assumptions, but other have not been verified.

Firstly, it appears that the pandemic had effectively an impact on the perception of this means of payment, and more broadly on consumer credit. Indeed, it has appeared that the more the effects of Covid have been felt and have led to a change in payment habits, the greater the need to use BNPL solutions and to increase the frequency of credit cards will be. More broadly, it appears that economic concerns drive consumers to question their payment and consumption habits, however the subsequent choices occur in opposite ways.

Therefore, it cannot be assumed that each uncertain period will have the same effect on consumption and payment choices. Nevertheless, no matter the uncertain situation or its direction, it appears that the effect on BNPL is real.

Secondly, the tendency to subscribe to modern methods instead of traditional ones is also verified. In chapter 3, a negative relationship emerged between the so-called traditional and new methods, such as mobile wallets or BNPL. However, here again, the observations were descriptive, especially for the BNPL system. The statistical analysis carried out illustrated that there is indeed a link between this shifting trend and the attractiveness towards BNPL solutions.

Finally, this research has shown that the interest of consumers in this system is also partly motivated by the proposed products. Indeed, the economic concerns variables are correlated with the probability of buying one of the proposed practical solutions but not correlated with the interest towards these products. Therefore, it can be argued that economic stress situations do cause consumers to turn to this system, but this interest is only true for very specific products.

For any further research, I would recommend developing more the theoretical basis via a practical approach. More specifically, I would encourage drawing up clearer and more solid guidelines based on broader cases, this could give a better basis for practical analysis.

Also, I recommend not to rely only on economic factors to explain the effects on payment methods. Indeed, as seen via the survey, the current economic problems push to reflection, this kind of questioning is surely not only due to economic factors but also to social factors.

Thirdly, in my view, the survey's questions may not capture all the considerations lighted up in chapter 3. Indeed, the statistical analysis was unable to determine the concrete effect of e-commerce on the use of the BNPL solution. In fact, it is clear that e-commerce is driving a rise in the BNPL market. Indeed, how can a product grow if the market in which it is not growing? However, the e-commerce market is made up of several players, it is therefore interesting to judge the place of BNPL in this business and to look in what proportion the growth of e-commerce influences the growth of the BNPL market.

I hope this thesis, although explanatory, provides a good theoretical and practical basis for the Buy Now, Pay Later system. Indeed, even if it has some limitations, I think it offers good insights into the topic and leaves the door open for further analysis.

Chapter 6. BIBLIOGRAPHY

Abdelrhim, M., and Elsayed, A. (2020). *The effect of COVID-19 spread on the e-commerce market: the case of the 5 largest e-commerce companies in the world*. Retrieved from SSRN: <https://www.researchgate.net/publication/343123992>

Afterpay. (2021). *Afterpay Limited FY21 Annual Report*. Retrieved from <https://afterpay-corporate.yourcreative.com.au/wp-content/uploads/2021/08/APT-FY21-Annual-Report.pdf>

AFM. (2022). *Buy Now, Pay Later : Verkenning van een nieuw trend*. Retrieved from <https://www.afm.nl/~profmedia/files/rapporten/2022/rapport-buy-now-pay-later.pdf>

Airport Technology. (2022). *Buy now, pay later could bolster the recovery of airlines*. Retrieved from <https://www.airport-technology.com/comment/buy-now-pay-recovery-airlines/>

Akat, M., and Karataş, K. (2020). *Psychological Effects of COVID-19 Pandemic on Society and Its Reflections on Education*. 15. 1-13. 10.7827/TurkishStudies.44336.

Alcazar, J. and Bradford, T. (2021a). *The appeal and proliferation of buy now, pay later: Consumer and merchant perspectives*. Federal Reserve Bank of Kansas. Retrived from <https://www.kansascityfed.org/research/payments-system-research-briefings/the-appeal-and-proliferation-of-buy-now-pay-later-consumer-and-merchant-perspectives/>

Allcott, H., Kim, J.J., Taubinsky, D. and Zinman, J. (2021). *Are high-interest loans predatory? Theory and evidence from payday lending*. Review of economic studies.

Amazon. (2021). *Finance your purchase with instalments by Barclays*. Retrieved form <https://www.amazon.co.uk/Barclays-Instalments/dp/B094DFWTMC>

Ando, A. and Modigliani, F. (1963). *The “life cycle” hypothesis of saving: Aggregate implications and tests*. American Economic Review, 53(1):55–84.

Apple. (2022). *What’s new in Apple pay*. Retrieved from <https://developer.apple.com/apple-pay/whats-new/>

Appleyard, L. (2022). *Buy Now pay later: how to protect consumers without regulating it out of existence* . The conversation. Retrieved from <https://theconversation.com/buy-now-pay-later-how-to-protect-consumers-without-regulating-it-out-of-existence-184761>

Australian Finance Industry Association (AFIA). (2022). *The economic impact of buy now pay later in Australia*. Retrieved from https://afia.asn.au/files/galleries/AFIA_BNPL_Research_Report.pdf

Australian government. (2021). *Innovation & skills*. Retrieved from <https://www.austrade.gov.au/benchmark-report/innovation-skills>

Australian Securities Investments Commission (ASIC). (2020). *Buy now pay later : an industry update*. Retrieved from <https://asic.gov.au/regulatory-resources/find-a-document/reports/rep-672-buy-now-pay-later-an-industry-update/>

Australian Government Treasury. (2022). *Regulating buy now, pay later in Australia*. Retrieved from <https://treasury.gov.au/sites/default/files/2022-11/c2022-338372-op.pdf>

Babcock, S. (2022). *Klarna wants to bring the in-store experience to online shopping*. The current media. Retrieve from <https://thecurrent.media/klarna-virtual-shopping>

Berg, T., Burg, V., Gombović, A., et al. (2019). *On the Rise of FinTechs: Credit Scoring Using Digital Footprints*. The Review of Financial Studies Karolyi A (ed.) 33(7). DOI: 10.1093/rfs/hhz099.

Bick, A., Blandin, A., Mertens, K. (2020). *Work from Home Before and after the Covid-19 Outbreak*. CEPR Discussion Paper No. DP15000, Retrieved from SSRN: <https://ssrn.com/abstract=3650114>

BIS. (2010). *Basel III : International regulatory framework for banks*. Retrieved from <https://www.bis.org/bcbs/basel3.htm>

Brock, T. (2022). *Credit score: definition, factors and improving it*. Investopedia. Retrieved from https://www.investopedia.com/terms/c/credit_score.asp

Bruce; B. (2021). *Major retailers are starting to get rid of this popular perk*. Bestlife. Retrieved from <https://bestlifeonline.com/news-retailers-removing-layaway/>

Business Wire. (2022). *United Kingdom buy now pay later market report 2022*. Retrieved from <https://www.businesswire.com/news/home/20220214005573/en/United-Kingdom-Buy-Now-Pay-Later-Market-Report-2022-BNPL-Payments-are-Expected-to-Grow-by-50.5-to-Reach-29906.2-Million-in-2022---Forecast-to-2028---ResearchAndMarkets.com>

Campbell, J.Y. (2016). *Restoring rational choice: The challenge of consumer financial regulation*. American economic review, 106(5):1-30.

Campbell, J.Y., Jackson, H.E., Madrian, B.C., and Tufano, P. (2011). *Consumer financial protection*. Journal of economic perspectives, 25(1):91-114.

Cag, D. (2022). *The story of PayPal: The world's most valuable fintech firm*. Fintech Magazine Retrieved from <https://fintechmagazine.com/digital-payments/story-paypal-worlds-most-valuable-fintech-firm>

Chaudhary, H. (2020). *Analyzing the paradigm shift of consumer behavior towards E-Commerce during pandemic lockdown*. Retrieved from SSRN 3664668.

Chetty, R., Friedman, J.N., Hendren, N., Stepner, M., and the Opportunity Insights team. (2020). *The economic impact of Covid-19: Evidence from a new public database built using private sector data*. NBER Working paper No.27431.

Chilingaryan, M. (2021). *Klarna's Marketing Strategy: The unique growth story behind the brand*. Nogood. Retrieved from <https://nogood.io/2021/02/23/klarna-marketing-strategy/>

Chu, J. (1997). *Navigation the media environment: how youth claim a place through zines*. Social justice.24.3. 71-85

Congress.gov. (2021). *H.R.4120 – Comprehensive CREDIT act of 2021*. Retrieved from <https://www.congress.gov/bill/117th-congress/house-bill/4120>

Consumer Financial Protection Bureau (CFPB). (1968). *Truth in Lending Act (TILA)*. Retrieved from https://files.consumerfinance.gov/f/201503_cfpb_truth-in-lending-act.pdf

Consumer Financial Protection Bureau (CFPB). (1968). *Regulation Z*. Retrieved from https://www.federalreserve.gov/boarddocs/caletters/2008/0805/08-05_attachment1.pdf

Consumer Financial Protection Bureau (CFPB). (2022). *Buy Now, Pay Later : Market trends and consumer impacts*. Retrieved from https://files.consumerfinance.gov/f/documents/cfpb_buy-now-pay-later-market-trends-consumer-impacts_report_2022-09.pdf

Council of the European Union. (2021). *Proposal for a DIRECTIVE OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on consumer credits*. Interinstitutional File: 2021/0171(COD). 9433/1/22 REV. Retrieved from <https://data.consilium.europa.eu/doc/document/ST-9433-2022-REV-1/en/pdf>

Cross, R.J. (2022). *What's wrong with buy now, pay later? The risks of the newest tool to pull you into debt*. Pirg. Retrieved from <https://pirg.org/edfund/articles/whats-wrong-with-buy-now-pay-later-the-risks-of-the-newest-tool-to-pull-you-into-debt/>

Curious Capital. (2020). *We've found a winner in the BNPL space*. Seeking Alpha. Retrieved from <https://seekingalpha.com/article/4394589-afterpay-found-winner-in-bnpl-space>

Curry, D. (2022). *Klarna revenue and usage statistics (2022)*. Business of Apps. Retrieved from <https://www.businessofapps.com/data/klarna-statistics/>

Daly, L. (2021). *Digital Wallets are now the most popular payment method in the world*. The Ascent. Retrieved from <https://www.fool.com/the-ascent/personal-finance/articles/digital-wallets-are-now-the-most-popular-payment-method-in-the-world/>

David, P. A., and Greenstein (1990). *The economics of compatibility standards: an introduction to recent research*. Economics of Innovation and New Technology 1: 3-44.

Deaton, A.S. (2005). *Franco Modigliani and the Life Cycle Theory of Consumption*. Retrieved from SSRN: <https://ssrn.com/abstract=686475>

Debthammer. (2022). *Survey: Buy now play later plans fuel debt struggles*. Retrieved from https://debthammer.org/buy-now-pay-later-survey/?utm_source=rss&utm_medium=rss&utm_campaign=buy-now-pay-later-survey

Delivorias, A. (2021). *Consumer Credit Directives (CDD)*. Euro-parliament. Retrieved from [https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/698054/EPRS_BRI\(2021\)698054_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2021/698054/EPRS_BRI(2021)698054_EN.pdf)

Di Maggio, M., Williams, E., and Katz, E. (2022). *Buy Now, Pay Later Credit: User Characteristics and Effects on Spending Patterns*. NBER Working Paper Series, No. 30508

De Muynck, M., and Poelgeest, J. (2021). *The regulation of consumer credit in Netherlands and Belgium after Directive 2008/48 EC: a comparison*. Fiancial Law Institute Working Paper No.2012-02. Retrieved at SSRN https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1976987

Draganov, I., and Chivarini, L. (2022). *Startup and companies providing Buy Now, Pay Later (BNPL) services*. Retrieved from <https://app.dealroom.co/lists/18799>

DuPlessis, J. (2022). *New studies unveil the risks of 'Buy Now, Pay Later'*. Credit Union Times. Retrieved from <https://www.cutimes.com/2022/05/27/new-studies-unveil-the-risks-of-buy-now-pay-later/>

Economides, N., and Himmelberg, C. (1995). *Critical mass and network size with application to the US fax market*. Discussion paper EC-95-11. Stern School of Business, NYU.

Elderson, S. (2022). *Klarna spotlight launches with innovations to usher in a new wave of shopping*. Forbes. Retrieved from <https://www.forbes.com/sites/sharonedelson/2022/10/19/klarna-spotlight-launches-with-innovations-to-usher-in-a-new-wave-of-shopping/?sh=13428b6f1434>

Emarketer. (2021). *US Buy Now, Pay Later (BNPL) User Penetration, by Generation, 2018-2025 (% of digital buyers in each group)*. Retrieved from <https://www.insiderintelligence.com/chart/248217/async>

Eur-lex. (2013). *Regulation (EU) No 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012 Text with EEA relevance*. Retrieved from <https://eur-lex.europa.eu/legal-content/en/TXT/?uri=celex%3A32013R0575>

Fedeva. (2022). *European e-commerce report 2022*. Retrieved from https://www.fevad.com/wp-content/uploads/2022/06/HIGHRES_CMI2022_FullVersion_LIGHT.pdf

Ferrera, C., and Kessedjian, E. (2019). *Evolution of e-commerce and global marketing*. International Journal of Technology for Business (IJTB) ISSN:2644-5085, 1, 33-38

Financial Conduct Authority (FCA). (2021). *The Woolard Review – A review of change an innovation in the unsecured credit market*. Retrieved from <https://www.fca.org.uk/publication/corporate/woolard-review-report.pdf>

Fincog. (2021). *Buy Now, Pay Later providers*. Retrieved from <https://fincog.nl/publications/21/buy-now-pay-later-providers>

FintechFutures. (2022). *Buy Now Pay Later market size*. Retrieved from <https://www.fintechfutures.com/techwire/buy-now-pay-later-market-size-is-projected-to-reach-usd-3-68-trillion-by-2030-growing-at-a-cagr-of-45-straits-research/>

Fisher, C., Hollander, C., West, T. (2021). *Developments in the Buy Now, Pay Later Market*. Reserve Bank of Australia. Retrieved from <https://www.rba.gov.au/publications/bulletin/2021/mar/developments-in-the-buy-now-pay-later-market.html>

Garg, A., Goldshtein, D., Kaura, U., and Varadarajan, R. (2022). *Reinventing credit cards: responses to new lending models in the US*. McKinsey. Retrieve from <https://www.mckinsey.com/industries/financial-services/our-insights/reinventing-credit-cards-responses-to-new-lending-models-in-the-us>

Gathergood, J., and Weber, J. (2017). *Financial literacy, present bias and alternative mortgage products*. Journal of banking and finance, 78:58-83.

Gathergood, J., and Guttman-kenney, B. (2021). *The English patient: evaluating local lockdowns using real-time covid 19 & consumption data*. Covid Economics, 64:73-100.

Ghosh, P., Vallee, B., and Zeng, Y. (2021). *FinTech Lending and Cashless Payments*. SSRN Electronic Journal. DOI: 10.2139/ssrn.3766250.

GlobalEconomy. (2022). *Consumer credit by country: the latest data*. Retrieved from https://www.theglobaleconomy.com/rankings/consumer_credit/

Globe Newswire. (2022). *Europe buy now pay later market report 2022*. Retrieved from <https://www.globenewswire.com/news-release/2022/02/21/2388448/28124/en/Europe-Buy-Now-Pay-Later-Market-Report-2022-Fintech-Startups-are-Entering-the-BNPL-Market-with-Niche-Product-Offerings.html>

GoogleTrends. (2022). *Search terms: BNPL*. Retrieved from <https://trends.google.com/trends/explore?date=2019-01-01%202022-12-03&q=bnpl>

Grossman, M.,and Wirz, M. (2022). *Investors turn cautions on consumer debt*. The wall street journal. Retrieved from <https://www.wsj.com/articles/investors-turn-cautious-on-consumer-debt-11649624240>

Guttman-Kenney, B., Firth, C., and Gathergood, J. (2022). *Buy Now, Pay Later (BNPL)...On Your Credit Card*. Retrieved from SSRN: <https://ssrn.com/abstract=4001909>

Grubb, M.D. (2015). *Overconfident consumers in the marketplace*. Journal of economic perspectives, 29(4):9-36.

Hendy, N. (2022). *Buy now, pay later with no credit check explained*. Forbes advisor. Retrieved from <https://www.forbes.com/advisor/au/buy-now-pay-later/no-credit-check-explained/>

Howell, E., and Krulisova, Z., (2021). *Eu banks are missing the boat on BNPL*. Flagship advisory partners. Retrieved from <https://www.flagshipadvisorypartners.com/eu-banks-are-missing-the-boat-on-bnpl>

Huffman, L. (2022) *Klarna vs. Afterpay*. Investopedia. Retrieved from <https://www.investopedia.com/klarna-vs-afterpay-5187148>

Hughes, J. (2022). *How does Klarna make money?* Business chronicler. Retrieved from <https://businesschronicler.com/revenue-models/how-does-klarna-make-money/>

HSBC. (2022). *Make fast, easy peer-to-peer money transfers with PayNow*. Retrieved from <https://www.hsbc.com.sg/ways-to-bank/transfers/paynow/peer-to-peer-money-transfer/>

Ingram, M., and Chariell, J. (2021). *Buy-now-pay-later \$11.3 trillion opportunity in china, US just beginning*. Bloomberg. Retrieved from <https://www.bloomberg.com/professional/blog/buy-now-pay-later-11-3-trillion-opportunity-in-china-u-s-just-beginning/>

International Trade Administration. (2022). *Singapore's thriving e-commerce market*. Retrieved from <https://www.trade.gov/market-intelligence/singapores-e-commerce-market>

Ionescu, I., (2022). *The need to regulate Buy Now, Pay Later in Europe*. The paypers. Retrieved from <https://thepaypers.com/expert-opinion/the-need-to-regulate-buy-now-pay-later-in-europe--1257837>

Jacobsson, V., and Siemiatkowski, S. (2007). *Consumption Credit Default Predictions*. Masters Dissertation. Stockholm School of Economics.

Johnson, G.R., (2022). *Buy now pay later (BNPL) statistics*. Finder. Retrieved from <https://www.finder.com/uk/buy-now-pay-later-statistics>

Jonker, N., van der Cruijssen, C., Bijlsma, M. and Bolt, W. (2020). *Pandemic Payment Patterns*. De Nederlandsche Bank Working Paper No. 701, Retrieved from SSRN: <https://ssrn.com/abstract=3760322>

Kaplan, S.M., Leach, C.B., Lev, O., Mitzenmacher, E.T., Bieker, C.L., and Dawson, J.C. (2022). *CFPB releases long-awaited report on Buy Now Pay Later industry*. Mayer Brown. Retrieved from <https://www.mayerbrown.com/en/perspectives-events/publications/2022/09/cfpb-releases-long-awaited-report-on-buy-now-pay-later-industry>

Kenton, W. (2021). *What is a layaway plan? History, and which companies offer them*. Investopedia. Retrieved from <https://www.investopedia.com/terms/l/layaway.asp>

Klarna. (2022). *Interim report 2022*. Retrieved from https://www.klarna.com/assets/sites/15/2022/08/30191342/Klarna-Holding-AB_Interim-Report-2022_EN.pdf

Klarna. (2022). *Klarna announces Full year financial results 2021*. Retrieved from <https://www.klarna.com/international/regulatory-news/klarna-announces-full-year-financial-results-2021/>.

Klarna. (2017). *Klarna-Europe's newest bank is born*. Retrieved from <https://www.klarna.com/international/press/klarna-europes-newest-bank-is-born/>

Klarna. (2022). *Klarna for business*. Retrieved from <https://www.klarna.com/us/business/merchant-support/>

Klarna. (2022). *Klarna for shoppers*. Retrieved from <https://www.klarna.com/us/>

Klarna. (2020). *Fast-track upturn*. Retrieved from https://www.klarna.com/assets/sites/4/2020/06/05175256/Storyation_KLA-CLV-Report_v2-compressed.pdf

Leibbrandt, J. G. (2004). *Payment systems and network effects*. Thesis: University of Maastricht.

Lux, M., and Epps, B. (2022). *Grow Now, regulate Later? Regulation urgently needed to support transparency and sustainable growth for Buy-Now, Pay-Later*. M-RCBG Associate Working Papers Series, No.182:4-21.

Malka, D., (2021). *BNPL: A win-win for retailers and consumers as the holidays approach*. Retail Touch Point. Retrieved from <https://www.retailtouchpoints.com/topics/payments/bnpl-a-win-win-for-retailers-and-consumers-as-the-holidays-approach>

Monetary Authority of Singapore. (MAS). (2021). *Reply to parliamentary question on Buy now pay later schemes*. Retrieved from <https://www.mas.gov.sg/news/parliamentary-replies/2021/reply-to-parliamentary-question-on-buy-now-pay-later-schemes>

Morgan Stanley. (2022). *Here's why e-commerce growth can stay stronger for longer*. Retrieved from <https://www.morganstanley.com/ideas/global-ecommerce-growth-forecast-2022>

National Bank of Belgium (NBB). (2004). *Central des crédits au particuliers (CCP)*. Retrieved from <https://www.nbb.be/fr/centrales-des-credits/centrale-des-credits-aux-particuliers-ccp>

Nets. (2022). *Why European banks can benefit by adding BNPL services to enhance customer experience and profitability report*. Retrieved from <https://www.nets.eu/solutions/mobileservices/Documents/Why-European-banks-can-benefit-by-adding-BNPL-services-to-enhance-customer-experience-and-profitability.pdf>

Nicole Heales Financial. (2022). *The risks of Buy Now Pay later services*. Retrieved from <https://nicolehealesfinancial.com.au/financial-planning/the-risks-of-buy-now-pay-later-services/>

Nogoev, A., Yazdanifard, R., Samadi, B., and Mohseni, S. (2011). *The evolution and development of e-commerce market and e-cash*. International Conference on Measurement and Control Engineering 2nd (ICMCE 2011). DOI: 10.1115/1.859858.paper35.

Nugent, R. (1939). *Consumer credit and economic stability*. Russell Sage Foundation. Retrieved from <https://www.russellsage.org/sites/default/files/Consumer-Credit-Economic-Stability.pdf>

O'Donoghue, T. and Rabin, M. (1999). *Doing it now or later*. American Economic Review, 89(1):103–124.

Osterwilder, A., and Pigneur, Y. (2010). *Business Model Generation*. John Wiley & Sons, Inc.

Paige, W. (2022). *PayPal hails Venmo and BNPL growth in Q3 earnings, will accept Apple payment products*. Emarketer. Retrieved from <https://www.insiderintelligence.com/content/paypal-hails-venmo-bnpl-q3-earnings-accept-apple-payment>

Peterdy, K. (2022). *BNPL(Buy Now, Pay Later)*. Corporate Finance institute. Retrieved from <https://corporatefinanceinstitute.com/resources/commercial-lending/bnpl-buy-now-pay-later/>

PrecedentResearch. (2022). *Buy Now Pay Later*. Retrieved from <https://www.precedenceresearch.com/buy-now-pay-later-market>

Quantilope. (2020). *Covid-19's impact on how consumers use Buy Now, Pay Later Services*. Retrieved from <https://www.quantilope.com/resources/insight-studies-how-has-covid-19-shaped-how-consumers-are-using-buy-now-pay-later-services>

Rajesh, N.V. (2019). *Klarna: 22 facts you need to know*. Endlessgain. Retrieved from <https://www.endlessgain.com/blog/klarna-buy-now-pay-later-payment-method/>

Research and Markets. (2022). *Singapore buy now pay later business and investment opportunities*. Retrieved from https://www.researchandmarkets.com/reports/5304986/singapore-buy-now-pay-later-business-and?utm_source=BW&utm_medium=PressRelease&utm_code=7k5bqp&utm_campaign=1787496+

[+Singapore+Buy+Now+Pay+Later+Business+and+Investment+Opportunities+Report+2022%3a+A+%243.15+Billion+Market+by+2028+Featuring+Key+Players+-+Atome%2c+Hoolah%2c+Rely%2c+Grab%2c+Split&utm_exec=chdo54prd](#)

Renzoulli, K.A., (2022). *Beware of these hidden risks in popular buy no, pay later plans*. Newsweek. Retrieved from <https://www.newsweek.com/2022/02/18/beware-these-hidden-risks-popular-buy-now-pay-later-plans-1677143.html>

Reserve bank of Australia. (2021). Payment system board annual report. Retrieved from <https://www.rba.gov.au/publications/annual-reports/psb/2021/>

Rolfe, A. (2021). *Top 20 BNPL nations ranked by e-commerce size and market share*. Payments industry intelligence. Retrieved from <https://www.paymentscardsandmobile.com/top-20-bnpl-nations-ranked-by-e-commerce-size-and-market-share/>

Roth, E. (2022). *The ugly economics behind Apple's new pay later system*. The verge. Retrieved from <https://www.theverge.com/2022/6/8/23157184/ugly-economics-behind-apple-buy-now-pay-later-system-bnpl>

Rossmann, T. (2021). *Do young adults want credit cards?* Bankrate. Retrieved from <https://www.bankrate.com/finance/credit-cards/playing-your-cards-right-younger-millennials-late-to-the-credit-cards-party/>

Sekhar Pani, S. (2022) *Buy Now, Pay Later*. Retrieved from SSRN: <https://ssrn.com/abstract=4085867>

Shahriari, S., and Shahriari, M. (2017). *Perspectives and Prospects of E-Commerce and M-Commerce*. International Journal of Research in Management & Social Science. 5. 43 – 46.

Sheth, N. (2022). *How does Klarna make money?* Finty. Retrieved from <https://finty.com/us/business-models/klarna/>

Shevlin, R. (2021). *Buy Now, Pay Later: The “new” payments trend generating \$100 billion in sales*. Forbes. Retrieved from <https://www.forbes.com/sites/ronshevlin/2021/09/07/buy-now-pay-later-the-new-payments-trend-generating-100-billion-in-sales/?sh=20e801192ffe>

Singapore Fintech Association. (SFA). *Buy Now, Pay Later (BNPL) working group launches BNPL code of conduct for Singapore*. Retrieved from <https://singaporefintech.org/buy-now-pay-later-bnpl-working-group-launches-bnpl-code-of-conduct-for-singapore/>

Statista. (2022). *E-commerce in the United Kingdom*. Retrieved from <https://www.statista.com/topics/2333/e-commerce-in-the-united-kingdom/>

Suadfakih. (2021). *Where is the buy now pay later industry going in Europe?* Medium. Retrieved from <https://medium.com/included-vc/where-is-the-buy-now-pay-later-industry-going-in-europe-274d04bb9679>

Tapscott, D. (1998). *Growing Up Digital. The Rise of the Net Generation*. New York: McGraw Hill. xii +338. ISSN 0-07-063361-4.

Tijssen, J., and Garner, R. (2021). *Buy Now, Pay Later in the UK*. Bain & Company, Inc. Retrieved from: https://www.bain.com/globalassets/noindex/2021/bain_report_buy_now_pay_later-in-the-uk.pdf

UK Government. (2020). *Achieving behaviour change a guide for national government*. Retrieved from https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/933328/UFG_National_Guide_v04.00__1__1_.pdf

UK Finance. (2022). *UK payment markets summary 2022*. Retrieved from <https://www.ukfinance.org.uk/system/files/2022-08/UKF%20Payment%20Markets%20Summary%202022.pdf>

UKtech. (2022). *What are the dangers of BNPL?* Retrieved from https://www.uktech.news/other_news/what-are-the-dangers-of-bnpl

Unctad. (2019). *Europe continues to dominate global e-commerce ranking*. Retrieved from <https://unctad.org/news/europe-continues-dominate-global-e-commerce-ranking>

Veling, J. (2022). *What is Buy Now, Pay Later?* NerdWallet. Retrieved from <https://www.nerdwallet.com/article/loans/personal-loans/buy-now-pay-later>

Wall Street Journal Markets (2022). *Afterpay ltd*. Retrieved from <https://www.wsj.com/market-data/quotes/AU/XASX/APT/financials/annual/income-statement>

Weliver, D. (2021). *What credit score do you need to get approved for a credit card?* Money Under30. Retrieved from <https://www.moneyunder30.com/credit-score-needed-to-get-approved-for-credit-card>

Worldpay/Fidelity National Information Services (FIS). (2022). *The global payments report for financial institution and merchants*. Retrieved from <https://offers.worldpayglobal.com/rs/850-JOA-856/images/ENGPR2022.pdf>

Wang, R. (2022). *Business Model innovation in Swedish Fintech industry, a study case of Klarna*. Retrieved from diva-portal : <https://www.diva-portal.org/smash/get/diva2:1711507/FULLTEXT01.pdf>

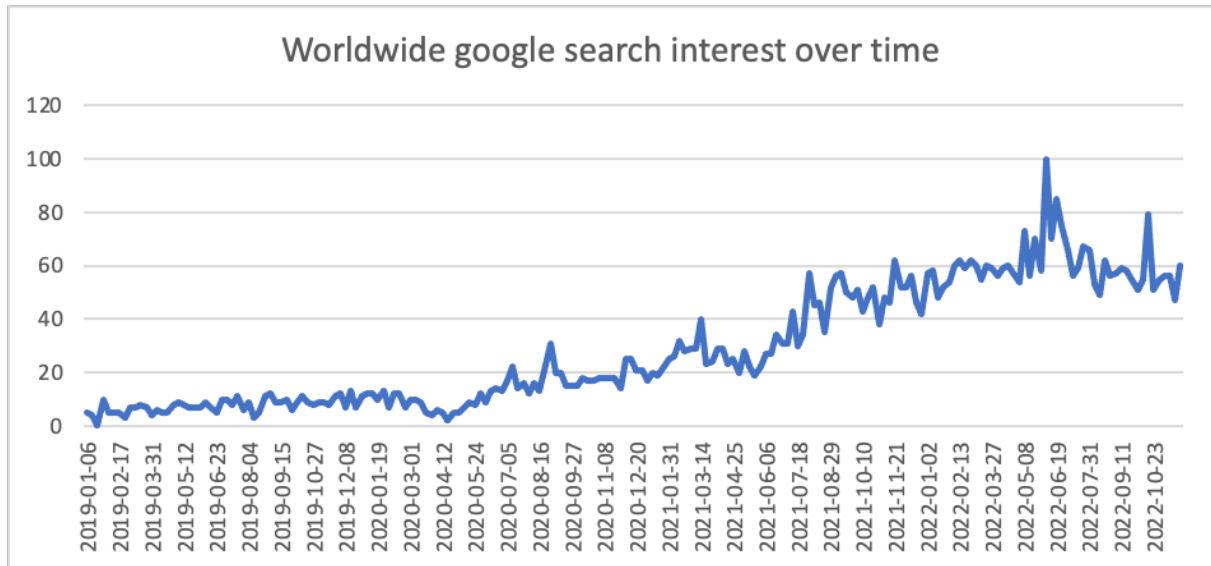
YahooFinance. (2022). *Affirm Holdings, Inc.(AFRM)*. Retrieved from https://finance.yahoo.com/quote/AFRM/key-statistics/?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAACHU9s3hJnGBIUMDKqlyJzrm9CPSjiSU63lwtcTDoJkwqwlzKm6mzTm1JZ2obD6KJVQturLqh0X20x5xU4XIg_7PW5HIT2C-LU9DiwrkYMNWK0cjXdtlWaEbF1KlbuApoHTjQvs9VdGoohQdalVNlprRvFzITVYZlpLDcoZvTqOx

YU, S. (2020). *Klarna: Comment la fintech a changé son Business Model*. Forbes. Retrieved from <https://www.forbes.fr/entrepreneurs/klarna-comment-la-fintech-a-change-son-business-model/>

Chapter 7. APPENDIX

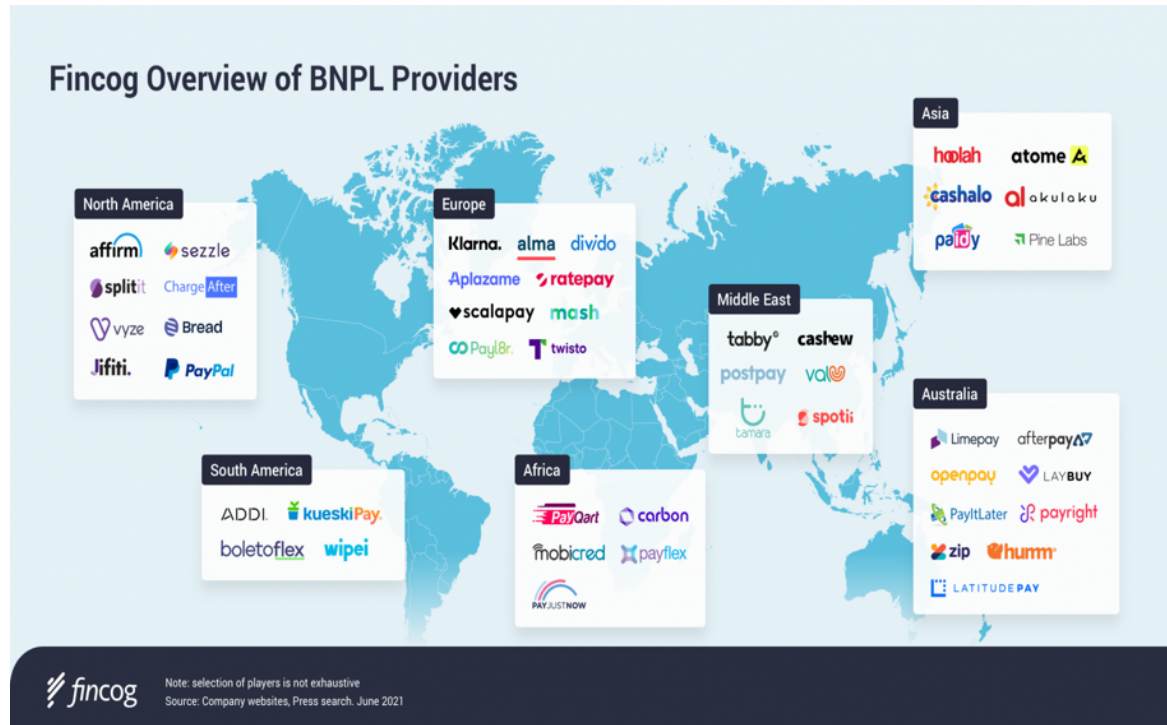
APPENDIX: CHAPTER 1

Table 1.1 The trend of the Buy Now, Pay Later system given by the search on google



(GoogleTrends, 2022)

APPENDIX: CHAPTER 2
Table 2.1 The BNPL per geographic area



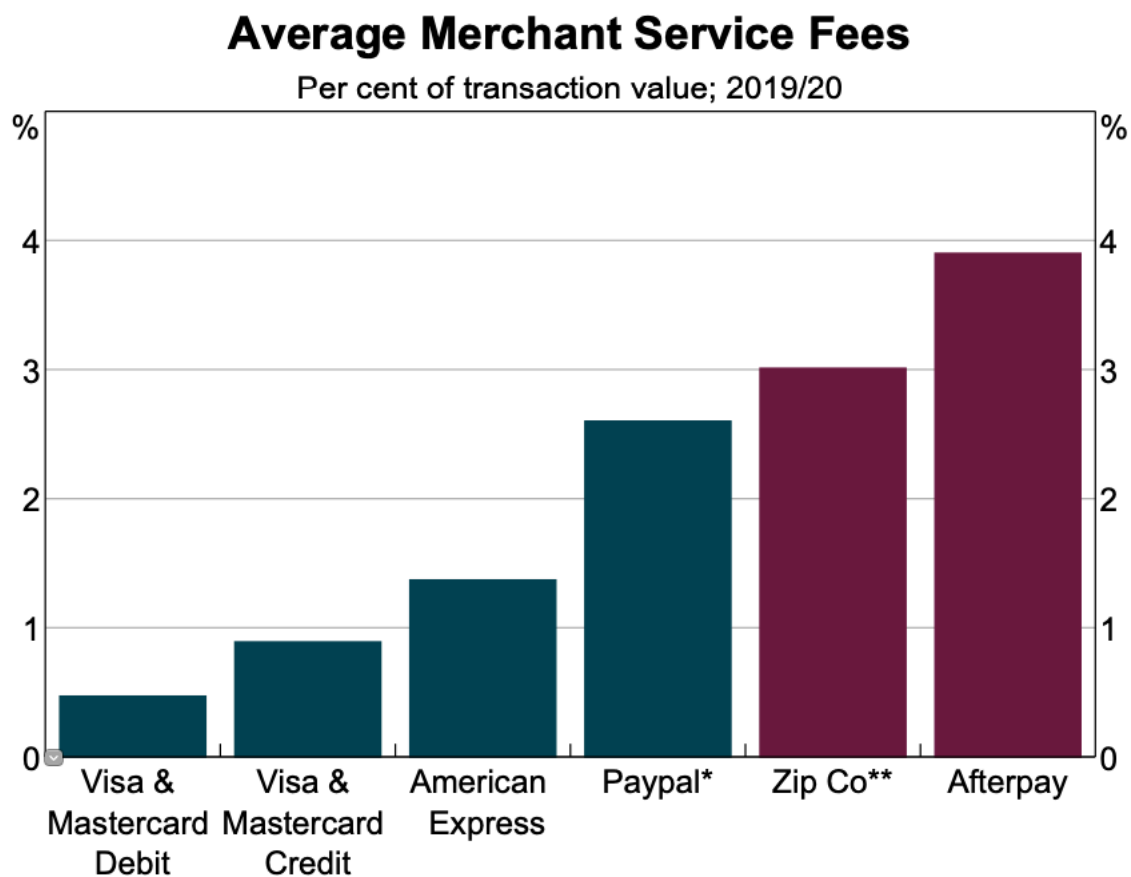
(Fincog, 2021)

Table 2.2 Offer plan of the main market players

	APR	Terms	Fees
Affirm ★★★★★ 5.0 NerdWallet rating	0%-30%.	4 installments, due every 2 weeks; monthly payment plans range from 3-60 months.	No fees.
Afterpay ★★★★★ 5.0 NerdWallet rating	0%.	4 installments, due every 2 weeks.	\$8 late fee.
Klarna ★★★★★ 5.0 NerdWallet rating	0%.	4 installments, due every 2 weeks.	\$7 late fee.
PayPal ★★★★★ 4.5 NerdWallet rating	0%.	4 installments, due every 2 weeks.	No fees.
Sezzle ★★★★★ 5.0 NerdWallet rating	0%.	4 installments, due every 2 weeks.	\$0 late fee. \$5 rescheduling fee. \$10 account reactivation fee.
Zip ★★★★★ 4.0 NerdWallet rating	0%.	4 installments, due every 2 weeks.	\$1 convenience fee per installment. \$5, \$7 or \$10 late fee.

(J.Veling, *Nerdwallet*, 2022)

Table 2.3 Fee charged on merchant between the different consumer credit providers



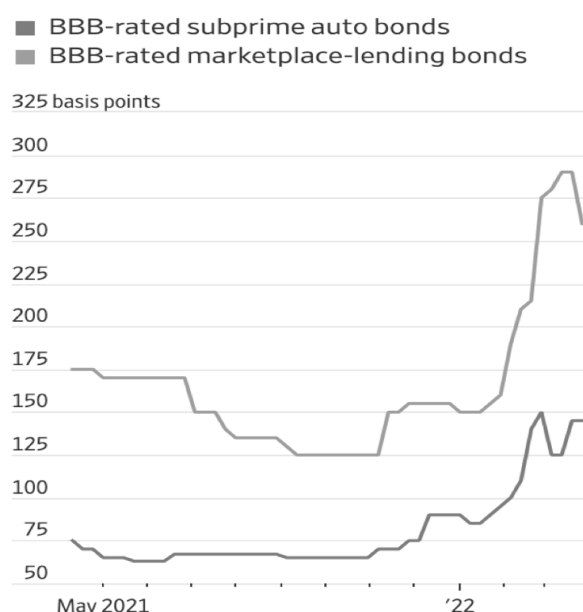
* For new users. Fixed fees apply based on currency and transaction type.

** Estimate only

Sources: Company reports; Paypal; RBA

(C. Fisher; C. Hollander; T. West, 2021)

Table 2.4. Consumer credit bond market increase



Source: J.P. Morgan

(M. Grossman; M. Wirz; *The Wall Street Journal*, 2022)

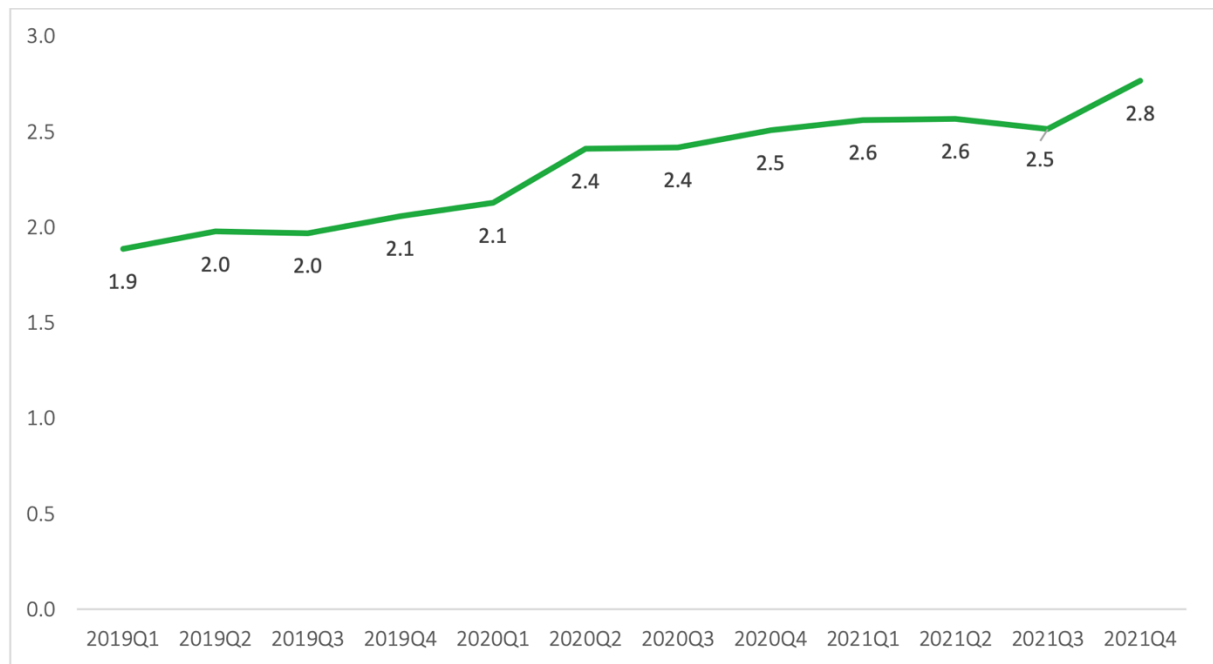
APPENDIX: CHAPTER 3

Table 3.1 Total loans provided by the top five lender in USA

	2019	2020	2021	19-21 CAGR
Loan Originations (Millions)	16.8	68.4	180.0	227%
Dollar Originations ⁵⁷ (\$ Billions)	2.0	8.3	24.2	245%
Average Loan Size (Dollar Originations / Loan Originations)	\$121	\$121	\$135	5.5%

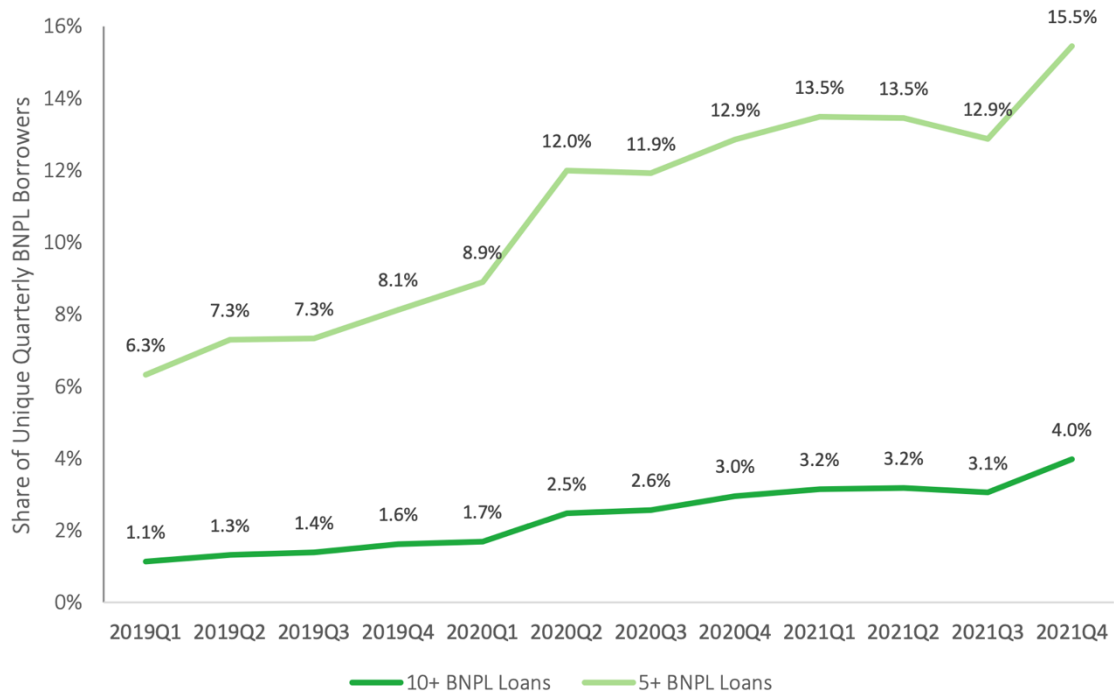
(CFPB, 2022) : https://files.consumerfinance.gov/f/documents/cfpb_buy-now-pay-later-market-trends-consumer-impacts_report_2022-09.pdf)

Table 3.2 The Average level of a specific lender BNPL product by a unique consumer



(CFPB, 2022) : https://files.consumerfinance.gov/f/documents/cfpb_buy-now-pay-later-market-trends-consumer-impacts_report_2022-09.pdf)

Table 3.3 share of BNPL borrower with at least 5+ and 10+ loans.



(CFPB,2022) : https://files.consumerfinance.gov/f/documents/cfpb_buy-now-pay-later-market-trends-consumer-impacts_report_2022-09.pdf)

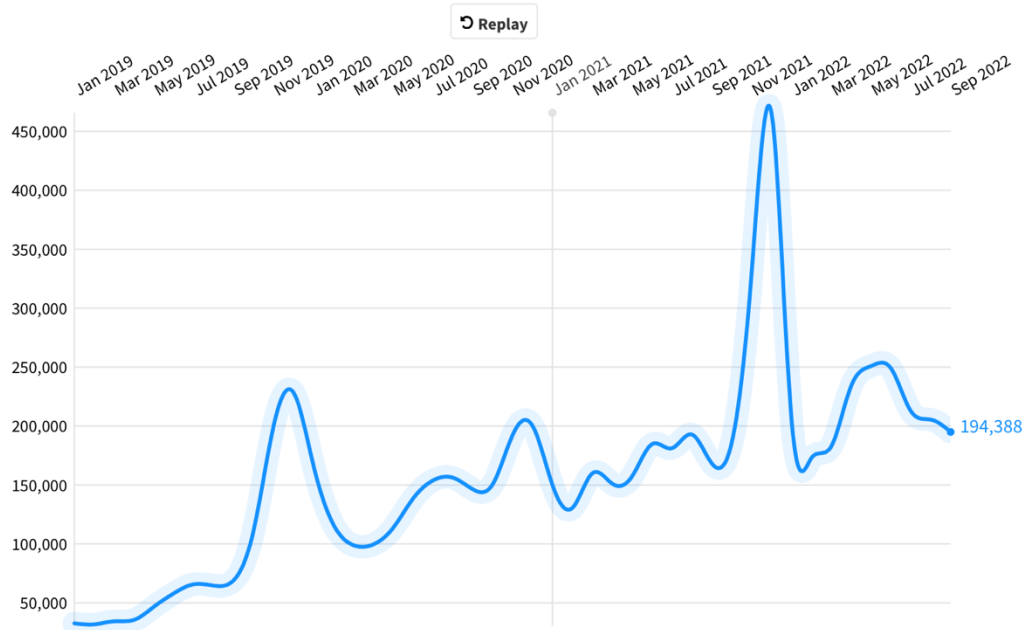
Table 3.4 Preferred products of Americans when using BNPL system

Vertical	2019		2020		2021	
	GMV (\$B)	% of Total	GMV (\$B)	% of Total	GMV (\$B)	% of Total
Apparel	1.34	66.1%	4.74	57.0%	12.43	50.5%
Personal Effects ⁶¹	0.09	4.5%	0.72	8.7%	2.76	11.2%
Mass Market ⁶²	0.13	6.5%	0.92	11.0%	2.65	10.8%
Beauty	0.29	14.0%	1.07	12.8%	2.01	8.2%
Other	0.12	5.7%	0.26	3.1%	1.49	6.1%
Home ⁶³	0.03	1.7%	0.29	3.5%	1.11	4.5%
Travel/ Entertainment	0.01	0.5%	0.06	0.7%	0.80	3.2%
Services ⁶⁴	0.01	0.5%	0.10	1.2%	0.64	2.6%
Automotive	0.002	0.1%	0.03	0.4%	0.27	1.1%
Health ⁶⁵	0.01	0.2%	0.09	1.1%	0.23	0.9%
Everyday ⁶⁶	0.003	0.2%	0.04	0.5%	0.23	0.9%

(CFPB,2022) : https://files.consumerfinance.gov/f/documents/cfpb_buy-now-pay-later-market-trends-consumer-impacts_report_2022-09.pdf)

Table 3.5 Statistics of Klarna penetration in UK

Number of downloads of the Klarna app in UK: 2019 - 2022



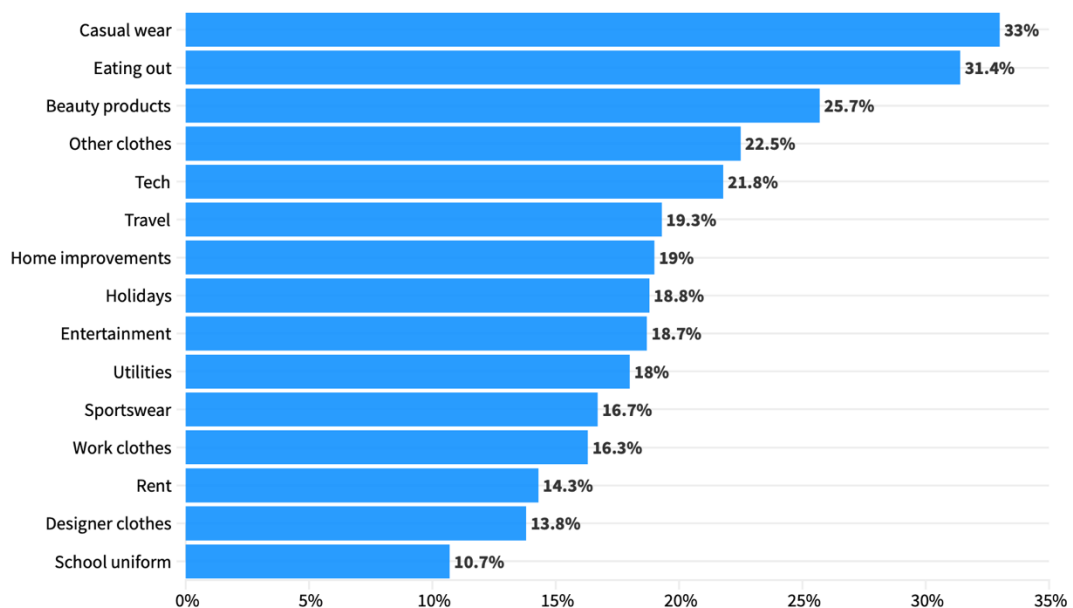
(Finder,2021) : <https://www.finder.com/uk/buy-now-pay-later-statistics>)

Table 3.6 Overview of the products prioritized by Britons when using BNPL products

Graph

Table

Product categories purchased by consumers using BNPL in 2021

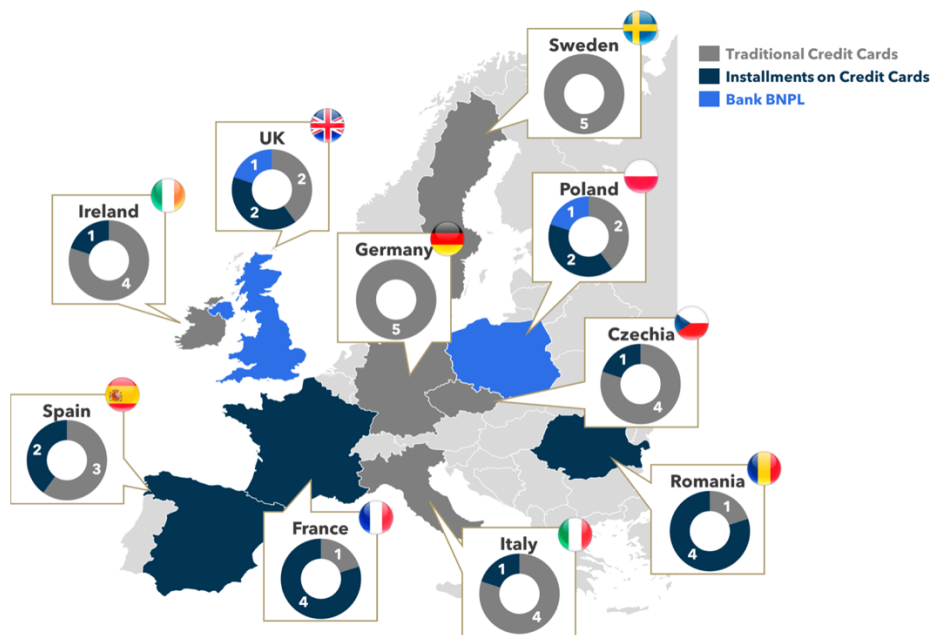


Source: Finder research



(Finder,2021) : <https://www.finder.com/uk/buy-now-pay-later-statistics>)

Table 3.7 Overview of bank's penetration in BNPL market in Europe



Source: Flagship Advisory Partners research

(Flagship, 2021) : <https://www.flagshipadvisorypartners.com/eu-banks-are-missing-the-boat-on-bnpl>)

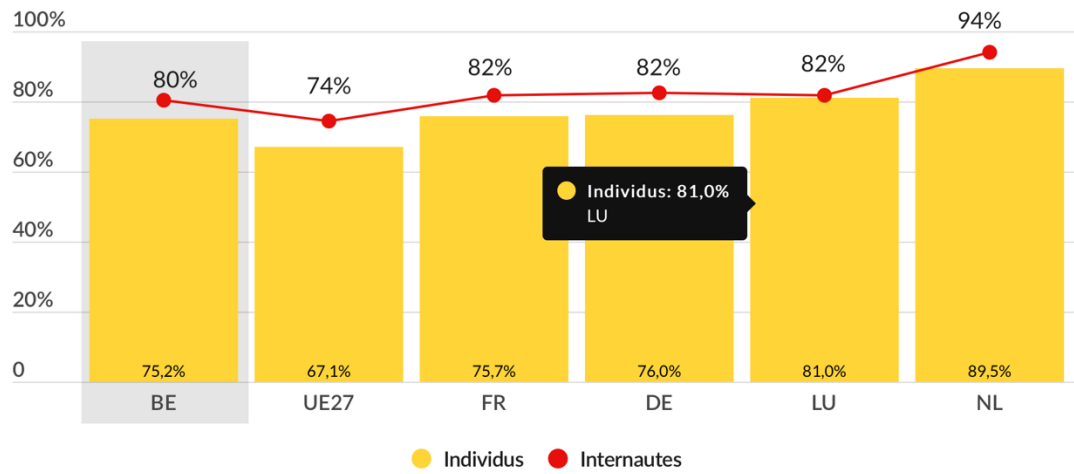
Table 3.8 Biggest e-commerce market and BNPL market around the world

Table shows the BNPL market in each nation as a percentage of total e-commerce turnover and the total value of the BNPL market.			
Nation	E-comm turnover (2020) GBP	BNPL %	BNPL market value in GBP
Sweden	£27,931,559,760	23%	£6,424,258,745
Germany	£87,375,648,480	19%	£16,601,373,211
Norway	£17,188,652,160	15%	£2,578,297,824
Finland	£11,459,101,440	12%	£1,375,092,173
Australia	£26,499,172,080	10%	£2,649,917,208
New Zealand	£3,580,969,200	10%	£358,096,920
Netherlands	£22,918,202,880	9%	£2,062,638,259
Denmark	£17,188,652,160	8%	£1,375,092,173
Belgium	£10,026,713,760	7%	£701,869,963
United Kingdom	£191,939,949,120	5%	£9,596,997,456
France	£94,537,586,880	4%	£3,781,503,475
India	£42,971,630,400	3%	£1,289,148,912
Indonesia	£17,904,846,000	3%	£537,145,380
Japan	£141,090,186,480	3%	£4,232,705,594
Philippines	£3,580,969,200	3%	£107,429,076
Singapore	£5,013,356,880	3%	£150,400,706
Italy	£29,363,947,440	2%	£587,278,949
Poland	£10,026,713,760	2%	£200,534,275
Spain	£52,998,344,160	2%	£1,059,966,883
United States	£790,677,999,360	2%	£15,813,559,987

(Payment industry intelligence, 2021) : <https://www.paymentscardsandmobile.com/top-20-bnpl-nations-ranked-by-e-commerce-size-and-market-share/>)

Table 3.9 Belgian e-commerce trend

Individus/internautes (*) ayant commandé en ligne au cours des douze derniers mois



(Fgov, 2022) : <https://economie.fgov.be/fr/themes/line/les-tic-en-belgique/barometre-de-la-societe-de/les-menages-et-linternet/les-menages-et-le-commerce>

TABLE 4.1 Description of the variables name of the Economic concerns dimension

<u>Description</u>	<u>Variable Name</u>
Vos habitudes de consommation ont-elles été impactées par le covid ?	COVID1
La pandémie vous a-t-elle obligé à changer vos habitudes de consommations	COVID2
L'inflation influence-t-elle vos habitudes de consommation ?	INFLA1
Face à l'effet de l'inflation, accepteriez-vous de changer vos habitudes ?	INFLA2
La crise énergétique influence-t-elle vos habitudes de consommation ?	ENERG1
Face à l'effet de la crise énergétique, accepteriez-vous de changer vos habitudes ?	ENERG2
Les produits de paiement actuels (Mastercard/PayPal, Crédit à la consommation/...) vous permettent-ils de consommer comme vous le souhaitez ?	BUY

Table 4.2 Descriptive statistics of the economic concern dimension

Variables	Number of observations	Mean	Standard deviation	Minimum	Maximum
COVID1	96	3.02	1.22	1	5
COVID2	96	2.66	1.27	1	5
INFLA1	96	3.74	1.00	1	5
INFLA2	96	3.79	0.96	1	5
ENERG1	96	3.89	1.10	1	5
ENERG2	96	4.04	0.95	1	5
BUY	96	4.03	0.88	1	5

Table 4.4 Principal component analysis made on economic concerns variables

Factors	Eigenvalue	Proportion	Cumulative
Factor 1	2.3317	33.3111	33.3111
Factor 2	1.6606	23.7234	57.0346
Factor 3	1.0014	14.3067	71.3413
Factor 4	0.7917	11.3102	82.6516
Factor 5	0.5231	7.4730	90.1246
Factor 6	0.4319	6.1707	96.1953
Factor 7	0.2593	3.7046	100.000

* An eigenvalue explains how much variance of the total variance a given factor accounts for. For example, the first factor has an eigenvalue equal to 2.33. This means this factor covers the information of 2.10 variables. Given this score each eigen value account for a certain proportion of the total variance. For this first factors the proportion will be 33,31%. According to the Kaiser criterion, an eigenvalue must be above 1 to be accepted as explanatory. (Mooi et al., 2018) In this case I have chosen the first 3 dimensions.

Variables	K.M.O	DIM1	DIM2	DIM3
COVID1	0.53	0.3559	0.3273	0.0775
COVID2	0.51	0.1467	0.4514	0.1843
INFLA1	0.60	0.4799	0.0154	0.1700
INFLA2	0.54	0.3565	0.3087	0.0043
ENERG1	0.60	0.6650	0.0005	0.0153
ENERG2	0.51	0.3268	0.3631	0.0038
BUY	0.53	0.0006	0.1939	0.5457

*K.M.O (Mayer-Olkin criterion) This criterion measures the adequacy of each variable in the model and look if they suit for a factor analysis. On other word, this test the proportion of variance among variables which may have a common variance. To be acceptable, the score should be at least above 0.5 for each variable.(Mooi et al., 2018) The dimensions (or factor) hereafter determines which variable represent the most a given dimension. (N.Uyttendaele in 2020) This will allow to associate a dimension(factor) with a variable according to their proportion to share a common variance. In this case we can associate the dimension 1 (factor1) with the highest score, ENERG1.

Table 4.5 Variables naming of the attitude towards payment method dimension

<u>Description</u>	<u>Variable Name</u>
Connaissez-vous le concept du BNPL ?	C_BNPL
A quelle fréquence achetez-vous de nouveaux produits en ligne ?	NEW
Avez-vous une carte de crédit ?	CRD1 (binary variable: 1 if yes, 0 if no)
A quelle fréquence utilisez-vous les cartes de crédit ?	CRD2
A quelle fréquence utilisez-vous les cartes de débits ?	DEB1
Quel moyen de paiement utilisez-vous pour effectuer vos achats en ligne ?	ONLINE (0 if debit; 1 if credit; 2 if PayPal)
Préférez-vous utiliser les carte de crédit ou de débit pour vos achats en ligne ?	PREF (binary variable: 1 if credit; 0 if debit)
Pour quel type de produit pensez-vous utiliser le système du Buy Now, Pay Later ?	USE_BNPL
Avec les conditions proposées par le BNPL, pensez-vous l'utiliser plus souvent que les carte de crédit ?	BNPL_CR
Parmi les choix proposés, quelle particularité du produit vous donne envie d'utiliser ce moyen de paiement ?	BNPL_P1 (1 if instalment, 2 if zero interest; 3 if non presence of banks; 4 if no credit score; 5 if other)
Parmi les choix proposés, quelle particularité du produit ne vous donne pas envie d'utiliser ce moyen de paiement ?	BNPL_P2 (1 if consumer credit; 2 if late fees; 3 if online purchase; 4 if no regulation; 5 if other)

Table 4.6 Descriptive statistics of the attitude towards payment method dimension

Variables	Number of observations	Mean	Standard deviation	Minimum	Maximum
C_BNPL	96	1.92	1.43	1	5
NEW	96	2.80	0.99	1	5
CRD1	96	0.73	0.45	0	1
CRD2	96	2.20	1.19	1	5
DEB1	96	4.44	0.95	1	5
ONLINE	96	0.80	0.59	0	2
PREF	96	0.10	0.31	0	1
USE_BNPL_ELEC	96	0.52	0.50	0	1
USE_BNPL_COTH	96	0.38	0.49	0	1
USE_BNPL_MENAG	96	0.28	0.45	0	1
USE_BNPL_LOISIR	96	0.35	0.48	0	1
BNPL_CR	96	2.33	1.19	1	5
BNPL_P1	96	1.64	0.76	1	5

Correlation Matrix	C_BNPL	NEW	CRD1	CRD2	DEB1	ONLINE	PREF
C_BNPL	1						
NEW	0.21	1					
CRD1	0.11	0.21	1				
CRD2	0.12	0.38	0.60	1			
DEB1	0.00	0.14	0.03	-0.12	1		
ONLINE	-0.04	0.15	0.23	0.26	-0.11	1	
PREF	-0.03	-0.04	0.13	0.23	-0.37	0.17	1
USE_BNPL_ELEC	-0.03	0.04	0.07	0.39	0.00	0.14	0.19
USE_BNPL_CLOTH	0.20	0.07	0.08	0.07	-0.11	0.00	0.02
USE_BNPL_MENAG	0.27	-0.02	0.02	0.11	0.00	-0.07	0.17
USE_BNPL_LOISIR	0.00	-0.03	0.11	0.21	-0.14	0.14	0.03
BNPL_CR	0.06	0.30	0.15	0.28	0.07	0.02	0.02
BNPL_P1	-0.06	-0.06	-0.30	-0.26	0.02	-0.16	0.03
BNPL_P2	0.01	-0.02	-0.03	-0.13	0.20	-0.06	-0.08

Correlation Matrix	USE_BNPL L_ELEC	USE_BNPL _CLOTH	USE_BNPL _MENAG	USE_BNPL _LOISIR	BNPL _CR	BNPL _P1	BNPL _P2
USE_BNPL_ ELEC	1						
USE_BNPL_ CLOTH	0.14	1					
USE_BNPL_ MENAG	0.28	0.28	1				
USE_BNPL_ LOISIR	0.01	0.28	0.02	1			
BNPL_CR	0.27	0.07	0.31	0.05	1		
BNPL_P1	-0.08	0.00	-0.04	-0.10	0.03	1	
BNPL_P2	-0.11	0.10	-0.06	0.15	-0.01	0.18	1

4.7 Impact of socio-demographic dimension as well as economic concerns on the attitude towards payment method

Variables	C_BNPL	NEW	CRD1	CRD2	DEB1	ONLINE	PREF
INTERCEPT	1.2814 (1.3680)	1.9911* (0.8809)	0.4928 (0.3818)	1.1300 (1.010)	4.2430*** (0.9133)	0.6454 (0.5291)	0.0268 (0.2970)
GEN	0.1708 (0.3170)	-0.3127 (0.2041)	0.1392 (0.0884)	0.2809 (0.2341)	0.0943 (0.2116)	-0.1744 (0.1226)	-0.0266 (0.0688)
AGE	-0.0872 (0.4476)	-0.1992 (0.2882)	-0.1796 (0.1249)	-0.7345* (0.3306)	0.0237 (0.2988)	-0.1029 (0.1731)	-0.0036 (0.0971)
DIPLOMA	0.5704 (0.5082)	0.3901 (0.3274)	0.1950 (0.1419)	0.7067. (0.3755)	-0.0795 (0.3394)	0.4744* (0.1967)	-0.0874 (0.1104)
ACTU1	-0.1679 (0.7228)	0.8131. (0.4654)	0.1326 (0.2017)	0.6676 (0.5338)	0.6938 (0.4825)	0.6217* (0.2796)	0.0308 (0.1569)
ACTU2	-0.2189 (0.7184)	1.3597** (0.4626)	0.6206** (0.2005)	1.7316** (0.5360)	0.4601 (0.4796)	0.7770** (0.2778)	0.0985 (0.1559)
ACTU3	0.5570 (0.4524)	0.2248 (0.2913)	-0.2188. (0.1262)	0.0271 (0.3342)	-0.2787 (0.3020)	0.0375 (0.1749)	0.0320 (0.0982)
HOME	-0.2756 (0.3832)	-0.1510 (0.2467)	-0.2141* (0.1069)	-0.4104 (0.2830)	0.0674 (0.2558)	-0.2599 (0.1482)	0.0011 (0.0832)
ECO_ATTITUDE	0.1202 (0.2744)	-0.0798 (0.1767)	-0.0393 (0.0765)	-0.0479 (0.2026)	-0.0851 (0.1832)	-0.1686 (0.1061)	0.0250 (0.0595)
Observation	96	96	96	96	96	96	96
R-square	0.050	0.1837	0.2458	0.2596	0.0452	0.1737	0.034

Signif.codes : 0 : '***' ; 0.001 : '**' ; 0.01 : '*' ; 0.05 : '.' ; 0.1 : ''

Variables	USE_BNP L_ELEC	USE_BNPL _CLOTH	USE_BNPL MENAG	USE_BNPL _LOISIR	BNPL _CR	BNPL _P1	BNPL _P2
INTERCEPT	-0.0159 (0.4611)	0.5966 (0.4588)	-0.0768 (0.4173)	0.6891 (0.4608)	2.5340* (1.0591)	2.2687** (0.7083)	3.2061*** (0.6606)
GEN	0.2450* (0.1068)	0.0167 (0.1063)	0.1334 (0.0967)	0.0088 (0.1067)	-0.0068 (0.2454)	-0.1395 (0.1641)	-0.1424 (0.1530)
AGE	-0.1321 (0.1508)	-0.0119 (0.1501)	-0.0447 (0.1365)	-0.0259 (0.1507)	-0.9748** (0.3465)	-0.0255 (0.2317)	0.2435 (0.2161)
DIPLOMA	0.1731 (0.1714)	-0.1744 (0.1705)	0.2180 (0.1551)	-0.2546 (0.1712)	-0.0957 (0.3936)	-0.4247 (0.2633)	-0.2335 (0.2455)
ACTU1	0.3062 (0.2436)	-0.2185 (0.2424)	-0.1116 (0.2205)	0.1648 (0.2434)	0.0608 (0.5595)	-0.2291 (0.3742)	-0.5913 (0.3490)
ACTU2	0.5124* (0.2421)	0.0943 (0.2409)	0.0903 (0.2191)	0.1922 (0.2420)	0.5741 (0.5561)	-0.5210 (0.3719)	-0.3442 (0.3469)
ACTU3	0.1137 (0.1524)	-0.0699 (0.1517)	-0.2957* (0.1380)	0.0311 (0.1523)	-0.0077 (0.3502)	0.0037 (0.2342)	-0.1088 (0.2184)
HOME	-0.1959 (0.1291)	-0.1428 (0.1285)	-0.2364* (0.1169)	-0.1342 (0.1291)	-0.8887** (0.2967)	-0.1512 (0.1984)	-0.2108 (0.1850)
ECO_ATTITUDE	0.0168 (0.0925)	0.0098 (0.0920)	0.0857 (0.0837)	-0.0476 (0.0924)	0.2639 (0.2124)	0.1040 (0.1421)	0.0535 (0.1325)
Observation	96	96	96	96	96	96	96
R-square	0.1295	0.0823	0.1196	0.0514	0.1871	0.0926	0.0883

Signif.codes : 0 : '***' ; 0.001 : '**' ; 0.01 : '*' ; 0.05 : '.' ; 0.1 : ''

4.8 Impact of socio-demographic dimension as well as economic concerns on the attitude towards payment method

Variables	C_BNPL	NEW	CRD1	CRD2	DEB1	ONLINE	PREF
INTERCEPT	0.5501 (1.2760)	1.5600 (0.8572)	0.2261 (0.3656)	1.2514 (0.9506)	3.6103*** (0.8845)	0.4355 (0.5058)	0.1099 (0.2857)
GEN	0.1815 (0.3098)	-0.2538 (0.2081)	0.1695 (0.0887)	0.3277 (0.2308)	0.1799 (0.2146)	-0.1345 (0.1228)	-0.0466 (0.0693)
AGE	-0.4377 (0.4511)	-0.1495 (0.3030)	-0.1920 (0.1296)	-0.6084 (0.3361)	0.0915 (0.3127)	-0.0365 (0.1788)	-0.0364 (0.1010)
DIPLOMA	0.4530 (0.4890)	0.3319 (0.3285)	0.1443 (0.1401)	0.6430 (0.3643)	-0.1557 (0.3390)	0.4013* (0.1938)	-0.0685 (0.1095)
ACTU1	-0.2349 (0.7264)	0.6676 (0.4879)	0.0254 (0.2081)	0.3200 (0.5411)	0.4967 (0.5041)	0.4468 (0.2879)	0.1039 (0.1626)
ACTU2	-0.2871 (0.7204)	1.2263* (0.4839)	0.5190* (0.2064)	1.3945* (0.5367)	0.2808 (0.4993)	0.6090* (0.2855)	0.1674 (0.1613)
ACTU3	0.5571 (0.4370)	0.2352 (0.2935)	-0.2118 (0.1252)	0.0570 (0.3255)	-0.2638 (0.3029)	0.0476 (0.1732)	0.0260 (0.0978)
HOME	-0.2370 (0.3732)	-0.1456 (0.2507)	-0.2000 (0.1069)	-0.3619 (0.2781)	0.0705 (0.2587)	-0.2347 (0.1479)	-0.0044 (0.0836)
FACTOR1 ENERG	0.0364 (0.1372)	-0.0429 (0.0922)	-0.0402 (0.0393)	-0.1842 (0.1022)	-0.0417 (0.0951)	-0.1217* (0.0544)	0.0302 (0.0307)
FACTOR2 COVID	-0.1332 (0.1264)	0.0729 (0.0849)	0.0305 (0.0362)	0.1981* (0.0941)	0.1043 (0.0876)	0.0736 (0.0501)	-0.0429 (0.0283)
FACTOR3 BUY	0.4492* (0.1732)	0.0547 (0.1164)	0.0811 (0.0496)	0.0258 (0.1291)	0.0861 (0.1201)	0.0026 (0.0686)	-0.0091 (0.0388)
Observation	96	96	96	96	96	96	96
R-square	0.1357	0.1913	0.2764	0.3142	0.0624	0.21	0.0644

Signif.codes : 0 : '***' ; 0.001 : '**' ; 0.01 : '*' ; 0.05 : '.' ; 0.1 : ''

Variables	USE_BNP L_ELEC	USE_BNPL _CLOTH	USE_BNPL_ MENAG	USE_BNPL _LOISIR	BNPL _CR	BNPL _P1	BNPL _P2
INTERCEPT	0.5080 (0.4206)	0.4153 (0.4465)	0.1408 (0.4088)	0.8198 (0.4464)	3.4710*** (0.9495)	2.6293*** (0.6912)	3.086*** (0.6414)
GEN	0.2164* (0.1021)	0.0360 (0.1084)	0.1079 (0.0992)	-0.0186 (0.1084)	0.0004 (0.2305)	-0.1735 (0.1678)	-0.1380 (0.1557)
AGE	-0.0116 (0.1487)	-0.0211 (0.1578)	-0.0725 (0.1445)	-0.0667 (0.1578)	-0.5958 . (0.3356)	-0.0174 (0.2443)	0.2345 (0.2267)
DIPLOMA	0.2463 (0.1612)	-0.1921 (0.1711)	0.2514 (0.1566)	-0.2595 (0.1711)	0.1018 (0.3639)	-0.3618 (0.2649)	-0.2061 (0.2457)
ACTU1	0.3668 (0.2394)	-0.2582 (0.2541)	-0.0581 (0.2327)	0.2115 (0.2541)	0.0515 (0.5405)	-0.1378 (0.3935)	-0.5129 (0.3651)
ACTU2	0.5689* (0.2374)	0.0587 (0.2520)	0.1391 (0.2308)	0.2318 (0.2520)	0.5752 (0.5360)	-0.4353 (0.3902)	-0.2618 (0.3629)
ACTU3	0.1127 (0.1440)	-0.0666 (0.1529)	-0.2978* (0.1400)	0.0245 (0.1529)	0.0126 (0.3251)	0.0001 (0.2367)	-0.1136 (0.2197)
HOME	-0.2095 . (0.1230)	-0.1424 (0.1306)	-0.2391* (0.1195)	-0.1248 (0.1306)	-0.9448** (0.2777)	-0.1633 (0.2022)	-0.2347 (0.1876)
FACTOR1 ENERG	-0.0024 (0.0452)	0.0054 (0.0480)	0.0312 (0.0439)	-0.0231 (0.0480)	0.0757 (0.1021)	0.0480 (0.0473)	0.0782 (0.0684)
FACTOR2 COVID	0.0404 (0.0416)	0.0146 (0.0442)	-0.0208 (0.0405)	-0.0521 (0.0442)	0.2576** (0.0940)	-0.1390 (0.0684)	-0.0239 (0.0634)
FACTOR3 BUY	-0.1884** (0.0571)	0.0507 (0.0606)	-0.0034 (0.0555)	-0.0161 (0.0606)	-0.3551** (0.1289)	-0.0633 (0.0938)	-0.0022 (0.0873)
Observation	96	96	96	96	96	96	96
R-square	0.2421	0.0907	0.1162	0.0684	0.3163	0.0959	0.1008

Signif.codes : 0 : '***' ; 0.001 : '**' ; 0.01 : '*' ; 0.05 : '.' ; 0.1 : ''

Table 4.9 Principal component analysis made on the attitude towards payment methods variables

Factors	Eigenvalue	Proportion	Cumulative
Factor 1	2.6269	18.7642	18.7642
Factor 2	1.6100	11.5001	30.2643
Factor 3	1.5287	10.9196	41.1840
Factor 4	1.3363	9.5455	50.7296
Factor 5	1.1376	8.1258	58.8555
Factor 6	1.0626	7.3286	66.1841
Factor 7	0.8461	6.0442	72.2283
Factor 8	0.7993	5.7096	77.9379
Factor 9	0.7004	5.0034	82.9413
Factor 10	0.6269	4.4783	87.4197
Factor 11	0.5889	4.2068	91.6265
Factor 12	0.5417	3.8698	95.4963
Factor 13	0.4019	2.8710	98.3674
Factor 14	0.2285	1.6325	100.000

Variables	K .M.O
C_BNPL	0.54
NEW	0.47
CRD1	0.53
CRD2	0.58
DEB1	0.41
ONLINE	0.75
PREF	0.55
USE_BNPL_ELEC	0.48
USE_BNPL_CLOTH	0.46
USE_BNPL_MENAG	0.51
USE_BNPL_LOISIR	0.45
BNPL_CR	0.60
BNPL_P1	0.65
BNPL_P2	0.53

*As explained previously, The K.M.O criterion require a score above 0.5 for each variable. As we can observe, five variables are below the limit. Therefore, I need to remove these variables and re-assess the PCA calculation.

Factors	Eigenvalue	Proportion	Cumulative
Factor 1	2.1753	24 .1709	24.1709
Factor 2	1.4067	15.6310	39.8020
Factor 3	1.0999	12.2221	52.0241
Factor 4	1.0473	11.6373	63.6614
Factor 5	0.9265	10.2952	73.9567
Factor 6	0.7647	8.4967	82.4534
Factor 7	0.7189	7.9885	90.4420
Factor 8	0.4897	5.4417	95.8830
Factor 9	0.3704	4.1161	100.000

Variables	K .M.O
C_BNPL	0.52
CRD1	0.63
CRD2	0.63
ONLINE	0.75
PREF	0.51
USE_BNPL_MENAG	0.48
BNPL_CR	0.52
BNPL_P1	0.64
BNPL_P2	0.55

*Here again, the K.M.O criterion for one variable is below the limit. I must therefore re-assess a third time the PCA calculation.

Factors	Eigenvalue	Proportion	Cumulative
Factor 1	2.1309	26.6374	26.6374
Factor 2	1.1532	14.4161	41.0535
Factor 3	1.0964	13.7053	54.7589
Factor 4	0.9590	11.9882	66.7471
Factor 5	0.9155	11.4444	78.1916
Factor 6	0.7543	9.4290	87.6206
Factor 7	0.6195	7.7441	95.3647
Factor 8	0.3708	4.6352	100.000

Variables	K .M.O	DIM1	DIM2	DIM3
C_BNPL	0.66	0.0323	0.3109	0.1195
CRD1	0.64	0.6129	0.0219	0.0020
CRD2	0.62	0.7061	0.0208	0.0082
ONLINE	0.77	0.2445	0.1437	0.0412
PREF	0.60	0.1183	0.0962	0.3579
BNPL_CR	0.57	0.1048	0.3141	0.0944
BNPL_P1	0.67	0.2484	0.0525	0.3769
BNPL_P2	0.54	0.0633	0.1928	0.0960

Table 4.10 Electric bike study case information

Panier > Informations > Livraison > Paiement

Contact	aram_papikyan@hotmail.fr	Modifier
Expédier à	Avenue Robert Dalechamp, 1200 Woluwe-Saint-Lambert, Belgique	Modifier
Méthode	Livraison gratuite - Gratuit	

Ajouter un pourboire

Témoignez votre soutien à l'équipe de Buybestgear

1 % 23,99 €	2 % 47,98 €	Aucun
----------------	----------------	--------------

⌵ ⌶

[Ajouter un pourboire](#)

Merci beaucoup !

Paiement

Toutes les transactions sont sécurisées et chiffrées.

☐ Credit/Debit Card

et plus...

☐ PayPal

☒ Klarna - Payer maintenant, ou plus tard
[Klarna](#)

Après avoir cliqué sur « Valider le paiement », vous serez redirigé(e) vers Klarna - Payer maintenant, ou plus tard pour finaliser votre achat de façon sécurisée.

Lankeleisi RV800 Plus 750W 26" Fat Bike E-Vélo de Montagne avec Moteur Bafang 52km/h 150km 20Ah Samsung Batterie | Pré-commande

2399,00 €

Jaune

[Appliquer](#)

Sous-total 2399,00 €
Livraison Gratuit

Total EUR **2399,00 €**

4.11 Kenzo Study case information

KENZO

SOLDES

LUNAR YEAR

NOUVEAUTÉS

HOMME

FEMME

CHAUSSURES

ACCESSOIRES

ENFANT

AccueilCustomer ServiceQuels sont les moyens de paiement acceptés?

Les moyens de paiement acceptés sont les suivants : **cartes de crédit** (Visa, Mastercard, American Express, Carte Bleue and Maestro), **Paypal** et **Klarna** (Pay now, Pay later, Pay over time).

Les moyens de paiement locaux également acceptés sont les suivants : Sofort, iDeal, China Union Pay, WeChat Pay, Alipay, JCB, Discover et Diners Club.

Les paiements effectués avec Paypal, Sofort, Ideal, CUP, WeChat Pay, Alipay, JCB et Klarna Pay now sont débités immédiatement tandis que les transactions effectuées avec les autres moyens de paiement sont débitées lorsque la commande est expédiée.

La disponibilité des modes de paiement Klarna varie en fonction des pays :

- Klarna Pay now : Allemagne, Autriche, Pay-Bas.
- Klarna Pay later : Allemagne, Autriche, Belgique, Finlande, Pays-Bas, Royaume-Uni.
- Klarna Pay over time : Allemagne, Australie, Autriche, Espagne, Etats-Unis, Finlande, Italie, Royaume-Uni.

KENZO

1. Cart

>

2. Delivery & Shipping

>

3. Payment information

< Continue Shopping

Your cart

Wool and leather 'Tiger Varsity' jacket

Color: BLACK

Size: S

Qty : 1

€1,500.00

SHIPPING

Belgium

SUBTOTAL

SHIPPING

Express delivery

Delivery in 2-3 working days (excluding weekends)

€1,500.00

OFFERED

Promo code

>

CUSTOMER SERVICE

Monday to Friday

+33 (0)1 73 04 21 39

9.30am - 6.30pm (Paris time)

Customer Service

Delivery in 2-3 working days

Free returns within 14 days

Secure payments

VISA

PayPal

Klarna

Table 4.12 Krëfel study case information

CuisinesMagasinsJobsDeals

Commandé avant 22 h 00, livré le lendemain gratuitement, également le dimanche*

Conseillers produitsMarquesService clientèle

KRÉFEL

La vie en mieux

Catégories

Je recherche les meilleures idées de cadeaux

NLSe connecter

RachatCadeau de NoëliPhone 14Payer avec des éco-chèques

< Retour

Achetez ces produits maintenant. Payez-les dans 30 jours avec Klarna.

Filtres

Réinitialiser les filtres

Catégories

Aanvullen SDA (1)

Accessoires (25)

Accessoires (23)

Accessoires (4)

Achetez ces produits maintenant. Payez-les dans 30 jours avec Klarna.

Chez Krëfel, il existe de nombreuses manières de régler vos achats en toute sécurité. Avec Klarna, vous pouvez désormais **payer dans les 30 jours**, sans frais supplémentaire ! L'avantage ? Vous remettez à plus tard le paiement d'un produit qui vous plaît maintenant et n'êtes plus obligé d'avoir un moyen de paiement sous la main. Retrouvez ici tous les produits payables via Klarna.

Table 4.13 Descriptive statistics about the interest and probability to use some of the study cases

Variables	Number of observations	Mean	Standard deviation	Minimum	Maximum
BNPL1_I	96	3.62	1.16	1	5
BNPL1_P	96	2.39	1.23	1	5
BNPL2_I	96	3.17	1.38	1	5
BNPL2_P	96	2.48	1.25	1	5
BNPL3_I	96	3.78	1.13	1	5
BNPL3_P	96	3.26	1.14	1	5

Correlation Matrix	BNPL1_I	BNPL1_P	BNPL2_I	BNPL2_P	BNPL3_I	BNPL3_P
BNPL1_I	1					
BNPL1_P	0.41	1				
BNPL2_I	0.48	0.21	1			
BNPL2_P	0.22	0.24	0.5	1		
BNPL3_I	0.64	0.35	0.58	0.32	1	
BNPL3_P	0.31	0.30	0.38	0.42	0.66	1

Table 4.14 Impact of the socio-demographic as well as economic concerns dimension and attitude about payment method dimensions on the interest towards the study cases

Variables	BNPL1_I	BNPL2_I	BNPL3_I
INTERCEPT	2.0502 (1.2366)	1.3959 (1.4681)	2.3984 (1.2326)
GEN	-0.4131 (0.2492)	-0.2692 (0.2959)	-0.1331 (0.2484)
AGE	-0.1332 (0.3591)	-0.2465 (0.4263)	-0.1717 (0.3579)
DIPLOMA	0.0780 (0.4019)	-0.5913 (0.4772)	-0.1364 (0.4007)
ACTU1	0.5100 (0.5722)	0.1747 (0.6793)	-0.1996 (0.5703)
ACTU2	0.1114 (0.5908)	-0.4946 (0.7014)	-0.3466 (0.5889)
ACTU3	0.0306 (0.3554)	0.0982 (0.4220)	-0.0303 (0.3543)
HOME	0.0522 (0.3182)	0.2648 (0.3778)	0.2426 (0.3172)
ECO_ATTITUDE	-0.0343 (0.2157)	0.1244 (0.2561)	0.0566 (0.2150)
BNPL_ATTITUDE	1.1257* (0.4502)	1.5167** (0.5345)	1.0432* (0.4487)
Observation	96	96	96
R-square	0.1283	0.1293	0.0798

Signif.codes : 0 : '****' ; 0.001 : '**' ; 0.01 : '*' ; 0.05 : '.' ; 0.1 : ''

Table 4.15 Other view of the impact of the socio-demographic as well as economic concerns dimension and attitude about payment method dimensions on the interest towards the study cases

Variables	BNPL1_I	BNPL2_I	BNPL3_I
INTERCEPT	3.6931** (1.1692)	2.6667 . (1.4137)	2.9526* (1.1918)
GEN	-0.3715 (0.2481)	-0.3447 (0.3000)	-0.0998 (0.2529)
AGE	0.1279 (0.3673)	0.0304 (0.4441)	0.0872 (0.3744)
DIPLOMA	0.1428 (0.3951)	-0.6863 (0.4778)	0.0113 (0.4018)
ACTU1	0.3182 (0.5741)	0.0802 (0.6942)	-0.1649 (0.5852)
ACTU2	0.0459 (0.5930)	-0.7621* (0.7171)	-0.2318 (0.6064)
ACTU3	0.0647 (0.3446)	0.1011 (0.4267)	-0.0204 (0.3512)
HOME	-0.0293 (0.3161)	0.2067 (0.3822)	0.2113 (0.3222)
FACTOR1 ENERG	-0.1801 (0.1110)	0.0409 (0.1342)	-0.0148 (0.1131)
FACTOR2 COVID	0.2538* (0.1055)	0.0757 (0.1276)	0.1232 (0.1075)
FACTOR3 BUY	-0.1466 (0.1431)	-0.0203 (0.1731)	-0.1356 (0.1459)
FACTOR1 CRD	0.3586* (0.1182)	0.4478 (0.1429)	0.1641* (0.1205)
FACTOR2 BNPL_CR	0.1429* (0.1165)	0.1274 (0.1409)	0.1311* (0.1188)
FACTOR3 BNPL_P1	-0.0351 (0.1603)	0.0376 (0.1939)	0.2477 (0.1634)
Observation	96	96	96
R-square	0.2201	0.1921	0.1292

Signif.codes : 0 : '***' ; 0.001 : '**' ; 0.01 : '*' ; 0.05 : '.' ; 0.1 : ''

Table 4.16 Impact of the socio-demographic as well as economic concerns dimension and attitude about payment method dimensions on the probability to use the study cases

Variables	BNPL1_P	BNPL2_P	BNPL3_P
INTERCEPT	0.4791 (1.2254)	-2.9493** (1.1091)	-0.2202 (0.9438)
GEN	-0.0036 (0.2469)	0.4722* (0.2234)	0.0672 (0.1864)
AGE	-0.4091 (0.3505)	0.4555 (0.3210)	0.2455 (0.2686)
DIPLOMA	0.1357 (0.3922)	-0.1870 (0.3618)	0.2129 (0.3004)
ACTU1	-0.4038 (0.5607)	-0.0293 (0.5107)	-0.4857 (0.4277)
ACTU2	-0.1590 (0.5764)	0.2212 (0.5286)	-0.2487 (0.4422)
ACTU3	0.6380 . (0.3467)	0.2582 (0.3172)	0.1039 (0.2655)
HOME	-0.2844 (0.3104)	-0.0928 (0.2847)	0.2850 (0.2385)
ECO_ATTITUDE	0.1531 (0.2104)	0.5649** (0.1927)	0.0385 (0.1612)
BNPL_ATTITUDE	0.3220 (0.4548)	1.0120* (0.4200)	0.7389* (0.3467)
BNPL1_I	0.3936*** (0.1051)	-	-
BNPL2_I	-	0.4044*** (0.0810)	-
BNPL3_I	-	-	0.6274*** (0.0808)
Observation	96	96	96
R-square	0.262	0.4043	0.5038

Signif.codes : 0 : '***' ; 0.001 : '**' ; 0.01 : '*' ; 0.05 : '.' ; 0.1 : ''

Table 4.17 Other view of the impact of the socio-demographic as well as economic concerns dimension and attitude about payment method dimensions on the probability to use the study cases

Variables	BNPL1_P	BNPL2_P	BNPL3_P
INTERCEPT	0.8637 (1.2054)	-2.8292* (1.1111)	-0.9004 (0.9211)
GEN	-0.1067 (0.2448)	0.5604* (0.2327)	-0.0363 (0.1887)
AGE	-0.4460 (0.3578)	0.3746 (0.3417)	0.2118 (0.2792)
DIPLOMA	0.3060 (0.3849)	0.0578 (0.3722)	0.2972 (0.3002)
ACTU1	0.0220 (0.5599)	0.1792 (0.5342)	-0.2292 (0.4365)
ACTU2	0.2345 (0.5773)	0.6246 (0.5555)	0.0575 (0.4510)
ACTU3	0.6052 . (0.3355)	0.2660 (0.3207)	0.0861 (0.2618)
HOME	-0.1477 (0.3077)	-0.2495 (0.2946)	-0.2938 (0.2408)
FACTOR1 ENERG	0.0993 (0.1097)	0.3219** (0.1033)	0.1394 (0.0843)
FACTOR2 COVID	-0.2658* (0.1063)	0.0336 (0.0984)	-0.1387 . (0.0808)
FACTOR3 BUY	-0.0656 (0.1402)	0.2487 . (0.1332)	0.1106 (0.1093)
FACTOR1 CRD	-0.0417 (0.1152)	0.0391 (0.1164)	0.1158 (0.0908)
FACTOR2 BNPL_CR	0.2503* (0.1145)	0.1196 (0.1090)	0.2256 * (0.0892)
FACTOR3 BNPL_P1	0.0065 (0.1561)	0.1044 (0.1492)	0.2266 . (0.1235)
BNPL1_I	0.4466*** (0.1074)	-	-
BNPL2_I	-	0.4522*** (0.0849)	-
BNPL3_I	-	-	0.6466*** (0.0823)
Observation	96	96	96
R-square	0.3429	0.4209	0.5409

Signif.codes : 0 : '***' ; 0.001 : '**' ; 0.01 : '*' ; 0.05 : '.' ; 0.1 : ''

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