

Research Report

Price rules in consumer credit: should the EU act?

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Abstract

Price rules are enacted to prevent some sub-prime lenders from wrongly exploiting the price-insensitivity of a significant share of sub-prime borrowers. High diversity across countries can be observed in both the type of rules adopted (combining direct and indirect price caps) and their degree of tightness. Rules seem to be tighter in an environment of high financial inclusion, intense public support in social matters, low risk of poverty, high household saving ratios and/or high maturity of consumption credit markets. The few episodes of marked tightening have shown a significant decrease in both costs and volumes of sub-prime loans, and it remains unclear whether large substitution effects have been triggered as a result. EU harmonisation in price rules could be justified by the need for a better level-playing field; however, given the diversity in price rules, in the degree of tightness of these rules and in the structure of sub-prime markets, it could also spark significant negative effects. Overall, further research is greatly needed to appreciate better the size and mechanisms of sub-prime markets, and the implication of price rules.

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List of abbreviations

APRC	Annual percentage rate of charge
CCD	Consumer Credit Directive
MCD	Mortgage Credit Directive
FCA	Financial Conduct Authority
NBFI	Non-bank financial institutions
PSD2	Payment Service Directive 2

Executive summary

Sub-prime lenders primarily supply loans with high interest rates to households excluded from banking consumer credit. Sub-prime borrowers display high risk profiles and/or thin credit files, and are often in need of short-term funding. As such, there is a debate on the ability of such consumers to make rational decisions when they take a loan. Among the policies that try to address these issues, price rules are the most intrusive.

Price rules have been adopted only at national level and approaches differ markedly across the EU. One of the key questions addressed by the present study is therefore to assess whether EU authorities should take action in order to further harmonise them. To that end, the present study will assess the sub-prime market's main characteristics, the different degrees of tightness in price rules across the EU, the main drivers behind the decision to tighten those rules and the main effects of new price rules on the sub-prime market.

Main characteristics of sub-prime consumer credit markets

Sub-prime lenders typically provide loans with shorter terms (three months or less), small amounts and high interest rates. As non-bank financial institutions (NBFIs), they are generally supervised by local authorities, and have to comply with EU rules such as the PSD2, the CCD, etc.

Sub-prime borrowers are primarily credit constrained or unbanked because of their low income, insufficient collateral or/and thin credit files. Lack of savings and budget pressure are the main factors behind their demand for sub-prime credit. These loans are most often used to fund essentials and/or cover unexpected expenses. The high-risk profile of these consumers can be permanent or accidental. Due to their thin credit files and more precarious employment situation, young households and new migrants are more likely to ask for sub-prime credit.

Most borrowers of doorstep loans and payday loans are low-income workers and live in poor neighbourhoods with little banks' presence. Average peer-to-peer borrowers are middle- to high-income individuals attempting to refinance their existing debt.

Due to the combination of higher funding costs, higher consumer risks and higher customer acquisition costs, the average interest rates on sub-prime loans are substantially higher than for banks. First, as NBFIs, sub-prime lenders cannot fund their loans with cheap deposits and interbank funds, and often rely on self-financing or investment from parent companies. Second, sub-prime lenders sell high-risk products with no collateral to recover in case of arrears or default. Third, customer acquisition costs remain high for these business models.

Finally, the scant data collected reveal that the sub-prime market represents only a tiny share of total consumer credit, excepting Latvia. The systemic nature of sub-prime lenders is therefore non-existent in almost all other economies and the primary focus of authorities regarding sub-prime loans is on consumer protection.

National approaches to price rules and diversity in degrees of tightness

Price rules in the EU result from some combination of direct and indirect price caps. The former regulate contractual and default interest rates, whereas the latter focus on other cost-related factors such as anatocism, cross-selling, fees, charges, etc. Cap levels can differ significantly across member states. The scope of application also varies between countries (all lenders, banks, NBFIs, fintechs, etc.).

Building on the existing literature, a comparable country index is developed in order to assess to what extent domestic price rules are restrictive. The tightness of rules is judged based on their potential to fulfil the initial goals of authorities: eliminating predatory practices, reducing the overall costs of credit and/or boosting consumer protection. The risk that the rules could limit overall credit access is also taken into account.

Comparing 2018 and 2009, price rules have tightened in all observed countries. In 2018, three groups can be distinguished concerning the value of the country index: high (Belgium, France, Poland and Slovakia); medium (Czech Republic, Hungary, UK and Spain) and low (Latvia, Lithuania and Romania). Looking at developments in the past decade, the greatest changes occurred in the UK and Slovakia, where strict caps were imposed a few years ago.

Main drivers behind price rules

Different drivers can explain why high diversity persists in the degree of tightness of national price rules. Beyond poor practices and the volumes of NPLs observed in sub-prime markets, authorities have also taken several external factors into account. Based on the identified statistics, it seems that governments tend to adopt tighter rules in an environment of high financial inclusion, intense government social spending, low risk of poverty, high household saving ratios and high maturity of consumer credit market. The diversity in the value of these five metrics across countries seems to explain much of the diversity in the restrictiveness of price rules across the EU.

Consequences of price rules

No comparable statistics have been identified to assess whether sub-prime markets are smaller in countries with tighter price rules. However, in the few countries where data could be collected, it appears that the few episodes of significant tightening in local price rules have reduced costs of loans and/or the volume of loans issued. Regarding substitution effects, in theory, borrowers excluded from sub-prime loans as a result of new price rules have several options: dropping their demand for credit, postponing their demand, turning to other legal lenders, or asking for loans from family/friends or illegal lenders. The few figures collected tend to reveal limited substitution effects as a result of more restrictive price rules.

Policy recommendations

- Policy-makers should encourage the development of statistics that lead to a better understanding of sub-prime loan markets. In parallel, the business models and their implications should continue to be well understood. The latter is especially important, as fintech is transforming sub-prime loans.
- Policy-makers should continue to enhance research on price rules adopted across the EU. The objective is to compare them to each other and assess their main differences and similarities. This exercise can contribute to identifying the best national regulatory practices and help governments adjust their own rules in the best way possible when needed.
- Policy-makers should consider different factors when adjusting their price rules: volume of NPLs on the sub-prime segment, the degree of financial inclusion in the country, the extent to which public social support is available, the risk of poverty or social exclusion, the overall saving behaviour of households and the maturity of credit markets.
- Authorities should ensure they have a proper understanding of the main effects of a given set of price rules. In impact assessments, they should consider three main effects: the impact on the volume of sub-prime loans, the impact on the costs of sub-prime loans, and the alternatives that can be used by consumers excluded from sub-prime loans because of price rules.
- It could be reasonably assumed that harmonising price rules at the EU level would facilitate cross-border supply of sub-prime loans. However, given the high diversity in national price rules and in their degree of constraints, the local factors to consider when setting these rules, and the overall limited knowledge of sub-prime markets, this harmonisation would also cause significant negative effects. For instance, an in-between solution could reinforce consumer protection in some countries and reduce it in others.

Introduction

Broadly speaking, two main types of consumer credit markets exist in the EU: mainstream and alternative. The former includes banks and mostly serves households with lower risk profiles. The latter comprises non-bank lenders which primarily focus on households with higher risk profiles and/or thin credit files. A particular segment included in alternative loans concerns sub-prime lenders, which generally offer credit with interest rates far higher than market averages. The spread is usually justified by the difference in the risk levels of consumers.

There is generally an interplay between banks and sub-prime lenders, as consumers who cannot have access to credit on the mainstream market often turn to the alternative, specifically sub-prime, market. As under-banked or unbanked consumers often need funding quickly, higher interest rates often trigger debates on the ability of borrowers to make rational decisions and then repay their loans.

Over the last decade, policy-makers have adopted different policy approaches to address these issues. The first one concerns the imposition of pre-contractual information disclosure duties in order to help consumers understand and compare products. At the EU level, this was heavily emphasised in the CCD (2008) and MCD (2014). The main inconvenience of this approach is that the responsibility rests with the household to proactively seek and process relevant information on products. The second line of action has placed the focus on the core principles that should shape the creditworthiness assessment. Highlighted in the MCD (2014), these principles often struggle to keep pace with the ever changing type of data used to conduct the assessment.

Given the limitations of the two above approaches, some price rules have also been implemented. Authorities have tried to limit the amount of interest rates and/or other fees. Given its much more intrusive nature, this approach is the most debatable of the three. The imposition of such restrictions could be also perceived as a sign of regulatory weakness. Regulators unable to monitor market forces through non-coercive means forbid all products whose prices are above a certain level.

Thus far, price rules have been adopted only at national level and approaches can markedly differ across member states. One of the key questions addressed by the present study is therefore to assess whether EU policy-makers should take action in order to further harmonise price rules. To that end, the study first aims at better understanding the market which is most impacted by price rules, namely sub-prime credit. What are the main characteristics of sub-prime products, lenders and borrowers? Then, given the diversity of price rules across the EU, a methodology is developed to build a comparable country index on the degree of tightness of the rules. In addition, the main drivers behind the choice of authorities to adopt tighter rules or not are assessed. Finally, the study analyses to what extent price rules impact sub-prime markets and trigger substitution effects.

1. Characteristics of the sub-prime loan market

1.1 Who are sub-prime lenders?

1.1.1 Complement to mainstream lenders

The consumer credit market can be divided into two sub-sectors: mainstream and alternative. In the mainstream market, traditional ‘high-street’ banks target mostly low-risk consumers for which financial data is available. The creditworthiness assessment of these consumers is typically based on the use of standard financial data that is provided by credit bureaus and/or that has been collected on consumers’ credit history by that bank. The interest rate for such credit is typically close to the average market rate. Most of the time, mainstream lenders refuse to grant loans to consumers with high-risk profiles and/or thin credit files, for different reasons. First, the likely lack or absence of financial data makes creditworthiness assessment difficult. Secondly, the strategy of these banks can be simply to avoid serving such consumers because imposing much higher interest rates could negatively affect banks’ reputations. Last but not least, regulatory constraints on the degree of risk of loan exposures, through capital ratio requirements, can dissuade high-street banks from lending to high-risk households.

Consumers who cannot be offered a credit on the mainstream credit market because of their high-risk profiles and/or thin credit files can then be served by alternative lenders, which mostly operate as non-bank financial institutions (NBFIs). Among these NBFIs, sub-prime credit providers can tolerate higher risk than mainstream banks, by charging interest rates much higher than market averages. As a consequence, sub-prime consumer lending has emerged primarily in areas where there is demand that banks cannot or choose not to satisfy. Sub-prime loans can be perceived as complementary to, rather than substitutes for, ‘mainstream’ loans.

There is not a fully accepted definition of sub-prime credit. The European Commission defines three distinctive features: shorter terms (three months and less), small borrowing amounts, and high interest rates (Devnani et al., 2014). More specifically, the UK Consumer Finance Association (CFA, 2016)¹ used the term “high cost short-term credit” and defined it as unsecured loans that last less than one year at an interest rate of over 100% APR.

1.1.2 Business models of sub-prime lenders

Sub-prime loans are mostly provided by non-bank financial institutions (NBFIs). NBFIs are financial institutions that do not have a full banking license. As such, in general they cannot fund their activities through deposit-taking or the interbank market, as banks generally do. Sub-prime lenders are NBFIs involved in consumer non-secure lending and are generally defined as financial corporations engaged in lending. Lenders providing microcredit or leasing are not covered in the present paper.

Sub-prime lenders are generally supervised by domestic financial authorities and are regulated under several European directives: Payment Services Directive 2, E-Money Directive, Consumer

¹ See <http://cfa-uk.co.uk/wp-content/uploads/2016/11/SMF-Report-AKT10796.pdf>.

Credit Directive, etc. However, these lenders are typically subject to fewer rules than banks are. For instance, sub-prime lenders do not have to comply with prudential requirements such as capital adequacy, etc. As analysed in the section 1.1.3, one of the reasons behind less stringent or entirely absent prudential requirements is in the non-systemic nature of these firms.

A large number of business models providing sub-prime loans can be identified. The present study covers primarily four: payday loans, doorstep loans, online loans and peer-to-peer lending platforms. These types of lenders supply loans in amounts generally up to €1,000, for three months or less at a higher-than-average interest rate, and are profit corporations. One way to distinguish these business models is to assess the processes they have developed to distribute their products.

A payday loan generally consists of a small advance of money for less than two weeks against a post-dated pay cheque. The consumer writes the lender a check dated to a future payday for the initial amount of the loan plus interest. In exchange for the check, the consumer receives cash immediately. In some cases, rollover or refinancing of debt is also possible upon the agreement between the lender and the borrower. In order to receive a payday loan, consumers most often need to be employed and provide proof of employment. Credit scoring is often conducted through behavioural processes: the lender gives first a small loan in order to assess the consumer's repayment pattern. Upon successful repayment, a second, larger loan can be issued (Beddows & McAteer, 2014). These practices are mostly driven by the fact that no financial data is available on these consumers.

A doorstep loan generally consists of a larger amount of money for a longer term (three to six months). The credit is delivered to and collected at the borrower's place of residence. A potential borrower can directly apply for a credit or receive an unsolicited visit from an agent offering a loan. Upon the agreement, weekly repayment meetings are scheduled at the borrower's place of residence in order to collect the credit. In case of default, the consumer can roll over a debt. This type of lending is largely built on the personal relationship between an agent and a borrower, and requires no collateral or supporting documents. Practices in terms of credit scoring are broadly similar to those used by lenders providing payday loans.

In online lending, the process of credit application, delivery and collecting takes place entirely online. Borrowers apply for a desired sum of money online and are usually required to submit certain proofs of repayment ability. In line with doorstep loans and payday loans, credit scoring can be based on behavioural processes. In some cases, it can be conducted through patented artificial intelligence technology on the basis of clients' personal data. The scoring process is generally fully automated with no personal judgment involved. Should the consumer obtain a positive score, credit is issued directly to the bank account and collected on the agreed upon date.

Lastly, peer-to-peer platforms are online platforms that connect investor-households and borrower-households, without using bank intermediation. On this platform, the former can invest their savings by directly lending it to the latter. The process usually takes place only online. When a borrower applies for a loan, he or she needs to specify all relevant information

and provide proofs of repayment ability. Afterwards, borrowers are assigned a certain type of risk by the platform and investors can choose who they would like to invest in. There is usually no repayment guarantee, therefore if the borrower defaults, the investor loses his or her money completely. The scoring process is often entirely automated with no personal judgment involved. As analysed in section 1.2.2, the inclusion of peer-to-peer platforms within the segment of sub-prime lenders is debatable, given that a large share of borrowers have different profiles than those of other sub-prime borrowers.

1.1.3 Sub-prime loans: a tiny market

One of the main issues to be addressed when analysing sub-prime loans concerns the lack of statistics. For example, no database has been identified to assess in a consistent manner across countries the total outstanding amount of loans provided by sub-prime lenders. Some statistics have been identified for five countries: Czech Republic, Hungary, Latvia, Poland and the UK. Many of these statistics have been compiled in an *ad hoc* way. Overall, given that the maturity of such loans is less than one year, the distinction between outstanding value and value of new loans has little relevance on an yearly basis. The following analyses are an attempt to estimate the possible market share of sub-prime lenders among total consumer loans.

In the UK, according to the CFA (2016),² the market of “high cost short-term credit” grew from £300 million in 2006 to £2.5 billion in 2013, then decreased to £1.5 billion in mid-2016. These figures pale in comparison to the total outstanding value of consumer loans provided by monetary and financial institutions (MFIs), which stood at £159.7 billion in 2013 (ECRI, 2018).³ This would mean that in 2013, at its peak, the volume of sub-prime loans was equivalent to only 1.5% of total MFI consumer loans.

As for Poland, PwC (2014)⁴ estimated that total household debt due to personal loan companies reached zł4 billion in 2013. This amount was equivalent to 3.3% of the outstanding value of consumer loans provided by banks. There are however no details on interest rate practices. Therefore, this figure cannot be directly compared with the one for the UK, whose interest rate practices were clear. However, in line with the UK, the sub-prime credit market accounts for only a tiny share of total consumer loans.

In the Czech Republic, according to the CLFA,⁵ loans provided by NBFIs for funding goods and services for households reached Kč31 billion in 2015 and Kč31.2 billion in 2017. Based on the data collected by ECRI (2017), this represented respectively 14.6% and 13.5% of total MFI consumer credit. The leading companies were Provident Financial and some car companies. As analysed above, the latter ones will not be analysed in the present study, as these NBFIs most likely do not lend using interest rates much higher than market averages. Provident Financial

² Ibid.

³ See www.ceps.eu/publications/ecri-statistical-package-2018-lending-households-europe.

⁴ See p. 12 of the following 2014 PwC publication: www.pwc.pl/en/publikacje/assets/personal_loans_market_pwc_report_2014.pdf.

⁵ www.clfa.cz/statistiky/quarterly-and-yearly-results-of-leasing-non-bank-credit-and-factoring-markets-in-the-czech-republic.

accounted for only 1.2% of total MFI consumer loans. It is however likely that smaller sub-prime lenders operate on the Czech market. Therefore, the actual market share cannot be assessed thoroughly. Nonetheless, the sub-prime market most likely accounts for a small share of total consumer loans in the Czech Republic

In Hungary, in recent years, Provident Financial has also been the main sub-prime lender for households and has accounted for a significant share of the total sub-prime market. In 2015, MFIs supplied Ft2.65 trillion in consumer loans, with Provident Financial issuing Ft53 billion (or 2%) of the total. Again, these statistics cannot give a full picture of sub-prime lending markets.

Last but not least, one possible outlier in the covered sample could be Latvia, where the NBFi consumer loan share of total consumer loans has reached very high levels in recent years. In 2017, the Alternative Financial Services Association of Latvia estimated that the total amount of new consumer loans (online consumer loans and consumer loans in person) reached €361 million, 40% above the level recorded in 2013.⁶ In parallel, according to the Central Bank of Latvia, banks issued €490 million in consumer loans. This would imply a ratio of 75%. Full details on the composition of NBFi loans could not be identified, but it is highly likely that the sub-prime loan share of total consumer loans is overall much larger in Latvia than in the four other economies analysed.

To conclude, excluding in Latvia, overall, sub-prime loans represent a tiny share of consumer credit markets and an even smaller share of total household loans. As such, the systemic risk of these activities is marginal. The policy approach of those types of products is therefore mostly based on consumer protection, given the consequences that sub-prime loans can have on consumers.

1.2 What types of consumers use sub-prime loans?

1.2.1 Overall characteristics of consumers

Sub-prime borrowers are primarily credit constrained or unbanked. The first group includes all consumers who have a payment account within mainstream banks but cannot borrow the needed funding from them; they can be fully or partly credit-constrained. Unbanked consumers have no payment account and therefore no or little financial data is available on them. Therefore, mainstream banks cannot conduct creditworthiness assessments of these clients and thus systematically exclude them from their products. Both groups of consumers are generally low-income with insufficient collateral. They turn to alternative lenders or face credit exclusion.

Research literature tends to show that drivers of the demand for sub-prime loans are somewhat different from those that shape demand for mainstream loans. For example, as revealed by (Ellison, Whyley, Forster, & Jones, 2011), the lack of savings, budget pressure and purchase of essentials in the context of unanticipated events are much stronger factors of the

⁶ See statistics at: www.lafpa.lv/en/statistics/non-bank-lenders/.

demand for sub-prime loans than for mainstream credit. Kempson (2012) found that in the UK, paying for essentials was the most common reason low-income persons applied for sub-prime loans.

Overall, the high-risk profile can be structural or accidental. The former mirrors long-term poverty, with for example repetitive episodes of unemployment or very low paid jobs. The “accidental” profile implies that some low-risk borrowers enter the high-risk category because of an unexpected life change event (health issue, job loss, partner death, divorce, etc.).

Individuals who are unemployed frequently have a higher likelihood of default due to the lack of regular income. Young households also face higher default probabilities due their higher likelihood of obtaining short-term labour contracts. These categories are also more likely to face complete credit exclusion, which might further lead to social exclusion (Directorate-General for Employment, Social Affairs and Equal Opportunities, 2008).

In the UK, the FCA (2017) showed that most users of high-cost short-term credit already were in a declining financial situation before they took out a sub-prime loan. This supports the hypothesis that low-income consumers are more likely to apply for sub-prime loans. Yet a worsening financial situation does not imply that these consumers would be better off without a loan. As already mentioned above, some research reveals that these loans are often used to finance essentials and/or cover unexpected expenses. This suggests such loans have low price sensitivity: customers are prone to taking these financial products without considering their repayment ability.

The FCA (2017) modelled a typical consumer of a high-cost short-term credit in the UK: a 35-year-old male with a lower-than-average income, with little to no savings, employed or receiving regular income, and falling behind on his bills. According to this research, daily expenses and bills are the two most common drivers for taking out a loan. Borrowers have identified NBFi loans as being fast and easy to get. A typical consumer had around five loans in 2016, with more than half of respondents (60%) noting their credit experience as “satisfactory”.

Statistics on the profiles of consumers asking for sub-prime loans can be identified for specific financial firms. However, no consolidated statistics could be found for the whole sub-prime segment. As shown in Box 1, microdata published by the ECB in its Household Finance and Consumption Survey reveal that in Spain, the main clientele of NBFi loans seems to be credit-challenged individuals. This could confirm the characteristics of consumers who use sub-prime loans.

Box 1. Credit provided by NBFIs in Spain

No consolidated statistics have been identified on the volume of credit provided by sub-prime lenders. One possible proxy concerns loans supplied by NBFIs. While no macroeconomic data could be found on NBFi loans, some microeconomic data is provided through specific surveys, such as the ECB Household Finance and Consumption Survey. Data is available only for Spain. Broadly 20% of the Spanish population took out an unsecured consumer loan in 2010. This share was slightly lower in 2013, at around 18%.

Over the 2010-13 period, the share of consumer credit belonging to traditional banks grew by 4.6 pp. (from 38% in 2010 to 42.6% in 2013), while the share of NBFIs decreased by 3.1 pp. (from 16.3% in 2010 to 13.2% in 2013). Meanwhile, informal loans recorded the highest growth (4.8 pp.), from 2.7% in 2010 to 7.5% in 2013. The negative correlation between NBFIs and informal lending might mirror a causal relationship between the reduced sub-NBFI credit supply and subsequent increase in informal lending. But further empirical analysis is needed to confirm this assumption.

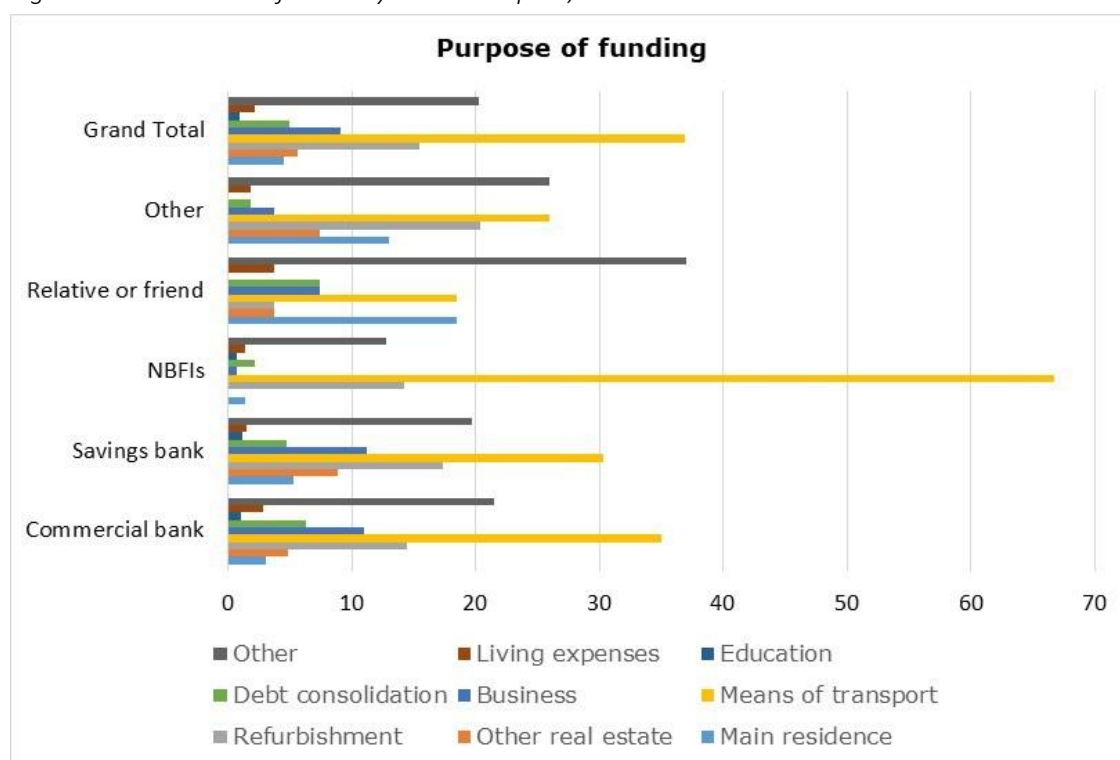
When it comes to personal characteristics of borrowers, the trend continued over the years:

- The share of young people (20-35) was higher for NBFI borrowers, while the share of older adults (50-70) was higher for traditional banks.
- The share of borrowers with only primary or no education was higher for NBFI loans in 2013, as compared to traditional banks.

In 2013, compared to borrowers from mainstream banks, NBFI borrowers were most often from the lowest-income quintile, unemployed and/or retired. They also had the highest refusal rate. Full infographics are available in the annexes.

Regarding the main purpose of the loan, in 2013 (see Figure 1) NBFI loans were used most frequently for car purchase or refurbishment. Informal loans, on the other hand, were used to purchase a household's main residence or means of transport, or meet living expenses.

Figure 1. Distribution of loans by lender in Spain, 2013



Source: HFCS, ECB.

The available dataset is limited and offers a small sample of observations. The total sample accounted for 6,197 households in 2010 and 6,106 households in 2013. Although it could be representative of the population, the sample provides limited data on NBFI borrowers (200 and 141 households in 2010 and 2013, respectively). In addition, sub-prime credit is only one part of the total NBFI loans. More analysis, potentially empirically-based, should be conducted to obtain more insight.

1.2.2 Type of borrower by type of sub-prime lender

Payday lending implies that a borrower should be employed, as the loan is to be repaid on the next pay day. Yet payday borrowers are credit-constrained individuals, coming generally from low-income families and/or poorer neighbourhoods where there are few to no banks. Previous research reveals that many payday borrowers are repeat customers, taking more than one loan per year (Schwartz & Robinson, 2017). While in payday lending the share of male borrowers is higher than the share of female borrowers (CMA, 2015), in doorstep lending, women are predominant (Bermeo, 2017).

An average doorstep credit consumer would be a middle-aged woman, living in rented or social housing and engaged in the workforce on a part-time basis (Falconer & Lane, 2017). This happens partly because the largest share of doorstep agents are also women and are likely to form long-lasting relationships with their borrowers (Bermeo, 2017).

When it comes to online lending and peer-to-peer platforms, data are more limited, as these types of lenders are relatively new as compared to payday or doorstep lenders. Moreover, these platforms traditionally do not release demographic data on their borrowers. Yet available literature sources indicate that average peer-to-peer borrowers are middle- to high-income individuals attempting to consolidate their debt (Morse, 2015). They cannot access mainstream loans due to their credit history (i.e. they are credit-constrained). Empirical evidence reveals that many peer-to-peer platforms advertise their credit solutions specifically as means to refinance an already existing debt.⁷ Peer-to-peer loans would therefore appear to complement mainstream credit.

In order to protect their investors, peer-to-peer platforms often hike up their loan qualification requirements, making it harder to obtain one, as compared to loans from payday/doorstep lenders. There are nonetheless lenders (e.g. AuxMoney) that offer loans to young people with thin credit files, such as young professionals and students. Overall, despite the fact that peer-to-peer lenders do not only target low-income earners, their products are still accessible to consumers who find it difficult to pay off their existing debt or with thin credit files, as is the case with individuals burdened by student loans.

1.2.3 Price-insensitivity of sub-prime borrowers

Behavioural insights can provide relevant elements to better understand why some consumers decide to take out a sub-prime loan. According to traditional economic theory, the average consumer is a rational human being and should refuse a credit that he or she won't be able to repay. This argument is opposed by behavioural economists who claim that a large share of credit-challenged consumers is often price-insensitive and might be subject to a 'present' bias, showcasing irrational behaviour (see for example Devnani et al., 2014). This present bias implies that these consumers assign greater weight to an immediate payoff as compared to long-run payoffs.

⁷ See www.zopa.com, www.creditgate24.ch/en and www.bondora.com/en/.

For instance, provided that they are late on the payment of a bill, high-risk consumers with no savings will have to exercise a rational choice within a limited range of options. Payday loans might be the only option for them (see Burton, 2010). In this context, even though these consumers might understand the difficulty of reimbursing the payday loan, their priority for the present moment is to pay the bill in arrears. Price-insensitivity is therefore a characteristic of a significant number of households that take out sub-prime loans.

1.3 What are the main drivers of sub-prime loan prices?

Several drivers can explain why prices of sub-prime loans are typically higher than for banking loans. While the higher risk profile of consumers using these products can explain a significant share of the spread, other elements are likely to raise the price of sub-prime credit even further. These elements are often related to the specificities of the business models of sub-prime lenders: funding structure, type of product provided, or cost of marketing.

First, contrary to banks, sub-prime lenders are generally not able to take deposits and access the interbank market. As a result, funding for loans often comes from their own statutory capital, investment or parent companies. Therefore, the costs of funding for these financial firms are often higher than for banks.

Secondly, due to the absence of collateral for the unsecured credit, the risk embedded in this type of financial product is higher than for other forms of lending. In case of customer default, the lender will not be able to recover the losses in the form of other commodities. The degree of risk further increases the cost of the credit compared to that of secured loans.

Thirdly, a 2014 ACCA study showed that customer acquisition costs can be particularly high for sub-prime lenders. In general, a significant share of NBFIs can incur high marketing expenses per customer. This could be due to scale effect, as the size of most NBFIs and sub-prime lenders is relatively small compared to that of banks. As such, given the limited amount of customers served, the marginal cost induced by marketing is much higher than for banks. As a result, the average cost of marketing is typically higher.

In the context of sub-prime lenders, the short repayment period and low amount lent generally imply that one repaid loan often does not offset the customer acquisition cost. If the newly acquired customer only takes one loan, it is highly likely that the remaining customer acquisition costs will not be covered. These costs are also not covered when a customer defaults on the loan. Such higher average marketing costs and the difficulty of covering them tend to boost the spread between sub-prime interest rates and banks' interest rates.

These costs and their components can vary across types of credit. For example, online lenders would pay more for online advertisements and 'leads' generated by specifically dedicated websites. Doorstep lending, on the other hand, would spend more on external advertising, materials and agents. The similar point for all of them, however, is the significant role of marketing expenses in the cost of customer acquisition.

Sub-prime lenders often run different loyalty or ‘refer a friend’ programmes to attract new customers. These programmes generally are based on monetary reward for a referee and a certain discount for the newly acquired customer. This also adds up to the cost of acquisition. The issue is that these costs are only paid up front. Hence the lender can never be sure that they will pay off. If the new customer defaults, the costs will have to be covered by other customers.

The same 2014 ACCA study calculated the average break-even point for customer acquisition costs. By using UK payday lenders data, they computed advertising, marketing, administration, operating, technology and financing costs. For an average loan of £327, a customer needs to take out and repay three loans in order for the company to reach the break-even point and cover the acquisition costs of attracting this customer. If a borrower takes only one loan, the other two loans have to be covered by other borrowers. If a borrower does not repay the loan, the cost once again has to be covered by other customers.

Moreover, there is a low scale effect for sub-prime lenders when it comes to operating costs, due to operational specificities such as scoring, collection, etc. The operating costs are similar for small and large loans, short-term and long-term loans. All these factors influence the APR charged by sub-prime lenders and make it higher than traditional banks’.

To conclude, sub-prime lender prices are higher than banks’ not only because of their borrowers’ higher risk profile, but also because of their model’s specificities. In order to increase their profits, some sub-prime lenders might also enter into abusive practices, by charging unjustifiably high interest rates, fees and charges. The British scandal related to the mis-selling of payment protection insurance serves as a demonstration of consumer detriment caused by sub-prime lenders (Financial Conduct Authority, 2017). Hence, responsible lending should be promoted and reinforced with the help of appropriate rules. One of the most debatable approaches concerns price rules.

2. Diversity in domestic price regulation across the EU

2.1 Different policy approaches to enhance consumer protection

Different policy approaches have been adopted to enhance consumer protection on consumer credit markets. The first one focuses on pre-contractual information disclosure duties. This approach was followed by the Consumer Credit Directive (2008)⁸ and the Mortgage Credit Directive (2014) with the aim of harmonising such rules across the EU. While these rules can increase transparency on credit markets, the main inconvenience is that consumers are still responsible for proactively collecting and understanding relevant information. In addition, these rules might be ill-designed for reinforcing significantly consumer protection against sub-prime loans, especially given the price-insensitivity of many consumers who apply for them (see section 1.2.3).

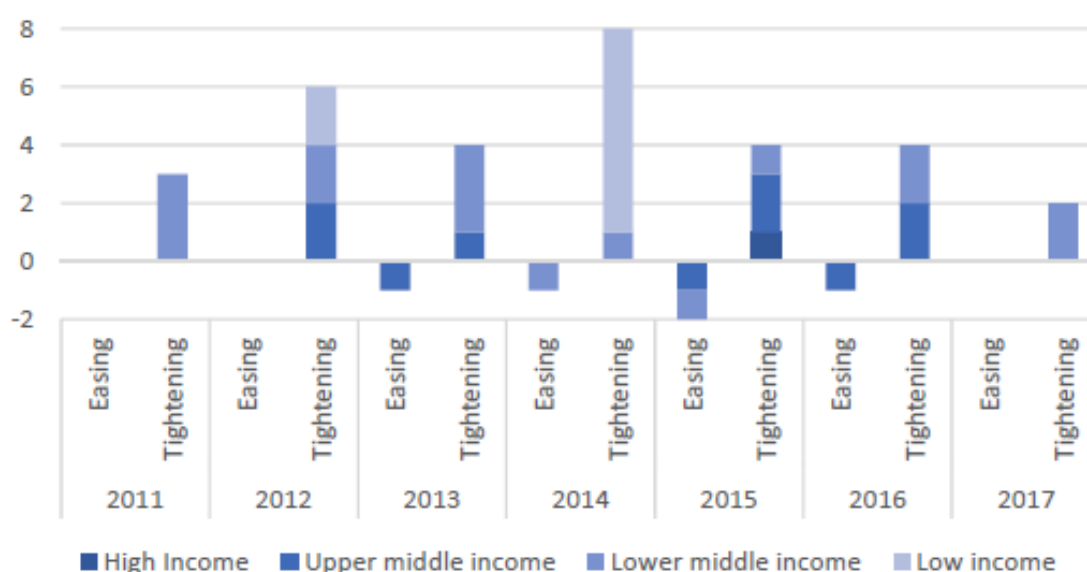
⁸ An 2010 amendment aimed at harmonising which elements should be covered by the published APRC.

A second approach focuses on the manner in which the creditworthiness assessment is conducted. This is notably the case in the Mortgage Credit Directive (2014), where some key principles have been included for that purpose. Given the diversity of methods used for assessing creditworthiness, the continual changes in related practices, and the general dimension of these principles, the policy might have a limited impact on credit markets and the way scoring is conducted for sub-prime loans.

A third approach is more intrusive than the two previous ones and consists of the implementation of direct restrictions on the level of credit price. Price rules can have different objectives. First, they can aim at preventing some lenders from adopting predatory practices, which are generally defined as lending that imposes unfair and abusive loan terms on borrowers. However, the definition of “unfair” and “abusive” is often ambiguous and can depend on local policy objectives. One possible interpretation could be a situation where a lender charges very high interest rates with large margins, despite the fact that households are highly unlikely to reimburse the loans. Secondly, price rules can also have a more ambitious objective and aim at increasing the average affordability of a significant share of consumer credit, even for lending that cannot be considered predatory. The explicit objective would be to limit the number of credit options available on the market and the emergence of sub-prime lenders.

Therefore, the tightness of domestic price rules for credit depends on the specific goals set by the government. The regulatory toolkit is largely based on price restrictions (direct and indirect price caps). Direct caps regulate contractual and default interest rates while indirect caps focus on other cost-related factors such as anatocism, cross-selling, fees, charges, etc. (Annex 1). Price regulation can be characterised by the different degrees of direct and indirect caps.

Figure 2. Recent global trends in consumer credit price regulation by income level



Source: World Bank.

According to a 2018 World Bank report, advanced economies often choose to avoid absolute interest rate ceilings, in order not to hurt credit supply while reducing predatory practices⁹ among lenders (Ferrari, Masetti, & Ren, 2018). The report nonetheless showcases evidence of recent policy tightening in advanced economies and an overall global tightening trend (see Figure 2 below) (Ferrari, Masetti, & Ren, 2018).

2.2 Methodology of country index on tightness of price regulation

The objective of this section is to quantify the degree of tightness of national price rules. Economic researchers have tried to quantify the tightness of laws in order to better understand trends and conduct empirical analyses combining both legal and economic variables. This has notably been made with the degree to which central banks are independent (see Cukierman, 2008).

However, the quantification of the degree of constraints of laws has some disadvantages. First, the choice of weighting for the different variables remains challenging and can sometimes be arbitrary. Secondly, in some cases, specific rules can hardly be compared between several countries, in which case the complexity and diversity of rules will not be accurately captured by a quantitative index. Some trade-offs need therefore to be considered. Finally, careful interpretation of these metrics is needed in order to avoid unfounded extrapolations. For example, measuring affordability on credit markets is not an objective of a country index that captures the degree of tightness.

The country index was developed for a heterogeneous group of 11 countries: Belgium, France, Czech Republic, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, Spain and the UK. The choice of these countries was based on their markedly differing price rules and degrees of maturity of their consumer credit markets.

The methodology adopted for the country index used the structure developed in the study by Reifner et al. for the European Commission (2010). In total, it contains 12 indicators that capture different direct and indirect interest rate restrictions. The value for each indicator mirrors the analysis of domestic rules. The exercise was conducted separately for 2009 and 2018 (see Annex 3).

The tightness of interest rate restrictions was judged on their potential to fulfil the initial goals of the regulation: preventing predatory practices, increasing general consumer protection and/or increasing average affordability. The potential impact of the rules on the number of credit options was also taken into account. The country index considered the following indicators (for each indicator, the value is based on a binary choice: “Yes, there is such a restriction” or “No, there is not such a restriction”):

- 1) *Contractual direct internal rate of return (IRR)*. It is the ceiling on interest rates specified in the initial loan agreement (absolute or relative). By not allowing the interest rate to

⁹ Predatory lending is imposing unfair and abusive loan terms, often through aggressive sales tactics (Agarwal, Amromin, Ben-David, Chomsisengphet, & Evanoff, 2013).

surpass a given threshold, the IRR decreases the price of the credit, prevent usury and limit over-indebtedness. Hence the present study considers ceilings on contractual interest rates to be a characteristic of tighter IRRs. This indicator is only related to caps on interest rates or APR, not on overall credit cost. (Value = 1 if Yes, = 0 if No).

- a) *The IRR applies to non-bank financial institutions.* If the IRR applies only to mainstream lenders, it would mean that consumer protection is offered only to mainstream borrowers, leaving sub-prime borrowers unprotected. Including NBFIs in the scope of the IRR ensures that consumers with bank credits and consumers with non-bank credits have the same conditions. It ensures a level playing field. Hence, IRRs that apply to NBFIs are considered to be stricter than those that do not include NBFIs. (Value = 0.5 if Yes, = 0 if No).
 - b) *Applicability to all market players.* Another dimension of the criteria is that the IRR applies to all types of lenders. It is ultimately stricter than the IRR that applies only to certain specific kinds of lenders. (Value = 0.5 if Yes, = 0 if No).
 - c) *Uniform ceiling regardless of loan amount.* Having one fixed interest rate ceiling that applies to loans of all sizes is ultimately stricter: some customers in need of smaller loans might be excluded from the market. (Value = 1 if Yes, = 0 if No).
 - d) *Is the IR on €500 three-months' debt below 20%?* The proxy for an average high-cost short-term credit is a value of €500 across Europe, with a duration under three months (Muller, Devnani, Heys, & Suter, 2014). Comparing maximum allowed interest rates on such loans revealed the tightness of restrictions. If the interest rate influenced by the cap remains lower than 20%, the restrictions are deemed to be tighter. (Value = 1 if No, = 0 if Yes).
- 2) *Statutory default interest rates.* Some countries apply statutory interest rates when regulating default on consumer credit. If debt repayment is late, and lender and borrower do not agree on the default interest, statutory default interest rates apply. Mandating specific statutory default interest rates prevents lenders from charging inadequately high interest rates in case of defaults. (Value = 0.5 if Yes, = 0 if No).
 - a) *Statutory default interest rates are fixed.* Fixed default interest rates provide higher protection from usury. But they are not flexible enough to accommodate all borrowers, thereby potentially leading to the exclusion of some categories. (Value = 0.5 if Yes, = 0 if No).
 - 3) *Default interest rate restrictions are explicit.* Besides providing statutory default interest rates, the state can also apply explicit caps on default rates. Calculated on the contractual or objective reference rate, these restrictions provide the upper limit of default interest rate that can be charged. They add up to the statutory default interest rate and are indicative of tight price regulation. (Value = 1 if Yes, = 0 if No).
 - 4) *Fees and charges are limited/regulated.* Banning or regulating additional charges that are not included in the APR concept helps to lower the cost of the credit, increase transparency and prevent usury. Hidden charges could take on the larger share of credit price in lenders' attempts to keep interest rates low and attractive. (Value = 1 if Yes, = 0 if No).

- 5) *Financing other financial instruments through a given credit is prohibited/regulated.* A financial instrument (e.g. payment protection insurance) financed through a given credit increases the amount of credit on which interest is taken and hence increases total cost of the credit. A ban or regulation on such practices lowers the cost of credit usury and hence relates to tighter interest rate restrictions. (Value = 1 if Yes, = 0 if No).
- 6) *Prohibited anatocism.* Anatocism, or ‘interest on interest’, is a practice by some lenders of compounding an interest rate (the amount of the loan includes the interest already paid, thus increasing the future interest to be paid). Banning anatocism lowers the overall cost of the credit. Therefore, this interest rate restriction can be considered tight. (Value = 1 if Yes, = 0 if No).
- 7) *Minimum capital/licensing requirement for lenders.* Installing a minimum capital requirement or mandating lenders to obtain a state’s license to operate would allow only for well-funded established companies to enter the market and thus lower the risk of predatory lending. Therefore, minimum capital requirement is associated with tighter IRR. (Value = 1 if Yes, = 0 if No).

An index for each country was then built by aggregating the scores for each of the above criteria. The member states under study were compared both to each other and to the maximum score, which is 10. The full detail of the index can be found in Annex 3.

2.3 Country index value across countries and over time

Overall, as shown in Figure 3 below, the average degree of tightness recorded for the sample increased between 2009 and 2018, from 3.3 to 5.5. Price rules tightened in all countries, in particular in the UK (from 2 to 5.5) and in Slovakia (from 4 to 7.5). Both Slovakia and the UK imposed strict caps and extra measures that aimed to reduce usury practices on the market. Slovakia already had some interest rate ceilings in place before 2009; over the 2009-18 period, the government tightened caps while adding extra clauses on non-interest costs, minimum capital requirements and compound interest rates.

The UK previously had unconstrained regulation. However, in 2015, it radically switched to caps that targeted high-cost short-term credit in order to reduce excessive charges for borrowers (FCA, 2015). The FCA conducted an in-depth review of high-cost short-term credit solutions, finding that such credit is detrimental to consumers and potentially leads to over-indebtedness. Regulation in the UK now specifically targets these solutions and not traditional consumer credit. Thus the scope of the UK’s price regulation is narrow and does not include home credit, overdrafts, etc. The FCA is currently reviewing other credit solutions to propose more inclusive regulation (FCA, 2018).

In 2018, three groups of countries could be observed. Within the first group, the degree of tightness was above 7 and could be considered high: Belgium, France, Poland and Slovakia. For the second group, the value of the country index was between 4 and 7 and could be considered medium: Czech Republic, Hungary, UK and Spain. The third group includes Member States with low country indexes (below 4): Latvia, Lithuania and Romania.

Within the first group, France¹⁰ and Belgium already had tight consumer credit price regulation in place in 2009, and have only tightened it since (see Figure 3). The measures applied focused notably on other cost-relevant factors of consumer credit price regulation such as financing other financial instruments through a given credit or licensing requirements for credit providers. Both countries also adjusted caps. France adjusted its caps depending on the credit amount, in order with to decrease the attractiveness of renewable credit. The adjustments were made frequently (Banque de France , 2018). Belgium followed a similar practice, adjusting its caps on a regular basis. Interest rate ceilings varied from one year to another but were tightened progressively over the 2009-18 period for all consumer credit solutions.¹¹

A broadly similar situation was observed in Poland where the government used both contractual and default interest rate ceilings to protect consumers. Recent regulation featured non-interest costs and tightened default rate ceilings as well as minimum capital requirements (Office of Competition and Consumer Protection , 2016) .

Several countries remained within the same group over the last decade: Czech Republic, Hungary and Spain. Czech Republic predominately tightened licensing and capital requirements as well as default interest rates (Wolf Theiss, 2016). Hungary and Spain, on the other hand, experienced more radical changes. Since 2015, Hungary started enforcing interest caps aimed at limiting the recurrence of excessive household indebtedness (Fáykiss, Palicz, Szakács, & Zsigó, 2018). Spain focused on other cost-related factors such as defining anatocism, tightening licensing requirements, and imposing default interest rate ceilings (Uria Menéndez, 2018).

As regards the group with low price rules, Latvia adopted stricter regulation on consumer credit, yet it did not feature any interest rate ceilings (contractual or default). Instead the government opted for a definition of an honest practice, limited the total cost of credit, and reduced the hours for credit issuance from 7:00 am until 11:00 pm (Kolesnikov & Petrov, 2016).

Lithuania adopted a broadly similar practice: limiting the total cost of credit without restricting interest rates. Important changes in Lithuanian consumer credit regulation occurred in 2011, 2013 and 2016. In 2011 and 2013, the state made institutional changes leading consequently to penalisation procedure changes, decreasing the maximum possible total cost of credit, and mandating responsible lending principles (Bublienė, 2014). Meanwhile, the Romanian government, challenged by a high share of non-performing loans, is actively engaged in drafting tighter policies for the consumer credit sector. Its major changes to consumer credit legislation occurred in 2016, focusing on loans in foreign currency and establishing default interest rate ceilings (Anton & Enache, 2018). Currently the Romanian government is also considering implementing contractual interest rate ceilings (Romania Insider , 2018).

Hence, a certain degree of tightening was noticeable in all sampled countries. Moreover, all sampled countries have limitations regarding the cost of credit. Yet the difference between regulations sometimes is very subtle. For example, Latvia and the Czech Republic do not have

¹⁰ Index for France in 2009 does not account for statutory default interest rate restrictions and cross-selling due to unavailable data.

¹¹ Available at <https://economie.fgov.be/sites/default/files/Files/Publications/files/subdoc-max-tarieven-fr.pdf>.

caps on contractual interest rates, yet still limit the total cost of credit. Therefore, this index allows for distinguishing between different levels of price regulation and ranking them in the most efficient way.

Figure 3. Index of degree of tightness of price rules

Country	Year	Index	Country	Year	Index
BE	2009	7.0	LV	2009	1.0
	2018	9.0		2018	3.0
CZ	2009	3.5	PL	2009	8.5
	2018	4.5		2018	9.0
ES	2009	3.0	RO	2009	2.0
	2018	5.5		2018	3.0
FR	2009	3.0	SK	2009	4.0
	2018	7.0		2018	7.5
HU	2009	1.5	UK	2009	2.0
	2018	4.5		2018	5.5
LT	2009	1.0	Average	2009	3.3
	2018	2.0		2018	5.5

Notes: Some countries (e.g. France) might exhibit a lower ranking in 2009 due to missing data; details are available in the annexes. Data for Latvia should be adjusted for July 2019, due to a change in local rules. In 2018, Spain did not limit the maximum price of a loan; however, for consumer protection purposes, loan price can be contested in court on the case by case basis. For 2018, price rules used for the table were applicable on 1 January 2018.

Source: Authors' elaboration.

3. Drivers of price rule choices

3.1 Cost model of loans and non-performing loans

How price rules are shaped should depend on local practices regarding how total loan cost is distributed between interest rates and other fees (notably fees to be charged in case of arrears and/or default). Restrictions are tighter where higher levels of abusive practices have been noticed. The fact that each national market has different cost models for consumer credit in general and sub-prime loans should *a priori* explain a significant part of the heterogeneity across countries in terms of rules. No data have been identified to identify the differences in cost model across countries.

Another variable concerns the relationship between the tightness of price rules and the share of household non-performing loans (NPLs) in each country. Refined data that could be most useful in analysing the issues addressed in the present study concerns the share of NPLs among sub-prime loans. It would be valuable to compare the share of mainstream NPLs with the share of sub-prime NPLs. If the latter is higher than the former, then a tightening in price rules could reduce sub-prime NPLs by, for example, banning the riskiest ones.

No consistent data across countries have been identified on household NPLs or sub-prime NPLs. The use of a proxy that covers NPLs to both households and non-financial corporations (NFC) reveals an absence of correlation between the share of total NPLs at country level and the value of the country index. Due to the inclusion of NFC loans in this metric for NPLs, this can hardly

be interpreted in the context of the present study. Overall, while it can be assumed that the objective of a significant number of price rules is to reduce the share of sub-prime NPLs and, by extension, the overall share of household NPLs, no available statistics prove it.

3.2 Financial inclusion

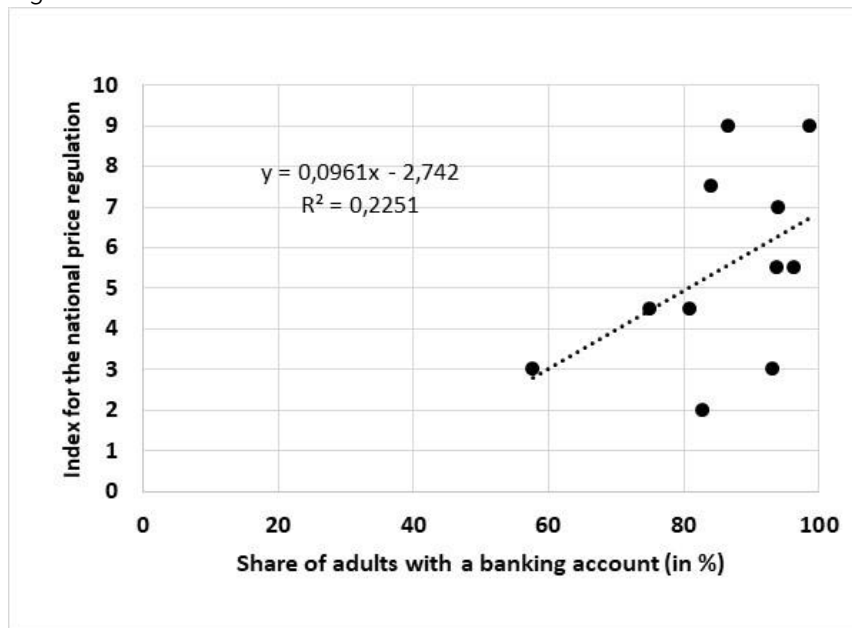
One specific driver that can shape price rules is related to financial inclusion. According to the World Bank, financial inclusion means that “individuals have access to useful and affordable financial products and services that meet their needs – transactions, payments, savings, credit and insurance – delivered in a responsible and sustainable way”. The starting point toward broader financial inclusion is to have access to a transaction account. Once a household has access to such an account, it can send and receive payments, save money, etc. In addition, the use of a transaction account contributes to building a household’s financial data, which can help banks conduct creditworthiness assessments when the household requests a loan. Without a transaction account, no matter the consumer’s risk profile, banks cannot assess creditworthiness.

Against this background, the share of the population who do not have access to a transaction account provides an interesting indicator of the share of households who do not have a credit file with banks. The vast majority of these consumers cannot obtain a loan from banks, and this has little to do with their ability to reimburse. A noticeable positive correlation can be observed between the 2018 country index on the degree of tightness of price rules and the 2017 share of the population who have access to current accounts (see Figure 4).

Regarding the correlation’s possible causality, it can be legitimately assumed that the country index can hardly influence the share of consumers with a transaction account. Conversely, it is possible that governments consider variables of financial inclusion when they set price rules. The assumption would be that the higher the share of consumers with a transaction account, the tighter price rules can be. In countries where the share of households with a transaction account is very high (for example Belgium and France, which scored 99% and 94% respectively), consumers are credit-constrained because of their higher risk profile rather than the inability of banks to score them.

On the other hand, the low share observed in Romania (58%) could imply that many households are excluded from mainstream credit markets mostly because of the lack or absence of financial data in their profile. Therefore, even though their risk profile might not be significantly higher, they can be prone to seeking alternative loans, such as sub-prime loans. This could explain why, in early 2018, the degree of tightness in Romanian price rules was still relatively low. The local government could approach sub-prime lending as a necessary tool for strengthening financial inclusion.

Figure 4. Financial inclusion



Source: World Bank and authors' own calculations.

3.3 Public support in social matters

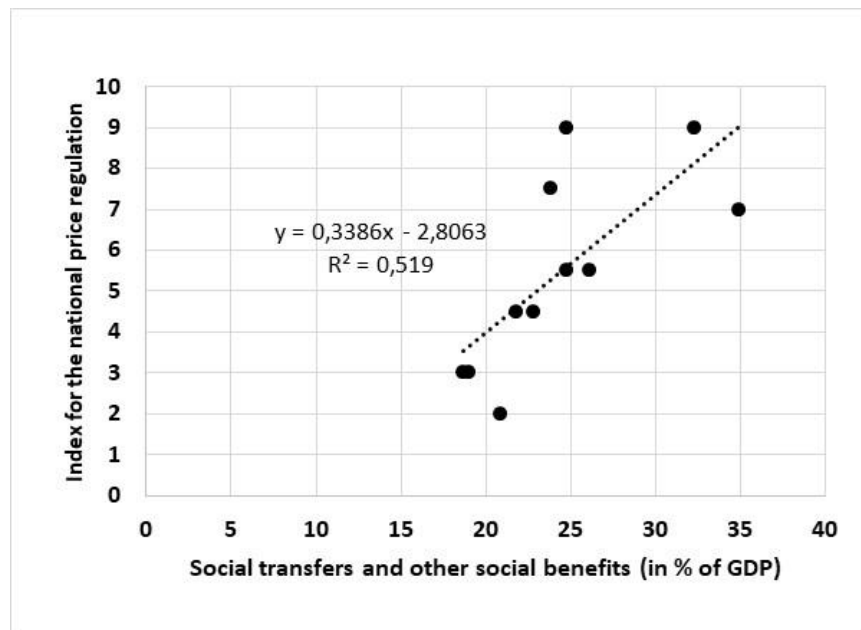
One interesting analysis is to isolate the extent to which local authorities provide public support in social matters. Support is divided between social transfers in kind and other social benefits. According to the European Commission,¹² social transfers in kind consist of goods and services provided to households by governments either for free or at prices that are not economically significant (social housing, etc.). The second type of support paid by governments concerns transfers to households, in cash or in kind, intended to relieve them from the financial burden of a number of risks or needs – by convention: sickness, invalidity, disability, occupational accident or disease, old age, surviving family member death, maternity, family support, employment promotion, unemployment, housing, education and general neediness) – via collective schemes or outside such schemes by government units.

In countries that provide a high level of social-related public support, credit-constrained consumers with financial difficulties are more likely to have a higher number of options other than alternative loans. Typically, this reflects the assumption that where welfare states are strong, the need for sub-prime loans is limited. The high positive R-sq between the percentage of GDP dedicated to social transfers of all sorts and the country index value could indicate a significant impact of the welfare state on establishing consumer credit price rules (see Figure 5). For example, in countries such as Belgium and France, where social transfers are very high (more than 30% of GDP), authorities have developed tight price rules because they might consider sub-prime lending unnecessary. Conversely, in Romania, where social transfers were still low in 2017 in comparison to GDP (reaching 18.7%), price rules were less stringent, likely

¹² See European Commission glossary: <https://data.europa.eu/euodp/data/dataset/XmWtR0bF1Owf0domkHKJA>.

in order to provide options to credit-constrained households. These assumptions would need further empirical analyses to be confirmed.

Figure 5. Public support in social matters



Source: European Commission (AMECO) and authors' own calculations.

3.4 Risk of poverty or social exclusion

According to Eurostat (2018),¹³ the at-risk-of-poverty or social exclusion population corresponds to “the sum of persons who are either at risk of poverty, or severely materially deprived or living in a household with a very low work intensity.” The at-risk-of-poverty-rate is the share of the population with an equivalised disposable income below the at-risk-of-poverty threshold, which is set at 60% of the national median equivalised disposable income. These measures include social transfers. The material deprivation rate is an indicator in the European Union Statistics on Income and Living Conditions (EU-SILC) and expresses the inability to afford some items considered by most people to be desirable or even necessary to lead an adequate life.¹⁴ This forced inability to pay (rather than the choice not to do so) can concern unexpected expenses, a one-week annual holiday away from home, a meal with meat, adequate heating of a dwelling, durable goods such as a washing machine, being confronted with payment arrears (mortgage or rent, utility bills, purchase instalments or other loan payments, taxes, etc.).

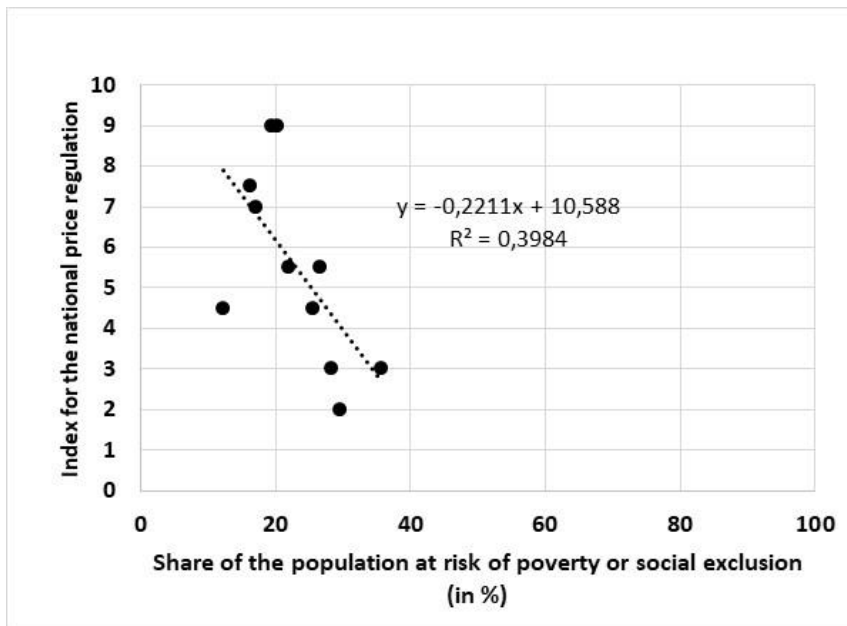
As indicated by Eurostat, rate values are provided after all social transfers have been completed. This would imply, for instance, that if high-risk consumers need to process an unexpected payment by a certain deadline, their options are fewer than they are in section 3.3.

¹³ See Eurostat glossary: [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:At_risk_of_poverty_or_social_exclusion_\(ARPE\)](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:At_risk_of_poverty_or_social_exclusion_(ARPE)).

¹⁴ According to Eurostat, the indicator distinguishes between individuals who cannot afford a certain good or service, and those who do not have this good or service for another reason, e.g. because they do not want or do not need it.

The moderate negative correlation between the country index and the risk of poverty (see Figure 6) could suggest that the lower the risk of poverty of a given population, the tighter the price rules. When a large share of the population is at risk of poverty, authorities might tend to ensure that the at-risk population have a few loan options rather than no options at all. In other words, where the share of at-risk population is high, authorities could perceive sub-prime lending as a last resort.

Figure 6. Poverty risk



Source: Eurostat and authors' own calculations.

The empirical analysis would require more in-depth testing in order to obtain more robust findings regarding the interplay between price rules and the risk of poverty. One remaining question concerns the extent to which there could be reversed causality, namely whether or not less stringent price rules might eventually contribute to reinforcing poverty owing to the difficulty some households encounter in reimbursing their sub-prime loans.

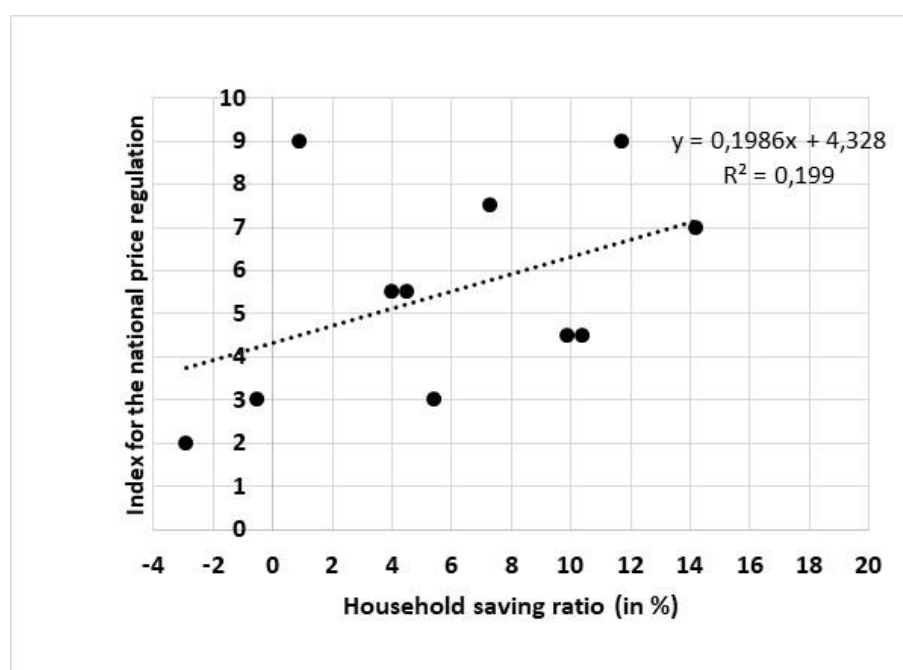
3.5 Saving behaviour of households

Another external factor that could influence the way price rules are shaped concerns the saving behaviour of households. One interesting proxy to mirror such dynamics is the saving ratio published by the European Commission. The saving ratio is defined as gross saving divided by gross disposable income. Gross saving is the part of the gross disposable income which is not final consumption expenditure. Figure 7 suggests a low correlation between the level of the saving rate and the country index for price rules. It appears unlikely that the tightness of price has an influence on saving ratio. However, it is possible that authorities consider the ability and propensity of households to save when they draft price rules. In countries where saving ratios are high, households are able to build significant amounts of precautionary saving that could be used in case of unexpected events. Conversely, in countries with low saving rates, the

average precautionary saving is likely limited and a large share of the population might not be able to pay an unexpected bill.

In Belgium and France, where price rules are highly restrictive, saving ratios recorded in 2018 were relatively high (respectively 11.7% and 14.2%). In Spain and the UK, saving ratios were much lower (respectively 4.5% and 4%) and price rules were less constraining than in Belgium and France. Interestingly, the CFA (2016) emphasised that in 2015 four British individuals out of ten possessed less than one week's worth of income savings. Against this background, any unanticipated expense might be critical for those UK consumers, especially as social transfers and other social benefits remained limited compared to countries such as Belgium and France. Finally, saving ratios recorded in Lithuania and Romania were broadly null or negative. This would imply that a large part of the population has no savings.

Figure 7. Saving behaviour



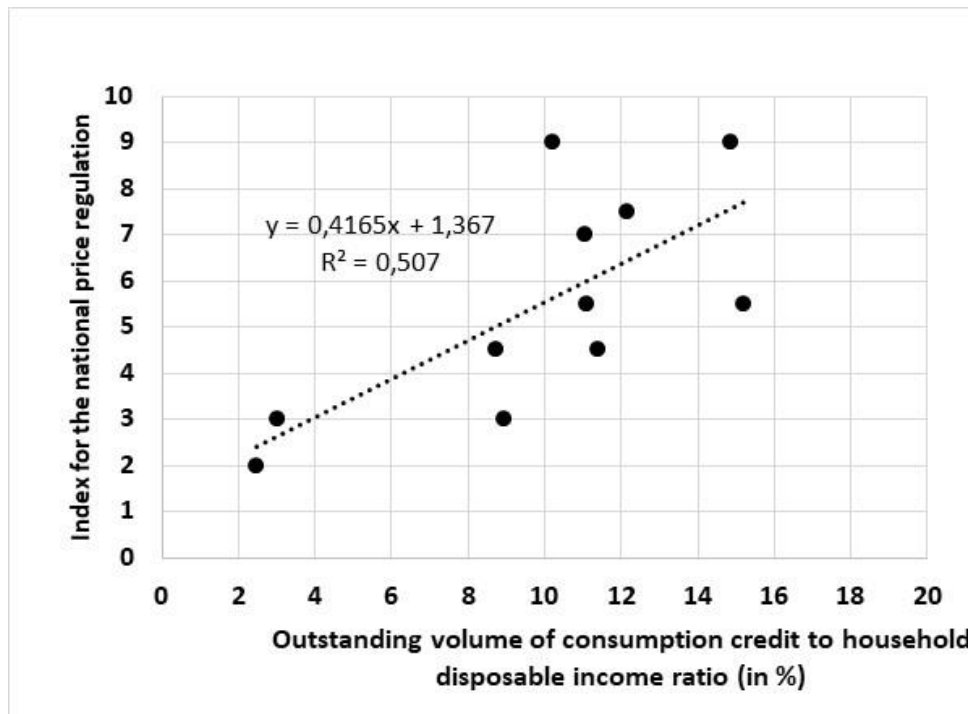
Source: European Commission (AMECO) and authors' own calculations.

3.6 Maturity of credit markets

Another parameter that could play a role in the enactment of price rules relates to the development and maturity of consumer credit markets in a given country. An interesting proxy to mirror maturity could be the outstanding volume of consumption credit to household disposable income ratio. A high level of that ratio implies that banks are able to provide consumption loans for a large share of the population. The need for alternative loan options might be limited. Figure 8 shows a high positive correlation between the level of maturity of consumption credit markets and the country index on price rules. This might indicate that authorities take the level of development of those markets into account when they set price rules.

The indicator's main limitation is that it might not reflect the financial situation of the poorest households in the economy. Other indicators such as public support in social matters and poverty risk might better capture this dimension. For instance, in the UK, the tightness of price rules reached medium levels in 2017, in a context of a highly developed credit market. However, the relatively low level of constraints on price rules might be due to other variables for the UK: high poverty risk, low saving ratios and limited public support in social matters.

Figure 8. Development of credit markets



Source: ECRI (2018 Statistical Package) and authors' own calculations.

To conclude, these different correlations suggest that authorities likely consider the whole context in the economy before enacting price rules for consumption credit. It is possible that they integrate metrics reflecting financial inclusion, poverty risk, household saving, public support in social matters, and maturity in consumer credit markets. Each country of the sample recorded different values for each of these five metrics. It is probable that only one or two of these metrics were considered when price rules were shaped. For example, in Slovakia, price rules were significantly tightened over the decade ending in 2018, whereas the welfare state was limited and a significant share of the population still did not have a transaction account in 2017 (16% according to the World Bank). The same year, however, poverty risk, as measured by Eurostat, was on average the third lowest and the maturity of consumer credit markets the second highest since 2009. This reveals that each country of the sample has different characteristics, which could explain the high heterogeneity in the degree of tightness of price rules.

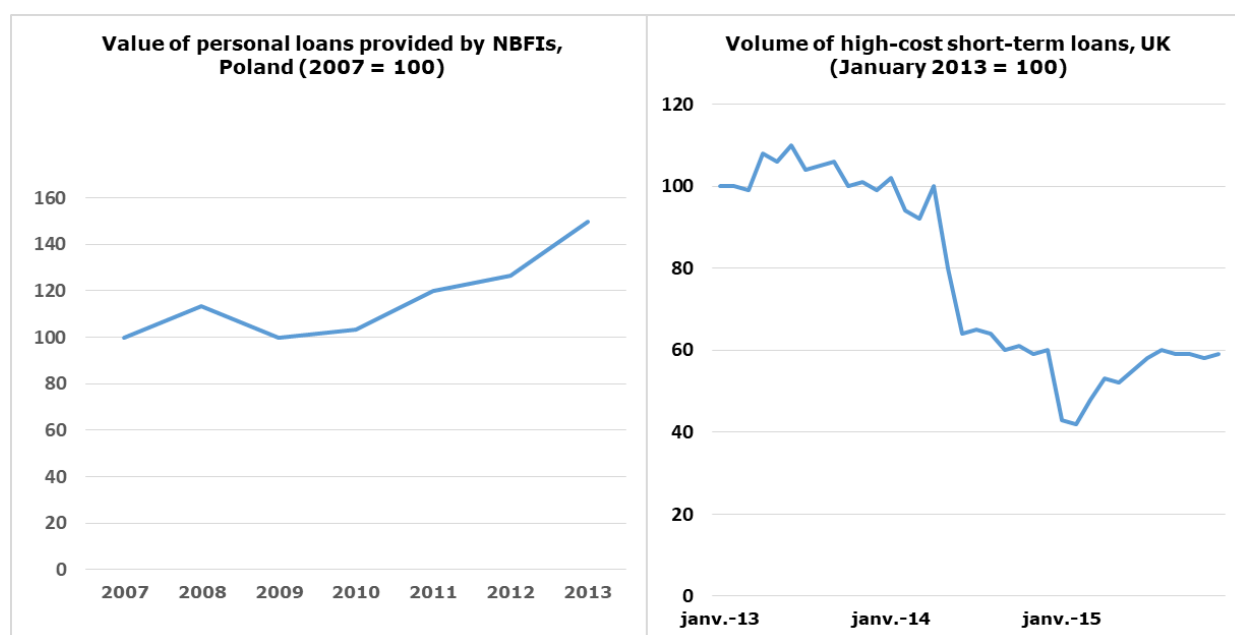
4. Consequences of price rules

4.1 Impact on volume of credit disbursed

As analysed in section 1, no consistent and comparable statistics on the volume of sub-prime loans at a given time have been identified. As such, it seems to be difficult to assess whether countries with tighter price rules display lower market shares of sub-prime loans. However, it might be possible to assess to what extent a change in national legislation has affected the volume of sub-prime loans.

The impact of rules implemented in the UK in 2014 has been the object of numerous research publications. As emphasised by the CFA (2014), the volume of high-cost short-term loans increased from £330 million in 2006 to £2.5 billion in 2013, a growth rate of more than 700%. This spectacular figure prompted authorities to adopt stricter rules for this type of products in 2014. The effect on the volume of activities was immediate, as the outstanding value of these loans decreased by 40% right after the implementation of the new price rules (see Figure 9 below).

Figure 9. Amount of alternative loans in Poland and the UK (these statistics are not comparable)



Source: CFA (2017) for the UK and PwC (2017) for Poland.

In 2016, the significant tightening observed in Slovakian price rules contributed to the departure of at least one of the main sub-prime lenders, Provident Finance (see Slovak Spectator, 2016). In the short-term, this withdrawal certainly resulted in a marked decrease in the volume of sub-prime loans. Finally, in Poland, despite restrictive price rules, the number of loans provided by NBFIs grew by half between 2009 and 2013 (see Figure 9). To conclude, regarding the analysed countries, it appears that when marked growth is recorded in the volume of sub-prime loans for several consecutive years, authorities eventually intervene by implementing tighter price rules aimed at reducing their volume on the market.

4.2 Effects of price rules on market prices charged to borrowers

Only in the UK were granular statistics identified to assess the impact of price rules on the cost of credit. The FCA (2017) revealed that radical caps on high-cost short-term credit led to a decrease in credit cost by around a third. The same report also reveals that the average amount of additional fees paid by consumers decreased by half since caps were implemented.

No comparable statistics could be identified for the sample's other economies. However, some effects and mechanisms triggered by price rules can be analysed. Overall, it can be assumed that the decision to fix limits on the price of consumer credit impacted market prices charged by sub-prime lenders, as was the case in the UK after the adoption of the 2014 price rules.

For some business models, the restrictions might be too constraining to continue supplying loans. These lenders would therefore simply leave the market. In other cases, establishing interest rate ceilings might incentivise lenders to converge their credit prices towards caps. This convergence process should concern prices that are both slightly above and below caps. Consumers who were paying prices above caps might therefore be big winners, while consumers who were paying prices below caps might be losers.

Through the establishment of caps, lenders should also be incentivised to improve their credit portfolio. Consumers with the highest risk profiles would be excluded. As a consequence, default rates would be likely to decrease, thereby resulting in lower total recovery costs. Should a share of recovery costs be distributed to consumers without missed repayments, the improvement in the credit portfolio should contribute to a decrease in fees for a given consumer profile.

In addition, restrictions might also incentivise sub-prime lenders to innovate. Innovation could contribute to reducing costs and improving certain processes. Eventually, innovation and cuts in cost could allow lenders to implement lower interest rates for a large share of their consumers. More specifically, the adoption by authorities of ceilings on default interest rates, whose purpose is to limit the amount lenders charge on late payments, could encourage lenders to improve their processes for creditworthiness assessments in order to reduce consumer defaults. However, if restrictions on other types of fees are not highly constraining, it is also possible that these other types of fees might increase in order to counterbalance the losses.

4.3 Substitution effects

It is highly likely, as shown in section 4.1, that constraining price rules will result in the exclusion of a large share of high-risk profiles from some sub-prime lenders. In that context, one of the most debatable issues of price rules concerns the type of alternative funding that can be used by excluded consumers. To summarise, there are four broad alternatives.

No alternative option

Consumers who no longer have access to sub-prime lenders as a result of additional price rules may simply have no other option. The findings of a survey conducted by the FCA (2017: 12) on

the impact of the 2015 price cap on high-cost short-term credit reveals that 60% of declined consumers did not use an alternative source of funding. It is not clear whether these consumers sought another option and could not find it, or simply did not seek one.

On the policy side, the implications of the ‘no alternative option’ are ambiguous. Given that price rules aim at increasing consumer protection, the rules could be considered successful if they contribute to consumer welfare. Therefore, are excluded consumers who did not use an alternative source of funding better off? The answer may depend on the purpose of the sub-prime loan. If the purpose had to do with paying for essential goods or services (education, health bills, late utility bills, etc.), then the impact of the new price rules could be considered negative.

Conversely, in the case of sub-prime loans aimed at funding goods or services that were not used for essentials (presents, appliances, holidays, etc.), then the effect of price rules could be considered positive. Nevertheless, the line between what is essential and what is not can sometimes be ambiguous. In addition, the objective of restricting the supply of loans depending on their purpose is going beyond the actual mandate of policy-makers who try to regulate consumer credit, and sub-prime lenders in particular, and could be defined as an unnecessary, paternalist approach.

Postponing

Another possible option is that the excluded consumers postpone their demand for credit. They try to increase savings in order to cover their bills. They then take the opportunity to improve their credit file and obtain a better credit score. Nevertheless, for the case of consumers who have to cover their bills immediately in order to avoid further penalties or legal consequences, the option to postpone might not be viable. Furthermore, one indirect effect of binding restrictions can also be related to the distribution of the credit, as lenders disproportionately redirect credit supply towards “profitable-for-lenders” options such as large-scale collateralised, long-term credit. It would negatively affect higher-risk consumers, as such solutions often do not correspond to their needs.

Other lender and product

Another likely option is to look for another lender who can accept supplying the needed loan, while complying with the new price rules. In the survey by the FCA (2017), 15% of declined consumers adopted this strategy. The new lender might accept the consumer based on creditworthiness assessments that differ from those of their competitors or simply because they changed their consumer scoring methodology as a result of the new price rules.

Informal lending

The most controversial alternative relates to the use of informal lending. Informal credit sources can be implicitly divided into two kinds: informal loans granted by relatives and/or friends (private loans), and funding granted by illegal lenders (illegal loans). The former offers a low or even no interest rate loan upon agreement between the parties; arrears and default

on such loans can potentially lead to social exclusion but not necessarily over-indebtedness. Credits from illegal providers are not regulated, thus consumer protection is non-existent; in case of arrears or defaults, consumer well-being can be markedly impacted by illegal providers, with the possible use of threats, harassment, violence, etc.

The collection of statistics on informal lending remains challenging. The vast majority of the theoretical and empirical literature focuses on developing and emerging economies, where informal lending can be widespread. In the EU, several surveys have been trying to cover the phenomena of private loans. No empirical publication that aims at appreciating the volume and dynamics in illegal loans has been identified.

As regards the possible interplay between private loans and price rules, two questions can be raised: Is the volume of private loans higher in countries with tighter rules? Has the volume of private loans increased after the adoption of tighter price rules, as was notably the case in the UK in 2015 and Slovakia in 2016?

The answer to the first question is problematic given that a large share of private loans has little to do with the tightness of price rules. For example, a significant share of young households borrows from their family to buy their first home, especially in cities where prices are much above the national average. There is a low likelihood that these young people asked their families for funding because of price restrictions on formal loans.

The ECB Household Finance and Consumption Network Survey (HFCNS) conducted in 2016 provided data for 940 households using private loans, in five countries of the sample covered in the present study: Belgium, Hungary, Latvia, Slovakia and Spain. The lowest country quintile, when gross income is considered, accounted for only 16% of the total number of respondents (versus 27% for the highest quintile). It can be reasonably assumed that the lowest quintile is the most likely to be impacted by the tightness of price rules.

The 2016 ECB survey provided granular data on nine loan purposes. As analysed in previous sections, the two purposes which are the most common for sub-prime loans are covering living expenses and other purchases, and debt consolidation (“the sub-prime purposes”). As expected, the lowest quintile recorded the highest share of loans with sub-prime purposes: debts: 51% versus 39% for the second quintile, 33% for the third, 25% for the fourth and 18% for the fifth.

Belgium, Hungary and Slovakia covered more than 90% of the households in the lowest income quintile; the share of loans with sub-prime purposes was 60% in Slovakia, 41% in Belgium, and 31% in Hungary. One possible interpretation could be that price rules were tighter in Belgium than in Hungary (which was true for Slovakia only from 2016, after the survey, which covered mainly data points recorded in 2014, was conducted). Therefore, the assumption would be that it was more difficult for the poorest consumers to access formal loans for sub-prime purposes in Belgium than it was in Hungary. Their use of informal loans would be more intense than in Hungary. However, more in-depth studies and a larger sample would be needed to confirm the

robustness of these analyses. The case of Slovakia, whose price rules were roughly as tight as those of Hungary in 2014, confirms that interpreting these statistics remains challenging.

As regards the second question on the impact of a tightening in price rules on the demand for informal loans, the survey by the FCA (2017) revealed that broadly one quarter of declined consumers, after the establishment of caps, turned to informal loans. The same survey cannot produce evidence that a significant share of declined applicants opted for illegal lending. The FCA estimates that less than 5% of those consumers would consider taking out an illegal credit and 3% of those using informal loans confirmed that their lender earned money on such practices. However, consumers who took out such loans have little propensity to admit it, especially to a financial supervisor.

5. Concluding remarks and policy recommendations

Overall, this report carries out an extensive analysis of credit price regulation and its impact on the sub-prime credit sector across several EU countries. The study reveals that the largest share of consumers using alternative loans display high-risk profiles. Many exhibit low price sensitivity to sub-prime credit solutions due to their short-term need for funding and the lack of alternative options. High-risk consumer profiles, as well as the specificities sub-prime lender business models (more expensive funding, product type, marketing cost) influence the price of sub-prime credit, making it even higher than that of mainstream credit.

Much heterogeneity could be observed in 2018 in the degree of constraint of price rules in Belgium, Czech Republic, France, Hungary, Latvia, Lithuania, Poland, Romania, Spain, Slovakia and the UK. However, over the last decade, tightening has been recorded in all of these countries.

Different drivers can explain why high diversity can be observed in the degree of tightness of national price rules. Beyond poor practices and NPL volumes observed in sub-prime markets, authorities have taken several external factors into account. Based on the identified statistics, it seems that governments tend to adopt tighter rules in an environment of high financial inclusion, intense public support in social matters, low risk of poverty, high household saving ratios and/or high maturity of consumption credit markets. The diversity in the value of these five metrics across countries seems to explain much of the diversity in the restrictiveness of price rules across the EU.

No comparable statistics have been identified to assess whether the effects of price rules differ across the EU. In the few countries where data could be collected, it appears that significant tightening in local price rules reduces loan costs and/or volumes. Regarding substitution effects, in theory, borrowers who cannot access sub-prime loans as a result of new price rules have several options: dropping their demand for credit, postponing their demand, turning to other legal lenders or asking for loans from family/friends or illegal lenders. The few figures that could be compiled tend to reveal limited substitution effects as a result of more restrictive price rules.

It could be reasonably assumed that harmonising price rules at the EU level could facilitate cross-border supply of sub-prime loans. However, given the high diversity in national price rules and in their degree of constraints, the local factors to consider when setting these rules, and the overall limited knowledge of sub-prime markets, this harmonisation would also cause significant negative effects. For instance, an in-between solution could reinforce consumer protection in some countries and reduce it in others.

Bibliography

- Agarwal, S., Amromin, G., Ben-David, I., Chomsisengphet, S., & Evanoff, D. (2013). *Predatory Lending and The Subprime Crisis*. Cambridge, MA: National Bureau of Economic Research.
- Alfaro, R., & Gallardo, N. (2012). The determinants of household debt default . *Revista de Analisis Economico*, 55-70.
- Anton, G., & Enache, P. (2018, January 26). *Recent Legislative Changes Impacting The Crediting Business And The Secondary Markets For Banking Assets*. Retrieved from Mondaq: <http://www.mondaq.com/x/634362/asset+finance/Recent+Legislative+Changes+Impacting+The+Crediting+Business+And+The+Secondary+Markets+For+Banking+Assets>
- Artner, S. (2014, July 17). *Slovakia tightens consumer protection rules*. Retrieved from Global Compliance News: <https://globalcompliancenews.com/slovakia-tightens-consumer-protection-rules/>
- Bailey, A. (2018, May 02). *High-cost credit: what next?* Retrieved from Financial Conduct Authority: <https://www.fca.org.uk/news/speeches/high-cost-credit-what-next>
- Banque de France (2018, October 1). *Taux d'usure*. Retrieved from Banque de France : <https://www.banque-france.fr/statistiques/taux-et-cours/taux-dusure>
- Beddows, S., & McAteer, M. (2014). *Payday lending: fixing a broken market*. ACCA. London: The Association of Chartered Certified Accountants.
- Beddows, S., & McAteer, M. (2014). *Payday lending: fixing a broken market*. London: The Association of Chartered Certified Accountants.
- Bermeo, E. (2017). *Women and high cost credit: a gender analysis of the hoem credit industry in the UK*. Bristol: University of Bristol - Personal Finance Research Centre.
- Bouyon, S., & Gagliardi, P. (2018). *Lending to European Households and Non-Financial Corporations: Growth and Trends in 2017*. Brussels: CEPS.
- Bouyon, S., & Ayoub, J. (2018). *Consumer Credit, Digitalisation and Behavioural Economics Are new protection rules needed?* Brussels: European Credit Research Institute.
- Bublienė, D. (2014). The Future of Consumer Credit in Lithuania: "Quo vadis", Consumer Credit? *Juridica International*, 22, 149-167.
- Burton, D. (2017). Credit inclusion and the home credit market in post-communist member states of the European Union. *Critical Social Policy*, 444–463.
- Burton, M. (2010). *Keeping the plates spinning: perceptions of payday loans in Great Britain*. Consumer Focus.
- cBanque (n.d.). *Taux de l'usure des crédits conso - réforme de 2011*. Retrieved from cBanque: <https://www.cbanque.com/credit/usure-reforme-2011.php#jpWURzHbECgtpvcA.99>
- CEE Market Watch (2017, September 29). *Romania's central bank: Risky loans of non-bank institutions rise too fast*. Retrieved from Central European Financial Observer: <https://financialobserver.eu/recent-news/romanias-central-bank-risky-loans-of-non-bank-institutions-rise-too-fast/>

- CEPS, LIST & UCC (2016). *Study on the role of digitalisation and innovation in creating a true single market for retail financial services and insurance*. Brussels: Directorate-General for Financial Stability, Financial Services and Capital Markets Union.
- CFA (2017). *Impact of regulation on High Cost Short Term Credit: How the functioning of the HCSTC market has evolved*. London: Consumer Finance Association.
- Cherednychenko, O. O., & Meindertsmas, J. M. (2018). *Mis-selling of Financial Products: consumer credit*. Brussels: Directorate General for Internal Policies.
- Cherednychenko, O., & Meindertsmas, J.-M. (2018). *Mis-selling of Financial Products: Consumer Credit*. Brussels: European Parliament's Committee on Economic and Monetary Affairs.
- CMA (2015). *Payday lending market investigation*. London: Competition & Markets Authority.
- Critical research (2017). *Price cap research*. London: FCA.
- D'Alessio, G., & Iezzi, S. (2013). *Household Over-Indebtedness: Definition and Measurement with Italian Data*. Bank of Italy.
- Directorate-General for Employment, Social Affairs and Equal Opportunities. (2008). *Financial Services Provision and Prevention of Financial Exclusion*. Brussels: European Commission.
- Dunkley, E. (2014, October 3). *Payday lenders face UK wipeout*. Retrieved from Financial times: <https://www.ft.com/content/11465030-4af7-11e4-b1be-00144feab7de>
- ECB (2008). *The euro area bank lending survey*. ECB.
- Edmonds, T. (2018). *High cost consumer credit: the new regulatory regime*. London: Commons Library.
- Ellison, A., Whyley, C., Forster, R., & Jones, P. A. (2011). *Credit and low-income consumers*. Policis.
- Ellison, A., Dignan, T., Forster, R., & Whyley, C. (2010). *Interim Evaluation of the National Illegal Money Lending Projects*. London: Policis.
- Eurofinas (2010). *Preliminary Observations: Interest Rate Restrictions*. Brussels: Eurofinas.
- Eurofound (2013). *Household over-indebtedness in the EU: The role of informal debts*. Eurofound.
- European Banking Authority (2013). *Report on Consumer Trends. Supervisory Concerns Regarding Consumer Protection Issues in 2012/13*. London: EBA.
- Evershed, T. (2018, 05 23). *Peer2Peer Finance News*. Retrieved from Millennials dominate European P2P lending: <http://www.p2pfinancenews.co.uk/2018/05/23/millennials-p2p-lending/>
- Fáykiss, P., Palicz, A., Szakács, J., & Zsigó, M. (2018, March). Experiences of Debt Cap Regulations in Hungarian Retail Lending. *Financial and Economic Review*, 17(1), 34-61.
- Falanga, A. (2015). *Over-indebtedness in the EU: from figures to expert opinions*. Réseau Financité & EFIN.
- Falconer, A., & Lane, J. (2017). *Debt on your doorstep*. Citizens advice.
- FCA (2014). *Consumer credit and consumers in vulnerable circumstances*. London: FCA.
- FCA (2015, January 02). *PS14/16: Detailed rules for the price cap on high-cost short-term credit - Including feedback on CP14/10 and final rules*. Retrieved from Financial Conduct

- Authority : <https://www.fca.org.uk/publications/policy-statements/ps14-16-detailed-rules-price-cap-high-cost-short-term-credit>
- FCA (2017). *High-cost credit Including review of the high-cost short-term credit price cap*. London: Financial Conduct Authority .
- FCA (2018, May 31). *FCA publishes outcome of high-cost credit review*. Retrieved from Financial Conduct Authority: <https://www.fca.org.uk/news/press-releases/fca-publishes-outcome-high-cost-credit-review>
- Ferrari, A., Masetti, O., & Ren, J. (2018). *Interest Rate Caps The Theory and The Practice*. The World Bank, Finance, Competitiveness and Innovation Global Practice. The World Bank.
- Fily, A., & Aliyev, F. (2011). *Study on interest rate restrictions in the EU: BEUC response*. Brussels: BEUC.
- Financial Conduct Authority. (2017). *Payment protection insurance complaints: feedback on CP16/20 and final rules and guidance* . London: FCA.
- Fondeville, N., Özdemir, E., & Ward, T. (2010). *Over-indebtedness in the EU: New evidence from the EU-SILC special module*. Brussels: Directorate- General for Employment, Social Affairs and Equal Opportunities.
- Fondeville, N., Özdemir, E., & Ward, T. (2010). *Over-indebtedness. New evidence from the EU-SILC special module*. Brussels: European Commission: Social Situation Observatory .
- Fraisse, H., Lé, M., & Thesmar, D. (2017). *The real effects of bank capital requirements* . European Systemic Risk Board.
- Gutierrez de Cabiedes, P., & Cantero Gamito, M. (2014). Household Over-indebtedness in Spain before and after the Crisis: from Credit Boom to Credit Crunch. In I. Domurath, G. Comparato, & H. Micklitz, *The Over-indebtedness of European Consumers – a View from Six Countries* (pp. 67-84). European University Institute.
- Havrylchuk, O., Mariotto, C., Rahim, T., & Verdier, M. (2018). *What drives the expansion of the peer-to-peer lending?* Paris: SSRN.
- Hopkins, J., Pick, S., & Farr, D. (2017). *Proce cap research* . London: Financial Conduct Authority .
- Kempson, E. (2002). *Over-indebtedness in Britain*. London: Department of Trade and Industry .
- Kempson, E. (2002). *Over-indebtedness in Britain*. Personal Finance Research Centre.
- Klūga, M., & Roķis, K. (2018, February 9). *Payday lenders outraged at frank consumer rights campaign*. Retrieved from LSM: <https://eng.lsm.lv/article/society/society/payday-lenders-outraged-at-frank-consumer-rights-campaign.a267283/>
- Kolesnikov, D., & Petrov, S. (2016, June 17). *New amendments of the regulation on consumer protection and alternative dispute resolution in Latvia*. Retrieved from Njord Law: <https://www.njordlaw.com/new-amendments-regulation-consumer-protection-alternative-dispute-resolution-latvia/>
- Kotous, J., & Šimek, D. (2017, April). *Consumer credit in the Czech Republic: from chaos to order*. Retrieved from Financier Worldwide: <https://www.financierworldwide.com/consumer-credit-in-the-czech-republic-from-chaos-to-order/#.W8XpHXszbcs>
- Le Blanc, J., Porpiglia, A., Teppa, F., Zhu , J., & Ziegelmeyer, M. (2015). *Household saving behaviour and credit constraints in the euro area*. European Central Bank.

- LSM (2015, December 22). *Latvian payday loan firm 4Finance shut down in Lithuania*. Retrieved from LSM: <https://eng.lsm.lv/article/society/society/latvian-payday-loan-firm-4finance-shut-down-in-lithuania.a160855/>
- Maquet, I., Maestri, V., & Thévenot, C. (2016). *The coverage rate of income support measures in the EU: measurement and challenges*. Directorate-General for Employment, Social Affairs and Inclusion.
- Mateescu, A. (2015). *Peer-to-Peer Lending*. Data society .
- Miller, H. (2013). *Interest rate caps and their impact on financial inclusion* . EPS-PEAKS.
- Morse , A. (2015). Peer-to-Peer Crowdfunding: Information and the Potential for Disruption in Consumer Lending. *Annual Review of Financial Economics*, 463-482.
- Muller, P., Bishop, G., Devnani, S., Lewis, M., & Ladher, R. (2012). *Non-bank financial institutions: Assessment of their impact on the stability of the financial system*. Brussels: Directorate-General for Economic and Financial Affairs.
- Muller, P., Devnani, S., Heys, R., & Suter, J. (2014). *Consumer Protection Aspects of Financial Services*. Brussels: Directorate-General for Internal Policies. Retrieved from FCA: <https://www.handbook.fca.org.uk/handbook/glossary/G3328.html>
- Muller, P., Devnani, S., Heys, R., & Suter, J. (2014). *Consumer Protection Aspects of Financial Services*. Brussels: DIRECTORATE GENERAL FOR INTERNAL POLICIES.
- Muller, P., Devnani, S., Heys, R., & Suter, J. (2014). *Consumer Protection Aspects of Financial Services*. Brussels: European Parliament's Committee on Internal Market and Consumer Protection.
- Muller, P., Devnani, S., Heys, R., & Suter, J. (2014). *Consumer Protection Aspects of Financial Services*. Brussels: Directorate General for Internal Policies.
- Munro, M., Ford, J., Leishman, C., & Karley, N. K. (2005). *Lending to higher risk borrowers: Sub-prime credit and sustainable home ownership*. York: Joseph Rowntree Foundation.
- NN Investment Partners (2018, January 10). *Europe 2018: Four key trends investors can benefit from in Alternative Lending*. Retrieved from NN Investment Partners: <https://www.nnip.com/Default-Display-on-3/Europe-2018-Four-key-trends-investors-can-benefit-from-in-Alternative-Lending.htm>
- Office of Competition and Consumer Protection (2016, March 10). *Poland introduces new consumer loan regulations*. Retrieved from Office of Competition and Consumer Protection: https://uokik.gov.pl/news.php?news_id=12256&news_page=28
- Uria Menéndez (2018). Regulatory regime applicable to consumer loans in Spain: Instalment credit. In *The Consumer Finance Law Review - Edition 2*. Morrison & Foerster. Retrieved from Mariscal & Abogados: <https://www.mariscal-abogados.com/regulatory-regime-applicable-to-consumer-loans-in-spain/>
- Pereira, M. C., Coelho, F., & Lourenço, Ó. (2017). Who Feels Credit Constrained in Europe? The Role of Social Capital. *The journal of consumer affaires*, 380-405.
- Policis (2004). *The effect of interest rate controls in other countries* . London: Policis.
- PwC (2013). *Personal Loans in Poland*. PwC.

- Reifner, U., Knobloch, M., Schröder, M., Dick, C., Jaroszek, L., Voronkova, S., & Iliewa, Z. (2010). *Study on interest rate restrictions in the EU*. Brussels/Hamburg/Mannheim: Final Report for the EU Commission DG Internal Market and Services.
- Romania Insider (2018, February 21). *Romanian Senate committees approve draft bill to limit interest rates on loans*. Retrieved from Romanian Senate committees approve draft bill to limit interest rates on loans: <https://www.romania-insider.com/draft-bill-limit-interest-rates-loans/>
- Schwartz, M., & Robinson, C. (2017). *A Corporate Social Responsibility Analysis of Payday Lending*. York University - School of Administrative Studies.
- The Czech Trade Inspection Authority (2014, February 07). *Act on Consumer Credit was breached more frequently*. Retrieved from The Czech Trade Inspection Authority: <https://www.coi.cz/en/act-on-consumer-credit-was-breached-more-frequently/>
- The European Commission (2014). *Report from the Commission to the European Parliament and the Council on the implementation of Directive 2008/48/EC on credit agreements for consumers*. Brussels: The European Commission.
- The Slovak Spectator (2016, February 26). *Provident Financial leaves Slovakia, due to new law*. Retrieved from The Slovak Spectator: <https://spectator.sme.sk/c/20104939/provident-financial-leaves-slovakia-due-to-new-law.html>
- TNS Opinion & Social (2012). *Special Eurobarometer 373 Retail Financial Services*. Brussels: Directorate-General Internal Market and Services.
- Wolf Theiss (2016, August). *Developments in Consumer Credit Regulation in the Czech Republic*. Retrieved from Wolf Theiss Client Alert: https://www.wolftheiss.com/fileadmin/content/6_news/clientAlerts/2016/2016_Q3/160802_WolfTheiss_CA_Consumer_Credit_Act_ENG.pdf

Annexes

Annex 1. Direct Interest Rate Restrictions

Restrictions	Type		Sub-type	Mechanism	Influence	Countries
Direct IRR – impacts the price of the credit directly through imposing limitations on the interest rate	Contractual	Relevant to the initial interest rate stated in the contract	Absolute	Fixes a certain level of nominal rate cap	Most often applied only to a certain type of lenders	Greece, Ireland, Malta
			Relative	Calculates the cap in relation to a certain variable	Most often comes in the form of APR. Difference by amount, credit type, duration etc.	Belgium, France, Germany, Estonia, Italy, Netherlands, Poland, Portugal, Slovakia, Slovenia, Spain
			None		Have some forms of doctrines (concept of fairness/unfairness, unconscionability)	Austria, Bulgaria, Cyprus, Czech Rep, Denmark, Finland, Hungary, Latvia, Lithuania, Luxembourg, Romania, Sweden, UK
	Default	Relevant to the interest rate applied after a default	Statutory interest rates	Fixed or based on a reference	Applied when contracting parties do not agree on the default interest rate to be payed	Austria, Belgium, Latvia, Lithuania, Luxembourg, Malta, Spain, Bulgaria, Czech Rep, Estonia, Finland, Germany, Hungary, Italy, Portugal, Slovakia, Slovenia, Sweden
			Ceilings	Explicit default interest rate ceilings or general usury supervision	Explicit default interest rate may be fixed or relative. In case there is none, there may be an additional limit provided by general usury legislation	Austria, Belgium, Denmark, France, Finland, Greece, Hungary, UK, Bulgaria, Czech Rep, Denmark, Estonia, Finland, Germany, Italy, Luxembourg, Poland, Portugal, Slovakia, Spain (overdrafts only), Slovenia, Malta
			None		General usury supervision might apply	Ireland, Romania

Source: “Study on interest rate restriction in the EU. Final report” by IFF & ZEW, 2009

Annex 2. Indirect Interest Rate Restrictions

Restrictions	Type	Sub-type	Mechanism	Influence
Indirect – impacts the cost of the credit indirectly through imposing limitations on other factors	Other cost relevant factors	Uniform definition of interest	Law defines uniform and objective definition of the credit price and payable interest	Defines and prevents usury. Uniform definition of credit interest increases market transparency
		Compounding	Prohibition of anatocism e.g. interest on interest	Prevents from usury and ensures lower cost of credit
		Variability	Limits the variation of interest rates e.g. by how much interest rates can increase	Prevents from usury and ensures lower cost of credit
		Fees and Charges	Limits the amount of hidden fees and charges, apart from those included in the APR e.g. intermediary fees, non-financial charges etc.	Ensures market transparency and lowers the total cost of the credit
		Payment Protection Insurance	Limiting or banning the practice of using initial credit in order to financing other financial instruments	Ensures higher degree of competition on the market, limits the total cost of the credit, increases transparency

Source: “Study on interest rate restriction in the EU. Final report” by IFF & ZEW, 2009

Annex 3. Grouping member states

		Direct IRR								Other cost relevant factors				Total
		1) There exist contractual direct IRR (fixed or relative)	a) IRR applies to Non-Banking Financial Institutions	b) IRR applies to all market players	c) Uniform ceiling regardless of loan amounts	d) Could the APR on 500 euros 3-months debt cross 20%?	2) There exist statutory default IRRs	a) Statutory ceilings are fixed	3) Default ceilings are explicit	4) Fees and charges are limited/regulated	5) Financing other financial instruments through a given credit is prohibited/regulated	6) Anotocism is prohibited	7) There exist a minimum capital or licensing requirement for lenders?	
		Yes (1)/ No (0)	Yes (0.5)/ No (0)	Yes (0.5)/ No (0)	Yes (1)/ No (0)	Yes (0)/ No (1)	Yes (0.5)/ No (0)	Yes (0.5)/ No (0)	Yes (1)/ No (0)	Yes (1)/ No (0)	Yes (1)/ No (0)	Yes (1)/ No (0)	Yes (1)/ No (0)	
				Yes (0.5)/ No (0)										10
BE	2018	1	0.5	0.5	0	1	0.5	0.5	1	1	1	1	1	9
	2009	1	0.5	0.5	0	1	0.5	0.5	1	1	0	1	0	7
CZ	2018	0	-	-	-	0	0.5	0	1	1	0	1	1	4.5
	2009	0	-	-	-	0	0.5	0	1	1	0	1	0	3.5
ES	2018	0	-	-	-	1	0.5	0	1	0	1	1	1	5.5
	2009	0	-	-	-	0	0.5	0.5	1	N/A	N/A	1	0	3
FR	2018	1	0.5	0.5	0	1	0.5	0.5	1	N/A	1	0	1	7
	2009	1	0.5	0.5	0	0	N/A	N/A	1	N/A	N/A	0	0	3
HU	2018	1	0.5	0.5	0	0	0.5	0	1	1	0	0	N/A	4.5
	2009	0	-	-	-	0	0.5	0	1	N/A	N/A	0	N/A	1.5
LT	2018	0	-	-	-	0	0.5	0.5	0	0	0	N/A	1	2
	2009	0	-	-	-	0	0.5	0.5	0	N/A	N/A	0	0	1
LV	2018	0	-	-	-	0	0.5	0.5	0	1	0	0	1	3
	2009	0	-	-	-	0	0.5	0.5	0	N/A	N/A	0	0	1
PL	2018	1	0.5	0.5	1	0	0.5	0.5	1	1	1	1	1	9
	2009	1	0.5	0.5	1	1	0.5	N/A	1	1	1	1	0	8.5
RO	2018	0	-	-	-	0	0.5	0.5	0	0	0	1	1	3
	2009	0	-	-	-	0	0	N/A	0	0	1	1	0	2

SK	2018	1	0.5	0.5	0	0	0.5	0	1	1	1	1	1	7.5
	2009	1	0.5	0	0	0	0.5	0	1	1	0	0	0	4
UK	2018	1	0.5	0	1	0	0	N/A	1	0	1	1	N/A	5.5
	2009	0	-	-	-	0	0	N/A	1	0	1	0	0	2

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