

Interest Rate Caps

The Theory and The Practice

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Abstract

Ceilings on lending rates remain a widely used policy tool that is intended to lower the overall cost of credit or protect consumers from exorbitant rates. Interest rate caps come in many forms and scopes and, according to their rationale, ceilings can affect a small segment or the overall market. Over the past years, many countries have introduced new or tightened existing restrictions, while only a few have removed or eased them. This paper takes stock of recent developments in interest rates caps globally and classifies them according to a novel taxonomy. The paper also presents six case studies of different types of interest

rate caps. The case studies indicate that while some forms of interest rate caps can indeed reduce lending rates and help to limit predatory practices by formal lenders, interest rate caps often have substantial unintended side-effects. These side-effects include increases in non-interest fees and commissions, reduced price transparency, lower credit supply and loan approval rates for small and risky borrowers, lower number of institutions and reduced branch density, as well as adverse impacts on bank profitability. Given these potential negative consequences of interest rate caps, the paper discusses alternatives to reduce the cost of credit.

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Interest Rate Caps: The Theory and The Practice

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Executive Summary

The economic and political rationale for putting ceilings on lending rates is to protect consumers from usury or to make credit cheaper and more accessible. If the primary rationale is consumer protection, ceilings are usually set at levels that only affect extreme pricing but leave the core market with minimal implications. In contrast, if interest rate caps are used as a policy tool to achieve certain socio-economic goals, such as lower overall cost of credit, ceilings are set at “binding levels” intended to influence the market outcome.

Ceilings on lending rates remain a widely-used instrument in many EMDEs as well as developed economies. Our analysis shows that at least 76 countries around the world, representing more than 80% of global GDP and global financial assets, impose some restrictions on lending rates. These countries are not clustered in specific regions or income groups, but spread across all geographic and income dimensions. Of the countries with interest rate caps, a third introduced them to protect consumers from usury. This rationale is particularly used by high-income countries.

Interest rate caps are not static, but are an actively used policy tool. Since 2011, we find at least 30 instances when either new interest rate caps have been introduced or existing restrictions have been tightened. Over 75% of those changes occurred in low- or lower-middle-income countries. This outweighs the five instances when restrictions have been removed or eased and indicates that countries increasingly limit the maximum level of lending rates.

Interest rate caps come in many different forms. Restrictions used across countries vary substantially regarding what they cover and how they work. A novel taxonomy presented in this paper classifies interest rate caps according to the following features:

- *Scope.* A primary form of variation is the type of credit instrument/ institution and/or borrower they apply to. Caps can affect only a narrowly defined segment of the market (e.g. payday loans, credit cards, mortgages), cover loans by certain institutions (e.g. MFIs or credit unions) or cover all types of credit operations in the economy.
- *Number of ceilings.* Countries use either a single blanket cap for all transactions or multiple caps based on the type of the loan and/or socio-economic characteristics of the borrower.
- *Type.* The level of the cap can be either defined as a fixed, absolute cap or as a relative cap that varies based on the level of a benchmark interest rate. Absolute caps are used

more frequently in low and lower-middle income countries, whereas more developed economies tend to use relative caps.

- *Methodology.* The level of the relative cap can be either defined as a fixed spread over the benchmark or as a multiple of the benchmark rate.
- *Benchmark.* Most countries using a relative cap link it to the level of an average market rate, for example, the average lending rate over the past six-months. Alternatively, the ceiling can be defined as a function of the central bank's policy rate, but this is less prevalent among the countries in our sample.
- *Binding.* Independently of the type of benchmark used, caps can be binding or non-binding, i.e. they are below or above market rates. In countries where the primary aim is to prevent usury the ceilings are usually fixed at levels that affect only extreme pricing but leave the core market to operate with minimal implications.
- *Fees.* Some interest rate caps also explicitly regulate non-interest fees and commissions of the loan. This is either done by setting separate limits on non-interest costs or by defining the interest cap in terms of an annual effective rate (APR) that includes all fees and charges.

Establishing the causal effects of interest rate caps is challenging due to the heterogeneity of caps used and endogeneity concerns, but economic theory points to several possible side effects. Country case studies on Kenya, Zambia, Cambodia, the West African Economic and Monetary Union (WAEMU), India, and the United Kingdom show that effects and side-effects depend on the type and specification of the cap.

- *Caps set at high levels do not seem to affect the market and can help limit predatory practices by formal lenders.* Non-binding caps, i.e. caps set well above market rates, affect only extreme pricing with little impact on the overall market. If interest rate caps include regulations on non-interest fees and the non-regulated lending market is limited, then caps are a potential way to remove predatory lenders in the formal sector.
- *Binding caps set closely below market rates and that move with it might exert pressure on lenders to increase efficiency.* Flexible caps set below market rates but not so low that lenders can no longer remain in the market and price risk appropriately, can put pressure on banks and MFIs to reduce administrative expenses and increase operational efficiency. This is especially true for markets that have high overhead costs. However, *rising cost*

pressure on lenders can also come at the expense of brick and mortar networks, which may be negative for inclusion, if no alternative credit delivery channels are available. Moreover, calibrating interest caps at the “right” level to achieve operational efficiency is difficult.

- *The effectiveness of caps is often undercut by the use of non-interest fees and commissions.* The increased use of non-interest charges often reduces price transparency and makes it more complicated for borrowers, especially those with limited financial literacy, to assess the overall costs of the loan.
- *Binding caps set well below market levels can reduce overall credit supply.* The extent of the decline depends on the scope of the restrictions. Whereas narrow caps affect primarily a clearly defined market segment, broad restrictions can reduce overall credit supply in the economy. Blanket caps further affect the distribution of credit as they result in a particularly large decline of unsecured and small loans, as well as in credit to SMEs and riskier sectors. Average loan size increases, suggesting a reallocation from small to large borrowers, in many cases to the government. The case studies suggest that the increase in non-interest income is often not enough to compensate banks for the drop in interest income and consequently aggregate data point to a fall in banks’ interest income and an accompanied decline in profitability following the implementation of interest rate caps.

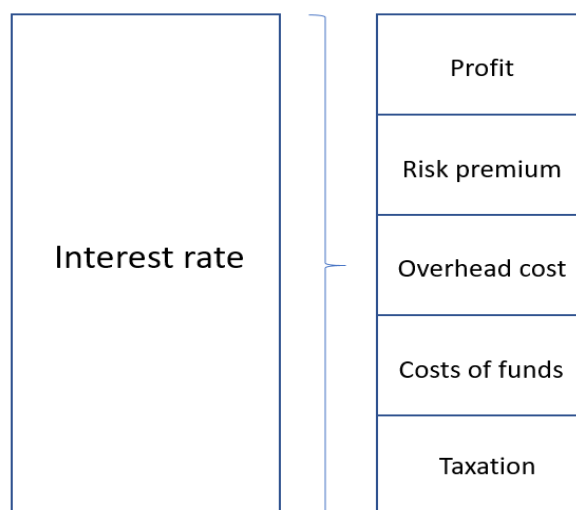
In light of the possible unintended consequences of interest caps, alternatives and complementary measures to interest rate caps should also be considered. These include measures to foster competition, reduce risk perception, overhead costs, and cost of funds. Consumer protection and financial literacy measures are also important measures, especially if interest rates are meant to protect consumers from usury rates.

1. The economics of interest rate caps

Interest rate caps are by definition a government intervention in the marketplace and a response to perceived market failures. Interest rate caps either target exploitative rates charged to the most vulnerable borrowers, or the overall cost of credit in some market segments or the entire economy. In the first case, if the primary rationale is consumer protection, ceilings are usually set at levels that only affect extreme pricing but leave the core market with minimal implications. In contrast, if interest rate caps are used as a policy tool to achieve certain socio-economic goals, such as lower overall cost of credit, ceilings are set at “binding levels” intended to influence the market outcome.

For evaluating interest rate caps, it is important to gain an understanding of why lending rates are high in the first place. The interest rate charged on loans, in simplified terms, is the sum of five components: costs of funds, overhead costs (e.g. administrative costs of the bank as well as costs of processing the loan), risk premium, profits and taxes.²

Figure 1: Decomposition of interest rates



Source: Based on Miller, 2013

Profit: Caps on interest rates are often justified by the perception that high lending rates are driven by banks’ ability to generate excessive profits from their lending activities. This ability to earn high profits is especially large when monopolistic or oligopolistic structures

² For more details see Miller (2013), Beck and Fuchs (2004) or Demirguc-Kunt and Huizinga (1999).

together with high barriers to entry result in limited competition in the financial system and give incumbents the power to set prices. In such an environment, it is often argued that interest rate caps can help to protect the public interest by guaranteeing a fair and reasonable interest rate.

Risk perceptions: High interest rates can also be driven by substantial risk premia on loans. Lenders calculate the risk premium based on the probability that a borrower repays the loan and the loss given default. In particular, for micro and small firms or households with no or little credit history and collateral it is difficult to accurately assess these parameters and the lack of information might result in high risk premia. This can give rise to adverse selection and moral hazard problems. Unable to identify a borrower's potential for repayment, banks will charge an aggregated interest rate which will be more attractive to the higher risk client because lower risk clients are likely to have access to alternative and cheaper sources of credit. This creates a higher risk of default and feeds back into higher risk premia and lending rates. The problem is especially pronounced in less sophisticated financial systems where banks lack proper tools to price and manage risks efficiently. Moral hazard occurs when clients borrowing at this elevated rate are required to make riskier investments to cover their borrowing costs. This also increases default probabilities and risk premia (Miller, 2013). Caps on interest rates might alleviate this vicious cycle by altering the aggregate interest rates, making them also attractive for more credit worthy borrowers and reducing the pressure to engage in high risk projects to cover the borrowing costs.

Overhead costs: High lending rates can also be due to structural reasons such as high overhead costs that reflect the general administrative costs of the lender as well as the costs of processing the loan application. However, overhead costs are not only determined by lenders' productivity but also reflect the nature of their business models. Processing costs are, for example, generally higher for small loan volumes or microcredit transactions that require face-to-face interactions and where lenders use personal contacts as a substitute for formal collateral or computerized scoring (Helms and Reille, 2004). Proponents of caps argue that ceilings on interest rates put pressure on banks to reduce administrative expenses and increase operational efficiency.

Cost of Funds: The level of interest rates depends on the cost that financial institutions pay to borrow the funds they then lend out. At the macro level these funding costs, either the

interest rate on deposits or the cost of wholesale funds, are a function of the prevailing “risk-free rate” in the economy and a premium reflecting the default risk of the institution. The “risk-free rate” reflects the fundamental equilibrium between savings and investment and is higher the scarcer the supply of capital in the economy is. Nominal rates are further influenced by expectations of future inflation. Caps on lending rates do not influence banks funding costs, but some countries try to reduce costs of funds by implementing caps on deposit rates.

Taxation: Finally, the level of interest rates is influenced by explicit and implicit taxation. Explicit taxation consists of the prevailing corporate tax rate in the jurisdiction that the bank operates in. Additionally, lending rates are impacted by implicit taxation, i.e. the opportunity costs of holding required reserves at the central bank. Reserve requirements are an implicit tax on banks if, as is usual, official reserves are remunerated at less-than-market rates (Demirguc-Kunt and Huizinga, 1999).

2. Overview of interest rates caps around the world

Collecting data on interest rate caps is inherently difficult as there are no “hard” quantitative data, they come in many different facets, and there is no uniform classification or data source. For this paper we look primarily at the existence of laws and regulations that *de jure* limit the level of lending rates for at least a part of the financial system. In addition, we include countries where interest rates are *de facto* constrained, for example by subsidized rates from public banks or through some form of negotiated agreement.

The main data source for the analysis of this paper is the *Global Microscope on Financial Inclusion* database, published by the Economist Intelligence Unit (EIU).³ The Global Microscope database provides detailed information on financial regulations relevant for financial inclusion for 55 emerging and developing countries. For this study we extract the information provided by the country notes on Indicator 4.1.1 “*Interest rate restrictions (credit)*”. We use the latest version of the Global Microscope, which is based on analyses and interviews conducted over the summer of 2016. The data, thus, give up-to-date information on the current state of interest rate restrictions. We extend the EIU data for countries not covered in their analysis by using information provided by primary sources, such as national

³ With technical support and oversight from the Center for Financial Inclusion at Accion, the Multilateral Investment Fund at the Inter-American Development Bank, and the MetLife Foundation.

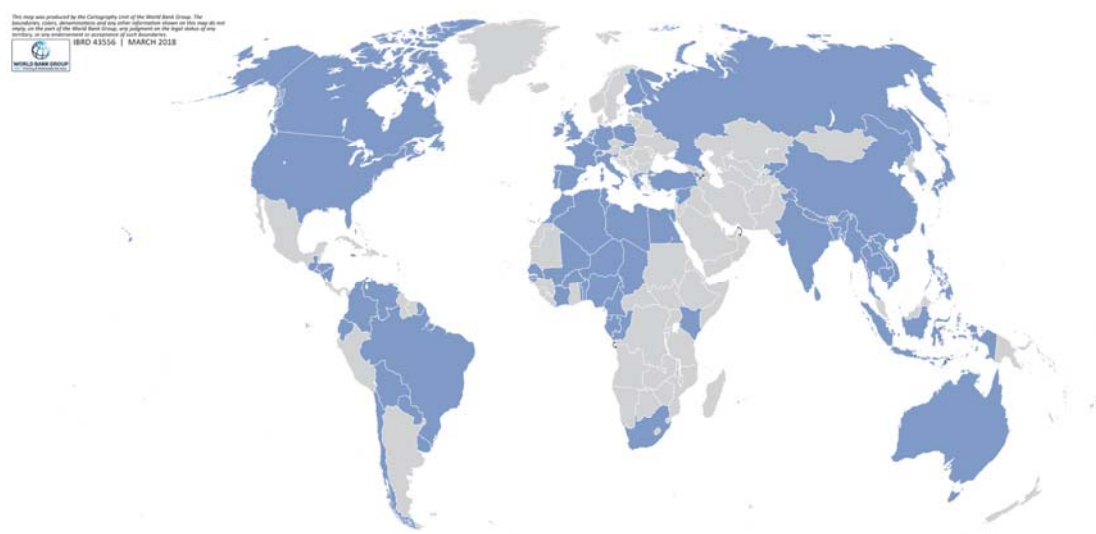
central banks or regulators, as well as analyses conducted by the IMF, the World Bank, the ADB and the European Commission. Finally, we also check news sites, such as Bloomberg or Reuters, for reports on interest rate caps.

Data for 97 countries were collected. For the remaining countries we do not have information, neither for the existence of interest rate caps, nor for their non-existence. It is important to keep in mind that this *absence of evidence is not evidence of absence*. Our analysis is thus only able to produce a “lower bound” of the number of countries around the world that use interest rate caps.

Who and Where?

Figure 2 shows that the use of interest rate caps is widespread. At least 76 countries in all regions around the world use some form of restrictions on the level of interest rates on credit. As discussed in more detail in the following sections of this paper, the scope and form of these restrictions vary greatly across countries. They range from measures affecting only a small segment of the market to broad and binding restrictions that affect the overall macroeconomic environment.

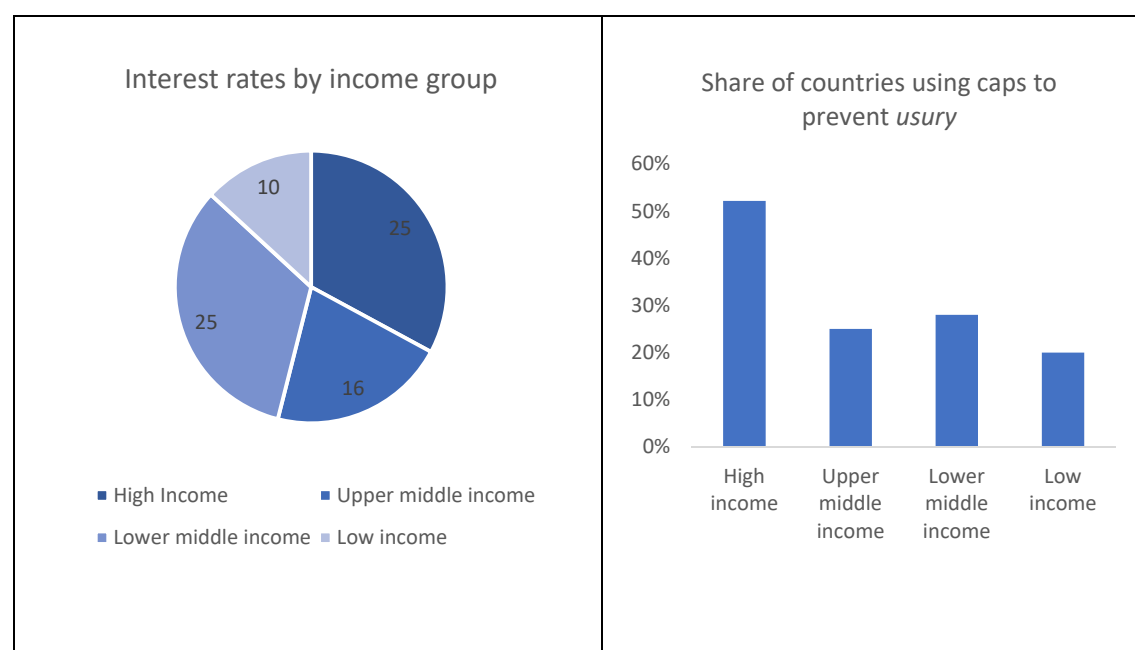
Figure 2: The use of interest rate caps around the world



Sources: EIU Global Microscope for Financial Inclusion, ADB, IMF, World Bank, National Authorities

These 76⁴ countries account for more than 80% of global GDP and 85% of global banking sector assets. Interest rate caps are not limited to a certain level of economic development, as proxied by GDP per capita. Our analysis reveals that at least 25 high-income countries (33% of all high-income countries), 16 upper-middle income countries (30% of all upper-middle income countries), 25 lower-middle income countries (49% of all lower-middle income countries) and 10 low-income countries (32% of all low income countries) use interest rate caps. The higher share suggests that interest rate caps are more prevalent in lower-middle income countries.⁵

Figure 3: Interest rate caps by income group



Notes: The right-hand chart plots the share of countries that have introduced interest rate caps to prevent “usury” as a share of all countries using interest rate caps per income group.

Source: Authors’ calculation

In several of those cases interest rate caps are remnants of old usury laws. Around one-third of the countries in our sample reason interest rate caps with usury and the associated intention to protect the most vulnerable consumers. This rationale is particularly used by many high-income economies in Europe, Asia Pacific and North America. Contrary, in other

⁴ See Table A1 in the Appendix for a detailed list. The aggregate number includes the eight WAEMU (West African Economic and Monetary Union) and six CEMAC (Central African Economic and Monetary Community) member countries, which face joint regulations by the central bank of their respective blocks.

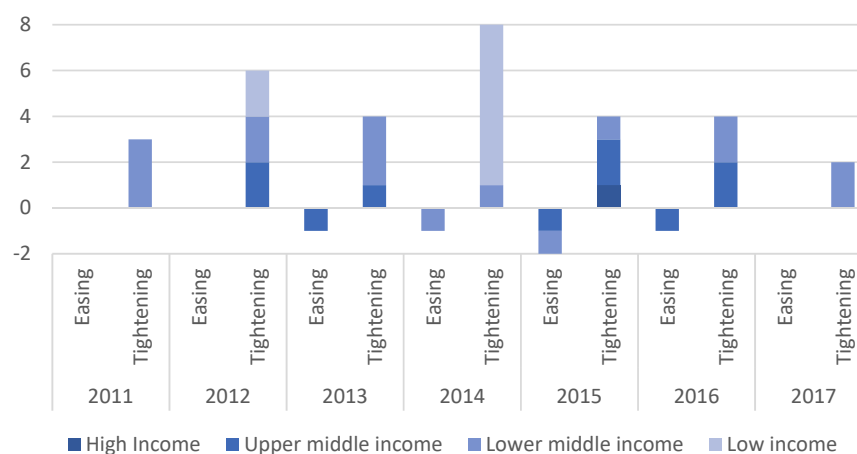
⁵ The difference might be even higher as it is more likely that we missed regulations in less developed countries due to more challenging data availability.

countries, many of them located in Africa or Latin America, interest rate caps are used as an active policy instrument with the explicit aim to change the overall price of credit in specific segments of the market or the entire economy.

Recent trends

The headline number of restrictions is similar to past studies on the use of interest rate caps (see for example Maimbo and Gallegos, 2014) and more than 85% of the countries identified by Maimbo and Gallegos (2014) still use some form of interest rate caps. However, this does not mean that the state of regulations regarding interest rate caps is static over time. Since 2011, we find at least 30 instances when either new interest rate caps have been introduced or existing restrictions were tightened (i.e. the level of the cap was lowered or the scope of restrictions was broadened). For example, in Kenya and the Kyrgyz Republic authorities introduced new caps on interest rates in 2016 and 2013, respectively, and the United Kingdom set caps on payday loans in 2015. Most recently, in 2017 Nigeria set ceilings on mortgage rates and Cambodia implemented caps on the maximum rates charged by microfinance intuitions. In other places existing restrictions were tightened. In the WAEMU the cap was reduced from 18% to 15% for banks and from 27% to 24% for microfinance institutions in 2014. Similarly, South Africa reduced the level of caps and removed some exemptions in early 2016. Turkey and Indonesia reduced caps on outstanding credit card balances in 2013 and 2016, respectively.

Figure 4: Recent trends by income group



Notes: 2012 tightening includes the six CEMAC countries; 2014 tightening includes the eight WAEMU countries

Source: Authors' calculation

In at least five instances caps were either removed or eased (i.e. the level of the cap was increased or the scope was narrowed). In Argentina, the central bank announced the elimination of all interest rate caps for credit operations in January 2016. Zambia, which had introduced caps only in 2013, removed them again in 2015. China removed all restrictions on commercial bank lending rates in 2013 and scrapped controls on deposit rates in 2015, but keeps controls, among others, on microfinance.⁶ India replaced its blanket cap on MFI interest rates with a more flexible framework in 2014, and Thailand granted some exemptions from existing regulations and higher caps to “nano-finance” providers, a nascent segment.

Overall, new or tighter restrictions were predominantly implemented by low or lower-middle income countries. Countries in those two income groups account for more than three-quarters of all new or tightened caps. The majority of them tightened interest rate caps with the objectives to reduce the cost of borrowing. Less than one-third of the low and lower-middle income countries tightened the interest rate cap too with the explicit objective to protect consumers from usury rates. In contrast, out of the five easing events, three are driven by upper-middle income countries.

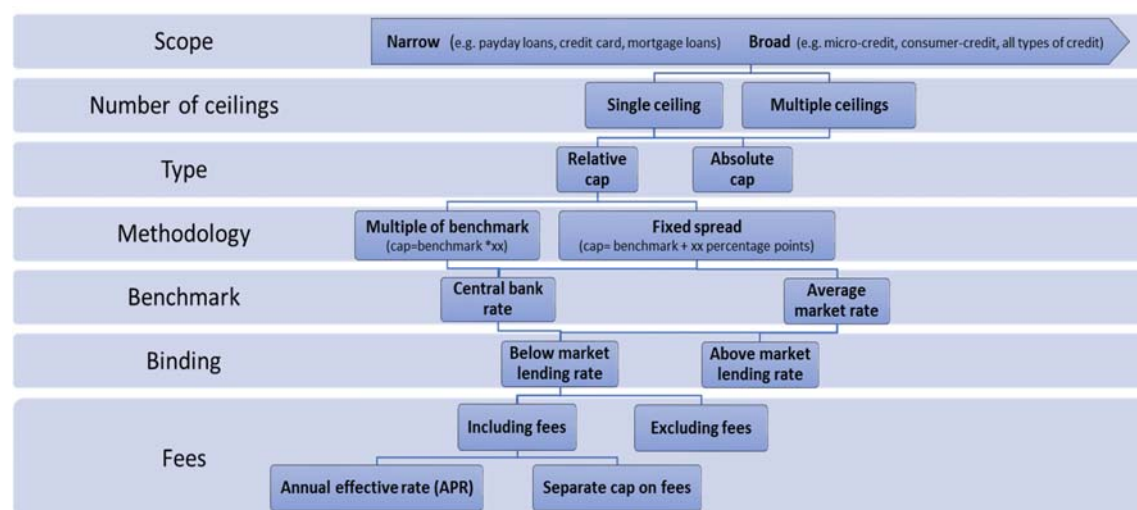
⁶ <https://www.frbsf.org/banking/files/Asia-Focus-China-Interest-Rate-Liberalization.pdf>;

<https://www.bloomberg.com/news/articles/2017-12-01/china-bans-unlicensed-micro-lending-curbs-rates-to-limit-risks>

3. Taxonomy of interest rate caps around the world

Interest rate caps come in many different forms. Restrictions used across countries vary substantially regarding what they cover and how they work. This section classifies existing interest rate caps based on their *scope*, *number of ceilings*, *type*, *methodology*, *benchmark*, whether they are *binding* and whether they also include *fees*, as highlighted below.

Figure 5: Taxonomy of interest rate caps



Source: Own compilation

Different scope of restrictions

A primary form of variation of interest rate restrictions is the *type of credit instrument and/or institution/and or borrower* they apply to. The scope ranges from restrictions affecting only a narrowly defined segment of the market to broad-based regulations that affect rates on all types of credit operations in the economy.

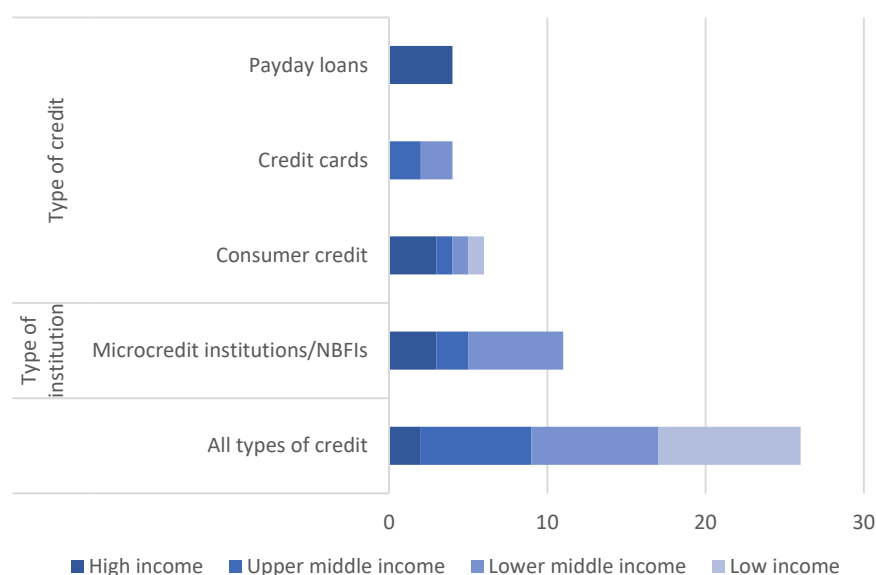
One example for narrowly defined interest rate caps is restrictions on the rate of *payday loans*.⁷ In our sample, four high-income countries set limits on the maximum interest rate of payday loans. In the United States, more than 30 states have such ceilings on payday-loan rates. Similarly, in the United Kingdom interest and fees charged on payday loans⁸ are capped

⁷ While there is no set definition of a payday loan, it is usually a short-term, high cost loan, that is typically due on the borrower's next payday. The loans are for small amounts and in the United States many states set a limit on payday loan size. <https://www.consumerfinance.gov/ask-cfpb/what-is-a-payday-loan-en-1567/>

⁸ The regulation officially refers to high-cost short-term credit. See Section 5 for more details.

at 0.8% per day of the amount borrowed and “... borrowers must never pay more in fees and interest than 100% of what they borrowed.”⁹ Canada's Criminal Code limits the interest rate on payday loans to 60% per year, but many provinces set substantially lower caps. Payday loan rates are also regulated in Australia. The rationale for setting caps on payday loans is usually to prevent usury and protect vulnerable and financially less literate segments of the society from predatory lending.

Figure 6: Scope of interest rate restrictions



Source: Authors' calculation

Other types of narrowly defined interest rate caps based on the type of loans are ceilings on interest rates on outstanding *credit card balances* - such restrictions are currently used in Indonesia, Paraguay and Turkey - or restrictions on *mortgage loans* as implemented in Nigeria in April 2017. A broader scope of restrictions is used in Morocco and Nepal, which limit interest rates on *general consumer credit* while providing exemptions for micro-credit.

Several countries set special interest rate caps particularly for certain *priority sectors of the economy*. In Vietnam, for example, special rules apply to agricultural and rural lending. Similarly, Bolivia sets caps for loans for social housing and certain sectors such as agriculture, manufacturing, mining and tourism.

⁹ <https://www.fca.org.uk/firms/price-cap-high-cost-short-term-credit>. See Section 5 for more details.

Interest rate restrictions are not always based on the type of instrument, but in some cases on the type of lending institution instead. Several countries set ceilings on lending rates exclusively for credit provided *by micro-finance institutions*. The Reserve Bank of India, for example, sets caps only on *loans from Non-Banking Financial Company-Micro Finance Institution (MFIs)*. The level of the cap depends on the size of MFIs, with large MFIs (portfolio > INR 1 billion) facing lower caps than small MFIs.¹⁰ Cambodia set a cap on microfinance institutions in March 2017. In Nicaragua caps apply only to non-regulated MFIs and China limits the maximum lending rate of micro-credit companies. Other countries that apply caps on the lending rate of micro-credit institutions include Bangladesh, Honduras and Tunisia. In Ireland, credit facilities granted by credit unions are subject to interest caps under current regulations, whereas banks face no such restrictions. The largest number of countries in our sample apply restrictions that affect *all types of credit*. Among the 26 countries using this blanket form of interest rate cap are nine low income and eight lower-middle income countries.

Number of ceilings

Some countries use *one blanket cap* for all transactions. A potential problem with a single cap across all types of credit is that it can result in a dislocation of credit away from small or high-risk loan products. A cap set at a level that might be appropriate for large and secured loans can be too low for a sustainable provision of small loans to riskier borrowers (FSDT Kenya, 2016). Many countries try to mitigate this problem by using *multiple caps*. South Africa, for example, has seven separate ceilings for mortgages, credit facilities, unsecured credit transactions, development credit, short-term transactions, other credit and incidental credit agreements (see below). Also, in El Salvador, a usury law establishes interest rate caps across all financial institutions and for regulated and non-regulated MFIs, but applies different interest rates to the differing socioeconomic segments of the population.

¹⁰ <https://rbidocs.rbi.org.in/rdocs/notification/PDFs/43BF010714FSC.PDF>. See Section 5 for more details.

Table 1: Example of multiple caps used in South Africa

Credit type	Maximum prescribed interest rate
Mortgage agreements	Repo Rate + 12% per year
Credit facilities	Repo Rate + 14% per year
Unsecured credit transactions	Repo Rate + 21% per year
Development credit agreements*	Repo Rate + 27% per year
Short-term transactions	5%/ 3% per month**
Other credit agreements	Repo Rate + 17% per year
Incidental credit agreements	2% per month
SARB Repo Rate stands at 6.75% as of November 2017.	
* SMEs and low income housing; ** 5% per month on first loan and 3% per month on subsequent loans within a calendar year.	
Source: www.saica.co.za/Portals/0/Technical/LegalAndGovernance/39379_gon1080_Fees.pdf	

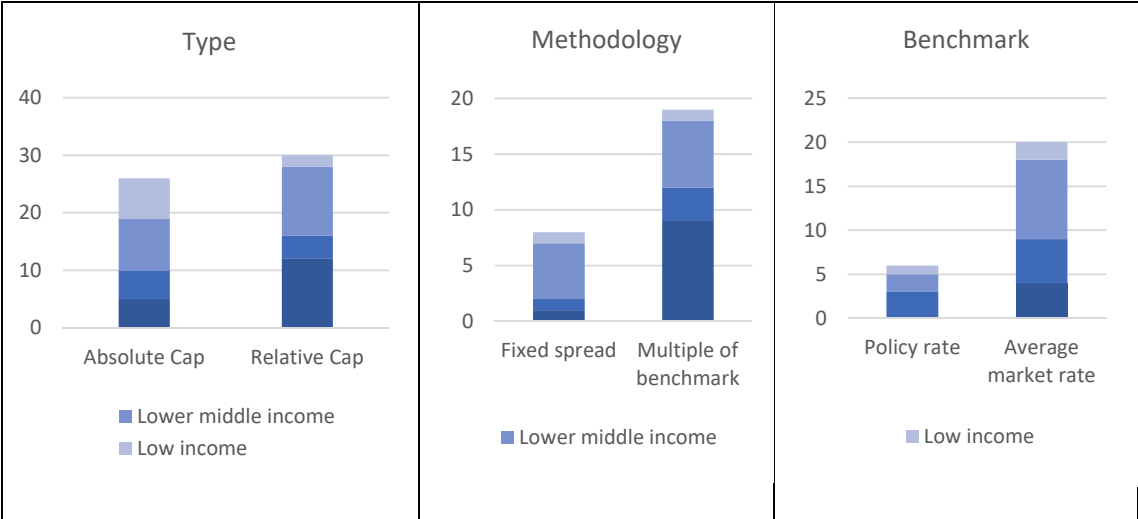
How are they calculated (type, methodology and benchmark)?

Interest rate restrictions do not only differ in scope but also in how they are calculated. One important distinction is how the maximum level of interest that banks or other MFIs can charge is determined. There are two main ways of doing that. The first way is setting an *absolute cap*, i.e. a fixed nominal rate that may not be exceeded. We find evidence that at least 26 countries rely on absolute interest rate caps. Two-thirds of the countries using absolute caps are either low or lower-middle income countries, with only few high-income countries using them. The level set by absolute caps varies substantially. The Republic of Korea, for example, applies an absolute cap of 24% per annum, Thailand of 28% per annum, and Jamaica uses a cap of 40% per annum. As mentioned above, most countries in our sample do not use a single absolute limit, but have multiple, different caps based on the size, or type of loans, the socio-economic characteristics of the borrower, or the industry.

The majority of countries in our sample, 54% of the countries for which we have this information, uses a *relative cap*. Relative caps tend to be used more frequently in more developed countries. Out of the 30 countries using relative caps, 16 are high or upper-middle income countries. A relative interest rate cap means that the maximum level of the allowed interest rate depends on the level of a benchmark rate. The cap is then usually either defined as a certain spread over the benchmark (cap= benchmark + xx percentage points), or a multiple of the benchmark rate (cap = xx*benchmark rate). In contrast to absolute caps, relative caps vary over time based on the movement of the benchmark rate. In most cases the

current level of the benchmark is used to calculate the cap, but some countries also use average past values. For example, in Guatemala the cap on interest rates charged on credit cards is calculated as twice the median moving annual interest rate of the banking system for the previous 12 months.

Figure 7: Application of interest rate caps



Source: Authors’ calculation

The type of benchmark used for calculating the level of relative interest rate caps is usually either the *central bank’s policy rate* or an *average market rate*. The use of central bank rates is less prevalent in our sample. Only six countries, including Kenya, Nepal, Nigeria and South Africa, cap lending rates based on the level of the policy rate. In contrast, 20 countries use some form of (weighted) average market interest rate to determine the level of the benchmark. For example, in Colombia the cap is calculated as 1.5 times the current average banking sector rate; the Reserve Bank of India sets the cap for regulated MFIs at 2.75 times the average base rate of five large commercial banks¹¹; in the Kyrgyz Republic the relative cap is calculated as the weighted average interest rate on loans issued by banks and MFIs plus 15%; and in Paraguay interest rates applied on credit cards may not be higher than three times the current average deposit rate as published monthly by the Central Bank.

¹¹ See Section 5 for more details on India.

Binding or non-binding and all-inclusive costs

Independently of the type of benchmark used, a key question is *whether the caps are binding* in a sense that they are set at levels below market rates. In countries, where the primary aim of the restriction is to prevent usury this is usually not the case and ceilings are fixed at very high levels that affect only extreme pricing but leave the core market to operate with minimal implications. In the European Union, for example, caps are generally set at a substantial percentage above the average market rate for certain product groups, ranging between 33% (France), 50% (Italy) and 100% (Germany).¹² In contrast, when interest rate caps are used as a policy instrument to achieve certain socio-economic goals, such as lower cost of credit or more competition in the banking sector, ceilings are set below market rates. Such *binding constraints* amount to direct price setting and can alter the structure of the market if effectively enforced (FSDT Kenya, 2016). Recent examples include Bolivia, Zambia and Kenya or Cambodia where caps were fixed substantially below prevailing average lending rates (see country case studies below for more details).

A further important differentiation is whether stated caps only apply to nominal interest rates or *whether they also apply to fees and commissions related to the loan*. If the regulation seeks to cap those as well this can be either done by directly specifying limits on non-interest costs of a loan or by setting caps on the annual effective rate (APR), which includes the interest rate and all fees and charges. The first approach is, for example, taken by South Africa, which publishes a comprehensive list of maximum fees applicable to different types of credit in addition to the respective interest rate caps.¹³ In India, MFIs are restricted from charging any fee other than a processing fee of 1% of the loan amount.¹⁴ Caps on effective rates are used in Thailand, where the 28% ceiling includes interest rates and fees. Other examples of countries explicitly targeting effective rates are El Salvador and Morocco. Effectively limiting the level of non-interest costs, however, is challenging as banks have strong incentives to come up with new and “creative” solutions and to find loopholes in regulations in order to recoup lower returns stemming from interest rate caps. Examples for this are the bundling of services, such as adding mandatory credit insurance to loan contracts.

¹² Iff/ZEW, 2010.

¹³ www.saica.co.za/Portals/0/Technical/LegalAndGovernance/39379_gon1080_Fees.pdf

¹⁴ <https://rbidocs.rbi.org.in/rdocs/notification/PDFs/43BF010714FSC.PDF>

De-facto constraints

Not all types of interest rate caps are formally codified into law. In our sample, four countries *de facto* depress the level of interest rates in other ways. In Brazil, banks must allocate a certain share of their demand deposits to loans to particular market segments, such as housing, agriculture and microcredit, each of which has a respective cap on interest rates. In addition, loans made with second-tier funding from the Brazilian Development Bank also face ceilings.¹⁵ Rules on on-lending also apply in Sri Lanka. Financial institutions borrowing from the state-owned savings bank, which is a major source of local funding to microfinance borrowers primarily in the informal sector, are not allowed to on-lend funds at a rate exceeding 12% of their own borrowing costs. In the Philippines, banks have a “gentlemen’s agreement” that caps the spread of bank lending to a maximum of 5 percent over the 91-day T-bill rate.¹⁶ Estonia has no official interest rate caps, but court practice has shown that courts will intervene if the level of interest payments in comparison to the principal is unreasonably high.

4. Potential economic impact of interest rates caps

The multiplicity of types and variations of interest rate caps used across countries makes a quantitative analysis of their effects challenging (see box 1 below). This said, economic theory points to possible unintended consequences that can undermine the policy goal.

Box 1: Challenges for establishing the effect of interest rate caps

Endogeneity concerns: Interest rate caps are not implemented in a vacuum, but in response to developments that (at least perceivably) call for policy intervention. It is thus difficult to disentangle the causal effect of the cap from other factors that influence the variables of interest. The problem is especially pronounced when caps are implemented in response to a financial crisis or when they are part of a “package” of interventions.

Challenges in cross-country comparability: The cross-country comparison of restrictions is complicated due to the multiplicity of variations used (see Section 4). It is thus very difficult to

¹⁵ BNDES lending has retracted considerably since the first quarter of 2015 and is now subject to much tighter regulations.

¹⁶ <http://www.bsp.gov.ph/downloads/Publications/FAQs/intrates.pdf>

treat the implementation or removal of caps in different countries as comparable, binary events and establish average effects.

Lack of uniform data source and definition: The problems are aggravated by the lack of a uniform and regularly updated data source,¹⁷ which uses a standardized taxonomy to classify interest rate restrictions. Such a database, potentially based on surveys of regulators and market participants, would allow to follow trends in the use of restriction and enable a panel analysis of their effects.

If interest rate caps are set so low that lenders cannot recoup at least their cost of funding and overhead costs and make a non-zero risk adjusted return, it will not be economically viable for them to lend. If binding restrictions apply exclusively on the level of nominal interest rates, banks and MFIs may try to compensate for the impact of mandatory low rates by **increasing non-interest fees and charges** related to the loan. This can also be done by a bundling of products and requiring borrowers to buy costly additional services, such as credit insurance, in order to obtain a loan. Such “hidden extra costs” reduce transparency and make it more difficult for borrowers, especially those with limited financial literacy, to assess the overall cost of borrowing and “comparison shop” for loans (Helms and Reille, 2004).

Another response of lenders to low interest rate caps is to **reduce credit extension**. Studies (e.g. Staten, 2008) show that credit supply is highly elastic to price changes and consequently a ceiling resulting in lower lending rates can trigger a swift reduction in the quantity of loans available. The reduction in credit supply caused by interest rate caps may not be uniform across borrowers, but fall predominantly on high-risk borrowers. In particular, too low ceilings on lending rates can lead to a reallocation from small borrowers to large commercial borrowers or the government, which are less risky and cheaper to administer (IMF, 2017). As lending institutions move to larger loan sizes to be more efficient, clients can also feel pressed to increase their borrowing amounts in order to maintain access to external finance. This can result in borrowing amounts exceeding the client’s repayment capacity and thus, increase the **risks of over indebtedness**. In the micro-finance context, where lenders often expand outreach by funding network expansion through profits from existing

¹⁷ The Global Microscope database covers only 55 emerging and developing countries.

borrowers, interest rate caps can force lenders to **stop expanding or even withdraw services to remote rural areas** and focus instead on urban areas that are less expensive to service (Miller, 2013). Cut off from the formal financial system, small borrowers may be forced to turn to informal lenders, which are not regulated and charge substantially higher rates. Interest rate caps can thus run counter to their stated objectives of increasing affordable access to credit, especially for poor and underprivileged customers. **General uncertainties about the implementation of new or changes to existing caps** can also have impacts on financial intermediation, and ultimately limit credit.

Additional potential side effects stem from the resources needed to monitor and enforce compliance with the cap. In countries with scarce supervisory capacities, the **requirements to monitor the cap can divert resources** and limit the ability of supervisors to discharge their primary responsibilities.

Lastly, at the macroeconomic level caps on lending rates can **reduce the effectiveness of monetary policy** transmission. For example, if ceilings are linked to the policy rate and the central bank were to lower policy rates to stimulate credit growth, the accompanied decline in the lending rate ceiling would counter the intended effect on credit growth and economic activity.

The case studies below aim to shed some light on the economic impact of interest rate caps in selected countries.

5. Country Case studies: Kenya, Zambia, Cambodia, WAEMU, India and the United Kingdom

Given the difficulties in conducting a quantitative analysis of the impact of interest rate caps in a cross-country setting (see Box 1), we turn in this section to study the effects in six particular cases. These specific country case studies allow us to study the economic impact of clearly defined changes to interest rate restrictions based on events analysis. The case studies comprise the introduction of new caps in Kenya in 2016, the implementation of interest rate caps in Zambia in 2013 and the subsequent removal in 2015, the cap on microfinance institutions implemented in Cambodia in 2017, the reduction in the level of the interest rate ceiling in the WAEMU in early 2014, the move from an absolute to a relative, market-based

cap in India, and the introduction of a cap on high-cost short-term credit in the United Kingdom in 2015.

The selection of case studies is geared towards analyzing different variations of recently implemented interest rate caps and based also on data availability. Table 2 uses the taxonomy developed in Section 3 to classify the caps used in those countries along their key characteristics.

Table 2: Summary of the country case studies

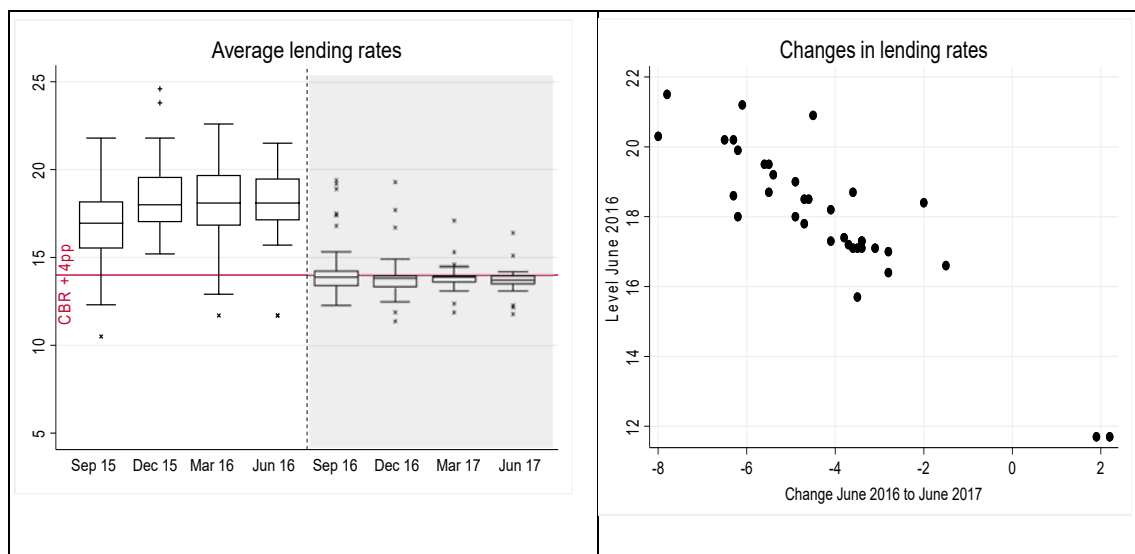
	Kenya	Zambia	Cambodia	WAEMU	India	UK
Scope						
Narrow			•		•	•
Broad	•	•		•		
Number of ceilings						
Single ceiling	•		•			•
Multiple ceilings		•		•	•	
Type						
Relative cap	•	•			•	
Absolute cap			•	•		•
Methodology						
Multiple of benchmark			NA	NA	•	NA
Fixed spread	•	•	NA	NA		NA
Benchmark						
Central bank rate	•	•	NA	NA		NA
Average market rate			NA	NA	•	NA
Binding						
Below market rate	•	•	•	•	•	
Above market rate						•
Fees						
Regulated	•	•*			•	•
Not regulated			•	•		
* The application of cap allows for among others, an arrangement fee and survey fee and a commitment fee – as well as insurances to be charged over and above the effective annual rate of interest.						

Source: Own compilation

Kenya: Blanket cap on all types of credit operations¹⁸

The Kenyan Parliament introduced a new law on interest rate controls with the aim of reducing the cost of borrowing in September 2016.¹⁹ Before the implementation of the cap, real lending rates in Kenya had been high, exceeding the Sub-Saharan Africa median lending rate by around 6 percentage points in Q2 2016. The new law caps lending rates at 4 percentage points above the central bank rate (CBR).²⁰ With the CBR currently at 10%, this implies a ceiling of 14% on loan rates. The law also sets a floor on term-deposit rates at 70% of the CBR.

Figure 8: Impact of interest rate cap on lending rates in Kenya



Notes: Lending rates that are above the 14% cap after September 2016 are due to factors such as time needed to implement new interest rates for loans, loans in arrears that have not yet been regularized and loans that are currently subject to court process.

Source: Central Bank of Kenya

The illustrations above show that the average lending rate of the 41 commercial banks in Kenya dropped from around 18% before the implementation of the cap in June 2016 to 13.9% in December 2016 and remained marginally below the level of the cap throughout 2017. Two banks reduced rates by almost 8 percentage points and 11 other banks by more than 5 percentage points following the change in regulations. Interestingly, the only two banks that had rates below the cap level of 14% in June 2016 increased rates towards the cap level

¹⁸ For a more detailed assessment see *Kenya Economic Update*. World Bank (2017).

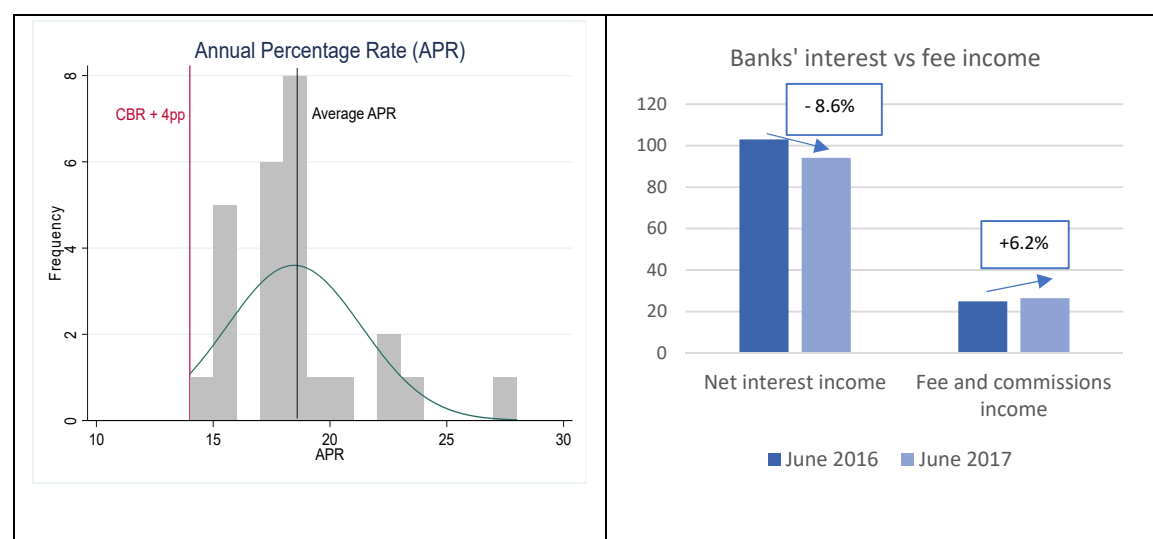
¹⁹ https://www.centralbank.go.ke/uploads/banking_circulars/1456582762_Banking%20Circular%20No%204%20of%202016%20-%20The%20Banking%20Amendment%20Act%202016.pdf

²⁰ Caps do not apply to MFIs and Savings and Credit Cooperative Organization (SACCOs).

by June 2017. Consequently, parallel to a decline in the average rate level, the dispersion of rates across banks diminished. The standard deviation decreased from 2.1 to 1.4 and the difference between the 90th and 10th percentile lending rate dropped from 3.7% to 1.9%. These observations suggest that the cap is binding in a sense that most banks had to reduce rates to comply with the new regulation. Price differentiation across commercial banks widely vanished with almost all institutions setting lending rates closely below the 14% cap.

The stated interest rate, however, does not cover the full cost of credit. A more comprehensive measure of the cost of credit is the *annual percentage rate* (APR), which additionally includes all fees and commissions charged by lenders. The figure below shows the distribution of APRs for a sample of 26 commercial banks in Kenya as of mid-November 2017. The APR of all banks is higher than the 14% interest rate cap. The average APR stands at 18.5% and the maximum is 27.5%. More than half of the banks charge an APR of more than 18%, indicating that fees and commissions increase the effective cost of the loan by at least 4 percentage points.

Figure 9: Non-interest fees and commissions in Kenya



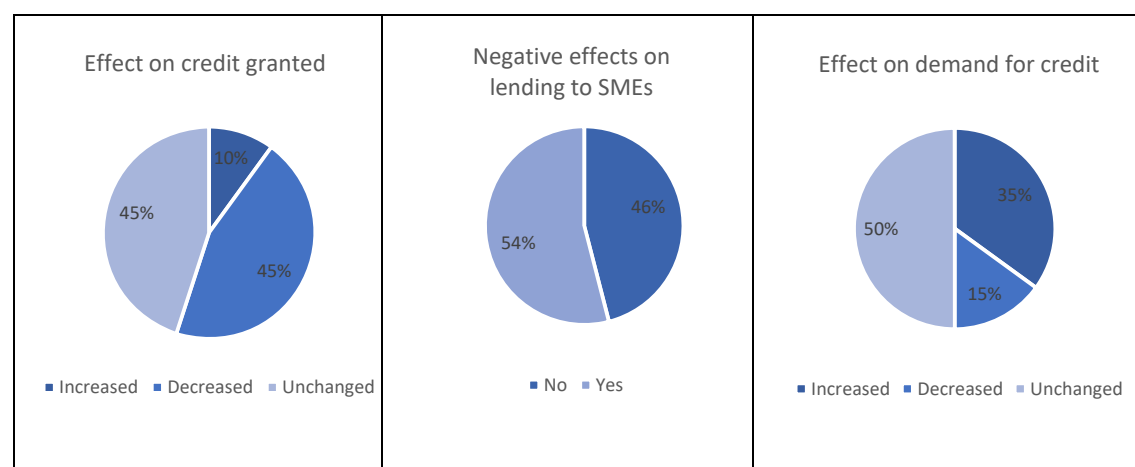
Notes: Left hand panel: APR of KS 100,000 personal unsecured loan for up to 1 year; 6-month repayment frequency as of November 2017. Right hand panel: Interest and fee income of ten banks listed on NSE in KSh bn. Source: <http://www.costofcredit.co.ke/site/index>; Company reports extracted

A related analysis of the financial statements of 10 banks listed on the Nairobi Stock Exchange (NSE) reveals that while banks' net interest income dropped by 8.6% between June 2016 and June 2017, income generated by fees and commissions increased by 6.2%. This

suggests that following the implementation of the cap banks sought to compensate the loss in interest income by adding fees and commissions.

The forced ceiling on interest rates made an already difficult lending environment, due to external headwinds and challenges in the domestic banking sector, even more difficult (World Bank, 2017). The growth rate of aggregate credit to the private sector declined to an average of 3.8% y-o-y between September 2016 and August 2017, from an average of 13.6% y-o-y over the previous 12 months. The decline in lending is also confirmed by a survey of commercial banks conducted by the Central Bank of Kenya where 45% of the banks state that the interest rate cap reduced the amount of credit granted. A majority of 54% of the commercial banks in Kenya further reports a negative effect of the interest rate cap on lending to SMEs. Also, the Kenya Bankers Association (KBA) reports a sharp decline in loan disbursements, especially for unsecured personal loans. In June 2017, for instance, while 3.2 million loan applications were made, only about 1.1 million loans were disbursed. This presents a 34% success rate, sharply down from the 50% success rate before the law was signed in August 2016.²¹

Figure 10: Impact of interest rate cap on credit supply and demand in Kenya



Source: Central Bank of Kenya Commercial Banks' Credit Survey April – June 2017

The KBA further observes that as a consequence of the interest rate cap, credit is more skewed towards the secure and short-term market end. Lenders are moving away from households and SMEs that lack collateral and instead lend to the government. Credit to the

²¹ <http://www.kba.co.ke/news60.php>

public sector increased on average by 14% y-o-y between September 2016 and August 2017. Lending to the government is a particularly attractive alternative due to the high sovereign bond yields. Yields on “risk-free” 1-year and 5-year government bonds are between 11% and 12.6% and thus only slightly below the 14% lending cap. The decline in credit supply stands in contrast to an apparent increase in demand. Roughly one-third of banks state that credit demand has picked up since the introduction of the interest rate cap.

[Zambia: Implementation and repeal of differentiated caps](#)

The Bank of Zambia introduced interest rate caps in January 2013 with the objectives of increasing access to finance for SMEs, reducing over-indebtedness and reducing the cost of borrowing, although real lending rates appeared broadly in line with the regional median. The maximum lending rate for banks was set at a 9 percentage point margin over the policy rate of the Bank of Zambia. Non-banks (regular MFIs) and development MFIs were allowed to charge a factor of 1.644 and 2.303, respectively, times the bank interest rate ceiling. With the policy rate standing at 9.25% at the time of the implementation of the cap, this resulted in ceilings of 18.25%, 30% and 42%, respectively.²² In all cases, ceilings were binding as they were set at a level below the prevailing market rate.²³ In November 2015 the Bank of Zambia reversed course and removed all ceilings on lending rates and allowed institutions to set rates freely.

During the period that the cap was effective, credit growth in Zambia slowed substantially.²⁴ The decline was especially pronounced for credit extended by MFIs, as the capped interest rates were less than half of their effective rates prior to January 2013 (FSDT Kenya, 2016). The annual growth rate in net MFI loans dropped from 63% before the implementation of the law in December 2012 to 38% at the time the cap was repealed in late 2015. The right-hand panel of Figure 11 shows that following the implementation of interest rate ceilings, the ratio of fee income to interest income of MFIs increased. The ratio jumped from 5.8% in December 2012 to a peak of 18% in June 2014. This increase suggests that MFIs

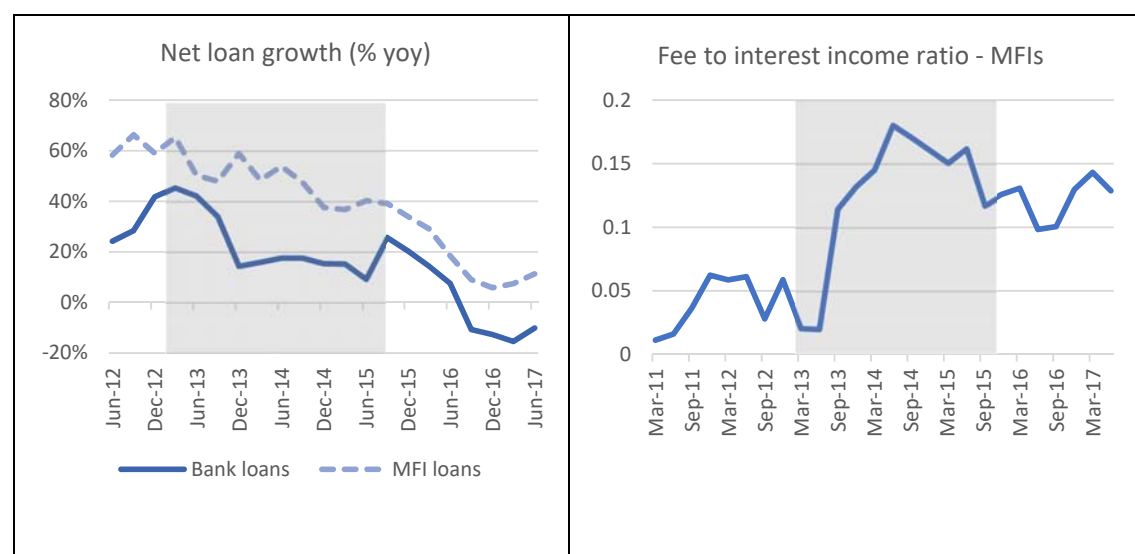
²² Ceilings increased over the next two years as the Bank of Zambia hiked its policy rate five times to 12.5% by the end of 2014.

²³ The average bank lending rate was 21.28% and the average lending rate to micro-enterprises 94.6% in 2012 (FSD Africa, 2013).

²⁴ In addition to the cap, other factors such as elevated fiscal borrowing needs might have contributed to the slow down.

tried to compensate for the lower interest rate by charging higher fees. Higher fees were also observed by an analysis of individual loan contracts, which also revealed that transparency suffered as banks stopped providing the total effective cost of the loan as an APR (World Bank, 2014). The increase in fees was not always explicitly mentioned and non-interest fees were sometimes expressed as a ratio, making it difficult for customers with limited financial literacy to understand the full cost of the loan.

Figure 11: Effect of interest rate caps on in Zambia



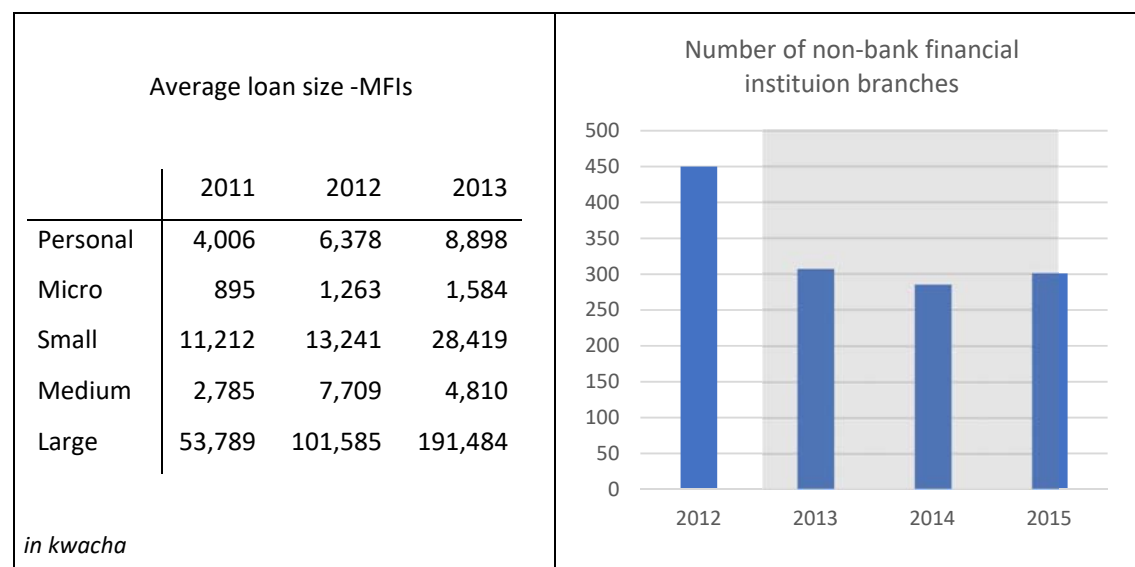
Source: Bank of Zambia

Data in Figure 12 suggest that following the implementation of the cap MFIs also tried to reduce overhead costs by increasing the average loan size - large loans are cheaper to administer - and thinning out their branch networks. The MFI sector experienced some consolidation and several institutions, especially some consumer lending MFIs that had charged very high rates prior to the cap, exited the market.

In November 2015 the Bank of Zambia removed all caps and issued a circular on the disclosure of fees to promote transparency in pricing. Assessing the direct impact of the repeal is difficult as it coincided with a period of significant economic distress in Zambia, which strongly affected the financial sector and impacted interest rates. Still, data suggest that following the repeal lending rates started to increase, for SME loans the median spread over the policy rate rose from the capped 9% in June 2015 to 19.5% in June 2017, and the price differentiation across banks widened. Parallel to rising interest rates banking fees seemed to

decline. Average monthly maintenance fees, for example, dropped by around one-third over these two years. The repeal of the cap, however, did not change the trend of slowing credit growth, which continued throughout 2016 as Zambia continued to struggle with the economic fallout from lower copper prices, El-Nino related effects on agriculture, fiscal challenges and a sharp depreciation of the domestic currency.

Figure 12: MFIs - Larger loans and fewer branches after the implementation of the cap



Source: World Bank (2014), Bank of Zambia

Cambodia: Interest rate caps exclusively on microfinance institutions

In March 2017 the National Bank of Cambodia (NBC) imposed an interest rate ceiling of 18% per annum for loans of any maturity extended by microfinance institutions. The limit is set well below the average interest rate of 34.5% for loans in KHR and charged by MFIs in 2016²⁵ and even 2.5 percentage points below the average rate charged by commercial banks in 2016. The stated objective of the cap is to “... protect consumers from excessive interest charged by the institution [MFIs] and to effectively promote the use of affordable loans.”²⁶ The regulation came despite a report published by the NBC in November 2016 warning about the potential negative effects of interest rate caps on credit extension to small borrowers.²⁷

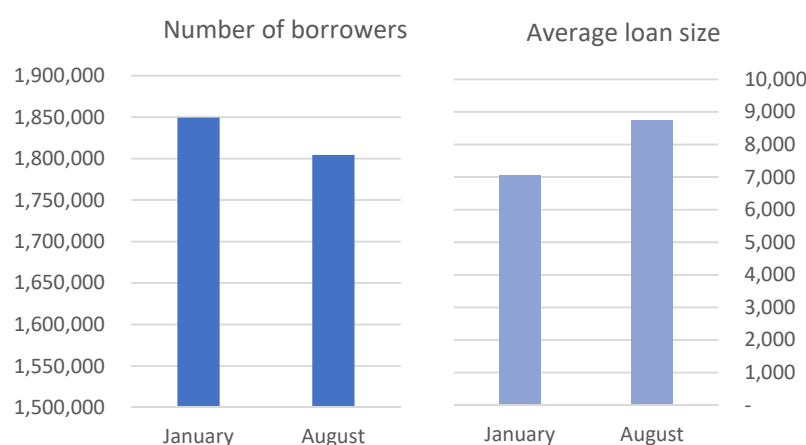
²⁵ https://www.nbc.org.kh/download_files/supervision/sup_an_rep_eng/Annual-Report-2016-ENG-Final.pdf

²⁶ https://www.nbc.org.kh/download_files/legislation/prakas_eng/Prakas-on-Interest-Rate-Cap-Eng.pdf

²⁷ https://www.nbc.org.kh/download_files/research_papers/english/8074InterestRateUnderstandingand-PossibleDistortionsofInterestRateCapinCambodia.pdf

Following the implementation of the cap, nominal lending rates of MFIs decreased and interestingly also lending rates by deposit-taking banks, which were mostly not subject to the cap,²⁸ converged towards the 18% level. Initial data on MFI lending activity show that the number of borrowers decreased by around 45,000, or 2.5%, between January and August 2017. Over the same period the average loan size increased, suggesting that fewer small loans were disbursed and MFIs tried to reduce costs and increase the efficiency of their lending operations.

Figure 13: MFI borrowers and loan size before and after the cap



Notes: 2017 data. Average loan size is expressed in KHR thds. It is calculated by dividing the total amount of MFIS loan outstanding by the number of borrowers.

Source: National Bank of Cambodia

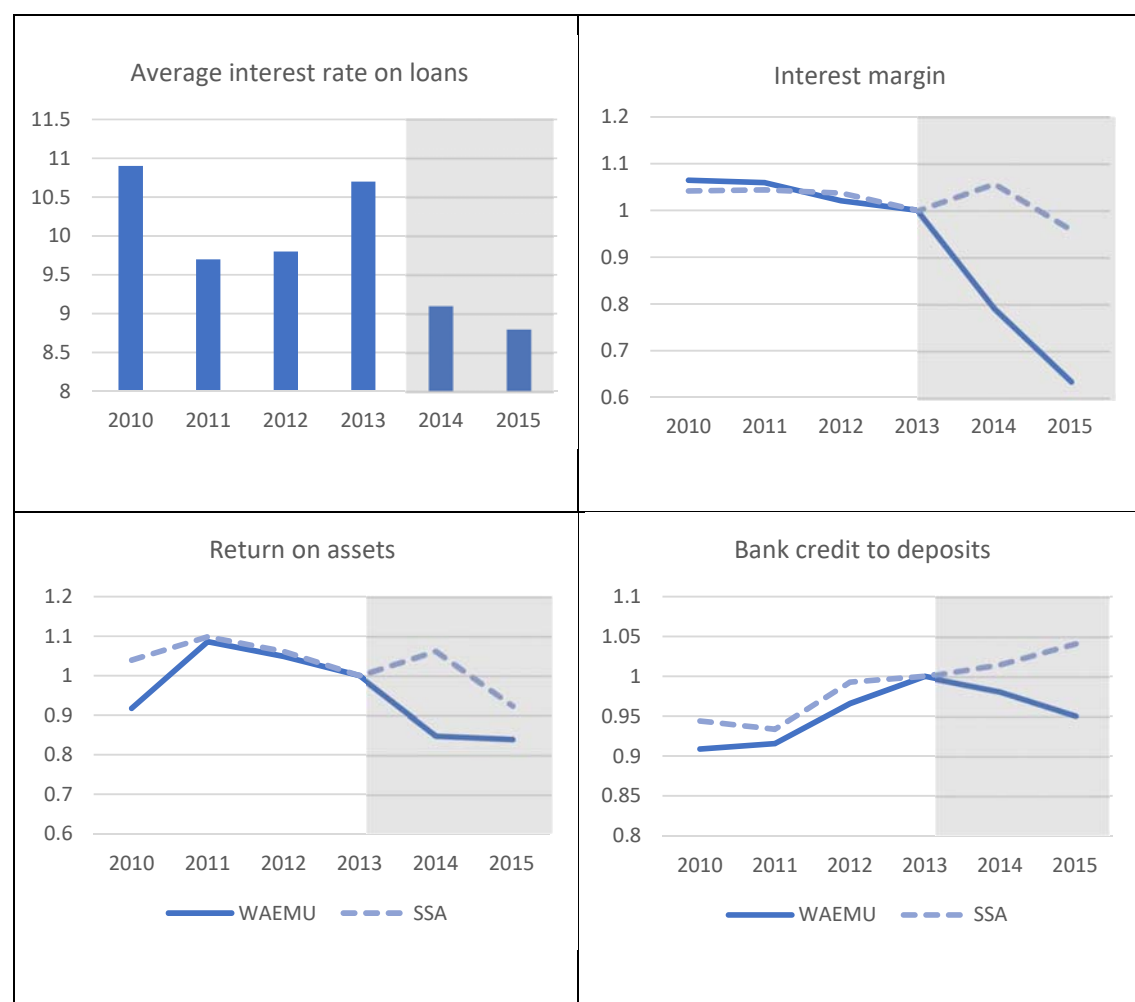
WAEMU: Reduction of the interest rate ceiling

Interest rates in Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo, the eight member countries of the West African Economic and Monetary Union (WAEMU), have been capped since 1997. The caps are set as absolute limits with different levels applied to banks and non-bank financial institutions, mainly MFIs. On 1st January 2014, the levels of the caps were revised downwards by the BCEAO. For banks, ceilings went from 18% to 15% and for microfinance institutions they went from 27% to 24%.²⁹ Before the downward revision real lending rates were substantially higher than the Sub-Saharan Africa median.

²⁸ The cap applies to microfinance deposit-taking institutions but not to commercial banks.

²⁹ <http://www.bceao.int/Avis-no-003-08-2013-aux.html>

Figure 14: Effect of interest rate caps in WAEMU



Notes: Charts 2 to 4 plot the average level of the respective variable for the WAEMU member countries in dark blue and the average for all other countries in the Sub-Saharan Africa (SSA) region in light blue (dotted lines). The series are standardized to 1 in 2013 by dividing them by their respective values in 2013.

Sources: IMF, World Bank

The figures above show that following the decision to reduce the rate ceiling in early 2014 average lending rates in the region dropped, suggesting that the lower ceilings were binding. The average rate on loans declined from 10.7% in 2013 to 9.1% in 2014 and continued to fall to 8.8% in 2015.³⁰ Lower lending rates resulted in decreasing interest margins for banks. The average interest rate margin in WAEMU in 2014 was more than 20% lower than in the previous year and continued to fall in 2015. Parallel to falling interest rate margins, the profitability of the banking sector took a hit after the ceilings on interest rates were lowered.

³⁰ Data based on IMF Country Report No. 17/99. BCEAO data are slightly different.

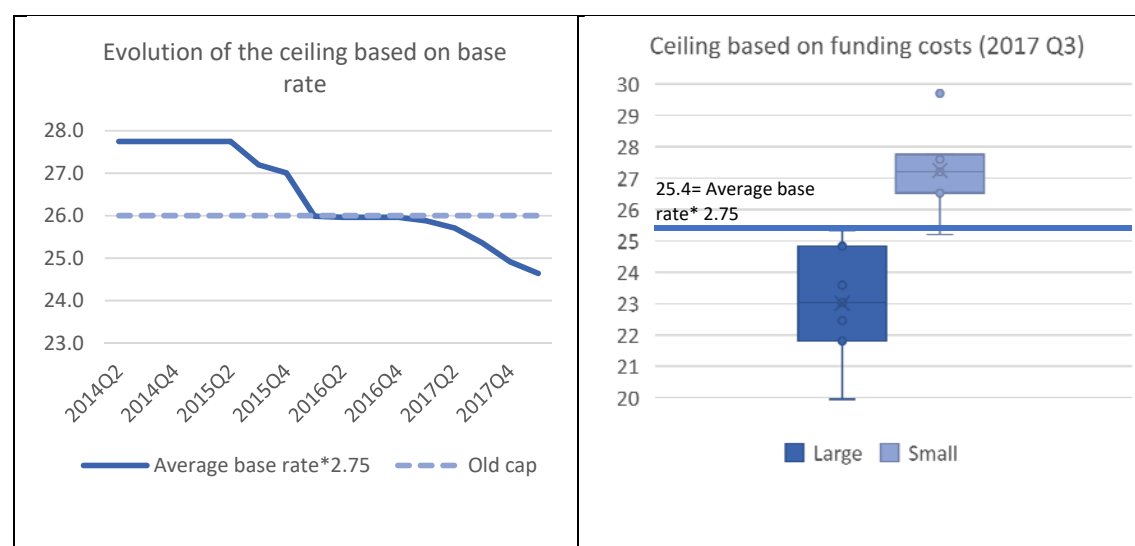
Average return on assets fell by around 15% year-on-year in 2014 and did not recover in 2015. Finally, at the aggregate level the ratio of credit to deposits, which was rising until 2013, declined after 2013 suggesting that banks were more reluctant to extend credit.

Developments in WAEMU in this period contrast to trends in the broader Sub-Saharan Africa region as indicated by the dashed lines in panels 2-4. Compared to 2013, average interest rate margins, profitability and credit to deposit ratios increased in 2014 and did not fall in Sub-Saharan Africa as was the case in the WAEMU. This suggests that the developments in the WAEMU countries were driven by idiosyncratic factors, such as the reduction in interest rate caps, rather than by regional or global trends.

India: Moving from an absolute to a flexible, market-based cap

In the aftermath of the Andhra Pradesh (AP) microfinance crisis, India launched interest rate caps on loans from microfinance institutions. The cap was initially set at a fixed limit of 26% per annum on individual loans in December 2011. However, to allow for *Non-Banking Financial Company-Micro Finance Institutions (NBFC- MFIs)* operational flexibility, the Reserve Bank of India replaced this absolute cap with a more nuanced framework in 2014.

Figure 15: Interest rate ceilings on MFIs in India



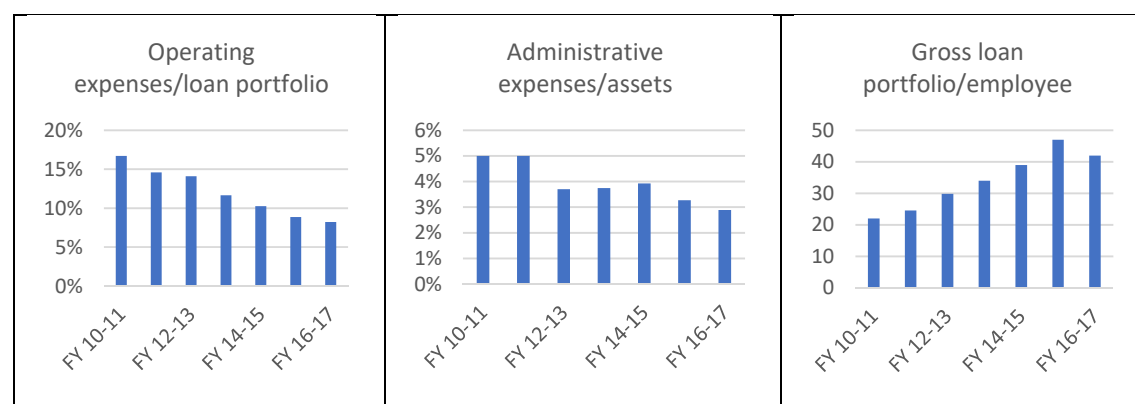
Sources: RBI, MFIN, own calculation

According to the updated regulation, the lending rate ceiling is calculated to be the lower of the following: i) cost of funds (at market rates) plus margin (10% for large MFIs (loan

portfolio exceeding INR 1bn) and 12% for the others); or ii) the average base rate of the five largest commercial banks by assets multiplied by 2.75.³¹ This modification should ensure that in a low cost environment, the ultimate borrower will benefit, while in a rising interest rate environment NBFC-MFIs can continue to lend sufficiently at viable terms.³²

The figure above shows the different components of the interest rate cap framework in India. In the left-hand panel it plots the development of the ceiling based on the average base rate of the five largest banks. It can be seen that, when introduced in 2014, this ceiling was higher than the previously applied 26% absolute cap. As the average base rate has declined since then the level of the cap fell from 27.7% in 2014 to 24.6% in Q1 2018. Due to the calculation of the ceiling as a multiple of the benchmark rather than as a fixed spread the percentage point reduction in the cap exceeded the percentage point reduction of the base rate and the difference between the two variables declined from 17.7% to 15.7%. The right-hand panel shows that the level calculated based on the average base rate is the effective upper limit for almost all small NBFC-MFIs, as their funding costs plus 12% margin are higher and hence the lower threshold applies. In contrast, for large NBFC-MFIs the effective cap is lower. It varied from 20% to 25.3% depending on the individual funding costs in late 2017. Average lending rates of the individual MFIs are closely below their respective caps, suggesting that the caps are binding.

Figure 16: Cost and productivity improvements in the MFI sector



Notes: Gross loan portfolio per employee is expressed in Rs. lakhs.

Source: MFIN

³¹ Moreover, the maximum variance permitted for individual loans between the minimum and maximum interest rate cannot exceed 4%. Processing charges are capped at 1% of gross loan amount.

³² <https://rbidocs.rbi.org.in/rdocs/notification/PDFs/43BF010714FSC.PDF>

The caps do not seem to distort the MFI market. MFIs' credit portfolio and branch network grew at a healthy pace over the past years unfazed by the cap. The sector is generally profitable³³ boosted by large improvements in cost efficiency and productivity. The shares of operating expenses to total loan portfolio and of administrative expenses to assets almost halved between FY 2010-11 and FY 2016-17. Over the same period the average loan portfolio handled per employee doubled, indicating improvements in operational productivity. These observations suggest that the interest rate caps might have created pressure on the MFI sector to reduce operating costs and increase efficiency. Efficiency increases were also supported by regulatory changes introduced by the RBI at the time, including improvement to the agent banking network and creation of payment banks.

United Kingdom: Cap on high-cost short-term credit

In January 2015 the United Kingdom's Financial Conduct Authority (FCA) implemented a cap on high-cost short-term (HCST) credit,³⁴ including payday loans. The principal aim of the interest rate cap was to protect HCST credit consumers from excessive charges, including default charges and interest. The cap consists of the following three components:³⁵

- an initial cost cap of 0.8% per day – interest and fees charged must not exceed 0.8% per day of the amount borrowed
- a £15 cap on default fees – if borrowers default, fees must not exceed £15. Firms can continue to charge interest after default but not above the initial rate; and
- a total cost cap of 100% (applying to all interest, fees and charges)– borrowers must never pay more in fees and interest than 100% of what they borrowed.

Two years after the implementation, the FCA conducted an assessment of the impact of the cap.³⁶ It reports that the cap in combination with other regulatory measures³⁷ was followed by a sharp contraction of the size of the HCST market. The number and value of loans

³³ RoA was 1.77% and RoE 12.73% in FY 2016-17 according to MFIN.

³⁴ High-cost short-term credit is defined as a credit arrangement with an APR or more than 100% and which is due to be substantially repaid within a maximum period of 12 months.

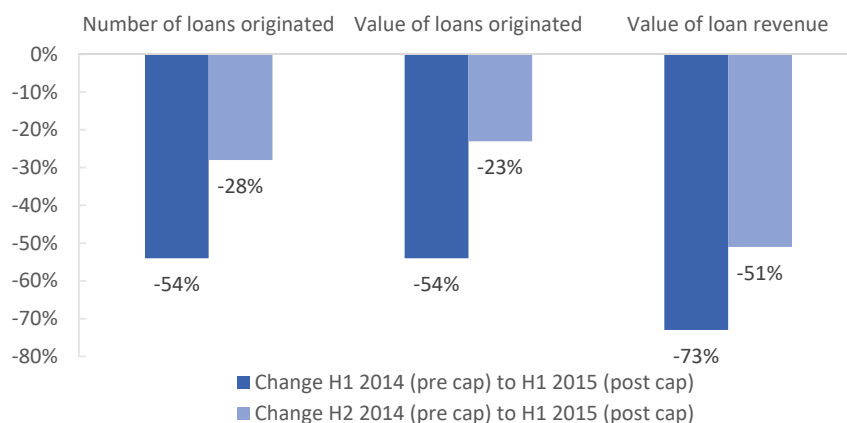
³⁵ <https://www.fca.org.uk/firms/price-cap-high-cost-short-term-credit>

³⁶ <https://www.fca.org.uk/publication/feedback/fs17-02.pdf>

³⁷ In addition to the interest rate cap, the FCA implemented several other regulations to the HCST credit market, including restrictions on the number of rollovers, transparency requirements, and the active use of supervisory and enforcement powers to identify and penalize misconduct.

originated dropped by more than 50% between the first half of 2014 and the first half of 2015.³⁸ Revenues and profits of firms dropped and many firms no longer managed to cover their costs and exited the market. As the HCST market is small (outstanding HCST credit is less than 0.2% of GDP), these developments did not impact the wider financial system in the United Kingdom.

Figure 17: Changes in HCST loan number, value and revenues



Source: FCA

To analyze the impact on consumers, the FCA distinguishes between consumers that obtained a loan following the introduction of the cap and those consumers that had obtained an HCST credit before the cap, but lost access thereafter. It shows that the former group benefitted from the implementation of the cap. The average cost of credit has declined and borrowers are more able to repay the loan on time. Default rates have declined and fewer late fees are charged. Consumers also benefit from the increased availability of longer-term loans.

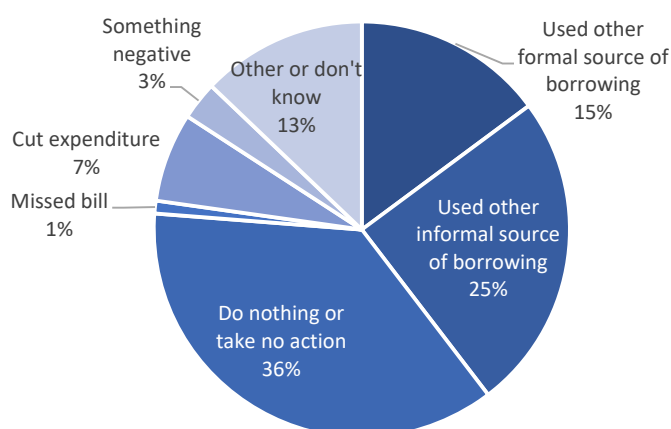
However, a report by the Consumer Finance Association (CFA) highlights that from the start of 2014 until mid-2015 the acceptance rate at the final stage of the loan application fell from 50% to around 30%.³⁹ This led to many consumers losing access to the credit that they had in the past. Declined loan applicants were on average younger, more likely to be

³⁸ The decline in borrowers cannot be linked entirely to credit supply reductions as also fewer people applied for loans due to improved financial performance, less marketing by lenders, etc.

³⁹ <http://cfa-uk.co.uk/wp-content/uploads/2017/03/030317-HCSTC-and-market-functioning-Oxera.pdf>

unemployed and poorer than successful applicants. Survey data show that only 40% of unsuccessful loan applicants reacted to the loss in access to HCST credit by either turning to informal sources of borrowing, such as loans from family and friends, or to other formal sources of borrowing, including high-cost products, such as revolving credit and personal loans. 8% state that they had to cut expenditures or missed bills. The largest share, over one-third of respondents, did not take any action after their loan application had been declined. Overall, this suggests that for the majority of declined HCST loan applicants the cap prevented a rise in indebtedness, although in some cases at the expense of painful cut-backs in expenditures.

Figure 18: Reaction of declined payday loan applicants



Notes: The Figure plots the answer to the following survey question: *When you were unable to get a payday loan on this occasion, what did you do?*

Source: FCA, Critical Research (<https://www.fca.org.uk/publication/research/price-cap-research.pdf>)

Lessons from the country case studies

The case studies on Kenya, Zambia, Cambodia, the West African Economic and Monetary Union (WAEMU), India, and the United Kingdom serve as examples for different variations of interest rate regulations and highlight several aspects of their design and effects. Although the impact of caps varies substantially based on these differences and causal statements of effects are complicated by simultaneous developments, the case studies point to the following general effects of interest rate ceilings, which are broadly in line with the consequences identified based on economic intuition:

- *Lower nominal rates, but higher fees.* Binding caps, i.e. ceilings set below prevailing market rates, result in an instantaneous decline in nominal lending rates. Price dispersion across banks diminishes and lending rates converge towards the level of the cap. This effect is especially pronounced when a single, blanket cap that does not allow for price differentiation based on lender or borrower characteristics is applied. Nominal lending rates, however, are only one part of the overall cost of credit and the analyses show that banks' fee income increases substantially following the introduction of interest rate caps. This suggests that lenders raise fees and commission to make up for the decline in interest rates. Increases in fees are even observed in cases where restrictions also apply to non-interest costs of the loan.
- *Reduced transparency.* The increased use of non-interest charges can reduce price transparency and make it more complicated for borrowers to assess the overall cost of the loan.
- *Reduced credit supply, especially for small and riskier borrowers.* Credit growth slows following the introduction of interest rate caps and loan approval rates decline. The extent of the decline depends on the scope of the restrictions. Whereas narrow caps affect primarily a clearly defined market segment, broad restrictions can reduce overall credit supply in the economy. Blanket caps further affect the distribution of credit as they result in a particularly large decline of unsecured and small loans, as well as in credit to SMEs and high-risk borrowers. Average loan size increases suggest a reallocation from small to large borrowers. If interest rates for government bonds are higher than the level of the interest caps, a reallocation of credit away from the real sector to the sovereign may also take place.
- *Lower number and branch density of MFIs.* Binding caps for microfinance institutions, either caps directly targeted at the industry or undifferentiated, economy-wide caps that are primarily designed for banks and hence set at levels too low for MFIs, are followed by a reduction in the overall number of microfinance institutions in the market as well as a reduction in branch density. This may be negative for financial inclusion if no alternative delivery channels are available.
- *Caps set at high levels do not seem to affect the overall market and can help limit predatory practices by formal lenders.* Non-binding caps, i.e. caps set well above market rates, affect

only extreme pricing with little impact on the overall market. Such caps can protect consumers from excessive borrowing costs and help to reduce default rates and over-indebtedness, especially if the non-regulated market is small. However, even caps set well above market rates can result in the exclusion of some high-risk borrowers.

- *Pressure to lower operating costs and increase efficiency.* If ceilings on interest rates are set at binding levels that are not so low that lenders can no longer remain in the market and price risk appropriately, they can put pressure on lenders to reduce administrative expenses and increase operational efficiency, especially if alternative delivery channels are available. However, calibrating the cap at the “right” level is difficult.
- *Adverse impact on bank profitability.* Aggregate data point to a fall in banks’ interest income and an accompanied decline in profitability following the implementation of interest rate caps.

6. Alternatives to interest rate caps

Given these potential negative side effects of interest rate caps it is worth considering alternative ways for reducing interest rates. The optimal solution depends on the intended policy goal.

If the intended policy goal is to reduce the overall cost of credit in the economy or segments thereof, alternative solutions should be based on the source of the distortion causing the “excessive” rates e.g., lack of competition, risk perception, overhead costs, or macroeconomic considerations. To this end, an effective **credit monitoring mechanism** is essential for providing disaggregated data on underserved segments and pin pointing the type of distortion.

Lack of competition (excess profits): If incumbent banks and MFIs enjoy significant market power allowing them to earn high profits by setting elevated rates, lending rates can be reduced by **fostering competition in the financial sector**. The paradigm is that competition between financial institutions should force them to compete on the price of loans that they offer and hence reduce interest rates. Competition can serve to bring down profit margins and/or reduce overhead costs by improving efficiency (Miller, 2013). Helms and Reille (2004) show that increases in competition were the main reason for declining lending rates in Bolivia, Bosnia, Cambodia and Nicaragua. Limited competition in the financial sector is not necessarily

due to collusive behavior of incumbent banks, but often the result of structural weaknesses in the legal and institutional framework that prevent, for example, the orderly resolution and exit of weak banks or provide implicit subsidies for “too-big-to-fail” systemic banks. If that is the case, **strengthening regulatory and supervisory capacities** can help to alleviate these shortcomings and to reduce rates by fostering competition.

Risk premium (risk perceptions): If the main reason for high interest rates is information asymmetry resulting in large risk premia, solutions should focus on addressing the underlying information gaps. The **promotion of credit bureaus** can be a useful policy approach to facilitate access to more detailed financial records of potential borrowers and help to reduce risk premia and banks’ screening costs (Maimbo and Gallegos, 2014). In countries without comprehensive national identification systems, promoting ways to reliably and **cost-effectively verify a borrower’s identity** are also important measures to reduce information asymmetries. Risk premia can also be reduced by more **efficient loan foreclosure procedures**, including the introduction of small claim procedures, summary procedures for uncontested debt, or alternative dispute resolution procedures, that allow banks to limit the losses stemming from default of the borrower (Beck and Fuchs, 2004). Risk premia can also be lowered by choosing the **appropriate lending technology**, which Berger and Udell (2006) defines as a combination of primary information source, screening and underwriting policies/procedures, loan contract structure, and monitoring strategies/mechanisms.

Overhead costs: If high interest rates are driven by high general administrative costs, some of the policy measures mentioned above can reduce the application costs, i.e. credit bureau and reliable borrowers’ IDs. With respect to credit delivery, measures to promote alternative delivery channels, such as agent networks, and to promote the digitalization of financial services in general can help reduce such costs.

Cost of funds: In some instances, the underlying source of the distortions are large fiscal borrowing needs, in combination with shallow domestic debt markets and limited access to global debt markets, that drain liquidity and push up Treasury yields. As the government yield curve serves as the risk-free benchmark to price financial products and often as the de-facto floor for wholesale deposits of the relevant maturities in an economy, Treasury yields affect banks’ costs of funds and ultimately their lending rates. Addressing this source of distortion

requires a **holistic macroeconomic solution**, which includes effective fiscal and debt management frameworks as well as capital market development.

On the other hand, if the policy aim is to protect consumers from usury rates, alternative solutions should focus primarily on **promoting financial consumer literacy and consumer protection**. Financial literacy empowers borrowers to notice exploitative loan conditions more easily and can help to protect them from predatory lending. Another approach to protect borrowers from usury is to **enhance transparency**. Requiring financial institutions to disclose interest rates and loan conditions as well as preventing the use of “hidden costs and fees” also fosters competition and puts downward pressure on effective interest rates (Maimbo and Gallegos, 2014). Financial consumer protection can also be enhanced by **debt counseling** and **redressal mechanisms** for consumers.

While the policies described in this section tackle the root causes of interest rate caps, their implementation does require time and the impact will only be felt over the medium-term.

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Appendix:

Table A1: The use of interest rate caps around the world

Europe and Central Asia	Africa	Middle East and North Africa	Asia Pacific	Latin America and Caribbean	North America
Armenia	Benin*	Algeria	Australia	Bahamas, The	Canada
Belgium	Burkina Faso*	Egypt, Arab Rep.	Bangladesh	Bolivia	United States
Estonia	Cameroon**	Lebanon	Cambodia	Brazil	
Finland	Central African Republic**	Libya	China	Chile	
France	Chad**	Malta	India	Colombia	
Germany	Congo, Rep.**	Morocco	Indonesia	Ecuador	
Greece	Côte d'Ivoire*	Syrian Arab Republic	Japan	El Salvador	
Ireland	Equatorial Guinea**	Tunisia	Korea, Rep.	Guatemala	
Italy	Gabon**		Lao PDR	Honduras	
Kyrgyz Republic	Guinea-Bissau*		Myanmar	Jamaica	
Netherlands	Kenya		Nepal	Nicaragua	
Poland	Mali*		Philippines	Paraguay	
Portugal	Niger*		Sri Lanka	Uruguay	
Russian Federation	Nigeria		Thailand	Venezuela, RB	
Slovak Republic	Senegal*		Vietnam		
Slovenia	South Africa				
Spain	Togo*				
Switzerland					
Turkey					
United Kingdom					

* WAEMU member; ** CEMAC member

Sources: EIU Global Microscope for Financial Inclusion, ADB, IMF, World Bank, National Authorities