The Paradoxical Case Against Interest Rate Caps for Microfinance - And: How FinTech and RegTech Resolve The Dilemma

Dirk Zetzsche, University of Luxembourg
Dirk.Zetzsche@uni.lu

Tsany Ratna Dewi, University of Luxembourg
Tsanyratna.Dewi@uni.lu

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Dirk A. Zetzsche* & Tsany Ratna Dewi**

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* Dr. iur., Dr. iur. habil., LL.M. Professor of Law, ADA Chair in Financial Law (Inclusive Finance), Faculty of Law, Economics and Finance, University of Luxembourg, and Director, Centre for Business and Corporate Law, Heinrich-Heine-University, Düsseldorf, Germany.
** BSc., M.A., Ph.D. candidate, University of Luxembourg, research associate, in Financial Law (Inclusive Finance), University of Luxembourg and member of European Banking Institute Young Researchers Group (EBI YRG).

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I. Reanimating the dead: Interest caps as old and new trend in the Global South

During the second wave of financial inclusion, microfinance institutions funded primarily by Western donors and investors became increasingly important. At that time, hard interest caps were deemed a phenomenon of the past. However, recent experience tells us that this was incorrect.

First, a range of studies found that the median interest rate of (microfinance institutions) MFIs around the world was 26%pa in 2006, 35%pa in 2008 and 27%pa in 2011. Some regard these already high numbers as too low since they ignore the effect of compulsory savings. However, more significant than the median were the results from the extremes of the range, with the average rate in Uzbekistan exceeding 80%pa and 17%pa in Sri Lanka. These extreme positions triggered regulatory responses, as they left the impression that the world’s poorest parts of society pay the world’s highest cost for microfinance and small business capital.

Subsequently, approximately 40 developing countries and transitional bodies imposed interest rate caps. The impact of these caps is not yet entirely understood. The official reasoning, the advantages and – from our perspective – serious disadvantages of hard interest rate caps for microfinance and financial inclusion will be discussed in this paper. With a view

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1 On the stages of microfinance policies see the study of Jason Lin & Jane Sung, *Comparative Study of the Regulatory Framework on Microfinance*, 3 J. BASIC APPL. RES. 53–58 (2017), at 56. They researched the specific banking laws and regulations for each country to evaluate about the strictness of its laws and regulations over microfinance institutions, stating as follow: ‘…Four different categories were used to determine the strictness of the regulations imposed on microfinance institutions. One, if there were specific microfinance institution laws in place in the country to govern these institutions. Two, if the microfinance institutions were required to have a minimum start-up capital requirement. Third, if there were interest rate restrictions on the amount of interest the institutions could charge on the loans that they give out. Fourth and final, if there are additional financial ratios that need to be maintained by the institutions throughout their operations. The last three categories were evaluated by whether the specific requirement was imposed by specific microfinance laws or the regular banking laws of the country.’; on MFIs donor see also Bert D’Espallier et al., *From NGOs to Banks: Does Institutional Transformation Alter the Business Model of Microfinance Institutions?*, 89 WORLD DEV. 19–33 (2017), http://dx.doi.org/10.1016/j.worlddev.2016.06.021, at 34, stating that ‘The global microfinance sector has continued growing regardless, though it has undergone structural changes. Initially a purely philanthropic idea, microfinance started out in the 1970s as a not-for-profit activity sponsored by donors.’; Anis Chowdhury, *Microfinance as a Poverty Reduction Tool — A Critical Assessment*, UN 1–13 (2009), at 5 (stating: ‘Jonathan Morduch’s (2000) panel discussion with senior and experienced donors and NGO representatives in Colombia suggests that not more than 5 percent of microcredit programmes world-wide could become financially viable without subsidy.’ Chowdhury continues by citing The Economist on July 16, 2009 mentioning that: ‘Despite growing interest from private investors, 53% of the $11.7 billion that was committed to the microfinance industry in 2008 still came at below-market rates from aid agencies, multilateral banks and other donors’).

2 Richard Rosenberg, Adrian Gonzalez & Sushma Narain, *Are Microcredit Interest Rates Excessive?*, February CGAP Br. Feb. (2009), at 2.

3 Christoph Kneiding & Richard Rosenberg, *Variations in Microcredit Interest Rates*, CGAP Br. July (2008), at 1.

4 Richard Rosenberg et al., *Microcredit Interest Rates and Their Determinants: 2004–2011*, in MICROFINANCE 3.0: RECONCILING SUSTAINABILITY WITH SOCIAL OUTREACH AND RESPONSIBLE DELIVERY 69–104 (Doris Köhn ed., 2013), at 75.

5 Aneel Karnani, *Regulate Microcredit to Protect Borrowers*, 1133 ROSS SCH. BUS. WORK. PAP. (2009), at 12.

6 Kneiding and Rosenberg, supra note 3, at 1.

7 Cf. on the different types of authority used for imposing interest rate caps Brigit Helms & Xavier Reille, *Interest Rate Ceilings and Microfinance*, Sept OCCAS. PAP. No 9 1–19 (2004), at 1.
to identifying a better solution than hard interest rate caps, we propose alternative means to further the policy goals of achieving the adequate or ‘fair’ interest rate outcomes that regulators had in mind when imposing hard interest caps.

In this paper, we focus on hard interest caps, a subset of interest rate caps. To be clear, we do not argue against regulatory or social mechanisms that aim to achieve ‘fair’ interest rates. Some type of interest mitigating device is available in more than half of all countries around the world: A World Bank study from 2014 lists 76 of 152 countries (around 40%) within the World Bank universe that apply some type of interest cap. These countries include Australia, the Bahamas, Canada, Germany and the United States. However, we take a stance in this paper against hard interest rate caps. Clarifying the terminology is of prime importance. We distinguish between three types of interest caps. First, in the case of ‘soft caps’, social ethics, or a gentlemen’s agreement among a nation’s economic and political elites serves to keep interest rates low. Second, mezzo caps may enforce social norms and prohibit usury practices by demanding fair interest rates. Enforcement usually takes places via private law mechanisms, such as denying the enforcement of a usurious contract in court. Finally, a hard cap fixes an interest rate on an absolute level (for example 20%) or a relative level (for example 10% over a benchmark rate). Such a cap is often enforced by a central bank or a government agency.

In the area between hard and mezzo caps, we find other caps, enforced by a central bank or bank regulator, that refer to the average interest rate charged by similar institutions. Such a cap may, for example, be 33% more than the average effective interest rate charged by microfinance institutions. We will show that, although these types of interest rate caps avoid some of the specific disadvantages of hard caps, they still exhibit some of the broader disadvantages of interest rate caps we identify in this paper if they are enforced by a central bank or other government agency. This justifies discussion of these caps in the context of hard interest rate caps, although we are aware of the thin line between these and the mezzo caps we find in many jurisdictions.

As shown in Table 1, at least 31 hard interest caps have been introduced since 1973; with the majority in developing or emerging economies.

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8 Samuel Munzele Maimbo & Claudia Alejandra Henriquez Gallegos, Interest Rate Caps around the World: Still Popular, but a Blunt Instrument, 7070 WPS 1–37 (2014), at 5-7.

9 See on interest rate caps, in general, Timothy E. Goldsmith & Nathalie Martin, Interest Rate Caps, State Legislation, and Public Opinion: Does the Law Reflect the Public’s Desires?, 89 CHIC. KENT. LAW REV. 115 (2014), at 129-130.

10 Helms and Reille, supra note 7, at 10 (citing Ghana and Ethiopia as examples for countries where all interest rate caps were removed, yet majority of their MFIs have chosen to preserve a lower interest rate and this artificially low interest rate is intimately linked to political pressure).
Figure 1: Interest Rate Caps Around the Globe - 1973-2017
| Country | Date of cap introduction | Maximum allowed interest |
|---------|--------------------------|--------------------------|
| Argentina | 2013 | 25% |
| Australia | 7/2010 | One-off establishment fee of 20% (maximum), monthly account keeping fee of 4% (maximum). |
| Bangladesh | 7/2011 | 27% for microcredit loans. |
| Benin, Burkina Faso, Côte d’Ivoire, Guinea Bissau, Niger, Senegal, Togo | 2014 | 15% for banks, 24% for other financial institutions, Decentralized Financial Systems (DFS) and other economic agents. (Set by the Central Bank of the UMOA - Union Monétaire Ouest Africaine or West African Monetary Union/WAEMU). |
| Bolivia | 4/2014 | Interest rate cap for microfinance is 11.5%, for small productive sector is 7% and medium and big productive sector is 6% |
| Brazil | 2004 | Up to 4% per month or up to 3% in those with a maturity of 120 days or more. |
| Cambodia | 4/2017 | 18%. |
| Cameroon, Central African Republic, Chad, Equatorial Guinea, Gabon, Republic of the Congo | 2012 | The microfinance sector interest rate should be calculated on the nature of the credit provided and if the interest rate exceeds 33%, it is risky. (Set by the CB of CEMAC - Communauté Économique Et Monétaire De L’Afrique Centrale or The Economic and Monetary Community of Central Africa). |
| Chile | 1981, upd. 2013 | Around 35% |
| Colombia | 2010, upd. 2017 | 36.76%. |
| Ecuador | 2015 | Depends on the amount of the given loan (Microcrédito de Acumulación Ampliada, Microcrédito de Acumulación Simple or Microcrédito Minorista), it ranges from 25.50%-30.50%. |
| Honduras | January 18, 1973 | Law Regulation for Non-Banking Lenders: 18% annually for loans with mortgage guarantee and 24% annually for loans with pledge or personal guarantee. |
| Country     | Date       | Description                                                                                                                                 |
|-------------|------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| India       | 2011, upd. 2014 | 26% on microfinance loans for up to 50,000 Rupees (2011); since April 2014, 10% for large MFIs (loans portfolios exceeding Rs.100 crore), 12% for the others. |
| Kenya       | 9/2016     | No more than 4% over the base rate set and published by the Central Bank of Kenya.                                                          |
| Myanmar     | 2011       | 2.5% per month, 30% annually.                                                                                                               |
| Paraguay    | 2003, with almost every month upd. Since 2006 in its CB website | Not exceed 30% the average of the annual effective rates received by the Banks and Financial Institutions on the consumer loans, according to the terms and coins in which credits are granted. |
| Poland      | 2016       | Central Bank Rate plus 3.5% (per 1 January 2016: 5%).                                                                                       |
| Thailand    | Q1/2014    | All costs (interests and fees) not more than 36%.                                                                                           |
| Uruguay     | 2007, upd. 2017 | Cash loans in local currency provided by financial intermediation companies have obligatory average rates: for micro-company and household with period up to 366 days, it ranges between 25,67% to 33,87%. |
| Vietnam     | 6/2013     | 9% for credit institutions and foreign bank branches, 10% for the People's Credit Funds and Microfinance Institutions                   |
The argument in favor of interest rate caps is straightforward: If banks and MFIs may not charge interest beyond a certain rate they will consequently not charge excessive interest. Hence, the cost of credit will go down and more people will have access to credit.11 Looking more closely, interest rate caps are often justified by an intention to improve access to finance. By making credit more affordable to the underserved they prevent consumers from becoming over-indebted, they prevent predatory lending, and they indirectly subsidize strategic economic groups who would otherwise have restricted or no access to finance.12

This paper argues that the case for hard interest caps is, generally speaking, unfounded and that the seemingly plausible mathematical justification is flawed. Further, it argues that hard interest rate caps may lead to unwanted consequences that are detrimental to poor people’s access to finance. Part II presents the official reasoning in favor of hard interest caps. Part III reveals the differences between MFIs and commercial banks in terms of credit risk, transaction and operational costs. Part IV argues that any one-size-fits-all solution, such as a hard interest rate cap, disregards the differences among MFIs and is thus harmful to a certain subset of MFIs that we refer to as ‘high cost, high service’ MFIs. This is the subset of MFIs that are active in less crowded and less accessible rural areas where financial inclusion is particularly difficult to achieve. In turn, the informal credit sector will be strengthened and mission drift will increase. Part V identifies the often aired argument that interest rates in the Northern Hemisphere tend to be much lower than in the Southern Hemisphere. In Part VI we consider alternative measures to influence credit market efficiency in the Southern Hemisphere, and argue that a transparent credit register and regulatory leniency given to digital financial services maximizes benefits and avoids most of the flaws of hard interest rate caps. Part VII concludes.

II. Official Reasoning in favour of Hard Caps

Our study of the regulatory materials published in the context of the implementation of interest rate caps reveals four justifications for imposing interest rate caps.

- First, regulators may intend to protect consumers and clients by ensuring a ‘fair’ price in financial transactions.13
- Second, an interest cap could be intended to prevent fraud or exploitation by deceptive credit providers.
- Third, political and economic motivations could be at play. For instance, the government could seek to support a particular strategic industry or sector of the

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11 See Nimal A. Fernando, Understanding and Dealing with High Interest Rates on Microcredit: A Note to Policy Makers in the Asia and Pacific Region, ASIAN DEV. BANK 1–13 (2006) at 4 (revealing that lower microcredit interest rates will help increase the depth and breadth of availability of affordable finance for poor households, yet the author emphasizes that imposing microcredit interest rate caps is not the answer).

12 Marco Azzalini, Valeria E. Pujia & Katia Raguzzoni, Microfinance in Palestine: Are Loans too Expensive and Should Interest Rates be Capped?, 1 ECON. DEV. POLICY BR. 1–8 (2016) at 5, available at http://www.itcoop-jeer.org/sites/default/files/English_23%20AGOSTO%202016_FINAL.pdf (last accessed 23 November 2017).

13 Iain Ramsay, To Heap Distress upon Distress? Comparative Reflections on Interest Rate Ceilings, 60 UNIV. TOR. LAW J. 707–730 (2010), at 714.
economy where a greater concentration of financial resources is required until the sector is self-sustaining and able to withstand competition from foreign competitors.\(^{14}\)

- Fourth, an interest cap could combat anti-competitive behavior in a situation where the interest rates and fees charged by providers exceed the actual cost of lending. In a monopoly setting, which we often find in rural areas of the South, providers have the power to set the price of credit far above the marginal cost, thus impacting consumer welfare. Monopolists typically provide too few offerings that are appropriate to consumers’ needs, and furthermore charge excessive prices.\(^{15}\)

In addition, in a move particularly directed against MFIs, several countries justified interest rate caps on the basis of client protection. The contention is that excessive interest rates charged by MFIs harm poor clients.\(^{16}\) Further, it is argued that overly high interest rates prompt business failure, resulting in negative consequences not only for poor clients but also the credit providers, namely the MFIs, themselves. Leading supporters of that argument refer to the German experience of the 19th century when a moderate interest rate was an important pre-condition for business success and growth.\(^{17}\)

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\(^{14}\) Maimbo and Gallegos, supra note 8, at 3.

\(^{15}\) Note that a monopoly does not always bring forward welfare losses. Where competition is less efficient and more harmful for the consumer, a monopoly is preferable. Industries with high absolute cost advantages and high operating costs (for example in high costly technology development and innovation, competition can inhibit the discovery process; in the industry that have increasing returns to scale, e.g., two small firms will require more resources to produce a given amount of output than one large firm, therefore one large firm will be better to operate; the extended example mostly lies in public sector which have the foremost benefit for the wide range society such as gas (energy sector), electricity grid, telecommunication, public transportation (e.g., there is no necessity to build two railway for two different train companies/providers just because they must apply competition), postal services, etc. ). They could operate more efficiently as monopoly rather than as competitive industry with many market participants since new entrants would mean higher costs for consumers; see Ashim Kumar Kar & Ranjula Bali Swain, Are Microfinance Markets Monopolistic?, 50 APPL. ECON. 1–14 (2018), https://doi.org/10.1080/00036846.2017.1310999, at 1, on countries that may be assumed as having a monopolistic environment in their microfinance sector, i.e., Peru and India. They also find weak evidence that the microfinance industry in Ecuador, Indonesia and Philippines operate under perfect competition.

\(^{16}\) See Maimbo and Gallegos, supra note 8 at 1 (stating: ‘in several countries the last financial crisis reopened the debate on interest rate controls as a tool for consumer protection’)and at 3 and 6; see also Ian Davis, Rural Banking: Designing an Effective Legal Framework for Microfinance, 2 J. BUSINESS, ENTERPRENEURSH. LAW. 395–423 (2009),http://digitalcommons.pepperdine.edu/jbel%5Cnhttp://digitalcommons.pepperdine.edu/jbel/vol2/iss2/5 at 418 (stating: ‘Policy makers in several developing countries have limited interest rates. For example, in Bolivia, the limit on the interest rate charged on loans is three percent per month. The objective is to protect the poor from aggressive lenders, but such intentions often backfire.’); In general, high interest rate be it as a result of a cap or a loanshark benchmark, it is harmful for the poor, see Katherine Hunt, The Law and Economics of Microfinance, 33 J. LAW COMMER. (2014), at 29 (stating: ‘This is because high interest rates effectively increase the regular outlay that borrowers have to integrate into their future cash flow. Given that the poor already have limited cash flow, which does not allow for the saving of funds for future expenses, it is logical that high interest rates are not affordable for many, and may result in a debt-trap’).

\(^{17}\) See Reinhardt H Schmidt, Hans Dieter Siebel & Paul Thomes, From Microfinance to Inclusive Banking: Why Local Banking Works (2016), at 76 et seq. (They depict the case of German savings banks and cooperative banks of the 19th century that were locally controlled, borrower paid market standard interest rates on savings with positive real returns and extended loans at fair and transparent terms and conditions. Even though interest margins were small, institutions of both types were able to cover their costs and to begin operating profitably
However, caps have side effects. The inability of some providers to cope with higher operating costs will limit the quantity of credit available to the poor. Furthermore, a cap limits product diversity and therefore access to credit. In extreme cases, the cap obliges providers to stay in the market, which in turn forces the clients of MFIs to re-enter an informal credit market populated by unregulated and sometimes predatory lenders. In turn, this facilitates the use of well-known informal, and infamous, enforcement mechanisms. Due to the interest rate cap relation between high funding and operating costs, MFIs face negative interest rate margins. This has shifted pricing points away from interest rates to fee charges, in some cases very high upfront fees. This in turn, has left MFIs with only high-risk clients who are in such a weak bargaining position that they accept any fee structure presented.

III. The Weak Fundament of Interest Rate Regulation

Theory suggests a ‘pure’ interest margin depends on the competitive conditions of the market, interest rate risk, credit risk, and the average operating expenses and risk profile of a financial institution. Further, there are other relevant variables not explicitly introduced into the model, such as opportunity cost of reserves, payment of implicit interest and quality of management. In a simplified equation, interest rates can be calculated as:

\[ \text{Interest Rate} = \frac{\text{Income from Loans} + \text{Other Income}}{\text{Cost of Funds} + \text{Loan Loss Expense} + \text{Operating Expenses} + \text{Tax} + \text{Profit}} \]

soon after their foundation. German’s example where moderate interest rates consistent with the borrower’s ability to pay, helped to keep credit risk low and furthered economic growth); See also Roy Mersland & Reidar Øystein Strøm, Microfinance Financial and Social Performance: An Introduction, in MICROFINANCE INSTITUTIONS 1–11 (Roy Mersland & Reidar Øystein Strøm eds., 2014) (Stating that: ‘...A fair prediction is that low-cost MFIs are more likely to survive against stronger competition in future, another is that low-cost MFIs are able to reach out to more low-income households (...)Therefore, it is imperative for the MFI to pay close attention to the operational costs’).

18 Azzalini, Pujia, and Raguzzoni, supra note 12 at 6; See also Maimbo and Gallegos, supra note 8 at 4 (Stating: ‘The introduction of interest rate cap causes credit suppliers to withdraw from the market and competition to decrease. Less market competition leads to a narrower range of products and less incentive to innovate’).

19 See CARLOS MADEIRA, November THE IMPACT OF INTEREST RATE CEILINGS ON MICROFINANCE INDUSTRY CENTRAL BANK OF CHILE (2017), http://www.macrothink.org/journal/index.php/ijsw/article/view/7953, available at https://www.sbif.cl/sbifweb3/internet/archivos/publicacion_11834.pdf (last accessed 11 March 2018) (Stating that: "Chile introduced a law in December of 2013 which gradually reduced the TMC (Tasa Máxima Convencional/Maximum Interest Rate) from above 50% to around 35%. Based on an analysis of all the debtors in 2013 which did not get new loans over the period 2014-2017, the SBIF (2017) estimates that the new law may have denied banking credit to a range of 151-227 thousand consumers. My estimate: 9.7% of households (197 thousand consumers)").

20 Maimbo and Gallegos, supra note 8 at 12 (stating: ‘As a result of lower caps on interest rates in Japan, the supply of credit appeared to contract, acceptance of loan applications fell, and illegal lending rose’). See on loan sharks Robert Mayer, Loan Sharks, Interest-Rate Caps, and Deregulation, 69 WASH. L. REV. 807–848 (2012), at 809, available at http://heinonlinebackup.com/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/waslee69&section=23.

21 Joaquín Maudos & Juan Fernández De Guevara, Factors Explaining the Interest Margin in the Banking Sector of the European Union, 28 J. BANK. FINANC. 2259–2281 (2004). at 2277.

22 Rosenberg et al., supra note 4 at 71 with content on the parentheses made by the author (The more detail version as follow: Income from loans + Other income = Cost of funds + Loan loss expense + Operating expense (personnel and administrative costs, such as salaries, depreciation, maintenance, etc.) + Tax + Profit).
The cost of funds may be influenced by the relevant central bank, while reasonable profit margin is the factor most likely to cause regulators and equity holders in microfinance institutions to lock horns. Nevertheless, the factors we are most concerned with - since they could reasonably influence the interest charged in the absence of state intervention and overly greedy investors - are the parameters of credit risk, transaction costs and services provided.\(^\text{23}\) We will argue in this section that when looking at MFIs in the South all three factors are characterized by a degree of diversity that renders any one-size-fits-all approach mistaken.

1. **Credit Risk: Substance vs Form**

First, the common denominator between financial intermediaries in the South and North is that both grant credit. But this relates only to style or form. The **substance of this financial relationship is different**. While debtors in the North for the most part hold a level of equity which functions as a risk cushion, the equity layer of debtors in the South is usually extremely thin compared to the debt they take on.\(^\text{24}\) Accordingly, debtors signing credit agreements in the South receive a form of debt that in substance is equity finance.

There are many reasons for the use of debt rather than equity, including for instance that equity is more expensive to write in countries where company law skills are less widely spread, capital controls hinder equity ownership of certain investors as well as transfer of ownership, and the establishment of a company takes months or even years. Another reason for using debt is that it may include a regular debt service agreement that imposes an additional discipline on the debtor which assists in securing repayment in an environment of weak corporate governance. Of course, it is easier to make repayments of debt, as opposed to

\(^{23}\) See Gregor Dorfleitner et al., *What Determines Microcredit Interest Rates?*, 23 **APPL. FINANC. ECON.** 1579–1597 (2013), at 1583.

\(^{24}\) See Hunt, *supra* note 16 at 24 (It is then probably mimicked in the interest rate difference between the developed and developing country. Hunt elaborates slightly the interest rates on microfinance loans that are generally between 32% - 37%. This is high compared to the interest rates charged to middle and upper class borrowers in the same developing countries, which may often pay interest rates below 10%. Hunt further cites Mayer, *supra* note 20 for the argument that in comparison to the interest rates charged by loan sharks in the slums of many developing countries (which charge up to 300%), the interest rates of microfinance are relatively cheap. For further comparison, the unsecured credit cards in Australia charged an interest rate of 20% which is not so different from the average MFI interest rate in developing countries); Based on data gathered by Helms and Reille, *supra* note 7 at 4, the interest rate charged by moneylenders in developing country could reach as high as 720% like in the case of Indonesia; see also the case in the EU for instance: European Central Bank (ECB), 5 MFI interest rates on new euro-denominated loans to euro area households, available at http://sdw.ecb.europa.eu/reports.do?node=1000002887 (last accessed 7 December 2017) (MFI interest rates for loans to households are differ if it with or without collateral: let’s depict one example for consumption purpose, floating rate and up to 1 year initial rate fixation, it ranges from 5.16% in October 2016 to 4.88 in October 2017 and on the same term with collateral/guarantee it decreases to 3.55 in October 2016 and 3.00 in October 2017).
equity, subject to staging milestones. Moreover, the ‘equity’ finance is granted to an extremely risky business. Typically, uninsured, single workers in self-employment generate the cash to repay the debt, hence unforeseen events such as accident, sickness or death may impact the likelihood of repayment. External uncertainties, particularly regional instability and political risk, may also impair the probability of debt repayment.

Loans in the North are most often secured by collateral, while at the same time the risk associated with personal disasters is lower. Most people in the North are insured against the usual hazards of life, such as ill health, unemployment, and old age. This means that risks are socialized rather than individualized. Accordingly, it becomes apparent that the seemingly low level of interest rates in the North reflects a relatively lower level of risk in the local debt markets.

Where we have similar risk structures in the North, we often see financial intermediaries charge double-digit interest rates, not too dissimilar from what we see in some countries in the South. Firstly, this pertains to uncollateralized consumer loans made to uncreditworthy and vulnerable members of society; for instance, two- or even three-digit interest rates are charged to Northern consumers who borrow via credit cards or enter into consumer loans spontaneously at shopping centers. Secondly, Northern SMEs have very little access to credit by established banks without additional collateral provided by their shareholders. Even if they do have access, they pay very high interest rates when compared to mature, large

25 See Jun Qian & Philip E Strahan, How Laws and Institutions Shape Financial Contracts: The Case of Bank Loans, 62 J. Finance 2803–2834 (2007), at 2826, 2804 et seq. The main premise of the study is that strong protection of creditor rights is linked with greater concentration of loan ownership, increased participation of foreign banks, longer-term lending, and lower interest rate. They compare the degree of creditor rights protection between developed and developing countries and find that the positive relationship between creditor rights and loan maturity claimed to be strongest among the developed countries than in the developing countries. They also mention that: ‘...as creditor rights improve, loans are more likely to be secured by collateral...’ This postulate may indicate that the developed countries secure the loan with collateral more than the developing countries do).

26 Jonathan Morduch, The Microfinance Promise, 37 J. Econ. Lit. 1569–1614 (1999), http://pubs.aeaweb.org/doi/10.1257/jel.37.4.1569., at 1573 stating in reverse to the West, in the South: ‘Received wisdom has long been that lending to poor households is doomed to failure: costs are too high, risks are too great, savings propensities are too low, and few households have much to put up as collateral. Not long ago, the norm was heavily subsidized credit provided by government banks with repayment rates of 70-80 percent at best. In Bangladesh, for example, loans targeted to poor households by traditional banks had repayment rates of 51.6 percent in 1980. By 1988-89, a year of bad flooding, the repayment rate had fallen to 18.8 percent (Morduch cites Khalily and Meyer, 1993). Similarly, by 1986 repayment rates sank to 41 percent for subsidized credit delivered as part of India’s high-profile Integrated Rural Development Program (Morduch cites Pulley, 1989); See also also David Hulme, Is Microdebt Good for Poor People? A Note on the Dark Side of Microfinance, 11 SMALL ENTERP. DEV. 26–28 (2000), http://www.developmentbookshelf.com/doi/10.3362/0957-1329.2000.006, at 26 (Stating also inverted to the western world, that: ‘not all microdebt produces favourable results, especially for poor people working in low-return activities in saturated markets that are poorly developed and where environmental and economic shocks are common. Because of circumstances beyond their control (sickness, flood, drought, theft and so on), lack of skills and knowledge or taking bad decisions, a proportion of poor borrowers encounter great difficulties in repaying loans’).

27 See Mayer, supra note 20; Goldsmith and Martin, supra note 9 at 129-130.
businesses.28 However, given the scarcity of equity cushions in the microfinance market, rather than simply looking at SMEs, an analogy is justified between Southern microfinance and Northern venture capital investments where funds are provided to newly established SMEs with ambitious, high-risk growth strategies and very little equity backing for their plans. In these venture capital markets, even with the current record-low interest environment, return expectations in the two-digit range are a necessity. This is reflective of a very high risk of business failure, given that 95% of new and innovative businesses never earn their capital costs.29 Regardless of the South or the North, or the specific interest rate levels, the operating margins of the borrowers are a necessary consideration in determining whether a rate is affordable or not. In the North, most microcredit goes to the retail service sector, or small-scale farming in the East, where borrowers seem to afford credit even if interest rates are 20% to 30%. Problems most often stem from mis-calculations of the market or particular business idea rather than the financing structure used.

This paper does not seek a cure-all solution. The important point here is: rather than being similar to the general debt market of the North, microfinance is a special debt market due to its high-risk nature. As such, debt granted by MFIs to their clients in the South is more comparable to venture capital investments and uncollateralized consumer debt in the North. Accepting this analogy enables a more accurate comparison and shows that the difference in interest rates between the North and South is far less significant than supporters of MFI interest rate caps are willing to accept. That does not mean that overindebtedness and high interest rates are not an issue, but it helps in understanding that a hard interest rate cap may not be the right solution.

2. Transaction Costs

Refinancing costs and transaction costs influence the interest rates charged to clients. With regard to transaction costs, the size of the loan matters. For instance, the total gross revenue derived from advancing a loan of EUR10 one hundred times will not differ greatly from a single loan of EUR1,000. However, in the absence of automation, it costs one hundred times as much to manage,30 even in the absence of doubtful repayment prospects. Accordingly, conventional

28 See also Fergal McCann & James Carroll, Observables and Residuals: Exploring Cross-Border Differences in SME Borrowing Costs, 02/RT/17 CENT. BANK IREL. 1–18 (2017), at 9 (‘...interest rates are lower for larger firms, larger loans and longer terms’).

29 Deborah Gage, The Venture Capital Secret: 3 Out Of 4 Start-Ups Fail, Wall Street Journal, 20 (2012) (Stating: ‘About three-quarters of venture-backed firms in the U.S. don’t return investors’ capital, according to recent research by Shikhar Ghosh, a senior lecturer at Harvard Business School. Compare that with the figures that venture capitalists toss around. The common rule of thumb is that of 10 start-ups, only three or four fail completely. Another three or four return the original investment, and one or two produce substantial returns. The National Venture Capital Association estimates that 25% to 30% of venture-backed businesses fail (...) If failure means liquidating all assets, with investors losing all their money, an estimated 30% to 40% of high potential U.S. start-ups fail. If failure is defined as failing to see the projected return on investment –say, a specific revenue growth rate or date to break even on cash flow–then more than 95% of start-ups fail, based on Mr. Ghosh’s research’); R. CHRISTEN AND D. DRAKE, COMMERCIALIZATION, THE NEW REALITY OF MICROFINANCE,” THE COMMERCIALIZATION OF MICROFINANCE, BALANCING BUSINESS AND DEVELOPMENT, KUMARIAN PRESS BY STYLUS PUBLISHING, PP. 2-22, 2002 (2nd ed. 2004).

30 Cf. Adrian Gonzalez, Analyzing Microcredit Interest Rates: A Review of the Methodology Proposed by Mohammed Yunus, 4 MIX DATA BR. 5–10. (2010), at 5-6 (stating that: ‘The main reason why microcredit interest
banks are often dissuaded by the contract and maintenance costs associated with small-scale loans and may cut off access to small finance altogether. This is equally true for the North and the South. Note that some conventional banks do grant large numbers of very small loans based on credit score data gathered from third parties. For instance, several Moroccan commercial banks grant small loans, but only to customers with a regular salary or excellent collateral. This is where the banks have a high level of assurance that they will get their money back. And, similar to MFIs, traditional microlenders charge higher interest rates to offset the higher operational costs involved in the labor-intensive area of traditional microlending.

Another factor influencing costs is duration. MFIs tend to extend very short-term credit, with a duration period of up to 3 months. The costs for negotiation and writing of the debt contract, and the initial accounting, are similar regardless of whether the contract is granted for 3 months or 30 years. Further, MFIs lack the largely automated contracting techniques used in the North, with most contracts written onerously by hand. The work necessitates the loan officer visiting the client in person, increasing the associated time and travel costs when dealing with remote areas. There may be additional costs if the site has poor physical infrastructure such as inadequate road networks, transportation, and telecommunication systems. These will add to administrative costs and operational costs on the ground. These rates are higher than those of other financial institutions is the higher operating cost necessary to deliver small loans, including administrative and personnel expenses; see also Megan Whittaker, *South Africa’s National Credit Act: A Possible Model for the Proper Role of Interest Rate Ceilings for Microfinance*, 28 NORTHWEST. J. INT. LAW BUS. 561–583 (2007), http://heinonlinebackup.com/hol-cgi-bin/get_pdf.cgi?handle=hein.journals/nwjilb28&section=24., pp. 563-564 (Stating: ‘The costs of microcredit are higher than in regular consumer banking, however, and therefore MFIs generally have to charge higher rates than consumer banks in order to cover those costs and retain enough profit to sustain themselves. This is due not to poor return rates, but instead to the inherent nature of microfinance; the transactional costs involved in making many small loans will always be larger than those required to make one big loan’); Richard Rosenberg et al., *Microcredit Interest Rates and Their Determinants 2004 – 2011*, June REPORTS BY CGAP ITS PARTN. (2013). state that MFI rates are higher, often much higher, than normal bank rates, mainly because it inevitably costs more to lend and collect a given amount through thousands of tiny loans than to lend and collect the same amount in a few large loans. They claim that higher administrative costs have to be covered by higher interest rates.

31 Fernando, supra note 11 at 3 (stating: ‘Commercial banks most often deal with large loans, and their transaction costs are lower than those of MFIs on a per unit basis. Thus, commercial banks are able to charge lower interest rates than MFIs).  
32 Basel Committee on Banking Supervision, *GUIDANCE ON THE APPLICATION OF THE CORE PRINCIPLES FOR EFFECTIVE BANKING SUPERVISION TO THE REGULATION AND SUPERVISION OF INSTITUTIONS RELEVANT TO FINANCIAL INCLUSION* 1–47 (2016), http://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0CB8QFjAA&url=http://www.bis.org/publ/bcbs294.pdf&ei=FL1LVFG_GlzToATYyYCoDw&usg=AFQjCNGFZNozsVdi_q2cAOYPSiXWNNYi1Q&bvm=bv.92765956,d.cGU. (last accessed 15 March 2018), at 23.  
33 Id., See Annex E of the Basel Committee on Banking Supervision on Traditional Microlending at 47-48.  
34 Helms and Reille, supra note 7, at 2-3 (arguing that personal interaction with clients magnify the total cost of microcredit: ‘Microcredit costs are high, but not because lending to poor clientele carries inherently higher risk. In fact, good microcredit programs often enjoy lower default rates than regular commercial banks. Microcredit costs are high because of the greater delivery costs of tiny transactions that require face-to-face interaction and because MFIs use personal contact as a substitute for formal collateral or computerized credit scoring.’).  
35 Fernando, supra note 11 at 3; Mersland and Strøm, supra note 17 (They mention that profitability plays a weak role in microfinance since operational costs constitute a large part of the total costs); Beatriz Cuéllar-Fernández et al., *Determinants of Margin in Microfinance Institutions*, 48 APPL. ECON. 300–311 (2016) (They
costs may also be the reason why, instead of becoming an industry with high profits, MFIs on average struggle with high costs and low earnings.  

The **counter argument** contends that MFIs benefit from economies of scale and that poor clients should not pay for inefficiently run MFIs. This may be true for MFIs in urban centers, but it is less true for MFIs in rural areas where clients may be widely spread over many hundreds of square kilometers, and where each client faces unique challenges. In these regions, interest rate caps hurt the poor by making it more difficult to get access to finance.

Another argument is that MFIs **sponsored by Northern donors** or development agencies would benefit from lower refinancing costs. It is argued that the lower costs of own funds would offset the higher operational costs of MFIs. While this argument may hold true for **some** MFIs, it does not justify interest rate caps for **all** MFIs in a single country or region. First, Northern donors and development agencies provide only a fraction of MFIs’ funds, and mainly focus on training and coaching in order to bring MFIs’ operational costs down and raise their expertise. Second, the funding from Northern institutions, including **investors**, donors and agencies, comes with additional currency exchange (FX) risk. Whether funding costs after FX risk or hedging costs turns out to be less expensive than the commercial banks’ costs of funding depends on the particular MFIs and currencies in question. In illiquid currencies, FX risk is a significant factor in MFIs’ costs of funds. Hence, the extent to which the MFIs’ refinancing costs are lower than those of commercial banks is highly specific to the institution, and does not justify a general hard interest rate cap. In the absence of donors’ funds in some Western African countries, the money used by MFIs to provide loans is provided by their clients in the form of savings. Exorbitant interest rates are fueled by client demands for superior investment returns. If returns are insufficient, clients will close their savings accounts. To protect the poorest, one will penalize the less poor, but still they are not getting rich.

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36 Reidar Øystein Strøm & Roy Mersland, *Microfinance: Costs, Lending Rates, and Profitability*, in *HANDBOOK OF KEY GLOBAL FINANCIAL MARKETS, INSTITUTIONS, AND INFRASTRUCTURE* 489–499 (Gerard Caprio ed., 2013), at 489.

37 In West African countries, the enforcement of interest rate caps on microcredit induce MFIs to refrain their service from poor and more remote areas and as the cap is deemed too low, they increase the average loan size, focusing instead on urban areas, which are less expensive to service in order to improve efficiency and returns (Helms and Reille, *supra* note 7 at 6).

38 Except pushing for social mission, donors somehow demand MFIs financial sustainability as well, see Morduch, *supra* note 26 at 1571 (Stating that: ‘The continuing dependence on subsidies has given donors a strong voice, but, ironically, they have used it to preach against ongoing subsidization. The fear of repeating past mistakes has pushed donors to argue that subsidization should be used only to cover start-up costs.’).

39 Cf. Moh’d Al-Azzam & Karim Mimouni, *Currency Risk and Microcredit Interest Rates*, 31 EMERG. MARK. REV. 80–95 (2017), http://dx.doi.org/10.1016/j.ememar.2017.03.001. (Stating: ‘foreign currency debt provides additional access to capital and offers funds in favorable and flexible terms to microfinance institutions (MFIs). Yet, we find that the use of foreign currency debt, on average, leads to higher microcredit interest rates. We also find that MFIs operating in countries with pegged exchange rate regimes and profit MFIs are better able to mitigate foreign currency risk. The results of the paper suggest that local currency debt is a better option for MFIs if the goal is to provide microcredit at lower interest rates’).
However, the local political economy could be a contributing factor in the willingness of regulators to impose interest rate caps: An interest rate cap that impacts MFIs could advance the interests of local commercial banks who may lose a competitor in reaching MFI clients trying to escape poverty. Imposing a cap may further a potentially untoward relationship between local banks and regulators. While we do not argue that subsidizing local banks is the (sole) motive of hard caps, public resistance to caps that primarily impact outsiders (i.e. Northern) is expected to be low.

3. Value-added services

The third factor influencing interest rates is the service level provided by MFIs. In this regard, some MFIs are remarkable in that they provide consultancy, coaching and other value-added services in addition to capital, a model that has been termed ‘microfinance plus’.  

‘Microfinance plus’ may be seen, on the one hand, as part of the MFI’s social mission which includes the tedious work of financially educating the destitute, improving health, nutrition and sanitation, as well as gender equality, and more broadly promoting a social return in addition to granting business loans. Some even draw a line between apparently competing regulatory objectives and the maintenance of the MFIs’ financial sustainability in delivering long-term services to clients on the one hand, and the social objective of poverty eradication on the other. They argue that the ‘microfinance plus’ model may aim more at poverty alleviation than sustainability. In fact, as many microfinance crises have shown, the two goals are closely intertwined. A microfinance crisis adversely affects the lives of poor borrowers by increasing pressure on them to undertake loan repayments beyond their financial ability, to the extent that some may lose what little they have and others may even be driven to suicide.

On the other hand, these value-added services may be viewed as part of MFIs’ risk management: education and enhancement of social health services reduces the risk that clients take unfortunate financial, business or personal decisions that may ultimately lead to  

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40 Lara Goldmark, Beyond Finance: Microfinance and Business Development Services, in AN INSIDE VIEW OF LATIN AMERICAN MICROFINANCE (Marguerite Berger, Lara Goldmark, & Tomás Miller Sanabria eds., 2006).

41 Elizabeth Littlefield, Jonathan Murdock & Syed Hashemi, Is Microfinance an Effective Strategy to Reach the Millennium Development Goals ?, 24 FOCUS NOTE 1–11 (2003), at Introduction.

42 Aruna Balammal, R. Madhumathi & M.P. Ganesh, Pentagon Performance Model of Indian MFIs: A Study of Institutional Enablers, 20(I) PARADIGM 1–13 (2016), http://journals.sagepub.com/doi/10.1177/0971890716637694., at 1.

43 Zaina Ahmed-Karim, Justina Alders-Sheya & Josien Sluijs, Client Protection in Microfinance: The Current State of Law and Regulation, PLATF. INCL. FINANC. ERNST YOUNG 1–24 (2015) (citing examples in the Indian state of Andhra Pradesh in 2010).

44 Philip Mader, Rise and Fall of Microfinance in India: The Andhra Pradesh Crisis in Perspective, 22 STRATEG. CHANG. 47–66 (2013). Prabhjot Kaur & Soma Dey, Andhra Pradesh Microfinance Crisis and its Repercussions on Microfinancing Activities in India, 3 JOURNAL MANAG. BUS. STUD. 695–702 (2013), http://www.ripublication.com/gjmbsSpl/gjmbsv3n7_02.pdf. (mentioning 54 suicides); Renuka Sane & Susan Thomas, A policy response to the Indian micro-finance crisis, INDIRA GANDHI INST. DEV. RES. (2011) (citing examples in the Indian state of Andhra Pradesh in 2010); Strøm and Mersland, supra note 36 at 490.
their premature passing. For both reasons, some MFI loan officers not only disburse loans and collect repayments but also promote their clients’ entrepreneurial⁴⁵ and other skills.

Again, an analogy with the North may help here. Clients of MFIs typically find themselves in a permanent restructuring scenario in that they are unable to take responsibility for their finances due to a lack of skills and resources. Debtors in the North in a restructuring scenario tend to incur very high interest rates, or additional service fees payable to business reorganization or restructuring consultants.⁴⁶ If they do not pay, they tend to remain in a constant state of financial flux. A higher interest rate charged by MFIs mimics to a certain extent their clients’ ongoing work-out needs.

We acknowledge that not all MFIs invest in these additional services to the same extent. A recent study analyses a sample where – we could say only or at least – 27% of the MFIs provide non-financial in addition to financial services.⁴⁷ It is also acknowledged that the benefits of these services are not always easy to determine⁴⁸ and have less impact than the initiators hope if the coaching is of low quality or misses the clients’ needs.⁴⁹ But this does not change the fact that coaching, even if only partially ineffective, adds to operational costs where it is provided, and does not add to costs elsewhere. In turn, operating expense ratios (OERs) and cost-per-client to loan ratios are recommended indicators of retail microfinance providers’ cost efficiency. Both ratios focus on nonfinancial operating expenses.⁵⁰ While this is not an

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⁴⁵ Please note that entrepreneurial skills are not merely beneficial for the borrower. A study shows that entrepreneurship is substantial also for microfinance chief executive officers (CEOs) where the entrepreneur-managed MFIs feature higher social performance, greater financial sustainability, and lower costs. see Trond Randøy, R. øystein Strøm & Roy Mersland, The Impact of Entrepreneur-CEOs in Microfinance Institutions: A Global Survey, 39 ENTREP. THEORY PRACT. 927–953 (2015) ; please also note that entrepreneurship is the skill that can be learned, but also the value will comply greater in a culture that nurtured it normatively, see the study which supports the notion that normative culture is an important predictor of entrepreneurship, Ilan Alon, Miri Lerner & Amir Shoham, Cross-national cultural values and nascent entrepreneurship, 16 INT. J. CROSS CULT. MANAG. 321–340 (2016), at 336.

⁴⁶ See Valentina Hartarska & Claudio Gonzalez-Vega, Credit Counseling and Mortgage Termination by Low-Income Households, 30 J. REAL ESTATE FINANC. ECON. 227–243 (2005), at the conclusions (The study remains scarce in this subject, but for instance we can see the case of the mortgage loan for low-income households in the Midwest during the period 1991-2000, they mention that counseling is expensive).

⁴⁷ Goldmark, supra note 40.

⁴⁸ Some studies argue that microfinance ‘plus’ could matter, but more research is necessary, cf. Olga Biosca, Pamela Lenton & Paul Mosley, Where is the ‘Plus’ in ‘Credit-Plus’? The Case of Chiapas, Mexico, 50 J. DEV. STUD. 1700–1716 (2014). Other studies see benefits, cf. Beatriz Armendáriz & Ariane Szafarz, On Mission Drift in Microfinance Institutions, in In The HANDBOOK OF MICROFINANCE 341–366 (B. Armendariz & M. Labie eds., 2011),at 341; Shahidur R Khandker, Microfinance and Poverty : Evidence Using Panel Data from Bangladesh, 19 WORLD BANK ECON. REV. 263–286 (2005); Robert Lensink, Mersland Roy, Vu Nhung Thi Hong, Zamore Stephen, Do Microfinance Institutions Benefit from Integrating Financial and Nonfinancial Services? 50 APPL. ECON 21, 2386-2401, they reveal that the provision of nonfinancial services does not harm nor improve the MFIs’ financial sustainability and efficiency, yet, they find a meagre evidence of improved loan quality and greater depth of outreach with the provision of social services.

⁴⁹ Goldmark, supra note 40, at 213 et seq.; MUHAMMAD YUNUS, BANKER TO THE POOR (2007).

⁵⁰ Cf. Richard Rosenberg, Measuring Results of Microfinance Institutions: Minimum Indicators That Donors and Investors Should Track (A Technical Guide), CONSULT. GR. TO ASSIST POOR/THE WORLD BANK 1–32 (2009) at 11 et
argument for or against the ‘microfinance plus’ model, it is an argument against a one-size-fits-all solution for all MFIs (or even all financial institutions) which is the core of a hard interest rate cap.

Of course, one could argue that these value-added services are superfluous altogether, and that clients would be better off without a MFI coach telling them how to plan their finances, keep track of their costs, and run their business. But to the same extent that other financial institutions should be allowed to tailor their business models according to their strategies, resulting in execution-only and more service-oriented strategies, MFIs should be given the choice to experiment with what works best in their region and among their clients. With microfinance having become a global phenomenon, we find without doubt successful examples of one or the other model even where the overall statistics seem to indicate the opposite result. A strategy that advocates which model should be preferred is overly intrusive and harmful to innovation in the financial services sector; we need more rather than less innovation to tackle financial exclusion.

IV. Two Unwanted Consequences

In addition to being unjustified from an economic perspective, as we showed in the previous section, hard interest rate caps lead to two unwanted consequences: Increasing the importance of the informal credit sector, and furthering MFIs’ mission drift.

1. Increasing the importance of the informal credit sector

In part III, we argued that some MFIs, in terms of risks, transactions and operational costs, are structured entirely differently from commercial banks, while other MFIs’ exposures, costs and service levels are similar to those of their commercial peers. A hard interest rate cap is a one-size-fits-all solution. For a given set of circumstances, it sets an interest rate that is necessarily either too high or too low. It is too high for ‘low cost, low service’ MFIs, and potentially also for ‘high cost, low service’ MFIs, since it allows these MFIs to charge an excessive profit margin. Simultaneously, it is too low for ‘high cost, high service’ MFIs. The

seq. The OER allows a comparison between the earning of an MFI portfolio with their staff and administrative costs, while the cost per client/loan, displays how much it costs the MFIs to serve each client.

51 Bobbi Gray et al., Microfinance: A Sustainable Platform for Non-Financial Services, 20 PROG. ECON. RES. 163–182 (2011).

52 But the very fact that major commercial banks – benefitting from large financing, sometimes beneficial regulation, a broad branch basis with modest operating costs, low interest rates and sufficient staff members – do not penetrate the microfinance market, is evidence to the fact that the market is, at its core, not subject to the same risks and costs as the ordinary banking sector.

53 In fact, there is no such one-size-fits-all solution. In business management, all factors need to be measured individually. See Oded Shenkar, Cultural Distance Revisited: Towards a More Rigorous Conceptualization and Measurement of Cultural Differences, 32 J. INT. BUS. STUD. 519–535 (2001), http://www.palgrave-journals.com/jibs/journal/v32/n3/pdf/8490982a.pdf. Stating that: ‘...The appeal of the CD construct is, unfortunately, illusory. It masks serious problems in conceptualization and measurement, from unsupported hidden assumptions to questionable methodological properties, undermining the validity of the construct and challenging its theoretical role and application’; see also the study about interest rate cap in the EU Member States that mention the report does not provide a one-dimensional answer to interest rate restriction (IRR) questions, iff/ZEW, Study on Interest Rate Restrictions in the EU, Final Report for the EU Commission DG Internal Market and Services, Project No. ETD/2009/IM/H3/87, Brussels/Hamburg/Mannheim, (2010), at III.
one-size-fits-all nature of hard interest rate caps is also the reason why many studies into the effects of interest rate caps produce inconclusive results. For some institutions, regions and business strategies, a cap works. For others, it does not. An interest rate cap cannot apply universally because the nature of firms, clients and regions differs. Rather than one-size-fits-all hard caps, if a regulator seeks to micro-regulate interest rates it would need to impose firm-specific caps taking account of the cost of running the activity, the cost structure of the MFI, a reasonable profit margin measuring return on equity or assets, and the pricing policy vis-à-vis clients. Moreover, such caps must be adjusted regularly to reflect broader interest rate and economic volatility. Most regulators in the South lack the data and technology necessary to calculate such firm-specific caps, hence, they opted for hard caps.

For ‘high cost, high service’ MFIs, the high interest rates they charge are not a sign of inefficiency or extreme profiteering. The ‘high cost, high service’ subset of MFIs refers to those that are active in less crowded, less accessible rural areas where financial inclusion is particularly difficult to achieve. For these MFIs, a simple argument describes the impact of hard interest rate caps: If the interest rate cap disallows sufficiently high interest rates, those MFIs will be unable to pass on their high costs to their clients. In turn, a hard interest rate cap for these MFIs has two unwanted consequences: First, an interest rate cap if enforced will discourage the provision of tiny ‘micro’ loans while at the same time furthering opaque pricing structures, for instance by raising fees to compensate for lower interest rate income. Second, a hard interest rate cap may prompt a shutdown of MFI activity and facilitate growth of the informal credit sector including loan sharks. ‘High cost, high service’ MFIs will shut down their most costly branches. Rural areas with few clients will suffer first, but this is where financial inclusion is most needed, given the scarcity of financial intermediaries in those areas. If this happens, the interest rate cap has thrown the baby out with the water since the informal credit sector tends to charge even higher interest rates and “fees”, with numbers being

54 See Arvind Ashta, Laurence Attuel-Mendès & Zaka Ratsimalahelo, Another ‘French Paradox’: Explaining Why Interest Rates to Microenterprises Did Not Increase with the Change in French Usury Legislation, 40 EUR. J. LAW ECON. 479–509 (2015) (They elaborate the French paradox phenomenon, where the usury ceilings on loans to microenterprise has been abolished, yet it has not led to an increase in interest rates nor increase in microcredit).

55 ANNE POUCHOUS, THE REGULATION AND SUPERVISION OF MICROFINANCE: MAIN ISSUES AND PROGRESS, TRADE KNOWLEDGE NETWORK (TKN) REPORT (2012), at 11; Maimbo and Gallegos, supra note 8 (The sequence effect of rate capping can be like in Poland where interest restrictions reduced both access to credit and welfare). .

56 Helms and Reille, supra note 7 at 14.

57 Anita Campion, Rashmi Kiran Ekka & Mark Wenner, Interest Rates and Implications for Microfinance in Latin America and the Caribbean, IDB WORK. PAP. 1–47 (2010), at 31 (The available data suggest that MFIs withdraw from the countryside and focus on large cities, for instance, the findings from Nicaragua suggest that poor rural clients depend more on credit to smooth consumption than urban clients and when interest rates are capped, poor clients in rural areas are the first to be excluded, since it needs the higher costs to serve them); David E. Solan, How Consumer Bankruptcy Reforms Can Help Save Microfinance in India, 13 OREGON Rev. INT. LAW 317–354 (2011), at 352; see also Davis, supra note 16 at 418 (stating: ‘When MFIs are required to charge a predetermined interest rate, which is usually much below the cost that the MFI incurs, MFIs are often forced to go out of business. As a result, those whom the MFI would have served are left without access to any financial services at all. This type of regulation often is a disservice to the very people it is meant to protect’).
reported for loan sharks of up to 300% p.a.\textsuperscript{58} If regulators want to keep financial activity within the formal sector \textit{and} protect the poor from loan sharks they should ensure that ‘high cost, high service’ MFIs remain active in those regions, given that these providers reduce the importance of the informal credit sector, which charges even greater interest, and enforces its claims by illicit means.

The counter argument here is that in some countries interest rates are capped at a low level, but enforcement of that cap may be weak, rendering the cap a mere signaling device.\textsuperscript{59} If a cap functions as a mere signal, it may be worthwhile giving it up altogether or switching to a soft or mezzo variant, outlined infra (at I.), in order to strengthen the civil institutions of that country. Expecting non-enforcement of a written rule is a recipe for corruption we desperately seek to avoid!

\section*{2. Furthering the mission drift}

For ‘high cost, high service’ MFIs that be able to remain in the market, a hard interest rate cap pressures any capacity that could be invested in the financial inclusion mission out of the picture. In turn, the mission drift, long discussed, expected or feared by theorists\textsuperscript{60} is imminent. The origin for the mission drift, however, does not reflect a newly found taste for capitalist behavior, but responds to pure market needs: without a focus on clients that are profitable by overall banking market standards, the MFIs would increase their exposure, and over time, get into financial difficulties.

Over time, MFIs would lose their social approach and would instead adopt the manner and expectations of their regulated peers, the local commercial banks. While the mission drift may be a welcome side-effect for some incumbents who see MFIs as unwanted (and often less regulated) competition, furthering the mission drift by virtue of hard interest rate caps is clearly against the spirit of the global financial inclusion agenda.

\section*{V. Comparison with the North}

Interest rate regulation is often justified by comparing the high rates charged by financial intermediaries in the South with record-low interest rates in the Western World.\textsuperscript{61} However,

\begin{itemize}
\item \textsuperscript{58} See Mayer, supra note 20 at 847.
\item \textsuperscript{59} In most MENA (Middle East & North Africa) countries, they use disclosure requirements of 70\% in order to try and ensure that interest rates are transparent, and albeit this cap already very high, most MFIs charge interest rates that are much higher than the interest rate cap. See Douglas Pearce, Financial Inclusion in the Middle East and North Africa: Analysis and Roadmap Recommendations, 5610 WORLD BANK POLICY RES. WORK. PAP. (2011), at 21.
\item \textsuperscript{60} See Roy Mersland & R Øystein Strøm, Microfinance Mission Drift ?, 38 WORLD DEV. 28–36 (2010) ; R. Peck Christen & D. Drake, Commercialization: The New Reality of Microfinance, in THE COMMERCIALIZATION OF MICROFINANCE: BALANCING BUSINESS AND DEVELOPMENT 2–22 (Deborah Drake & Elisabeth Rhyne eds., 2002) ; Afsheen Abrar & Attiya Y. Javaid, Commercialization and Mission Drift — A Cross Country Evidence on Transformation of Microfinance Industry, 5 INT. J. TRADE, ECON. FINANC. 122–125 (2014), http://www.ijtef.org/index.php?m=content&c=index&a=show&catid=49&id=638.; Jonathan de Quidt, Thiemo Rene Fetzer & Maitreesh Ghatak, Microfinance with a Monopoly Lender, MIMEO 1–27 (2011), at 1.
\item \textsuperscript{61} Keith Epstein and Geri Smith, The Ugly Side of Microlending, Business Week, December 13, 2007 (stating: “Now poor people are turning into one of the world’s least likely sources of untapped profit, primarily because
this argument does not compare like with like as it disregards not only the differences in exposures (see supra, at III.), but also in the overall ecosystem.

1. Differences in the ecosystem

In addition to disclosure, two types of factors determine the interest rates that credit institutions charge on their loans: **external factors** beyond the credit institution’s control and **internal factors** within the institution’s control.\(^{62}\) The former may refer to the Central Bank Rate (CBR), the Treasury Bill rate, the inflation rate within the economy and regulation-induced cash reserve requirements. The latter include, for instance, the credit institution’s operating costs such as staff salaries, interest on clients’ deposits, expenses and reserves for non-performing loans, and the costs of liquidity resulting from the necessity to ensure that clients have access to funding at any time.\(^{63}\)

While we have outlined how the internal factors of the MFIs’ businesses show similarities with high risk customer groups in the North (supra, at III.), significant differences also exist with regard to external factors, such as macroeconomic conditions, explicit and implicit bank taxation, deposit insurance regulation, as well as underlying legal and institutional indicators.\(^{64}\) Considering all those features, the simple arithmetic of the ‘cost-of-funds’ may differ according to each particular MFI, country or region.

2. Effective interest rate disclosures

While this is not the place to provide a full comparison of banking and tax laws, one example may serve for many: in countries of the North, interest rate transparency is achieved by consumer protection laws requiring financial institutions to disclose an **Annual Percentage**...
Rate (APR)\textsuperscript{65}, with strict rules as to how to calculate the APR. For instance, within the Euro Zone the European Central Bank defines in meticulous detail the methodology to be used.\textsuperscript{66}

In the South the situation is different, rendering the APR a less reliable instrument, for at least three reasons. First, such a benchmark remains scarce; where it is calculated, the data on which it is based is often insufficient since most smaller rural MFIs lack the resources to participate in questionnaires and data sharing. Second, the cap imposed often does not cover fees and commissions as the ‘effective rate’ used as a reference benchmark by Northern countries does. Third, the definition of interest rate remains vague so that providers could insert hidden fees.\textsuperscript{67} Accordingly, the cap may be set either too high or too low, which will create issues. Financial institutions could suffer losses if a cap rate is below the level of cost recovery\textsuperscript{68} while consumers would not be able to afford the loans if the cap is set unreasonably high.

In a financial industry with competitive markets and choice for consumers and SMEs, extreme differences in costs and prices - if transparent - would not persist, and firms with inefficient operations and high prices would be punished by losing clients.\textsuperscript{69} These examples demonstrate that the soft caps prevalent in the North do not merely aim at achieving low interest rates, but further the goal of overall credit market transparency while at the same time avoiding abusive practices such as excessive and hidden fees\textsuperscript{70} as well as the mis-selling of financial

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\textsuperscript{65} Helms and Reille, supra note 7 at 7 (stating: ‘An APR is the effective interest per payment-period rate multiplied by the number of payment periods in a year’); on the early study that contain examples used to demonstrate the practical application of the APR in relation to consumer credit, see EUROPEAN COMMISSION DIRECTORATE-GENERAL HEALTH AND CONSUMER PROTECTION, Study on The Calculation of The Annual Percentage Rate of Charge For Consumer Credit Agreements, available at http://ec.europa.eu/consumers/documents/study_apr_2013_final.pdf (last accessed 2 January 2018); Official Journal of the European Union L296/35, Consumer Credit Directive 2011/90/EU of 14 November 2011 amending Part II of Annex I to Directive 2008/48/EC of the European Parliament and of the Council providing additional assumptions for the calculation of the annual percentage rate of charge, available at http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:296:0035:0037:EN:PDF (last accessed 2 January 2018).

Original Report 2009 Revised October 2013.

\textsuperscript{66} European Central Bank (ECB), Cost-of-Borrowing Indicators: Methodological Note, available at http://www.ecb.europa.eu/stats/pdf/MI/CostofBorrowingIndicators-methodologicalnote.pdf?8728f90f2d44cb441a687bfb1b29a0eb (last accessed 7 December 2017).

\textsuperscript{67} Karnani, supra note 5 at 10-11 (He reveals the study of Professor Subrata Mitra that calculates the effective interest rate for an actual product of an Indian MFI and stating that, ‘With such hidden charges it is common for the effective annual interest rate to be over 100% even though the stated interest rate is only 15%’).

\textsuperscript{68} Fernando, supra note 11 at 4-5; See also Ashim Kumar Kar & Ranjula Bali Swain, Interest Rates and Financial Performance of Microfinance Institutions: Recent Global Evidence, 26 Eur. J. Dev. Res. 87–106 (2014), at 104 (They reveal the challenge between opting for financial sustainability or greater outreach. On the one hand MFIs have been pressured to increase their interest rates and/or to improve their efficiency by reducing costs and on the other hand MFIs charging high interest rates are a necessity to cover their costs and to achieve financial sustainability. However, this has triggered the mission drift assumption and MFIs at the same time also struggle with the intention to achieve depth and width of outreach).

\textsuperscript{69} Karnani, supra note 5 at 13.

\textsuperscript{70} In Armenia and Nicaragua, the lack of clarity and transparency on how to calculate the interest rate led banks and MFIs to impose various fees, charges or commissions (Helms and Reille, supra note 7 at 7-8).
products. Drawing on the examples of the North, microcredit rates could also be lowered by promoting competition and transparency of pricing policies and building the physical, human, and financial infrastructure for that purpose. We will focus on this insight and develop a framework designed for a competition-based interest rate model in the remainder of this paper.

3. The Case for Soft Caps

In a financially inclusive environment, with plenty of financial institutions competing for the broader society, a cap merely needs to tackle abuses of a dominant position by individual market participants, since the market and competitive forces are expected to do the rest. A soft cap drawing on social norms such as usury can capture individual misbehavior much better than a hard cap drawing on the interest level. For instance, a bank may seek to load an inadequate level of hidden fees upon a debtor that is in a difficult position. If we assume that the debtor’s initial interest rate level was low (for instance, due to a low interest rate period) and the overall interest rate level has risen until today, a hard cap may fail to prohibit the unjustified fee charged to the client – below the interest ceiling there may be a lot of space.

VI. Towards a Better World

The question remains as to how MFIs that do charge super-market standard interest rates can be singled out from those that merely charge what they need to (barely) survive in a hostile environment for banking services.

1. Enhancing competition among all credit intermediaries

As a starting point, we assume that any policy approach that furthers the cause of inefficient MFIs is doomed to fail if new entrants offer similar products on more efficient terms. The best possible way is thus to further competition among all intermediaries entitled to grant credit, including MFIs and regulated commercial banks, in order to use competition to mitigate against economically inefficient and socially undesirable business models. The idea in itself is not new; among others, CGAP proposes competition to achieve low interest rates. But the devil lies in the detail, in particular:

71 Maimbo and Gallegos, supra note 8 at 12 (Stating: ‘In South Africa, some financial institutions evaded caps by charging credit life insurance and other services, which reduced the transparency of the total cost of credit’).

72 POUCHOUS, supra note 55 at 11.

73 Fernando, supra note 11 at 8-9.

74 For competition as efficiency enhancing device cf DON E WALDMAN & ELIZABETH J. JENSEN, INDUSTRIAL ORGANIZATION: THEORY AND PRACTICE (2012).

75 Helms and Reille, supra note 7 at 11; See also Leif Atle Beisland, Roy Mersland & Trond Randøy, The Association between Microfinance Rating Scores and Corporate Governance: A Global Survey, 35(5) INT. REV. FINANC. ANAL. 268–280 (2014), at 268 (Their study reveals that level of competition intensity are positively associated with MFIs rating scores).
1) how we further competition in rural and/or high-risk debt markets where few financial institutions are present and offer loan services;

2) how we tackle the downside of competition, which may include a higher risk of over-indebtedness, since new entrants tend to lessen rather than increase credit standards; and

3) to what extent we protect existing MFIs that tend to lose market power under the influence of new competitors.

In an environment where competition between MFIs is too strong, as has happened in Central America, authorities may use an interest rate cap as a justification to limit competition and prevent over-indebtedness.

2. Looking at the clients: side: The Case for a Credit Register

Most approaches seeking to reduce interest rates focus on the MFIs’ costs and their charges. We take the opposite perspective and start with the core of the pricing mechanism which is the high risk inherent in microcredit (supra, at III.).

One factor driving this risk is a lack of transparency in credit relations. This allows some borrowers to receive multiple loans from multiple lenders at the same time, while a lack of credit history prevents poor families from borrowing at lower rates, because the lender must assume that the family has multiple lending relationships. Thus, a lack of trust within the credit markets is at the core of the interest rate issue. Information transparency is needed not only by owners to monitor financial returns and sustainability, but also by customers to get to know the true cost of service and market information, and last but not least by donors to get information about the social impact of their engagement.

A factor that furthers competition on the basis of merit is a credit register that details the name of each client as well as the nominal amount and duration of debt granted to them. To avoid free riding by competitors, disclosing the interest rate charged is not desirable; but the

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76 See Jessica Schicks, The Over-Indebtedness of Microborrowers In Ghana: An Empirical Study From A Customer Protection Perspective, CENT. EUR. RES. MICROFINANCE (2011).

77 On the negative sides of competition, see Craig McIntosh & Bruce Wydick, Competition and microfinance, 78 J. DEV. ECON. 271–298 (2005).at 271 et seq. See also Esubalew Assefa, Niels Hermes & Aljar Meesters, Competition and Performance of Microfinance Institutions, 23 APPL. FINANC. ECON. 767–782 (2013) (arguing that increased competition is linked with lower loan repayment, lower financial performance and lower overall market efficiency).

78 A study using the Lerner index of market power indicates that MFIs tend to have a lower outreach when faced with intense competition. Cf. Id., Assefa, Hermes & Meesters at 769.

79 McIntosh and Wydick, supra note 77, at abstract and at 271-272, 290.

80 Leif Atle Beisland, Roy Mersland & Trond Randøy, Transparency and Disclosure in the Global Microfinance Industry: Implications for Practice and Policy Makers, in OXFORD HANDBOOK OF POLITICAL, INSTITUTIONAL AND CORPORATE TRANSPARENCY (Forssbaeck & Oxelheim eds., 2014).(See Table 1: Transparency and disclosure in relation to key stakeholders).

81 On the positive sides of credit scoring, see Vitalie Bumacov, Arvind Ashta & Pritam Singh, The Use of Credit Scoring in Microfinance Institutions and Their Outreach, 23 STRATEG. CHANG. 401–413 (2014).
register could disclose an interest rate band within which clients’ debt is allocated, for example 10%-12%, 12%-14%, etc., so that other financial institutions could estimate a client’s liquidity needs to service existing debt. Such registers, on the one hand, mitigate the risk of fraud by clients that take out multiple lines of credit from banks and MFIs. On the other hand, it increases competition since all credit intermediaries can approach clients and offer better credit rates. Some credit scoring systems focus not solely on the financial aspect as a benchmark. Instead, their starting point is compliance with a social and environmental aspect. One could expect free riding in this environment since credit intermediaries can rely on the signal provided by the interest rate and seek to undercut it. But there will be little incentive to do so if we disclose interest rate windows only, in contrast to the specific rate charged. Further, in a world of uncertainty, the competing credit intermediary does not know whether the set interest rate is accurate. Thus, it will be forced to apply its own due diligence to ensure the credit rate charged is commensurate with the risk. In advocating a credit register, we do not disregard the potential fraud, privacy, regulatory and governance challenges, as well as data accuracy issues. Implementing a functional credit register is far from easy. Further, care must be taken to avoid the credit register turning into a breeding ground for fraud and usury by another name. However, this does not mean such registers cannot work at all. First, countries of the South could direct their best regulators (usually the central banks) to set-up and supervise the register. Second, technology (RegTech\textsuperscript{84}) may help not only in the set-up, but also in the governance and supervision of a credit register. Third, international support could strengthen the register’s ongoing governance and technological sophistication.

By this token, in the North, centralized credit registers reduce information asymmetry in the credit markets.\textsuperscript{85} Also, in some Southern countries, the commercial banks run credit registers. However, it is frequently reported that MFIs neither have access to these registers, nor can they provide information to them, be it for procedural or other reasons. Credit registers, however, work best if they are as comprehensive as possible. This has prompted some authorities to cooperate and exchange data between registers across their jurisdictional borders.\textsuperscript{86} The same function is provided by a credit bureau that acts as an informational intermediary where lenders are able to contribute and improve the information they have

\textsuperscript{82} See also Beisland, Mersland, and Randøy, supra note 75 at 268 (Credit scoring and credit register are quite in the same boat in the sense that both of them attempt to conduct lending process with transparency. They stating that: ‘...the level of competition intensity are positively associated with rating scores’).

\textsuperscript{83} See Begona Gutierrez-Nieto, Carlos Serrano-Cinca & Juan Camon-Cala, A Credit Score System for Socially Responsible Lending, 133 J. BUS. ETHICS 691–701 (2016); Carlos Serrano-Cinca, Begoña Gutiérrez-Nieto & Nydia M. Reyes, A Social and Environmental Approach to Microfinance Credit Scoring, 112 J. CLEAN. PROD. 3504–3513 (2015), http://dx.doi.org/10.1016/j.jclepro.2015.09.103.

\textsuperscript{84} Cf. Douglas W Arner, János Barberis & Ross P. Buckley, FinTech , RegTech and the Reconceptualization of Financial Regulation, NORTHWEST. J. INT. LAW BUS. 1–51 (2016), at 35-36.

\textsuperscript{85} Lorenzo Gai & Federica Ielasi, Credit Quality and Guarantees: How to Interpret the Central Credit Register for A Better Access to Credit, 26 STRATEG. CHANG. 291–299 (2017), http://doi.wiley.com/10.1002/jsc.2131., at 291.

\textsuperscript{86} Id., Gai & Ielasi at 291, like in the case of Europe.
about new clients. Again, the existence of credit bureaus in combination with some degree of competition can reduce the risks of over-indebtedness of individual clients. 

Reducing information asymmetries by sharing this type of information is beneficial for several reasons: it can increase efficiency, competitiveness and the volume of lending, and it can decrease default rates. It may also result in more accurate lending decisions and improved welfare. Recent experiences in several countries support this view. For instance, in Cambodia, when full disclosure on the Calculation of Interest Rates on Microfinance Loans was made obligatory, interest rates began to decline by 3.5% to 5% monthly. The same result achieved by different means was reported in a study analysing the transformation of MFIs from NGO structures to shareholder-owned and typically regulated financial entities, where the annual interest rates charged by MFIs fell by 5.9% on average (from 39.5% to 33.6%) after transformation. The data suggests that transformation leads to improved governance structures and transparency. And of course, interest rate reduction can be achieved by enhanced financial efficiency. In turn, we would assume that those MFIs large enough to be fully regulated would have sufficient expertise to make use of professional financial market policies to reduce their financing costs.

3. Looking at the Intermediary side: Disclosure of Effective Rates

Credit market transparency functions as a double-edged sword: apart from the provider’s enhanced ability to measure the creditworthiness of clients, it should also promote client choice. For that purpose, we advocate rules that require lenders to provide clear statements
to their clients of true annual interest rates including all costs and charges,\textsuperscript{95} resulting in disclosure of "effective interest rates."

We acknowledge the difficulties in drafting such a rule, but there are examples on which the South could draw to avoid the painful failures the North has experienced in the past. For instance, in the European Union, all credit agreements must include the total cost of the loan, while in the United States, creditors are obliged to display standardized information showing the terms of credit cards agreements, the display being termed a "Schumer Box".\textsuperscript{96} In both cases, clients can obtain a clear picture to compare interest rates between lenders, while deceptive lenders will lose business. Full disclosure paired with fair practice is the best protection for client-borrowers,\textsuperscript{97} particularly where financial literacy is low.\textsuperscript{98} This is especially true for the "effective rate", mandatory in Europe, which is akin to flat-rate credit. It lessens the need for advanced mathematics skills which we do not expect to be widely spread in the rural areas of the South.

However, even the best transparency practices are likely to fail if clients cannot comprehend the financial obligations stemming from loan calculations. While client financial education is a long-term goal, very simple tables of paydowns could function as the best substitute to prevent abuse. Recommendations may entail providing numerical examples of what the interest rates mean, and supplying illiterate clients with a videotaped discussion in their native language to explain the implications of interest rates.\textsuperscript{99}

It is true that credit transparency raises privacy concerns in the North. Information sharing and privacy do not fare well together. However, when balancing the need for survival and a plannable future with privacy, we would prefer the former over the latter. Notwithstanding the former, a centralized register should be kept in the most trusted agency Southern countries have, which in most cases is the central bank.

4. Facilitate Digital Financial Services

Finally, competition works better when more competitors compete for business. While regulated banks tend to be poor performers in rural areas, digital financial services (DFS) will overwhelm MFIs in those areas unless the latter can defend their turf by valuable added services. The potential risk of abusing a monopoly position declines to the same extent that access to credit is provided by more than one entity. Digital financial service providers can provide the alternate channel to credit necessary to enhance competition. This is because they

\textsuperscript{95} Cf. Heywood W. Fleisig & Nuria de la Peña, Legal Policy and Ramifications for Rural Finance: Legal and Regulatory Requirements for Effective Rural Financial Markets, \textit{in} CENTER FOR THE ECONOMIC ANALYSIS OF LAW (2003), at 27.

\textsuperscript{96} Maimbo and Gallegos, \textit{supra} note 8 at 25.

\textsuperscript{97} Monica Hamlett, \textit{supra} note 92.

\textsuperscript{98} MARGARET MILLER ET AL., \textit{THE CASE FOR FINANCIAL LITERACY IN DEVELOPING COUNTRIES: PROMOTING ACCESS TO FINANCE BY EMPowering CONSUMERS, THE INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT/THE WORLD BANK} (2009), at 4.

\textsuperscript{99} Fleisig and Peña, \textit{supra} note 95 at 27.
enable many financial transactions from a divergent random space with a simple mobile phone as long as a mobile network is available.

DFS amplify the use of technology, which can increase efficiency, decrease operating costs and enlarge potential outreach. In contrast to DFS, conventional MFI operations often involve cash transactions, branches and a depository vault for fiat money, but they also provide other services and incur related operational costs. DFS also redefines accessibility and affordability, which are at the core of financial inclusion. DFS are, in fact, a game changer. In 89 countries, innovative digital financial services are available that not only transform the way people access financial services, but also offer new business opportunities for operators. Around the globe, more than half a billion mobile money accounts were registered at the end of 2016. Active accounts amounted to more than 170 million, representing new customers who belong to financially excluded and under-served populations. DFS enables underserved clients to transact in small amounts at (hopefully) affordable costs. DFS may also minimize the risk of financial crimes peculiar to cash-based transactions. This frugal innovation has had a formidable impact on the financial service map. A modest innovation has evolved into a huge industry where the emerging economies of the South take the lead while the North stands by.

Of course, it would be naïve to believe the DFS providers to be the new Saints of the South. In fact, they will come with their own profit expectations and problems. For instance, the parties involved in the management and storage of account data and the holding of customer funds, the providers of digital technology and the agents all introduce various forms of risk, including operational risks, consumer-related risks, and the potential for financial crime.

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100 Technology benefits industries to enlarge their outreach as intrinsically it enables cross-border expansion. The use of technological innovation may also motivate the acquisition of international knowledge and it could improve performance in foreign markets, for instance as revealed by the study of of Czech SMEs, see Martina Musteen & Deepak K. Datta, Learning about Foreign Markets: A Study of Czech SMEs, 9 J. INT. ENTREP. 91–109 (2011), at 91 ("...our results indicate that emphasis on technological innovation directly and indirectly influences the performance of such SMEs in international markets").

101 GSMA, STATE OF THE INDUSTRY REPORT ON MOBILE FINANCIAL SERVICES FOR THE UNBANKED 2014 (2014), http://spidercenter.org/polopoly_fs/1.146036.1378747792!/menu/standard/file/Mobile banking - financial services for the unbanked.pdf.

102 GSMA, STATE OF THE INDUSTRY REPORT ON MOBILE MONEY: DECADE EDITION 2006-2016 GSMA (2017), http://www.gsma.com/mobilefordevelopment/wp-content/uploads/2017/03/GSMA_State-of-the-Industry-Report-on-Mobile-Money_2016.pdf., at 6.

103 KATE LAUER & TIMOTHY LYMAN, February DIGITAL FINANCIAL INCLUSION: IMPLICATIONS FOR CUSTOMERS, REGULATORS, SUPERVISORS, AND STANDARD-SETTING BODIES CGAP BRIEF (2015), at 1.

104 The term coined by Bound and Thornton, KIRSTEN BOUND & IAN THORNTON, OUR FRUGAL FUTURE: LESSONS FROM INDIA’S INNOVATION SYSTEM, NESTA (2012), http://www.nesta.org.uk/sites/default/files/our_frugal_future.pdf. (last accessed 5 December 2017).

105 Dirk A Zetzsche et al., From FinTech to TechFin: The Regulatory Challenges of Data-Driven Finance, 7 Univ. Hong Kong Fac. Law Res. Pap. 1–36 (2017), at 3 (Non-financial institution for instance technology, e-commerce and telecommunications companies that entering financial services businesses).

106 LAUER AND LYMAN, supra note 103 at 2.
Agents in particular, are not only prone to attract robbery\textsuperscript{107} but are also vulnerable to becoming insolvent as a result of legal disputes, as costs and/or compensation payments can exceed their net worth.\textsuperscript{108} Further, theft and fraud could stem from hackers and other cybercriminal activity.\textsuperscript{109} If we tackled all those issues, which are arguments in favor of MFIs, and where DFS are widely spread, MFIs may lose an important part of their refinancing opportunities due to a reduction in their clients’ deposits. MFIs will need to justify any additional rate or fee they charge to their clients. In many cases, they may fail in explaining why their credit is more expensive than that of the DFS. While market differentiation and longstanding customer relationships may help good MFIs survive, some may fail – and take their customers with them. Accordingly, incumbents could find themselves in the surprising situation of having to worry more about MFIs in the future than they imagine today.

Yet, DFS delivered by technology companies are most likely indifferent to the social mission carried out by MFIs.\textsuperscript{110} There is space for DFS, banks and MFIs in the South’s finance industry. However, MFIs can benefit from their additional service levels only if they merge the best practices and the most cost-effective utilization of technology, while at the same time maintaining high quality relationships with clients. Ultimately, the key to developing lucrative businesses and achieving financial inclusion, either in a traditional or disruptive (technological) manner, lies in understanding the needs of clients. If this is ensured, there is no place for hard interest rate caps that impact all MFIs in a given country or region regardless of their cost base or service level.

\textbf{VII. Conclusion}

1. Overly high microfinance interest rates are undesirable. However, simple regulatory solutions often fail to achieve the objective for which specific rules are implemented. This is especially true for hard interest rate caps.

2. A hard interest rate cap fails to achieve its objective since it is a one-size-fits-all solution that impacts MFI providers regardless of their cost structures or service levels. In terms of risks, transactions costs and value-added services, some MFIs are structured entirely differently to commercial banks, while other MFIs’ exposures, costs and service levels are similar to those of their commercial peers. Any hard interest rate cap misses these differences and is necessarily either too high or too low: It is too high for ‘low cost, low service’ MFIs, but also for ‘high cost, low service’ MFIs, since it allows a better than necessary profit margin, while it is too low for ‘high cost, high service’ MFIs where it will

\textsuperscript{107} Claudia Mckay, Mark Pickens & Mark Flaming, Agent Management Toolkit: Building a Viable Network of Branchless Banking Agents, CGAP TECH. GUID. (2011), http://www.cgap.org/sites/default/files/CGAP-Technical-Guide-Agent-Management-Toolkit-Building-a-Viable-Network-of-Branchless-Banking-Agents-Feb-2011.pdf., at xiii and 16.

\textsuperscript{108} Evan Gibson, Federico Lupo-Pasini & Ross P. Buckley, Regulating Digital Financial Services Agents in Developing Countries to Promote Financial Inclusion, 26 SINGAPORE J. LEG. STUD. 26–45 (2015), at 31.

\textsuperscript{109} See Arner, Barberis, Buckley, supra note 84, at 35-36.

\textsuperscript{110} Ross P Buckley & Ignacio Mas, The Coming of Age of Digital Payments as a Field of Expertise, 2016 J. LAW, TECHNOL. POLICY 71–87 (2016), at 72.
result in MFIs shutting down and will facilitate the informal credit sector including loan sharks.

3. Rather than imposing hard interest rate caps on intermediaries, we propose approaching the problem of overly high interest rates from the point where high interest rates originate, namely credit and transactions costs.

4. Microfinance credit risk is characterized by borrowers who have zero equity and are uninsured against sudden changes in their lifestyles, while their business models rely on short-term, project-related income. These risk factors justify an analogy between microfinance and venture capital investments. Microfinance is venture capital in the most extreme form. The associated high risk is often reflected in the high interest rates charged by MFIs.

5. Microfinance borrowers sometimes borrow from multiple financial institutions as well as informal lenders with aggressive enforcement mechanisms at their disposal. MFIs need to factor in these risks when granting credit to such borrowers.

6. While the nature of the underlying business cannot be changed, the transparency of the prevailing credit environment, by way of a central credit register for all financial institutions, improves credit conditions for honest borrowers who do not engage in simultaneous multiple lending relationships. Further, digital financial service providers could add to the choice of honest lenders in rural areas that seek only capital, while credit rate transparency would facilitate comparisons among similar MFIs and improve pricing efficiency. Rather than focusing on hard interest caps, regulators are best advised to focus on the practical hurdles of setting up a current credit register in which all loans are entered immediately after the transaction, if possible at the end of each business day.
### References to legislation per country [Annex 1#]

| Country  | Maximum allowed interest |
|----------|-------------------------|
| **Argentina** | Banco Central de la República Argentina (BCRA), TASAS DE INTERÉS, EN LAS OPERACIONES DE CRÉDITO --Última comunicación incorporada: “A” 462- Texto ordenado al 06/ 3/2018, available at http://www.bcra.gov.ar/Pdfs/Texord/t-tasint.pdf (last accessed 10 March 2018); |
| **Australia** | ASIC, Consumer Credit Regulation, available at https://www.moneysmart.gov.au/borrowing-and-credit/consumer-credit-regulation (last accessed 22 November 2017). |
| **Bangladesh** | MRA/Circular Letter No. Regu-05, Guidelines on Interest Rate / Service Charge of Microcredit and relevant issues, at 1, available at http://www.mra.gov.bd/images/mra_files/Circular/circularoninterestrate-english.pdf, (last accessed 5 January 2018); Diana Baide, Bangladesh Microcredit Regulatory Authority (MRA) to Restrict Fees, Cap Microloan Interest Rates at 27%, Discourage Flat Interest Rates, MICROCAPITAL BRIEF, November 18, 2010, available at https://www.microcapital.org/microcapital-brief-bangladesh-microcredit-regulatory-authority-mra-to-restrict-fees-cap-microloan-interest-rates-at-27-discourage-flat-interest-rates/ (last accessed 5 December 2017); Samuel Munzele Maimbo & Claudia Alejandra Henriquez Gallegos, Interest rate caps around the world: still popular, but a blunt instrument. No. 7070. The World Bank, 2014, at 18. |
| **Benin *)** | Banque Centrale des États de l'Afrique de l'Ouest, Avis n° 003 - 08 - 2013 aux établissements de crédit et aux systèmes financiers décentralisés, relatif à la fixation du taux de l'usure dans les Etats membres de l'Union Monétaire Ouest Africaine (UMOA), available at https://www.bceao.int/IMG/pdf/avis_aux_ec_taux_de_l_usure-derniere_version.pdf (last accessed 5 January 2018); see also BCEAO 2014 Annual Report Summarised Version, at 64, available https://www.bceao.int/IMG/pdf/bceao_2014_annual_report.pdf (last accessed 23 November 2017). |
| **Bolivia** | Bolivia: Decreto Supremo No 2055, 10 de julio de 2014, EVO MORALES AYMA PRESIDENTE CONSTITUCIONAL DEL ESTADO PLURINACIONAL DE BOLIVIA (Supreme Decree 2055), available at www.lexivox.org/norms/BO-DS-N2055.pdf (last accessed 11 January 2018) or https://www.asfi.gob.bo/images/MARCO_NORMATIVO/SERV_FINAN_/DS_2055.pdf (last accessed 10 March 2018) ;see alsoLEY No 393, EVO MORALES AYMA, PRESIDENTE CONSTITUCIONAL DEL ESTADO PLURINACIONAL DE BOLIVIA, DECRETA: LEY DE SERVICIOS FINANCIEROS (LEY DE 21 DE AGOSTO DE 2013), available at https://www.bcb.gob.bo/webdocs/sistema_pagos/2013%20-%20%20LEY%20%20Servicios%20Financieros.pdf (last accessed 5 January 2018); ASFI, https://www.asfi.gob.bo/index.php.norm-serv-fina-norm/recopilacion-de-normas.html (last
| Country       | Source                                                                                                                                       |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Brazil       | Banco Central Do Brasil, Marden Marques Soares and Abelardo Duarte de Melo Sobrinho, Microfinanças O Papel do Banco Central do Brasil e a Importância do Cooperativismo de Crédito, 2a edição, revista e ampliada Brasília, 2008 at 159, available at [https://www.bcb.gov.br/htm/public/microcredito/livro_microfinanças_internet.pdf](https://www.bcb.gov.br/htm/public/microcredito/livro_microfinanças_internet.pdf) (last accessed 10 March 2018); Banco Central Do Brasil, Resolution No. 3,229 of 2004, available at [http://www.bcb.gov.br/pre/normativos/busca/downloadNormativo.asp?arquivo=/Lists/Normativos/Attachments/46352/Res_3229_v1_0.pdf](http://www.bcb.gov.br/pre/normativos/busca/downloadNormativo.asp?arquivo=/Lists/Normativos/Attachments/46352/Res_3229_v1_0.pdf) (last accessed 10 March 2018); TECHNICAL NOTE of Resolution 3,310, dated August 31, 2005, Microcredit operations for low income and microentrepreneurs - Regulation 11.110 of 2005 – Consolidation, available at [http://www.bcb.gov.br/pre/denor/port/2005/1//3.310,C,de,31,de,agosto.asp](http://www.bcb.gov.br/pre/denor/port/2005/1//3.310,C,de,31,de,agosto.asp) (last accessed 10 March 2018). |
| Burkina Faso*) | BCEAO 2014 Annual Report Summarised Version, at 64, available [https://www.bceao.int/IMG/pdf/bceao_2014_annual_report.pdf](https://www.bceao.int/IMG/pdf/bceao_2014_annual_report.pdf) (last accessed 23 November 2017). |
| Cambodia     | National Bank of Cambodia, Prakas on Interest Rate Ceiling on Loan, Article 4, at 2, available at [https://www.nbc.org.kh/download_files/legislation/prakas_eng/Prakas-on-Interest-Rate-Cap-Eng.pdf](https://www.nbc.org.kh/download_files/legislation/prakas_eng/Prakas-on-Interest-Rate-Cap-Eng.pdf) (last accessed 5 January 2018); Cambodia caps interest rates on microcredit, March 20, 2017 available at [https://www.dawn.com/news/1321666](https://www.dawn.com/news/1321666) (last accessed 22 November 2017) and [http://news.xinhuanet.com/english/2017-03/13/c_136125874.htm](http://news.xinhuanet.com/english/2017-03/13/c_136125874.htm) (last accessed 30 November 2017). |
| Cameroon**)  | Communaute Economique Et Monetaire De L’Afrique Centrale - Union Monetaire De L’Afrique Centrale, Reglement N° 02/CEMAC/UMAC/CM, Portant d é finition et r é pression de l'usure dans les Etats de la CEMAC, available at [http://www.nationalcouncilofcredit.cm/images/tele/REGLEMENT_CEMAC_TAUX_USURE.pdf](http://www.nationalcouncilofcredit.cm/images/tele/REGLEMENT_CEMAC_TAUX_USURE.pdf) (last accessed 8 January 2018); Djibril Maguette Mbengue, The Worrying Trend of Interest Rate Caps in Africa, 11 November 2013, available at [http://www.cgap.org/blog/worrying-trend-interest-rate-caps-africa](http://www.cgap.org/blog/worrying-trend-interest-rate-caps-africa) (last accessed 23 November 2017). |
| Country                  | Text                                                                                          |
|-------------------------|--------------------------------------------------|
| Central African Republic | Communaute Economique Et Monetaire De L’Afrique Centrale - Union Monétaire De L’Afrique Centrale, Reglement N° 02/CEMAC/UMAC/CM, Portant définition et répression de l’usure dans les Etats de la CEMAC, available at http://www.nationalcouncilofcredit.cm/images/tele/REGLEMENT_CEMAC_TAUX_USURE.pdf, last accessed 8 January 2018; Djibril Maguette Mbengue, The Worrying Trend of Interest Rate Caps in Africa, 11 November 2013, available at http://www.cgap.org/blog/worrying-trend-interest-rate-caps-africa (last accessed 23 November 2017). |
| Chad                    | Communaute Economique Et Monetaire De L’Afrique Centrale - Union Monétaire De L’Afrique Centrale, Reglement N° 02/CEMAC/UMAC/CM, Portant définition et répression de l’usure dans les Etats de la CEMAC, available at http://www.nationalcouncilofcredit.cm/images/tele/REGLEMENT_CEMAC_TAUX_USURE.pdf, last accessed 8 January 2018; Djibril Maguette Mbengue, The Worrying Trend of Interest Rate Caps in Africa, 11 November 2013, available at http://www.cgap.org/blog/worrying-trend-interest-rate-caps-africa (last accessed 23 November 2017). |
| Chile                   | MINISTERIO DE HACIENDA, La Junta de Gobierno de la República de Chile, LEY N° 18.010, ESTABLECE NORMAS PARA LAS OPERACIONES DE CREDITO Y OTRAS OBLIGACIONES DE DINERO QUE INDICA, 27-JUN-1981, available at https://www.leychile.cl/Navegar?idNorma=29438 (last accessed 11 March 2018) amended to LEY NÚM. 20.715, SOBRE PROTECCIÓN A DEUDORES DE CRÉDITOS EN DINERO, 13-DIC-2013, available at https://www.leychile.cl/Navegar?idNorma=1057087 (last accessed 11 March 2018); see also the current version of interest rate regulation, Superintendencia de Bancos e Instituciones Financieras (SBIF), CERTIFICADO N° 02/2018, available at http://www.s bif.cl/s bif web 3/intern et/arc hi vos/Info_Fi n_10752_17014.pdf (last accessed 11 March 2018) and Carlos Madeira Central Bank of Chile, The Impact of Interest Rate Ceilings on Households’ Credit Access, November 2017, available at https://www.s bif.cl/s bif web3/internet/arc hi vos/publica cion_11834.pdf (last accessed 11 March 2018). |
| Colombia                | La Superintendencia Financiera de Colombia, en ejercicio de sus atribuciones legales y en especial de lo dispuesto en los artículos 11.2.5.1.1 y siguientes del Decreto 2555 de 2010, expidió el 29 de septiembre 2017 la Resolución No. 1298, Certificación del Interés Bancario Corriente para las modalidades de Crédito de Consumo y Ordinario, Microcrédito y Consumo de Bajo Monto, available at https://www.superfinanciera.gov.co/jsp/loader.jsf?lServicio=Publicaciones&lTipo=publicaciones&lFuncion=loadContenidoPublicacion&id=10090485 (last accessed 11 March 2018). |
| Country | Reference |
|---------|-----------|
| Côte d’Ivoire *) | BCEAO 2014 Annual Report Summarised Version, at 64, available [here](https://www.bceao.int/IMG/pdf/bceao_2014_annual_report.pdf) (last accessed 23 November 2017). |
| Equatorial Guinea **) | Communauté Économique Et Monétaire De L’Afrique Centrale - Union Monétaire De L’Afrique Centrale, Règlement N° 02/CEMAC/UMAC/CM, Portant définition et répression de l’usure dans les États de la CEMAC, available at [here](http://www.nationalcouncilofcredit.cm/images/tele/REGLEMENT_CEMAC_TAUX_USURE.pdf), last accessed 8 January 2018); Djibril Maguette Mbengue, The Worrying Trend of Interest Rate Caps in Africa, 11 November 2013, available at [here](http://www.cgap.org/blog/worrying-trend-interest-rate-caps-africa) (last accessed 23 November 2017). |
| Ecuador | Banco Central del Ecuador, Resolución N° 140-201 S-F LA JUNTA DE POLÍTICA Y REGULACIÓN MONETARIA Y FINANCIERA, available at [here](https://contenido.bce.fin.ec/docs.php?path=/documentos/Estadisticas/SectorMonFin/TasasInteres/Indice.htm) (last accessed 23 January 2018); see also Tasas de Interés, available at [here](https://contenido.bce.fin.ec/docs.php?path=/documentos/Estadisticas/SectorMonFin/TasasInteres/Indice.htm) (last accessed 23 January 2018). |
| Gabon **) | Communauté Économique Et Monétaire De L’Afrique Centrale - Union Monétaire De L’Afrique Centrale, Règlement N° 02/CEMAC/UMAC/CM, Portant définition et répression de l’usure dans les États de la CEMAC, available at [here](http://www.nationalcouncilofcredit.cm/images/tele/REGLEMENT_CEMAC_TAUX_USURE.pdf), last accessed 8 January 2018); Djibril Maguette Mbengue, The Worrying Trend of Interest Rate Caps in Africa, 11 November 2013, available at [here](http://www.cgap.org/blog/worrying-trend-interest-rate-caps-africa) (last accessed 23 November 2017). |
| Guinea Bissau *) | BCEAO 2014 Annual Report Summarised Version, at 64, available [here](https://www.bceao.int/IMG/pdf/bceao_2014_annual_report.pdf) (last accessed 23 November 2017). |
| Honduras | ACUERDO NÚMERO 37, JEFATURA DE ESTADO, HACIENDA Y CRÉDITO PÚBLICO, REGLAMENTO DE LA LEY PARA PRESTAMISTAS NO BANCARIOS, DECRETO LEY N°14, Publicado en la Gaceta Número 20,883 del 18 de enero de 1973, available at [here](http://www.cnbs.gob.hn/files/leyes/pnb-acdo-37.htm) (last accessed 13 March 2018). |
| India | Master Circular- ‘Non-Banking Financial Company-Micro Finance Institutions’ (NBFC-MFIs) – Directions, RBI/2015-16/20, DNBRI (PD) CC.No.047/03.10.119/2015-16, July 1, 2015 (Updated as on April 20, 2016), available at [here](https://rbidocs.rbi.org.in/rdocs/notification/PDFs/20BF010715F5CFC4543A097A94AA3B189133EB9C602B.PDF) (last accessed 5 January 2018); Samuel Munzele Maimbo & Claudia Alejandra Henriquez Gallegos, Interest rate caps around the world: still popular, but a blunt instrument. No. 7070. The World Bank, 2014 at 18. |
| Country | Source |
|---------|--------|
| **Kenya** | Central Bank of Kenya, Banking Circular No. 4 of 2016, available at [https://www.centralbank.go.ke/uploads/banking_circulars/1456582762_Banking%20Circular%20No%204%20of%202016%20-2016.pdf](https://www.centralbank.go.ke/uploads/banking_circulars/1456582762_Banking%20Circular%20No%204%20of%202016%20-2016.pdf) (last accessed 5 December 2017); Sharanya Madhavan, MICROCAPITAL BRIEF: Kenyan Government Caps Bank Lending Rates, Sets Minimum Deposit Rates, Monday, November 7, 2016, available at [https://www.microcapital.org/microcapital-brief-kenyan-government-caps-bank-lending-rates-sets-minimum-deposit-rates/](https://www.microcapital.org/microcapital-brief-kenyan-government-caps-bank-lending-rates-sets-minimum-deposit-rates/) (last accessed 22 November 2017); Invhestia, Interest Rate Capping and Credit Flow to Private Sector, available at [http://invhestia.com/2017/06/16/interest-rate-capping-and-credit-flow-to-private-sector/](http://invhestia.com/2017/06/16/interest-rate-capping-and-credit-flow-to-private-sector/) (stating: ‘The Banking Amendment Act No. 25 of 2016 took effect on September 14, 2016. Under this amendment, banks were limited to charging a maximum interest rate for a credit facility at not more than 4% and the minimum interest rate granted on a deposit held in interest earning account to at least 70% of the base rate set and published by the Central Bank of Kenya. The objective was to promote a savings culture among the Kenyan public but most importantly to lower cost of credit, resulting in growth of credit flow to private sector.’) (last accessed 23 November 2017). |
| **Myanmar** | Financial Regulatory Department, Number 21 point (b), Under the agreement of the Meeting No.(16/2011) of Union Government held on 4 August 2011 on interest rate, available at [http://www.mof.gov.mm/en/content/myanma-small-loans-enterprise-1](http://www.mof.gov.mm/en/content/myanma-small-loans-enterprise-1) (last accessed 5 January 2018) ; See also Dave Grace and Associates (DGA), LLC, Myanmar Microfinance Regulatory Benchmarking Survey, September 2016, at 29, [http://mekongbiz.org/wp-content/uploads/2017/02/ADB-MBI-MF-Benchmarking-Survey-10-Oct16-final-proof-DG-AB.pdf](http://mekongbiz.org/wp-content/uploads/2017/02/ADB-MBI-MF-Benchmarking-Survey-10-Oct16-final-proof-DG-AB.pdf) (last accessed 5 December 2017); Sanjay Sinha, IMPACT OF RESTRICTIONS ON INTEREST RATES IN MICROFINANCE, ADB SUSTAINABLE DEVELOPMENT WORKING PAPER SERIES, No.45, September 2016 available at [https://www.adb.org/sites/default/files/publication/200141/sdwp-045.pdf](https://www.adb.org/sites/default/files/publication/200141/sdwp-045.pdf) (last accessed 2 December 2017). |
| **Niger*)** | BCEAO 2014 Annual Report Summarised Version, at 64, available at [https://www.bceao.int/IMG/pdf/bceao_2014_annual_report.pdf](https://www.bceao.int/IMG/pdf/bceao_2014_annual_report.pdf) (last accessed 23 November 2017). |
| **Paraguay** | BANCO CENTRAL DEL PARAGUAY, Artículo 1º de la Ley N° LEY N° 2339/2003 que modifica el Artículo 44° de la Ley N° 489/95 “ORGANICA DEL BANCO CENTRAL DEL PARAGUAY”, available at [https://www.bcp.gov.py/limites-para-tasas-usurarias-i398](https://www.bcp.gov.py/limites-para-tasas-usurarias-i398) (last accessed 12 March 2018). |
| Country          | Information                                                                                                                                                                                                 | Reference                                                                                   |
|------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| Poland           | Article 359 Paragraph 2 of the Polish Civil Code came into force as of 1 January 2016, defining that statutory interest is the amount equal to the sum of the reference rate of the National Bank of Poland plus 3.5 percentage points, i.e. 5% in Jan 2016. | Portal for Competition Law, Statutory Interest and Payment Terms in Polish Law, February 28th, 2016, available at http://uclp.eu/odsetki-ustawowe-i-terminy-platnosci-w-polskim-prawie/ (last accessed 9 March 2018). |
| Republic Congo ** | Communaute Economique Et Monetaire De L’Afrique Centrale - Union Monetaire De L’Afrique Centrale, Reglement N° 02/CEMAC/UMAC/CM, Portant d é finition et r é pression de l’usure dans les Etats de la CEMAC, available at http://www.nationalcouncilofcredit.cm/images/tele/REGLEMENT_CEMAC_TAUX_USURE.pdf, last accessed 8 January 2018); Djibril Maguette Mbengue, The Worrying Trend of Interest Rate Caps in Africa, 11 November 2013, available at http://www.cgap.org/blog/worrying-trend-interest-rate-caps-africa (last accessed 23 November 2017). |                                                                                             |
| Senegal *)       | BCEAO 2014 Annual Report Summarised Version, at 64, available at https://www.bceao.int/IMG/pdf/bceao_2014_annual_report.pdf (last accessed 23 November 2017).                                                                 |                                                                                             |
| Thailand         | Notification of the Bank of Thailand No. FPG. 2/2558 on Prescription of Rules, Procedures, and Conditions for Undertaking Nano Finance Business Under Supervision for Financial Institutions (Unofficial Translation : This translation is for the convenience of those unfamiliar with the Thai language Please refer to Thai text for the official version), at 3, Number 4.2.4 on Interest, service charges, and penalty fee related to nano finance under supervision, sub number (1), available at https://www.bot.or.th/Thai/FIPCS/Documents/FPG/2558/EngPDF/25580018.pdf (last accessed 5 January 2018). |                                                                                             |
| Togo *)           | BCEAO 2014 Annual Report Summarised Version, at 64, available https://www.bceao.int/IMG/pdf/bceao_2014_annual_report.pdf (last accessed 23 November 2017).                                                                 |                                                                                             |
| Uruguay          | BANCO CENTRAL DEL URUGUAY, Ley N° 18212 de 19 de diciembre de 2007 Articulo 340 de la R.N.R.C.S.F. Periodo: SETIEMBRE 2017 - NOVIEMBRE 2017, available at http://www.gpa.uy/files.php/informes/7161/2018-01-03-bcu-tasas-medianas-01-2018.pdf?dl=false (last accessed 12 March 2018). |                                                                                             |
THE STATE BANK OF VIETNAM,

The Governor of the State Bank of Vietnam (SBV) issued Circular No. 16/2013/TT-NHNN on June 27, 2013 on maximum VND short-term lending rate to be charged by credit institutions and foreign bank branches to borrowers to meet the capital requirements for several priority economic sectors, available at https://www.sbv.gov.vn/webcenter/portal/en/home/sbv/news/news_chitiet?leftWidth=20%25&showFooter=false&showHeader=false&dDocName=CNTHWEBAP01162520092&rightWidth=0%25&centerWidth=80%25&_afrLoop=580782411958000#%40%3F_afrLoop%3D580782411958000%26centerWidth%3D80%2526dDocName%3DCNTHWEBAP01162520092%26leftWidth%3D20%2526rightWidth%3D0%2526showFooter%3Dfalse%26showHeader%3Dfalse%26_adf.ctrl-state%3Dfhbdxnffc_91 (last accessed 5 January 2018); Vietnam Microfinance Working Group, Microfinance Regulations in Vietnam, NOVEMBER/2013, at 20, available at http://www.microfinance.vn/wp-content/uploads/2014/01/Final-TA-Microfinance-Regulations-in-Vietnam.pdf (last accessed 5 December 2017).

*) Member of Central Bank of the UMOA - Union Monétaire Ouest Africaine or West African Monetary Union/WAEMU

**) Member of CEMAC - Communaute Economique Et Monetaire De L’Afrique Centrale or The Economic and Monetary Community of Central Africa