7070

Policy Research Working Paper

# Interest Rate Caps around the World

# Still Popular, but a Blunt Instrument

Samuel Munzele Maimbo Claudia Alejandra Henriquez Gallegos



## Abstract

Among other common forms of government financial control, caps on interest rates have been declining over the past several decades as most industrialized countries and a rising number of developing countries continue liberalizing their financial policies. However, in several countries the last financial crisis reopened the debate on interest rate controls as a tool for consumer protection. This paper undertakes a stock-taking exercise to determine the number of countries currently capping interest rates on loans. The paper looks at the main characteristics of the regimes countries have used, including the source of rate-setting authority, the methodology, and the criteria for establishing the cap. The paper finds at least 76 countries around the world currently use some form of interest rate caps on loans—all with varying degrees of effects, including the withdrawal of financial institutions from the poor or from specific segments of the market, an increase in the total cost of the loan through additional fees and commissions, among others. The paper concludes that there are more effective ways of reducing interest rates on loans over the long run and of improving access to finance: measures that enhance competition and product innovation, improve financial consumer protection frameworks, increase financial literacy, promote credit bureaus, enforce disclosure of interest rates, and promote microcredit products. Such measures should be implemented in an integrated manner. However, if caps are still considered a useful policy tool for reducing interest rates on loans and increasing access to finance, they should be implemented in accord with the caveats described in the paper.

The Policy Research Working Paper Series disseminates the findings of work in progress to encourage the exchange of ideas about development issues. An objective of the series is to get the findings out quickly, even if the presentations are less than fully polished. The papers carry the names of the authors and should be cited accordingly. The findings, interpretations, and conclusions expressed in this paper are entirely those of the authors. They do not necessarily represent the views of the International Bank for Reconstruction and Development/World Bank and its affiliated organizations, or those of the Executive Directors of the World Bank or the governments they represent.

This paper is a product of the Finance and Markets Global Practice Group. It is part of a larger effort by the World Bank to provide open access to its research and make a contribution to development policy discussions around the world. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at smaimbo@worldbank.org or chenriquezgalleg@worldbank.org.

# Interest Rate Caps around the World: *Still Popular, but a Blunt Instrument*

Samuel Munzele Maimbo World Bank Claudia Alejandra Henriquez Gallegos World Bank

**Keywords**: Financial Sector Policy Formulation, Policy Objectives, Financial Sector Development, Non-Bank Financial Institutions, Policy Implementation.

JEL Classification: G18, G28, G38.

# **Table of Contents**

1. Int	roduction
2. Gl	obal Stock-Taking Exercise
2.1.	Overall Results of the Stock-Taking Exercise
2.2.	Characteristics of Interest Rate Cap Regimes
2.3.	Effects of Interest Rate Caps12
3. Co	ountry Descriptions of Interest Rate Caps13
4. Fin	nancial Sector Characteristics of Countries That Cap Interest Rates on Loans20
4.1.	Financial Sector Regulator and Consumer Protection20
4.2.	Financial Sector Indicators
5. Po	licy Recommendations23
5.1.	Competition23
5.2.	Financial Consumer Protection24
5.3.	Financial Consumer Literacy24
5.4.	Credit Information25
5.5.	Microcredit Products
5.6.	Interest Rate Caps
6. Co	nclusions27
Referen	
Append	lix

#### 1. Introduction

Among other common forms of government financial control, caps on interest rates have been declining over the past several decades as most industrialized countries and a rising number of developing countries continue liberalizing their financial policies. The rationale for these changes is that making financial markets more accessible has a positive impact on growth, productivity, and poverty reduction (Bekaert, Harvey, and Lundblad 2001). However, in several countries the financial crisis of 2008 reopened the debate on interest rate controls as a tool for consumer protection. In fact, countries such as El Salvador (2012), the Kyrgyz Republic (2013), and Zambia (2013) introduced fresh interest rate caps on loans after the financial crisis, while others like Japan have imposed more restrictive caps.

Several political and economic reasons motivate the use of interest rate caps, for example, to support a specific industry or sector of the economy where a market failure exists or where a greater concentration of financial resources is needed. Those market failures result from information asymmetries and the inability of financial institutions to differentiate between risky and safe clients, from adverse selection, and from moral hazard. Thus interest rate caps may be a useful mechanism for providing short-term credit to a strategic industry or for supporting a sector until it is sustainable by itself (Miller 2013).

Interest rate caps can also be justified to protect consumers from usury and exploitation by guaranteeing access to credit at reasonable interest rates and to facilitate prosecution of exploitative and deceptive lenders. They can also help protect the public interest by ensuring a fair and reasonable interest rate on loans. On this premise, interest rate caps may also be a good way to limit access to credit to some impaired and low-income consumers, because they help avoid social harm (OFT 2010). And, finally, according to another rationale, because prices charged for credit can be arbitrary and anticompetitive and thus be higher than the true cost of lending, setting a lower cap on interest would still allow lenders to operate.

Others argue that in countries where financial institutions have high market power limiting the price of credit can be justified to protect consumers (Dewatripont and Tirole 1994). In fact, empirical evidence shows that interest caps on loans were successful in the Republic of Korea for the period 1956–94 and that financial liberalization did not significantly help increase financial depth (Demitriades and Luintel 2001). Nonetheless, we found no further evidence supporting this argument.

Other evidence argues against the use of interest rate caps since they are an inefficient tool for lowering interest rates, especially in the long run. They also limit access to credit, reduce transparency,

and decrease product diversity and competition. In addition, they could undercut the demand for formal credit and affect firms' productivity.

Moreover, because interest rate caps distort the market and generate adverse selection, financial entities tend to lend to clients with higher collateral, thereby creating inefficiencies in financial intermediation. Consequently, financial institutions curtail their lending to those who need it most and have little access to alternative sources of credit (Miller 2013). Even though financial institutions can remain profitable in the presence of interest rate caps, such restrictions may reduce investments in new markets. In extreme cases where ceilings are set at unprofitable levels, banks and microfinance institutions may withdraw from certain locales such as rural areas or from expensive market segments because they cannot cover their costs.<sup>1</sup> In some cases, then, low-income borrowers with few options for borrowing in the formal market could turn to unlicensed moneylenders, probably at a higher interest rate. Finally, according to some evidence, interest rate caps on loans discourage microfinance nongovernmental organizations (NGOs) and other sources of finance for the poor from converting into licensed financial institutions (Helms and Reille 2004).

Caps that are set too low and caps that are set too high are both problematic. In countries where the caps do not cover fees and commissions and when the definition of *interest rate* is not clear, for example, financial institutions may give the impression of compliance with the ceiling but charge fees and commissions that are not considered part of the cost of the loan. Some also argue that in the opposite case, when caps are not set too low, interest rates will still tend to rise toward the caps (Helms and Reille 2004; Miller 2013; and OFT 2010).

The introduction of interest rate ceilings 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. On the other hand, some expected benefits of financial liberalization are related to potential gains in terms of efficiency in the allocation of investment resources. In this context, Galindo, Schiantarelli, and Weiss's study (2007) of firms in 12 developing countries concluded that financial liberalization – such as reduction of credit controls – had improved the efficiency of investment in the majority of cases.

In light of all the arguments pro and con on interest rate caps, this paper examines the characteristics and effectiveness of interest rate regimes around the world and, when possible, provides policy recommendations.

<sup>&</sup>lt;sup>1</sup> Evidence of market contraction was seen in Nicaragua and West Africa.

For that purpose, the paper is organized as follows. Section 2 presents the results of the stocktaking exercise on the countries with interest rate caps and the ones without them. The section also provides a general description of the main characteristics of the various interest rate regimes, including the source of rate-setting authority, the criteria for determining what is capped, and the ways the cap is applied in countries that currently use them. Section 3 presents further details on the use of interest rate caps by country. Section 4 presents some relevant financial sector characteristics in countries that cap interest rates on loans. Section 5 discusses alternatives to interest rate caps for avoiding predatory lending. Finally, section 6 concludes.

#### 2. Global Stock-Taking Exercise

In this section, we look at all available sources to determine which countries around the world are currently imposing interest rate caps on loans. We also look at various characteristics of the caps, such as the criteria, methodology of the calculus, regulatory changes, and other relevant aspects. In addition, we look at whether the cap applies to the banking sector or to nonbanking financial institutions. Our primary sources of information include other research on interest rate restrictions, blogs from the Consultative Group to Assist the Poorest (CGAP), websites of government agencies, and news sites such as Reuters and the *Financial Times*. Finally, we provide some country evidence on the effects of interest rate caps.

Our study found the practice of regulatory controls on interest rates to be widespread. According to Helms and Reille (2004), for example, about 40 developing and transitional countries had interest rate ceilings in place. In European Union member countries, 14 states had some form of contractual interest rate ceiling in 2010, while 13 had no caps (iff/ZEW 2010). In addition, CGAP found 17 countries with interest rate ceilings in Sub-Saharan Africa (SSA) as of late 2010 (CGAP-MIX 2011).

#### 2.1. Overall Results of the Stock-Taking Exercise

The evidence from our review (figure 1) indicates that 61 out of the 152 countries (40 percent) that are inside the World Bank regions currently impose interest rate caps on loans. Most of these countries are in SSA and in Latin America and the Caribbean (LAC), accounting for 50 percent and 48 percent of the total countries in their respective regions, while only seven countries (or 44 percent) in East Asia and the Pacific (EAP) have interest rate caps. Evidence of interest rate caps was also found in 11 Western European countries and in other countries such as Australia, the Bahamas, Canada, and the United States.

Overall, 76 countries around the world impose some form of interest rate caps on loans. Table 1 gives a complete list of countries with interest rate caps<sup>2</sup>.

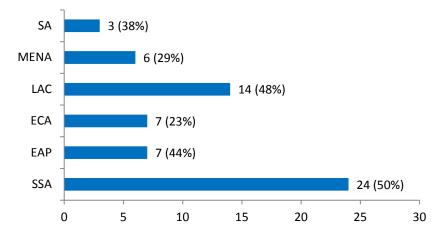


Figure 1. Number and Percentage of Countries with Interest Rate Ceilings, by Region

*Source*: Helms and Reille 2004; Mbengue 2013; Castellanos 2012; Porteous, Collins, and Abrams 2010; iff/ZEW 2010; EIU 2012, 2013; CGAP-MIX 2011; Steiner and Agudelo 2012.

*Notes*: The value in parenthesis represents the share of countries with interest rate caps in the region. EAP = East Asia and the Pacific; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SA = South Asia; SSA = Sub-Saharan Africa.

In this exercise, we found that the main reasons for using interest caps on loans were to protect consumers from excessive interest rates, to increase access to finance, and to make loans more affordable. Most countries regulate interest rates with the broad aim of protecting consumers, as in the case of Spain. Other countries provided more specific objectives, such as protecting the weakest parties (Portugal); shielding consumers from predatory lending and excessive interest rates (Belgium, France, the Kyrgyz Republic, Poland, the Slovak Republic, and the United Kingdom); stopping the abuses arising from too much freedom (Greece); controlling over-indebtedness (Estonia); and decreasing the risk-taking behavior of credit providers (the Netherlands). Similarly, in Thailand authorities stated that the purpose of the caps was to make finance affordable for low-income borrowers.<sup>3</sup> Finally, Zambia's authorities introduced the caps to mitigate the perceived risk of over indebtedness and the high cost of credit, as well as to enhance access to the underserved.

<sup>&</sup>lt;sup>2</sup> The stock-taking exercise was conducted during January-February 2014. Therefore, changes after that date are not reflected in this document.

<sup>&</sup>lt;sup>3</sup> http://www.microfinancethailand.com/.

SSA	EAP	ECA	LAC	MENA	SA	Western Europe	Others
Eritrea	China	Armenia	Argentina	Algeria	Bangladesh	Belgium	Australia
Ethiopia	Japan	Estonia	Bolivia	Egypt, Arab Rep.	India	France	Bahamas
Ghana	Lao PDR	Kyrgyz Republic	Brazil	Libya	Pakistan	Germany	Canada
Guinea	Myanmar	Poland	Chile	Malta		Greece	United States
Mauritania	Philippines	Slovak Republic	Colombia	Syrian Arab Republic		Ireland	
Namibia	Thailand	Slovenia	Ecuador	Tunisia		Italy	
Nigeria	Vietnam	Turkey	Guatemala	Guatemala		Netherlands	
South Africa			Honduras		Portugal		
Sudan			Nicaragua			Spain	
Zambia			Paraguay			Switzerland	
WAEMU			Republic Dominican			United Kingdom	
CEMAC			Uruguay				
			Venezuela, RB				

Table 1. Countries with Interest Rate Caps, by Region

Sources: Helms and Reille 2004; Mbengue 2013; Castellanos 2012; Porteous, Collins, and Abrams 2010; iff/ZEW 2010; EIU 2012, 2013; CGAP-MIX 2011; Steiner and Agudelo 2012.

*Notes*: The West African Economic and Monetary Union (WAEMU) includes Benin, Burkina Faso, Cote d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, and Togo. The Economic and Monetary Community of Central Africa (CEMAC) includes Cameroon, the Central African Republic, Chad, the Republic of Congo, Equatorial Guinea, and Gabon.

SSA = Sub-Saharan Africa; EAP = East Asia and the Pacific; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SA = South Asia; WE = Western Europe.

Romania established interest rate ceilings by law in 1938 but does not currently apply caps on bank loans or credit lenders (iff/ZEW 2010). Peru allows interest rates to be determined by the market, but in exceptional circumstances the central bank has the power to set caps. In Mexico, the central bank by law can regulate interest rates but has not done so. Panama, which used to have caps based on its usury law, eliminated the law in 2008 (Castellanos 2012). Morocco has the option to impose ceilings according to its Law on Microcredit Associations but has not exercised it (Khaled 2011). Neither Austria nor Denmark has maximum interest rates. Denmark debated the issue in early 2009 and 2010 but did not follow up. Finally, Cyprus, which used to have interest rate ceilings, ended the practice in 1999 to enhance its competitiveness in the banking sector (iff/ZEW 2010).

#### 2.2. Characteristics of Interest Rate Cap Regimes

When a country places interest rate caps on loans, it has to define the scheme to be used, including the source of the rate-setting authority, the type of legislation, and the entity responsible for setting the cap. We also explore the legal instruments countries use to establish the cap. Other relevant characteristics are whether the cap will apply only to the interest rate or to fees and commissions as well, whether the ceiling will vary according to the type of credit or to its duration or other criteria, and whether the cap will be absolute or relative. If the rate is relative, will the benchmark be exogenous or endogenous to the credit market, and will the cap be a multiplication coefficient or a fixed margin over the benchmark rate?

The text below cites the issues involved in setting interest rate caps on loans and provides definitions and examples of countries in each case based on our evidence.

**2.2.1. Source of Authority.** As defined in Helms and Reille (2004), an interest rate ceiling regime can take one of three forms, based on the source of the authority: interest rate controls, usury limits, and de facto ceilings.

Interest rate controls are usually found in banking or central banking laws that give authority to the financial regulator to set the maximum interest rate on lending for regulated financial institutions. This study found 24 countries that use interest rate caps on loans (see table A1 in the appendix). In SSA, 14 countries use interest rate controls, including the eight countries in the West African Economic and Monetary Union (WAEMU) and the six in the Economic and Monetary Community of Central Africa (CEMAC). Four in the Middle East and North Africa (MENA) (Algeria, Libya, the Syrian Arab Republic, and Tunisia) and two countries in EAP impose these controls. Only one country in Europe and Central Asia (ECA) (Turkey), one in LAC (Paraguay), one South Asia (SA) (India), and "others" (Bahamas) use interest rate controls as its source of authority.

The entity responsible for setting the interest rate caps in most of the countries that use them is the central bank, as found explicitly in Myanmar (where the central bank imposes ceilings for commercial bank lending) and Turkey (where the central bank sets a monthly maximum on conventional interest for credit cards).

*Usury limits* are generally encoded into usury laws and give authority to a government body to set limits on rates for specified financial institutions. Some sort of usury limits are used in 28 countries. The majority of them can be found in the LAC region (12 countries), followed by 7 in Western Europe, and 6 in ECA. Two countries were found in EAP and one in SSA.

The entity responsible for setting the interest rate caps in countries with usury laws varies across the sample. In some countries the central bank sets the cap as in Belgium, Colombia, Ecuador, Estonia, France, the Kyrgyz Republic, the Philippines, Poland, Portugal, Spain, Uruguay, and the República Bolivariana de Venezuela. In others, the authority may lie with the court, as in Germany; the legislature, as in Italy; or the parliament, as in Slovenia. In other countries such as the Slovak Republic and the United Kingdom, caps are set by the minister of finance.

*De facto ceiling* regimes are used in some countries when formal interest caps are not codified into law; however, interest rates are kept below specific levels through political pressure or judicial activism. Examples of this practice can be seen in eight countries, four of them in EAP. In China, Brazil, the Dominican Republic, the Lao People's Democratic Republic, and Vietnam, for example, state-owned banks offer credit at subsidized rates. In Pakistan, interest rates are repressed, unofficially and through government programs. In Ethiopia, microfinance institutions maintain a lower interest rate mainly for political reasons. Finally, another form of de facto ceilings is applied in the Philippines, which has a gentlemen's agreement to cap interest rates on loans.

**2.2.2. Legal Instrument.** In a sample of 30 countries, we found that the most common legal instrument for implementing interest rate caps is usury laws (30 percent of the countries), followed by criminal or civil codes (23 percent) and consumer credit laws (13 percent). Countries less frequently impose caps on interest rates through microfinance laws and credit union acts (7 percent of the countries in both cases; see table A2).

Usury laws for implementing interest rate caps have a long history going back to ancient times. Particularly, we found in our sample some examples of countries that have been using usury laws since many years such as France (1935), Japan (1954), and Namibia (1968). However, such laws have also been used recently in countries such as the Kyrgyz Republic (2013) and Uruguay (2007). Similarly, criminal or civil codes have implemented these caps: Malta's civil code dates from 1868, and Poland introduced interest rate regulations on loans through its civil code in 2005. The United Kingdom has used a credit union act to implement caps on interest rates since 1979, while Ireland has used such legislation since 2012 (see tables A3 through A10 for legal instruments by region).

Other legal instruments, such as consumer credit laws, are also in use: Spain's since 1995 and Australia's since 2009. Decrees have been used to set caps in Tunisia (1999) and Portugal (2009), while Zambia (2012) set caps on interest rates through banking laws. Bangladesh (2010) and Myanmar (2012) have regulated the maximum interest rates that microfinance institutions can charge through microfinance laws.

**2.2.3.** Criteria. An important aspect of the interest rate cap is defining what exactly is to be capped. Are fees and commissions, for example, considered part of the interest rate or not? This study found three types of interest to which a ceiling is applied: the effective interest rate, the annual percentage rate, and the nominal interest rate.

Our study found that the *effective interest rate*—that is, the interest rate that covers all financial costs (such as interest rates, fees, and commissions) expressed as a percentage of the loan used during each payment period—was the most common type. Tunisia and Zambia<sup>4</sup>, plus all countries in CEMAC and WAEMU use this definition to determine the cap.

The *annual percentage rate* (or APR) is the effective interest rate multiplied by the number of periods in a year; it therefore includes all commissions and fees. APR is commonly applied in the Western European countries<sup>5</sup> and in some countries in ECA such as Estonia, the Slovak Republic, and Slovenia and in Australia.

A less frequently used type of interest rate is the *nominal interest rate*, which represents the rate to be paid on a loan contract; thus it does not include fees, commissions, or other expenses. Countries such as Chile, Colombia, Greece, India, and the Kyrgyz Republic cap interest rates on loans according to this definition. Poland, for its part, relies on nominal interest rates for imposing ceilings but has a separate regulation for fees and commissions.

**2.2.4.** Methodologies. When countries decide to cap the interest rate on loans, they can apply two different criteria: an *absolute* cap (which is a fixed nominal rate) or a *relative* cap (which is calculated against a benchmark rate). When countries impose a relative ceiling, they also have to between a reference rate in the credit market in practice (*endogenous*) or a base rate such as the interbank refinancing rate (*exogenous*). Then, they must choose between using a *multiplication coefficient* or a *fixed margin* over the reference rate. Multiplication coefficients are usually expressed as *x* times the benchmark rate plus *x* percentage points.

Evidence of *absolute interest rate caps* were found in 24 countries (see table A3), most of them in SSA. Other examples include the U.S. state of Arkansas, which sets a maximum interest rate of 17 percent in its constitution; WAEMU countries, where the maximum effective interest rate is set at 15 percent for banks and 24 percent for nonbanking institutions; Thailand, with a cap of 36 percent for

<sup>&</sup>lt;sup>4</sup> http://www.boz.zm/publishing/Speeches/Press%20Release%20on%20Interest%20Rates.pdf.

<sup>&</sup>lt;sup>5</sup> Western European countries using APR to establish ceilings are Belgium, France, Germany, Ireland, Italy, the Netherlands, Portugal, Spain, and the United Kingdom.

microfinance lenders; the Arab Republic of Egypt, with a maximum interest rate of 7 percent for commercial transactions; and Bangladesh, with a cap of 27 percent for microcredit loans. The United Kingdom currently has an absolute interest rate ceiling of 2 percent per month for credit unions, and Greece limits the credit rate of nonbanks to 6.75 percent per year. As illustrated above, the application of absolute interest rate caps is limited to specific types of credit or specific types of institutions (iff/ZE 2010).

Indications of *relative interest rate ceilings* were found in 32 countries, most of them in SSA, LAC, ECA, and Western Europe. The majority of them use an endogenous benchmark rate, and only six use exogenous reference rates (see table A4).

Of those 26 countries that use *endogenous* benchmark rates, 17 use the *multiplication coefficient* over the reference rate, 7 use *fixed margins*, and 2 use a combination. Some examples of countries using the *multiplication coefficient* applied to an endogenous rate are Armenia, which has a ceiling of twice the banking rate; Estonia, with a ceiling of three times the market average; Chile, with a maximum interest rate of 1.5 times the average interest rate; and Portugal, with a maximum rate equal to 133 percent of the average APR by type of credit. Countries that apply a *fixed interest margin* to an endogenous reference rate are the Kyrgyz Republic and those in CEMAC, while Germany uses both a multiplication factor and a fixed margin to establish the maximum APR. In that case, the fixed margin of 12 percentage points serves as a second restraint on the dispersion of the ceiling from the mean (iff/ZEW 2010).

On the other hand, countries such as Belgium, Brazil, Mauritania, the Netherlands, and Spain use an *exogenous benchmark rate*. Multiplication coefficients are used in Brazil, which caps the interest rate on commercial loans at two times the SELIC (Sistema Especial de Liquidação e Custodia) rate, and in Poland, which uses a coefficient of four times Lombard rate, that is, the rate that determines the cost of liquidity obtainable at the National Bank of Poland (NBP). In the Netherlands, the base rate is set on the basis of the European Central Bank rate plus a fixed margin of 12 percent. Belgium uses a more complicated method for calculating the cap, where the references are derived from fluctuations of either the three-month Euribor or the one- or the two-year government bond rates (iff/ZEW 2010).

**2.2.5.** Unique or Different Ceilings. According to this study, most of the countries with interest rate caps establish different ceilings either on the amount of credit to be extended, the credit type, the duration of the credit, or a combination. Examples are Chile, which has nine categories of ceilings based on size, currency, and term; France, which calculates 12 caps based on the amount and type of credit; and Uruguay, where the interest cap depends on the amount of the loan. In addition, authorities sometimes impose different ceilings based on the type of institution to which the loan is made. For instance, Zambia

has one ceiling for banks, one for microfinance institutions, and one for nonbanking financial institutions. Similarly, Ireland has one ceiling for credit unions and another for private moneylenders.

In contrast, just a few countries use *unique* interest rate caps. Among them are the Kyrgyz Republic, which sets a cap only for microloans; Poland, which sets a unique cap on consumer loans; and the countries in CEMAC, which set a ceiling for the microfinance sector.

#### 2.3. Effects of Interest Rate Caps

Empirical evidence on the effects of interest rate caps on loans was found for some countries. In most cases, the effects were predominantly negative, even though, in the case of the United States, a few studies supported positive outcomes. For other countries, though, no results are yet available on the impacts of the caps, and it is too early to draw conclusions.

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. In WAEMU countries, the imposition of interest rate caps on microfinance loans caused microfinance institutions to withdraw from poor and more remote areas and to increase the average loan size to improve efficiency and returns because the interest rate ceiling was considered too low (Helms and Reille 2004). 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 (Ellison and Forster 2006; Porteous, Collins, and Abrams 2010).

In Armenia, the lack of clarity on how to calculate the interest rate led banks and microfinance institutions to impose fees and commissions, thus avoiding the ceiling and reducing the transparency for consumers (Helms and Reille 2004). In Poland, interest restrictions reduced both access to credit and welfare. In France and Germany, Ellison and Forster (2006) found that interest rate ceilings decreased the diversity of products for low-income households. In France, lenders have used revolving credit to reach lower-income households, while in Germany many low-income and high-risk borrowers are excluded from credit.

The work of Capera, Murcia, and Estrada (2011) finds a negative association between restrictive limits on interest rates and financial depth in 18 countries in Latin America for the period 1980–2008. In Nicaragua, for instance, the application of an interest ceiling caused microfinance institutions to reduce lending and prompted a number of such institutions to leave rural areas, due to high operational costs and risks. They also responded by adding fees and other charges to cover their costs, since these were not capped (Helms and Reille 2004). In the case of Colombia, Delgado (2004) found that interest rate limits severely affected small firms because of their higher transaction costs; more recently, the loosening of

caps was one of the reasons behind the increase in the volume of microcredit lending (Porteous, Collins, and Abrams 2010). In Bolivia, the introduction of maximum interest rates in 2004 led to a decrease in the licensing of new lending institutions (Miller 2013).

Several studies have analyzed the effects of caps on loans in the United States. Laeven (2003) found that financial liberalization measures, such as the elimination of interest caps, have positively affected small enterprises' access to finance, while Ellison and Forster (2006) observed a migration of clients to states with less restrictive lending. Another study focused on mid-19th century New York, concluding that interest rate caps increased both illegal lending and the average size of the loans (Bodenhorn 2007). Others findings in the United States reveal that access to credit for high-risk borrowers is greater when interest rate caps are higher but that the high cost of credit increases the probability of default. Furthermore, although the introduction of caps in the credit union sector lowered interest rates, the credit supply decreased (iff/ZEW, 2010).

### 3. Country Descriptions of Interest Rate Caps

As mentioned in section 2, 76 countries around the world are currently using some form of interest rate caps on loans. This section will provide further details on most of these countries by region.

#### 3.1. Sub-Saharan Africa

In SSA, interest rates on loans are currently capped in 24 countries. Those include the eight countries in the West African and Monetary Union (WAEMU) (Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, and Togo), plus Eritrea, Ethiopia, Ghana, Guinea, Mauritania, Namibia, Nigeria, South Africa, and Sudan. The six countries in CEMAC and Zambia also use interest rate caps.

*South Africa* has made several changes in its interest rate restrictions. First, the authorities signed an exemption in the usury law to remove small loans from the interest rate ceilings in 1993. Then, after more than a decade with no cap on small loans, a National Credit Act went into effect in 2007 and reimposed a cap on small loans and introduced a cap of 5 percent per month on short-term loans as part of an integrated credit framework. In addition, the act recognizes seven credit subsectors with different maximum interest rates linked to a benchmark rate set by the central bank. Fees are also capped (Porteous, Collins, and Abrams 2010). For their part, WAEMU countries—which established interest rate controls in 1997—dropped their ceilings by 3 percent in 2013. Banks can now charge a maximum interest rate of 15 percent, with a maximum rate of 24 percent for microfinance institutions (MFIs) (Mbengue 2013).

Although the National Bank of Ethiopia eliminated all interest rate ceilings in the financial sector in 1998, *Ethiopia* is still considered to have de facto interest rate ceilings since most microfinance institutions have chosen to maintain a lower interest rate, principally for political reasons.

Continuing with the trend of introducing interest rate controls in African countries, CEMAC which includes Cameroon, the Central African Republic, Chad, the Republic of Congo, Equatorial Guinea, and Gabon—capped interest rates in 2012. For the microfinance sector, the ceiling is calculated as the average effective interest rate charged by microfinance institutions during the previous six months plus a margin of 33 percent. In 2013, *Zambia* introduced a cap on commercial lending at nine percentage points over the policy rate.<sup>6</sup> It has also introduced a ceiling on the annual effective interest rate on loans charged by nonbanking financial institutions (NBFIs).<sup>7</sup> The interest rate ceiling is now 42 percent for NBFIs designated as microfinance service providers by the Bank of Zambia, while rates charged by other NBFIs are not to exceed 30 percent.<sup>8</sup>

#### 3.2. East Asia and the Pacific

In East Asia and the Pacific, seven countries currently have interest rate ceilings in place. *Japan*, whose 1954 usury law caps rates at 20 percent, has a long history of imposing such controls. Over the years, the country has implemented several changes to the regime. First, in 2000 it modified the law to allow interest rates up to 29.2 percent on consumer loans. Then, in 2006 a change to the Money Lending Business Law reduced the maximum interest rate permitted on unsecured loans to 20 percent (Porteous, Collins, and Abrams 2010). *Thailand* established in its civil code a maximum interest rate of 15 percent for loans granted by unofficial financial institutions. The central bank, however, set a ceiling of 28 percent for credit card loans (EIU 2012, 2013). In 2013, the Ministry of Finance capped the annual rate that microfinance lenders can charge at 36 percent.<sup>9</sup> *Myanmar*, which applies controls on interest rates for microfinance and bank lending, implemented a new law in 2011 that caps interest rates for microfinance and bank lending, which were lowered to 13 percent per year in 2012, while establishing a lending cap of 8.5 percent per year for the Myanmar Agriculture Development Bank (GIZ 2013; Duflos et al. 2013).

<sup>&</sup>lt;sup>6</sup> http://www.bloomberg.com/news/2012-12-21/zambia-caps-lending-rates-for-banks-including-stanbic-barclays.html.

<sup>&</sup>lt;sup>7</sup> Nonbanking financial institutions include companies, building societies, microfinance institutions, development banks, savings and credit institutions, and bureaus de change.

<sup>&</sup>lt;sup>8</sup> http://www.boz.zm/publishing/Speeches/Press%20Release%20on%20Interest%20Rates.pdf.

<sup>&</sup>lt;sup>9</sup> http://www.microfinancethailand.com/.

Other countries of the region, such as China, Lao PDR, and Vietnam, did not have an explicit law on interest rate ceilings; however, they apply de facto controls on state-owned banks that offer large loans at subsidized rates (Helms and Reille 2004). *China* ended its controls on lending rates in July 2013 as part of liberalization reforms.<sup>10</sup> Nevertheless, as Derek Scissors notes in a posting on the American Enterprise Institute website,<sup>11</sup> China offers financial subsidies through state-owned banks at real interest rates that are often negative, making it impossible for other lenders to compete. The government of *Vietnam* implemented certain government policies such as an interest rate subsidy through state-owned commercial banks.<sup>12</sup> In 2010, the government also removed the lending rate cap on commercial loans (IMF 2010). However, authorities have temporary capped interest rates on short-term loans that microfinance institutions can charge to some sectors such as agriculture, exports, high technology and small and medium companies (Vietnam Microfinance Working Group 2013).

In the *Philippines*, a "gentleman's agreement" maintains a cap on the bank interest rate of 5 percent over the 91-day T- bill rate in the secondary market, an arrangement implemented after the Asian crisis.<sup>13</sup> In 1981, the central bank removed the 1916 usury law, leaving a ceiling only on short-term lending rates; in 1983, all rates were deregulated, following market-oriented policies.

#### 3.3. Europe and Central Asia

Seven countries in Europe and Central Asia have contractual interest rate caps on loans, most of them established by usury laws. Through its civil code, *Armenia* imposes interest rate ceilings on loans granted by commercial banks and microfinance institutions; these rates cannot exceed twice the banking rate set by the central bank (EIU 2009). In *Slovenia*, ceilings apply to the nonbanking sector only, since it was judged that banks faced sufficient competition to keep rates in check. An interest rate cap of twice the average APR charged by banks and savings institutions applies to consumer credit. The caps are based on the term and the amount of the credit. Specific interest rate restrictions also apply to housing loans and caps for ecological credits (iff/ZEW 2010). In *Estonia*, the central bank set a unique ceiling on loans of three times the market average (iff/ZEW 2010).

In 2005, *Poland* introduced a maximum interest rate on consumer loans capped at four times the central bank Lombard rate. The ceiling is set on the borrowing rate, not the rate representing the total cost of the credit. Fees and additional charges related to the credit contract are separately regulated and cannot

<sup>&</sup>lt;sup>10</sup> http://www.economist.com/news/finance-and-economics/21582290-chinas-central-bank-has-liberalised-lending-rates-does-it-matter-small-step.

<sup>&</sup>lt;sup>11</sup> http://www.aei.org/speech/foreign-and-defense-policy/regional/asia/the-importance-of-chinese-subsidies/.

<sup>&</sup>lt;sup>12</sup> The interest rate subsidy scheme for short-term loans was eliminated by end-2009.

<sup>&</sup>lt;sup>13</sup> http://www.bsp.gov.ph/downloads/Publications/FAQs/intrates.pdf.

exceed 5 percent of the amount of the credit (iff/ZEW 2010). In 2008, the *Slovak Republic* set its interest rate cap at twice the average APR for the type of consumer credit extended. It cannot be four times higher than the value of the weighted average APR cost and the average interest rates for all types of consumer credits (iff/ZEW 2010). In 2013, the *Kyrgyz Republic's* parliament passed a usury bill imposing an interest rate cap on microloans to be set by its central bank and calculated as the weighted interest rate for bank loans plus 15 percent.<sup>14</sup>

In 2006, *Turkey's* central bank established a monthly maximum conventional interest for credit cards announced every three months. Then, in 2012, a new debt law imposed a ceiling on interest rates for consumer and credit card loans. Annual interest on consumer and credit card loans may be as much as 13.5 percent, or 50 percent more than the official interest rate set at 9 percent by the cabinet in 2006.

#### 3.4. Latin America and the Caribbean

Fourteen countries in Latin America and the Caribbean cap interest rates on loans. Like the ECA region, in most of LAC countries the maximum interest rates that financial institutions can charge are encoded in usury laws (Porteous, Collins, and Abrams 2010). In *Chile*, the law that set the maximum interest rates on loans dates from 1981. That rate cannot exceed by more than 50 percent the current interest rate set at the time of the convention. The current interest rate and the maximum interest rate are published by the Superintendence of Banks and Financial Institutions, which determines nine categories of credit operations based on currency, indexation, size, and term (Flores, Morales, and Yáñez 2005). Since 1995, *Paraguay* has also imposed interest rate controls on several segments. That country defines *usury* as an effective interest rate that exceeds by 30 percent the average of the maximum annual interest rates that banks and financial institutions charge on consumer credits, distinguishing by amount and term of the obligation. In *Argentina*, the usury law implemented in 1998 establishes that the maximum interest rate that the lender charges for personal lending operations. In the case of NBFIs, the interest rate cannot exceed by more than 25 percent the average interest rate for personal lending operations published by Argentina's central bank (Capera, Murcia, and Estrada 2011).

From 2000 onward, more countries in LAC have imposed interest rate caps. In 2000, for example, *Colombia* defined a usury interest rate for credit operations at 1.5 times the weighted average of interest rates for the specific segments of commercial credit, consumption credit, and microcredit. By law, financial institutions that offer microcredit are able to charge fees and commissions in addition to the

<sup>&</sup>lt;sup>14</sup> http://www.globalenvision.org/2013/10/15/microfinance-crosshairs-will-kyrgyzstans-usury-bill-backfire.

interest rate. At the end of 2010, the formula for calculating the benchmark rate was changed to a simple average of the interest rates in the previous 12 weeks for different segments, thus becoming less stringent (Castellanos 2012). In Nicaragua, a 2001 law regulates interest rates on only loans to institutions and individuals not regulated by banking authorities (including NGOs). Currently, the maximum interest rate is up to two times the weighted average charged by authorized commercial banks, published by Nicaragua's central bank,<sup>15</sup> while by law microfinance institutions can set interest rates freely (Helms and Reille 2004; EIU 2013). Since 2002, Brazil has capped interest rates for commercial loans in local currency that take place outside the financial system. Those operations cannot exceed the SELIC rate; however, when loans have economic purposes, the interest could be more than twice the SELIC rate. In 2011, the government launched a program to boost microcredit, capping interest rates at 8 percent per year for loans of up to R\$15,000. The government also offers subsidies through its state-owned banks for credit up to R\$500 million per year (EIU 2012). Bolivia, for its part, has applied interest ceilings to small loans since 2004. Then, in 2013, a new financial services law set interest rate caps and quotas on loans to the productive sectors and for housing (EIU 2013). The República Bolivariana de Venezuela's central bank established a maximum interest rate on loans and in 2006 also imposed caps on the collection of commissions, fees, or charges for some services (Capera, Murcia, and Estrada 2011).

In 2007, *Uruguay* capped interest rates based on the amount of the loan. When the amount of the loan is less than 2 million indexed units, the rate cannot exceed by more than 60 percent the average interest rates on credit transactions granted to non-financial private sector residents published by the central bank. For loans greater than 2 million indexed units, the interest rate is considered under usury if it is higher than 90 percent of the average interest rates published by the central bank.<sup>16</sup> In 2008, the central bank of *Ecuador* established a maximum interest rate for eight segments of credit: commercial corporative, commercial small and medium enterprises, consumption, consumer retail, housing, extended accumulation microcredit<sup>17</sup>, simple accumulation microcredit<sup>18</sup>, and subsistence microcredit<sup>19</sup>. The interest rate cap is calculated as a weighted average of all credit operations carried out in the past four weeks by segment based on the amount and multiplied by a risk factor determined by the central bank (Capera, Mucia, and Estrada 2011).

<sup>&</sup>lt;sup>15</sup> http://www.bcn.gob.ni/estadisticas/monetario\_financiero/financiero/tasas\_interes/particulares/index.html.

<sup>&</sup>lt;sup>16</sup> http://www.bcu.gub.uy/usuario-financiero/paginas/tasas\_topes.aspx.

<sup>&</sup>lt;sup>17</sup> Extended accumulation microcredit are defined as those credit operations whose amount and outstanding balance are higher than USD 10,000 granted to micro-entrepreneurs having annual revenues for less than USD 100,000; to self-employers; or to a group of borrowers with solidarity guarantee.

<sup>&</sup>lt;sup>18</sup> Simple accumulation microcredit are those credit operations between USD 3,000 and USD 10,000 granted to micro-entrepreneurs having annual revenues for less than USD 100,000; to self-employers, or to a group of borrowers with solidarity guarantee.

<sup>&</sup>lt;sup>19</sup> Subsistence credit are those credit operations for less USD 3,000 granted to micro-entrepreneurs having annual revenues for less than USD 100,000; to self-employers; or to a group of borrowers with solidarity guarantee.

El Salvador and the Dominican Republic are the most recent cases in the LAC region. Until 2012, the central bank of *El Salvador* could fix the interest rate only in exceptional cases (Capera, Murcia, and Estrada 2011). However, in late 2012 the country adopted a usury bill, in effect since August 2013, setting interest rate limits for all financial institutions and for regulated and non-regulated microfinance institutions (EIU 2013). In the case of the *Dominican Republic*, the monetary and financial law establishes that interest rates are determined by the market (Capera, Murcia, and Estrada 2011). However, since 2012, interest rates on loans in the microfinance sector have been subsidized, which is considered a de facto control on interest rates (EIU 2013).

#### 3.5. Middle East and North Africa

In the Middle East and North Africa, six countries currently apply interest rate controls on loans. *Tunisia* has had a microcredit law since 1999 that sets a ceiling on interest rates on loans at 5 percent including all commissions and fees. Because the law applies only to local associations, the cap is not enforced on the international NGO, ENDA-IA (Allaire et al. 2009; Khaled 2011). In *Malta* interest rates on loans have been fixed since 1868 by the civil code. This law is subject to exceptions; thus, for example, banks are excluded from the ceiling (iff/ZEW 2010). In *Egypt*, civil and commercial transactions are subject to a ceiling of 7 percent, while banks can determine their interest rate freely (Allaire et al. 2009). *Algeria, Libya,* and *Syria* also control interest rates on loans (Porteous, Collins, and Abrams 2010).

#### 3.6. South Asia

Currently, three South Asian countries—Bangladesh, India, and Pakistan—have interest rate ceilings. The Microcredit Regulatory Authority of *Bangladesh* set a cap of 27 percent for microcredit loans, beginning in 2011 (EIU 2012). This new regulation also limits administrative fees.<sup>20</sup> *India* is another country in the region with interest rate controls. In 2011, the Reserve Bank of India set a cap of 26 percent on microfinance loans for up to Re 50,000. Since 2013, microfinance institutions have been allowed to extend credit at 12 percent over their cost of borrowing.<sup>21</sup> According to Helms and Reille (2004), while *Pakistan* has no law imposing caps on interest rates, they are repressed unofficially through government subsides, which are considered a de facto control regime. In 2004, the government announced an annual interest rate cap of 9.5 percent on agricultural loans.

<sup>&</sup>lt;sup>20</sup>http://www.google.com/hostednews/afp/article/ALeqM5hBr1g5ZW0KbZS2RtNGSmXWvNMDcw?docId=CNG. 9cffc4fdf846d8715d7cc1b4f8a701a3.171.

<sup>&</sup>lt;sup>21</sup> http://in.reuters.com/article/2011/05/03/idINIndia-56735520110503.

#### 3.7. Western Europe

A recent study found that 11 Western European countries have contractual interest rate restrictions on loans (iff/ZEW 2010). For example, Belgium's 1992 usury law regulates interest rates according to the size and reimbursement period of the loan. Currently, it applies to consumer credit and is adjusted every six months. A regulation has also set the maximum borrowing rate for overdrafts on bank accounts since 2001. In France interest rate ceilings have been in place since 1935. Currently, the ceiling is 133 percent of average APR, according to the amount of the loan.<sup>22</sup> In Germany, a usury law prevents loans from exceeding twice the average interest rate in a specific sector or the average interest rate in the sector by 12 percentage points. The ceilings apply to both banks and nonbanking financial institutions. In contrast, Greece controls the maximum borrowing rate only for nonbank credit. Although Ireland has been named a country without interest rate caps on loans, it has a cap on the borrowing rate that credit unions can charge of 12.68 percent APR and a maximum of 187 percent APR for moneylenders. Italy's 1996 usury law mandates that interest rates on loans cannot be higher than 50 percent of the APR applied by banks and financial intermediaries.

For its part, the Netherlands has one legal interest rate ceiling for business transactions and another for transactions with consumers. The maximum APR set by the minister of justice for consumer credit is calculated as the legal interest rate plus 12 percent. Since 2009, *Portugal* has regulated interest rates on loans only for consumer credit. The ceilings are set by the central bank based on the average interest rate applied by credit institutions in the preceding quarter and on the purpose of the loan. Spain's consumer credit law of 1995 caps the interest rate for current account overdrafts at 2.5 times the legal interest rate. The country also has a ceiling related with social housing acquisition, which is part of the subsidized program on protected housing. And, finally, the United Kingdom has applied an interest rate cap on credit unions since 1979. This cap will be 3 percent per month (or 42.6 percent APR) as of April 2014.<sup>23</sup> Currently, the government is introducing several banking sector reforms that will cap the cost of payday loans.<sup>24</sup>

#### 3.8. Other Countries

Countries such as Australia, Canada, and the United States also cap interest rates. Australia and Canada have interest rate ceilings on payday loans. In Australia, payday lenders face a cap of 4 percent per month

 <sup>&</sup>lt;sup>22</sup> https://www.banque-france.fr/fileadmin/user\_upload/banque\_de\_france/publications/rapport-usure-avril-2013.pdf.
<sup>23</sup> See FCA (2013).
<sup>24</sup> https://www.gov.uk/government/news/government-to-cap-payday-loan-costs.

and a maximum official fee of 20 percent,<sup>25</sup> while in Canada, payday lenders can charge up to 60 percent.<sup>26</sup> In the United States, regulations vary across states in both methodology and applicability. For example, in the state of Arkansas the consumer interest rate is capped at 17 percent. However, in Colorado the interest on consumer loans may not exceed 12 percent unless made by a regulated lender. As an exception to the rule, in 2007 the U.S. federal government imposed a rate cap of 36 percent per year on payday loans to military personnel (Porteous, Collins, and Abrams 2010).

# 4. Financial Sector Characteristics of Countries That Cap Interest Rates on Loans

This section analyzes some relevant aspects of the financial sector of countries with interest rate caps on loans. To find common patterns in each region, we first identify the type of financial system regulator and look at the structure of financial consumer protection. We also analyze several financial indicators such as market size, financial system structure, and competition, as well as credit indicators.

### 4.1. Financial Sector Regulator and Consumer Protection

The discussion in this section is to make a link between the type of financial regulator and the consumer protection regulation and the use of interest rate caps. In this sense, our prior hypothesis is that countries with single financial regulators tend to use more interest rate caps than the ones that have multiple financial sector regulators. We also are interested on whether the countries have legislation for financial consumer protection and whether they have established a financial ombudsman; due that the main reason for using interest rate caps on loans are to protect consumers from excessive rates. The main findings are summarized below.

Analyzing a sample of 51 countries of the 76 that cap interest rates on loans, we found –as we were expecting- that 30 (59 percent) have a single financial sector regulator (see table A5). In half the countries with a single financial regulator, the central bank performs regulatory functions, while the rest rely on a different authority, such as a financial services authority or financial superintendence. This latter type of regulator is found mostly in SSA, ECA, and Western Europe and to a lesser extent in MENA and EAP.

 <sup>&</sup>lt;sup>25</sup> http://www.theguardian.com/money/2013/nov/25/payday-loan-costs-cap-george-osborne.
<sup>26</sup> http://www.ft.com/intl/cms/s/0/3c3bab76-55a4-11e3-96f5-00144feabdc0.html?siteedition=intl#axzz2rdAH0NUg.

We analyze 45 of the 76 countries with interest rate caps on loans for their approach to consumer protection. Not surprisingly, we found that 43 (96 percent) have legislation to protect consumers in financial matters. However, only 56 percent have established a financial ombudsman (see table A6). This finding may implied that much work needs to be done to improve framework of financial consumer protection to effectively protect consumers from predatory lending.

#### 4.2. Financial Sector Indicators

In our analysis, we collected data on several financial sector indicators in countries that cap interest rates on loans. First, we compare the indicator for each country with its respective regional average. Then, we calculate the percentage of countries in each region that have an indicator lower than the regional average. We then determine the relative financial performance of countries that impose interest rate caps and look for common patterns among them (see table A7). This section does not attempt to find a correlation between interest rate caps and relative performance. Therefore, we cannot conclude whether the caps result in poor performance on a range of indicators or whether countries with poor performance tend to be the one that introduce caps.

The main findings are summarized below.

In *Africa*, most countries with interest rate caps have a ratio of credit to gross domestic product (GDP) lower than the regional average, considering both the 2008 and the 2012 indicator (71 percent and 78 percent, respectively). In addition, according to the account penetration indicator, financial inclusion in 83 percent of them is lower than the regional average. Other financial inclusion indicators, such as access to a loan in the past year, show the same trend. In most of these countries, the private bureau coverage, depth of credit information, and strength of legal rights indicators fall below the regional average. In addition, only 6 percent of the countries that impose these caps have a higher share of state-owned banks than the regional average.

In *East Asia and the Pacific*, most of the countries with interest rate caps have a less-competitive banking system than the regional average (60 percent). In addition, 71 percent of them have lower indicators of private credit bureau coverage and weaker legal rights. Less financial inclusion, as measured by the share of the population receiving a loan in the past year, is also an important characteristic of the countries in the region (67 percent). However, the size of the market and banking concentration vary among countries.

The 71 percent of countries in *Europe and Central Asia* with interest rate caps had a lower proportion of people receiving loans in the past year, 60 percent had lower competition as measured by H-statistics<sup>27</sup>, and 71 percent had a credit-depth information index lower than the regional average. In addition, 57 percent of the countries with these caps had a higher share of state-owned banks than the regional average, while those not imposing interest rate caps had a ratio of state-owned banks below the regional average.

In *Latin American and the Caribbean*, most of the countries with interest rate caps have a creditto-GDP ratio, account penetration, and strength of legal rights index lower than the regional average (79 percent). Another interesting fact is that in only 6 percent of the countries with caps the share of stateowned banks is higher than the regional average. The concentration of banking assets and competition in the banking system do not seem to be common financial system characteristics among the countries in the region with caps.

In the *Middle East and North Africa*, most of the countries with interest rate caps have a credit-to-GDP ratio lower than the regional average (67 percent) and a lower proportion of people receiving a loan in the past year (80 percent). In addition, 67 percent of them have a three-bank asset concentration index higher than the regional average. Similar to other regions, private bureau coverage, depth of credit information, and strength of legal rights are below the regional average in countries that cap interest rates.

In *South Asia*, two of the three countries that cap interest rates on loans have a lower share of people taking out loans from formal financial institutions than the regional average. These countries also have less a competitive banking sector, according to the H-statistics index, and two of them trail the Lerner index<sup>28</sup>. Banking concentration, however, is lower than the regional average in all three countries, and the average credit-to-GDP ratio for the period 2008–12 is higher than the regional average in all of them.

Although *Western European* countries with interest rate caps score high on financial inclusion as measured by account penetration, the share of people receiving loans is lower than the regional average in all of them. They also score low on competition in the banking sector, according to Lerner index (73 percent), low on the depth of credit information (82 percent), and low on legal rights (73 percent). As in

<sup>&</sup>lt;sup>27</sup> H-statistics measures the elasticity of banks revenues relative to input prices. Under perfect competition, an increase in input prices raises both marginal costs and total revenues by the same amount, and hence the H-statistic equals 1. Under a monopoly, an increase in input prices results in a rise in marginal costs, a fall in output, and a decline in revenues, leading to an H-statistic less than or equal to 0 (GFDD, 2013)

<sup>&</sup>lt;sup>28</sup> The Lerner Index is a measure of market power in the banking market. Higher values indicate less bank competition.

ECA, most Western European countries have a relatively high share of state-owned banks. However, unlike ECA, 64 percent of Western European countries have relatively high banking concentration.

*Other countries* have a lower credit-to-GDP ratio than the regional average. Furthermore, the top five banks represent a higher share of the total market than the regional average.

Finally, overall results show that the financial systems in countries with interest rate caps have some common characteristics: 58 percent have a relatively low credit-to-GDP ratio; 71 percent have a relatively low share of people receiving loans; only 37 percent of them have a relatively important presence of state-owned banks; and 74 percent score at the regional average or below on the index of the strength of legal rights.

#### 5. Policy Recommendations

As this paper has shown, the imposition of caps on interest rates is widely practiced around the world; their primary intention is to protect the consumers who cannot afford the high interest rates offered by formal and informal financial institutions. However, the empirical evidence reveals a misconception about these rate caps, since they do nothing to ameliorate the cause of financial market failures, failures that must be addressed before interest rates can fall over the long term.

In light of those negative findings on interest rate caps, this section outlines some policy changes that may help reduce interest rates on loans in the long run and thus ultimately increase access to finance for underserved segments of the population. We also provide some measures to protect consumers from excessively high interest rates and to increase access to finance.

#### 5.1. Competition

Competition policies can not only help reduce interest rates on loans, especially those on microloans, but also help expand access to finance, offer wider choices of products, and encourage better services. In fact, a recent study by Love and Martinez (2012) found that low competition in the banking system has a negative effect on firms' access to finance. Regarding microcredit, Porteous (2006) describes common practices carried out by three countries to increase competitiveness in the microcredit sector. Some of these initiatives include opening branches in new areas; allowing microfinance institutions to offer products such as savings options to help reduce the cost of lending; making loan terms more flexible; and reducing the time it takes to get a loan. In addition, a recent survey of MFI managers in Latin America shows that competition is one of the main factors determining interest rates (Campion, Ekka, and Wenner

2012). Examples of countries where competition has helped reduce interest rates on loans are Bolivia and Cambodia. In Bolivia, BancoSol began operating in 1992, and, thanks to a competitive environment, it was able to lower its costs and pass along the savings to its clients in the form of lower interest rates. In Cambodia, interest rates in the microfinance market have dropped, leading to a decline in the interest rates on loans provided by informal moneylenders (Helms and Reille 2004). So, we can conclude that competition can help to reduce interest rates on loans acting as an alternative policy to the use of interest caps.

However, since more players do not automatically lead to greater competition, some conditions are necessary to create the environment for lower interest rates: a stable macroeconomic situation, an appropriate legal and regulatory framework, price transparency, consumer financial literacy, availability of credit information, and strong financial architecture, such as credit bureaus and credit agencies.

#### 5.2. Financial Consumer Protection

Adequate financial consumer protection has become an important pillar for the stability of the financial sector. It also helps protect high-risk groups from abuses like predatory lending and unscrupulous business practices, without the need of imposing a ceiling on interest rates (Helms and Reille 2004). Such protection also improves the governance of financial institutions and helps them consider all the risks that arise when dealing with retail customers.<sup>29</sup>

An effective framework for consumer protection should provide five elements: (i) transparency on disclosure of interest rates and all other loan costs, conditions, and terms; (ii) choice by guaranteeing fair and non-abusive business practices in the selling of financial products and services (e.g. high interest rates charged by non-banking financial institutions in some countries) and the collection of payments; (iii) redress through a mechanism for reporting complaints and resolving disputes; (iv) privacy of personal financial information; and (v) trust in the professionalism of financial institutions and in their ability to deliver what they promise. In addition, the framework should also provide programs for financial education (World Bank 2012).

#### 5.3. Financial Consumer Literacy

Because financial education and consumer protection are complementary, financial education must be part of consumer protection programs. A well-educated consumer should be able to understand the variety of financial products and services available in the marketplace and make appropriate use of them. This is particularly important for low-income people for whom good money management is a daily challenge.

<sup>&</sup>lt;sup>29</sup> The World Bank, for its part, has been analyzing good practices for consumer protection since 2009.

Financial consumer literacy measures should identify specific groups for financial education and provide tailored programs that meet their needs. Financial regulators should lead this effort but should also involve other players such as consumer organizations, government ministries and agencies, mass media, and the financial services industry. It is also important to evaluate the financial literacy of the population and measure the impacts of any programs implemented (World Bank 2012).

In this regard, a study carried out by Xu and Zia (2012) shows that financial literacy is weak everywhere and even weaker in low-income countries. At the same time, the study also found that the degree of financial literacy is lower in women, is positively associated with higher income, is higher in the middle of the life cycle, and varies according to geographic and ethnic disparities. All evidence indicates that financial literacy programs should focus on target groups. Evidence of the relationship between financial education and access to finance, however, appeared limited. The report notes that just a small proportion of individuals with low initial levels of financial literacy opened bank savings accounts in Indonesia after receiving training, while in China, financial education encouraged farmers in rural areas to take out crop insurance and had spillover effects on their peers.

#### 5.4. Credit Information

Measures to improve credit information systems are equally important to determining the causes behind the high interest rates charged by credit institutions. In this regard, the promotion of *credit bureaus* could be a useful policy approach to mitigating problems related to information asymmetries, which arise when an individual has inadequate financial records and must pay a high interest rate to offset the greater risk. An example of country where the establishment of credit bureaus has helped reduce lending costs is Cambodia, which launched a credit bureau in 2012 with the participation of all regulated banks and microfinance institutions (IFC 2013).

Equally important are requiring and enforcing the *disclosure of interest rates*, so that they are easily accessible. Easy access to this information allows competition to increase and interest rates to decrease. In fact, some studies show a positive relation between legal reforms that increase transparency of information and financial depth (Deakin, Demetriades, and James 2010). In the European Union, for instance, all credit agreements include the total cost of the loan. In the United States, creditors are required to display a "Schumer Box" which is a two-column table showing standardized information of the terms of credit cards agreements. While in Panama, since 2000 banks have had to provide their customers with information on the effective interest rate, the nature of loan, and other relevant information (Helms and Reille 2004).

#### 5.5. Microcredit Products

Microcredit products are another measure that may help alleviate poverty and provide access to finance to poor people who do not have access to formal loans. This measure could also help protect deprived groups in the population from taking out loans in the informal sector at excessively high interest rates (Khandker 2011). Thus, microcredit products can help to provide financing without the need of imposing interest caps on loans.

Empirical evidence on the impacts of microcredit products supports arguments for and against these initiatives. Some argue that they help smooth consumption, empower women, and reduce poverty for some but not for the poorest part of the population. Conversely, others say that they can increase poverty, disempower women, and reduce the educational level of children (Van Rooyen, Stewart, and De Wet 2012; Aggarwal, Klapper, and Singer 2012).<sup>30</sup>

Since the evidence on the impacts of microcredit lending is mixed, such programs should be developed with caution. First, they must be supported by formal regulations that ensure minimal standards such as disclosure of ownership (especially when microcredit programs are carried out by nonbanking financial institutions), by reporting of financial statements, and by transparent and understandable disclosure of interest rates to prevent predatory lending. Second, microcredit programs should be accompanied by financial literacy initiatives to educate microborrowers, particularly in rural areas. Third, microlending should include a protection policy for lenders and borrowers to avoid overindebtedness.

#### 5.6. Interest Rate Caps

Countries still seeking to cap interest rates on loans should consider some caveats. All measures discussed in this section will help improve competence and stimulate innovation, while promoting an effective legal and regulatory framework for both credit providers and consumers. Thus, for example, lenders can better assess the creditworthiness of the borrowers if a country has reliable credit bureaus. At the same time, borrowers can compare prices if financial institutions provide simple and standardized information on interest rates and if consumers have the financial literacy to understand that information.

If a regulation of interest rates is necessary, ceilings should be specific to certain products (such as consumer loans) or to certain providers (such as microfinance institutions) rather than covering the whole financial sector (OFT 2010). It is also important to determine an accurate and clear definition of

<sup>&</sup>lt;sup>30</sup> See Van Rooyen, Stewart, and De Wet (2012) and Aggarwal, Klapper, and Singer (2012) as examples of papers that further examine the impacts of microcredit.

which cap will be applied: the definition should include the total cost of credit—that is, the cost of borrowing plus fees and commission—to avoid evasion. The cap should be set at a reasonable level, which means high enough to allow lenders to make a profit but low enough to eliminate excess profit due to the lack of competition. An absolute rate ceiling is more appropriate for a specific type of credit provider. A relative rate ceiling based on an *exogenous* reference point is suggested when a country chooses to impose a unique ceiling, while a relative rate based on *endogenous* benchmarks could be more suitable when different ceilings are set. However, differentiation based on product, duration, and amount of the loan is preferable to a unique cap. Finally, sanctions should be clear and easy to understand (iff/ZEW 2010).

#### 6. Conclusions

In this paper, we undertook a stock-taking exercise to determine the number of countries currently capping interest rates on loans. We looked at the main characteristics of the regimes countries used, including the source of rate-setting authority and the methodology and criteria for establishing the cap. We also provided evidence on the effects of these regimes, when available, and made policy recommendations.

According to our study, 76 countries around the world are currently using some form of interest rate caps on loans, 61 of them in World Bank regions. In most, the caps are encoded in usury laws (28 countries), followed by interest rate laws (24 countries), while fewer countries (9) rely on de facto ceilings as the source of authority. The entity responsible for setting the cap is usually the central bank, but also can be the court, the legislature, the parliament, or the minister of finance. The most common legal instrument used to impose a cap is usury laws, followed by criminal and civil codes, both of them frequently used in the past but also in the present. Many countries impose the cap based on the effective interest rate or on the annual percentage rate, which are supposed to incorporate commissions and fees. Less often, though, countries use the nominal interest rate to set the cap. Evidence of separate regulations to control fees and commissions was found in only one country (Poland). As for how the cap is applied, the evidence shows a mixed preference for using absolute interest rate caps (24 countries) and relative ceilings (32 countries). Almost all countries that choose to impose relative ceilings use an endogenous benchmark rate (26 countries), while only a few use exogenous benchmark rates. A significant number of countries apply a multiplication coefficient over the benchmark rate to determine the final level of the cap. Countries less frequently impose a unique interest rate cap; instead, they have opted for setting different ceilings for different types of credit, amounts borrowed, or maturities.

Regarding the effects of these caps, the evidence points to more negative effects, such as a withdrawal of financial institutions from the poor or from specific segments of the market (as in WAEMU countries and Nicaragua), an increase in illegal lending (for example, in Japan and the United States), a decrease in the licensing of new lending institutions (as in Bolivia), an increase in the total cost of the loan through additional fees and commissions (as in Armenia, Nicaragua, and South Africa), and a decrease in product diversity (as in France and Germany). Interest rate caps, however, have partially worked to lower interest rates in the credit union sector of the United States. When analyzing some financial characteristics of the countries that cap interest rates on loans, we found that most have a single financial sector regulator like a central bank or a financial services authority. Not surprisingly, almost all countries have legislation on financial consumer protection, but financial ombudsmen are less frequent. Other common features of the financial systems include a relatively low credit-to-GDP ratio and more limited financial inclusion as measured by the share of people receiving loans. The structure of the banking system is characterized by a relatively strong presence of state-owned banks, while they also face problems related to legal rights of consumers.

Finally, this paper offers some policy recommendations that could help reduce interest rates on loans over the long run, protect consumers and increase access to finance: measures that enhance competition and product innovation, improve financial consumer protection frameworks, increase financial literacy, promote credit bureaus, enforce disclosure of interest rates, and promote microcredit products. Such measures should be implemented in an integrated manner. However, if caps are still considered a useful policy tool for reducing interest rates on loans and increasing access to finance, they should be implemented in accord with our caveats.

#### References

- Abiad, Abdul, Enrica Detragiache, and Thierry Tressel. 2008. "A New Database of Financial Reforms." Working Paper WP/08/266, International Monetary Fund, Washington, DC.
- Aggarwal, Shilpa, Leora Klapper, Dorothe Singer. 2012. "Financing Businesses in Africa: The Role of Microfinance." Policy Research Working Paper 5975, World Bank, Washington, DC.
- Allaire, Virginie, Arvind Ashta, Laurence Attuel-Mendes, and Karuna Krishnaswamy. 2009. "Institutional Analysis to Explain the Success of Moroccan Microfinance Institutions." Working Paper 09/057, Centre Emile Bernheim, Brussels.
- Bekaert, G., C. R. Harvey, and C. Lundblad. 2001. "Does Financial Liberalization Spur Growth?" NBER Working Paper 8245, National Bureau of Economic Research, Cambridge, MA.
- Bodenhorn, H. 2007. "Usury Ceilings and Bank Lending Behavior: Evidence from Nineteenth-Century New York." *Explorations in Economic History* 44 (2): 179–202.
- BRSS. 2011. Banking Regulation and Supervision Survey. Database of the World Bank, Washington, DC. http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTGLOBALFINREPORT/0,,cont entMDK:23267421~pagePK:64168182~piPK:64168060~theSitePK:8816097,00.html
- Campion, Anita, Kiran Rashmi Ekka, and Mark Wenner. 2012. "Interest Rates and Implications for Microfinance in Latin America and the Caribbean." IDB Working Paper 177, Inter-American Development Bank, Washington, DC.

- Capera, Laura, Andres Murcia, and Dairo Estrada. 2011. "Efectos de los Limites a las Tasas de Interés sobre la Profundización Financiera." *Financial Stability Report*. Bogotá: Central Bank of Colombia.
- Castellanos, Sara. 2012. "Interest Rate Caps: Back to the Future in LatAm?" *Economic Watch* (January), http://serviciodeestudios.bbva.com/KETD/fbin/mult/120123\_Emerging\_economies\_ec\_watch\_tc m348-285014.pdf?ts=17122013.
- CGAP-MIX (Consultative Group to Assist the Poorest-Microfinance Information Exchange). 2011. "Sub-Saharan Africa Microfinance Analysis and Benchmarking Report 2010." April 15, http://www.themix.org/sites/default/files/096 MIX Africa%20Report 05-05-2011.pdf.
- Deakin, Simon, Panicos Demetriades, and Gregory James. 2010. "Creditor Protection and Baking System Development in India." *Economics Letters* 108 (1): 19–21.
- Delgado, Catalina. 2004. "Inversión y Restricciones Crediticias en Colombia en la Década de los Noventa." *Ensayos Sobre Política Economica (ESPE), Banco Central De Colombia.*
- Demitriades, Panicos, and Kul Luintel. 2001. "Financial Restraints in the South Korean Miracle." *Journal* of Development Economics 64 (2): 459–79.
- Dewatripont, A., and Jean Tirole. 1994. "The Prudential Regulation of Banks." Institutional Repository 2013/9539, Universite Libre de Bruxelles.
- Doing Business. 2013. Database. Washington, DC: World Bank Group. http://www.doingbusiness.org/data
- Duflos, Eric, Paul Luchtenburg, Li Ren, and Li Yan Chen. 2013. *Microfinance in Myanmar Sector Assessment*. Washington, DC: IFC and CGAP.
- EIU (Economist Intelligence Unit). 2009. "Global Microscope on the Microfinance Business Environment: A Pilot Index and Study by the Economist Intelligence Unit," http://viewswire.eiu.com/report\_dl.asp?mode=fi&fi=134884398.PDF.
- \_\_\_\_\_. 2012. "Global Microscope on the Microfinance Business Environment 2012," https://www.eiu.com/public/topical\_report.aspx?campaignid=microscope2012.

- \_\_\_\_\_. 2013. "Global Microscope on the Microfinance Business Environment 2013," http://www.ebook3000.com/The-Economist--Intelligence-Unit----Global-Microscope-on-the-Microfinance-Business-Environment--2013- 211115.html.
- FCA (Financial Conduct Authority). 2013. "Regulating Consumer Credit for Credit Unions." Factsheet for Credit Unions 032, November 11.
- Global Financial Inclusion Database (Global Findex). 2011. World Bank, Washington, DC. http://datatopics.worldbank.org/financialinclusion/
- FinStats. 2014. Database of Financial Sector Development Indicators. World Bank, Washington, DC.
- Flores, Carolina, Liliana Morales, and Álvaro Yáñez. 2005. "Interés Máximo Convencional. Origen, Evolución y Forma de Cálculo." Serie Técnica de Estudios Nº 002. Superintendencia de Bancos e Instituciones Financieras, SBIF. Chile.
- Galindo, A., Fabio Schiantarelli, and Andrew Weiss. 2007. "Does Financial Liberalization Improve Allocation of Investment? Micro-evidence from Developing Countries." *Journal of Development Economics* 83 (2): 562–87.
- GFDD. 2013. Global Financial Development Database. World Bank, Washington, DC.

http://econ.worldbank.org/WBSITE/EXTERNAL/EXTDEC/EXTGLOBALFINREPORT/0,,cont entMDK:23269602~pagePK:64168182~piPK:64168060~theSitePK:8816097,00.html

- GIZ (Gesellschaft für Internationale Zusammenarbeit). 2013. "Myanmar's Financial Sector: A Challenging Environment for Banks." Yangon, Myanmar. November.
- Helms, Brigit, and Xavier Reille. 2004. "Interest Rate Ceilings and Microfinance: The Story So Far." CGAP Occasional Paper 9, Consultative Group to Assist the Poor, Washington, DC.
- IFC (International Finance Corporation). 2013. "IFC Advisory Services: Access to Finance." Annual Review 2013. Washington, DC: IFC.
- iff/ZEW. 2010. "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.
- IMF (International Monetary Fund). 2010. "Vietnam: 2010 Article IV Consultation: Staff Report and Public Information Notice." IMF Country Report 10/281. Washington, DC: IMF.

Khaled, Mohammed. 2011. "Microfinance Regulation in Post Revolution Tunisia." CGAP blog. April 29.

Khandker, Shahid. 2011. "Microcredit Deserves Support, Not Suppression." CGAP blog. March 17.

- Laeven, Luc. 2003. "Does Financial Liberalization Reduce Financing Constrains?" *Financial Management Association* 31 (4): 5-34.
- Love, Inessa, and María Soledad Martínez Pería. 2012. "How Bank Competition Affects Firms' Access to Finance." Policy Research Working Paper 6163, World Bank, Washington, DC.
- Mbengue, Djibril Maguette. 2013. "The Worrying Trend of Interest Rate Caps in Africa." CGAP blog. November 11.
- Miller, Howard. 2013. "Interest Rate Caps and Their Impact on Financial Inclusion." Economic and Private Sector, Professional Evidence and Applied Knowledge Services . February 2013.
- OFT (Office of Fair Trading). 2010. "Review of high cost credit final report. Annex B: Evidence and Arguments Surrounding Price Control and Interest Rate Caps for High-Cost Credit" OFT1232, United Kingdom.
- Ellison, Ana and Robert Forster. 2006. "The Impact of Interest Rate Ceilings: The Evidence from International Experience and the Implications for Regulation and Consumer Protection in the Credit Market in Australia." Policis Publications, United Kingdom.
- Porteous, David. 2006. "Competition and Microcredit Interest Rates." Focus Note No. 33, GCAP. February 2006.
- Porteous, David, Daryl Collins, and Jeff Abrams. 2010. "Interest Rate Policy." Policy Framing Note 4, Financial Access Initiative. January 2010.
- Steiner, Roberto and María Inés Agudelo. 2012. "Efectos y Consecuencias del Sistema de Cálculo Aplicado a las Tasas de Referencia y la Determinación de la Tasa de Usura." FEDESARROLLO, Centro de Investigación Económica y Social. Bogotá, Colombia.
- Van Rooyen, C., R. Stewart, T. De Wet. 2012. "The Impact of Microfinance in Sub-Saharan Africa: A Systematic Review of the Evidence." *World Development* 40 (11): 2249–62.
- Vietnam Microfinance Working Group. 2013. "Workshop on Sustainable Interest Rate Setting and Risk Management in Microfinance Institutions (16 May 2013): Key Messages on Microfinance Interest Rate."

World Bank. 2012. "Good Practices for Financial Consumer Protection." June 2012.

Xu, Lisa, and Bilal Zia. 2012. "Financial Literacy around the World. An Overview of the Evidence with Practical Suggestions for the Way Forward." Policy Research Working Paper 6107. World Bank, Washington, DC.

# Appendix

Interest rate control	U	De facto controls	
Algeria	Argentina	Italy	Brazil
Bahamas	Armenia	Japan	China
CEMAC	Belgium	Kyrgyz Republic	Dominican Republic
China <sup>a</sup>	Bolivia	Nicaragua	Ethiopia
India	Brazil	Philippines <sup>a</sup>	Lao PDR
Libya	Chile	Poland	Pakistan
Myanmar	Colombia	Portugal	Philippines
Paraguay	Ecuador	Slovak Republic	Vietnam
Syrian Arab Republic	El Salvador	Slovenia	
Tunisia	Estonia	South Africa	
Turkey	France	Spain	
WAEMU countries	Germany	United Kingdom	
	Guatemala	Uruguay	
	Honduras	Venezuela, RB	

Table A1. Classification of Countries according to Source of Authority for the Cap

Sources: Helms and Reille 2004; Mbengue 2013; Castellanos 2012; Porteous, Collins, and Abrams 2010; iff/ZEW 2010; EIU 2012, 2013; CGAP-MIX 2011; Steiner and Agudelo 2012.

*Notes:* CEMAC = Economic and Monetary Community of Central Africa; WAEMU = West African Economic and Monetary Union.

a. China and the Philippines used to have interest rate controls and usury limits, respectively. Currently, they apply de facto controls.

Criminal or Civil Code	Usury Law	Decree	Banking Law	Consumer Credit Law	Microfinance Law	Credit Union Act
Armenia	Chile	Bolivia	India	Australia	Bangladesh	Ireland
Canada	Colombia	Portugal	Turkey	Slovak Republic	Myanmar	United Kingdom
Egypt, Arab Rep.	France	Tunisia	Zambia	South Africa		
Estonia	Italy			Spain		
Malta	Japan					
Poland	Kyrgyz Republic					
Thailand	Namibia					
	Nicaragua					
	Uruguay					

Source: Author's elaboration based on interest rate circulars.

Al	osolut ceiling	Re	lative ceiling
Australia	Philippines	Argentina	Mauritania
Bangladesh	Thailand	Armenia	Netherlands
Canada	Tunisia	Belgium	Nicaragua
Egypt, Arab Rep.	United Kingdom	Brazil	Paraguay
Greece	United States	Chile	Poland
Ireland	Venezuela, RB	Colombia	Portugal
Japan	WAEMU	CEMAC	Slovak Republic
Malta		Ecuador	Slovenia
Myanmar		Estonia	South Africa
Pakistan		France	Spain
		Germany	Turkey
			Uruguay
		Italy	Zambia
		Kyrgyz Republic	

#### Table A3. Classification of Countries according to Absolute and Relative Ceilings

*Sources*: Helms and Reille 2004; Mbengue 2013; Castellanos 2012; Porteous, Collins, and Abrams 2010; iff/ZEW 2010; EIU 2012, 2013; CGAP-MIX 2011; Steiner and Agudelo 2012.

*Note:* CEMAC = Economic and Monetary Community of Central Africa; WAEMU = West African Economic and Monetary Union.

## Table A4. Classification of Countries That Use Relative Ceilings according to Benchmark Rate Criteria

	Factor applied over the benchmark rate							
Benchmark rate criteria	Fixed margin	Multiplic	cation coefficient	Fixed margin/multiplication coefficient	No information			
Endogenous	CEMAC	Argentina Nicaragua		Germany	South Africa			
	Kyrgyz Republic	Armenia	Paraguay	Zambia				
		Chile	Portugal					
		Colombia	Slovak Republic					
		Ecuador	Slovenia					
		Estonia	Spain					
		France	Turkey					
		India	Uruguay					
		Italy						
Exogenous	Mauritania	Brazil		Zambia	Belgium			
	Netherlands		Poland					

Sources: Helms and Reille 2004; Mbengue 2013; Castellanos 2012; Porteous, Collins, and Abrams 2010; iff/ZEW 2010; EIU 2012, 2013; CGAP-MIX 2011; Steiner and Agudelo 2012.

Note: CEMAC = Economic and Monetary Community of Central Africa.

## Table A5. Type of Regulator in Countries with

#### **Table A6. Consumer Protection Structure in**

**Countries with Interest Rate Caps** 

# Interest Rate Caps

Region     Single     N       SSA     80.0     N       EAP     20.0     N       ECA     85.7     N       LAC     50.0     N	fultinla
EAP 20.0 ECA 85.7	Iultiple
ECA 85.7	20.0
	80.0
LAC 50.0	14.3
	50.0
MENA 25.0	75.0
SA 0.0	100.0
WE 70.0	30.0
Others 66.7	33.3
Total 58.8	41.2

Region	Consumer protection						
Region	Legislation	Ombudsman					
Africa	83.3	42.9					
EAP	100.0	20.0					
ECA	100.0	57.1					
LAC	100.0	50.0					
MENA	66.7	0.0					
SA	100.0	50.0					
WE	100.0	100.0					
Others	100.0	100.0					
Total	95.6	55.6					

Source: Financial Sector Reform Dataset 2008;

central bank websites.

*Note*: SSA = Sub-Saharan Africa; EAP = East Asia and the Pacific; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SA = South Asia; WE = Western Europe. Source: Financial Sector Reform Dataset 2008; central bank

#### websites.

*Note*: EAP = East Asia and the Pacific; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SA = South Asia; WE = Western Europe.

#### Table A7. Financial Sector Indicators of Countries That Use Interest Rate Caps

(Percentage of countries with caps that have an index lower than the regional average)

	Index	SSA	EAP	ECA	LAC	MENA	SA	WE	Others	Total
Size of	Bank private credit to GDP (%) 2012	78.3	42.9	28.6	78.6	66.7	33.3	27.3	66.7	59.5
Market	Bank private credit to GDP (%) average 2008– 12	70.8	42.9	28.6	78.6	66.7	0	45.5	50.0	57.9
	Account at a formal financial institution (% age 15+)	83.3	50.0	28.6	78.6	20.0	33.3	30.0	33.3	56.1
Financial Inclusion	Loan in the past year (% age 15+)	72.2	66.7	71.4	64.3	80.0	66.7	100.0	0	71.2
	Loan from a financial institution in the past year (% age 15+)	72.2	33.3	14.3	50.0	60.0	66.7	80.0	0	54.5
	% of state-owned banks in 2010 (in terms of assets)	5.6	n.a.	57.1	46.2	n.a.	33.3	54.5	n.a.	37.0
Structure of the System <sup>a</sup>	3-bank asset concentration in 2011 (%)	73.7	28.6	42.9	21.4	66.7	0	63.6	25.0	49.3
	5-bank asset concentration in 2011 (%)	80.0	33.3	33.3	50.0	60.0	0	63.6	75.0	56.3
Competition in the	H-statistics 2010	57.1	60.0	60.0	27.3	_	100. 0	36.4	25.0	46.8
banking sector	Lerner index 2010	46.2	40.0	0	50.0	33.3	66.7	72.7	50.0	47.4
	Getting Credit Ranking	52.0	42.9	28.6	28.6	50.0	33.3	63.6	25.0	44.2
	Public registry coverage (% adults)	80.0	71.4	71.4	21.4	83.3	66.7	54.5	100.0	64.9
Getting	Private bureau coverage (% adults)	84.0	71.4	14.3	42.9	83.3	66.7	45.5	25.0	59.7
Credit Indicators	Credit depth of information index (0=low to 6=high)	76.0	28.6	71.0	0	67.0	67.0	82.0	50.0	55.8
	Strength of legal rights index (0=weak to 10=strong)	76.0	71.4	57.0	78.6	67.0	33.0	73.0	25.0	74.0

*Sources:* FinStats 2014; Global Findex 2011; BRSS 2011; GFDD 2013; Doing Business 2013. *Note:* SSA = Sub-Saharan Africa; EAP = East Asia and the Pacific; ECA = Europe and Central Asia; LAC = Latin America and the Caribbean; MENA = Middle East and North Africa; SA = South Asia; WE = Western Europe.

n.a. = not applicable; - = not available.

a. For this set of indicators the percentage indicates the share of countries with interest rate caps in the region that have an index higher than the regional average.