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Credit Rationing and Size-Contingent Eligibility Criteria

Alejandro Támara
Arturo Joaquín
M. Carmen Fernández Díez

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ABSTRACT

Public interventions in credit markets frequently prioritize micro, small, and medium enterprises, often excluding large firms based on the explicit or implicit assumption that they do not face meaningful credit constraints. Using new empirical evidence, this paper challenges that premise, showing that large firms also experience significant financing frictions and are not fully insulated from credit rationing. These findings call into question the widespread practice of using firm size as a proxy for firms' credit needs in the design of public credit support programs. A reassessment of size-based eligibility criteria is warranted to ensure that policies more accurately target firms facing genuine financial constraints, regardless of scale.

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JEL classification: G20

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INTRODUCTION

Public interventions in credit markets through productive financing are an important component of economic and financial policies. These interventions are justified by the presence of frictions affecting credit markets, leading to an inefficient allocation of resources (i.e., market failures). Asymmetric information is a central friction, which leads to the emergence of adverse selection and moral hazard in credit transactions, resulting in an inefficiently rationed equilibrium (Baltensperger, 1978; Fried and Howitt, 1980; Keeton, 1979; Stiglitz and Weiss, 1981). The presence of equilibrium credit rationing is frequently taken as a key justification for public intervention in credit markets. Credit rationing, a frequent occurrence, is characterized by the inability of creditworthy firms to obtain financing, even when they are willing to pay the prevailing interest rates. As a result, financial institutions may limit the supply of credit or deny loans altogether, not based on the quality of the project or borrower, but due to perceived risks and information gaps. This phenomenon is particularly acute in developing and emerging economies, where institutional weaknesses and limited financial infrastructure exacerbate these frictions. Understanding the scope of credit rationing is essential for designing effective public policies. It not only reveals the structural inefficiencies in credit markets, but also highlights the segments of the economy that are most underserved. This is especially relevant in Latin America and the Caribbean (LAC), where empirical evidence on credit rationing remains scarce.

Credit rationing is not solely a firm-level issue.¹ It is affected by both internal characteristics of firms (e.g., financial transparency, governance, and innovation) and external factors (e.g., inflation, informal competition, legal system effectiveness, and macroeconomic stability). The interaction between these internal and external factors determines the extent to which a firm is credit constrained (Támola, Fernández, and Joachín, 2024). This underscores the need for public interventions that go beyond firm size and instead focus on identifying and addressing the root causes of market failures.

Public productive financing programs have historically been directed toward small and medium enterprises (SMEs) and micro, small, and medium enterprises (MSMEs). The exclusion of large firms can be rationalized either by the absence of credit rationing for that segment or by the assumption that the return on public support for MSMEs is higher than that for large firms. Given the large, documented differences in productivity between MSMEs and large firms (McKinsey Global Institute, 2024), it is difficult to argue that the additional lending to MSMEs provides a generally larger return. More compelling is the argument that large firms simply do not need public financial support. In this line of reasoning, the exclusion of firms based on size effectively presumes that the separation between MSMEs and large firms is a nearly perfect classifier for determining the likelihood of credit rationing.²

This note provides a critical perspective, based on quantitative estimations, challenging the implicit assumption that large firms do not experience meaningful situations of credit rationing.³ It contributes to the public financing agenda by examining the prevalence of credit rationing by firm size, assessing the limitations of size-contingent eligibility criteria, and proposing alternative frameworks for more effective and inclusive public credit interventions. Its key findings and arguments are that: (i) data contradict the belief that large firms do not experience meaningful levels of credit rationing; and (ii) excluding large firms from public programs can result in resource allocation inefficiencies which negatively affect productivity.

1 New empirical evidence also suggests a relationship between credit rationing and firm related activities, such as innovation and product differentiation, among others (Gómez et al., 2026).

2 Public financing support programs, particularly those implemented through public development banks, do not always rely solely on firm size. In many cases, they are guided by broader development objectives and use criteria such as geographic location or sector of activity to identify unmet financing needs that are often overlooked by traditional commercial banks. For example, some programs specifically target areas with high poverty levels or remote regions, like the Amazon, where sector-specific initiatives are developed to promote employment and sustainable economic activity. However, even in these cases, size restrictions remain a key determinant for eligibility.

3 This paper adopts the conventional policy distinction between SMEs and large firms throughout the analysis. All figures and comparisons are revised accordingly to reflect this dichotomy. We define “meaningful” levels of credit rationing as instances where more than 10 percent of large firms report being fully or partially credit constrained, a threshold that is exceeded in several regions and countries based on our empirical findings (see Figures 3.2. and 4.2.)

Consequently, we propose reevaluating the use of size classifications in an arbitrary manner for the targeting and allocation of resources for credit programs, advocating instead for the implementation of strategies and mechanisms that do not introduce artificial discontinuities in eligibility for accessing public financial support programs. Finally, as a related discussion, the paper discusses the critical role of development finance institutions (DFIs) in diagnosing market failures, designing appropriate financial instruments, and ensuring that interventions are aligned with broader development goals as providing key elements to design alternative targeting criteria.



FIRM SIZE AS A POLICY CRITERION

Gibrat (1931) is credited with initiating the systematic study of firm size through his analysis of the lognormal distribution of sizes among French industrial firms. Currently, there is an extensive body of literature that considers firm size as a significant dimension for analysis (a Google Scholar search for titles containing “firm size” yields 7,790 results, excluding citations). However, the concept of firm size remains vaguely defined (Trigueiros, 2000). This ambiguity largely stems from the multiple dimensions through which size can be characterized and the various contexts in which such measures are applicable. As observed by Shalit and Sankar (1977), there is no universally ideal measure of firm size; the selection of a specific measure ultimately depends on the objectives of the study.

The interest in firm size classification extends well beyond academia. Governments worldwide have long used firm size classifications to tailor many of their laws, policies, and regulations, particularly in relation to tax obligations and labor regulations. The private sector, partly due to the differential regulatory and tax burdens imposed by governments, has adopted many of its practices to accommodate these classifications.

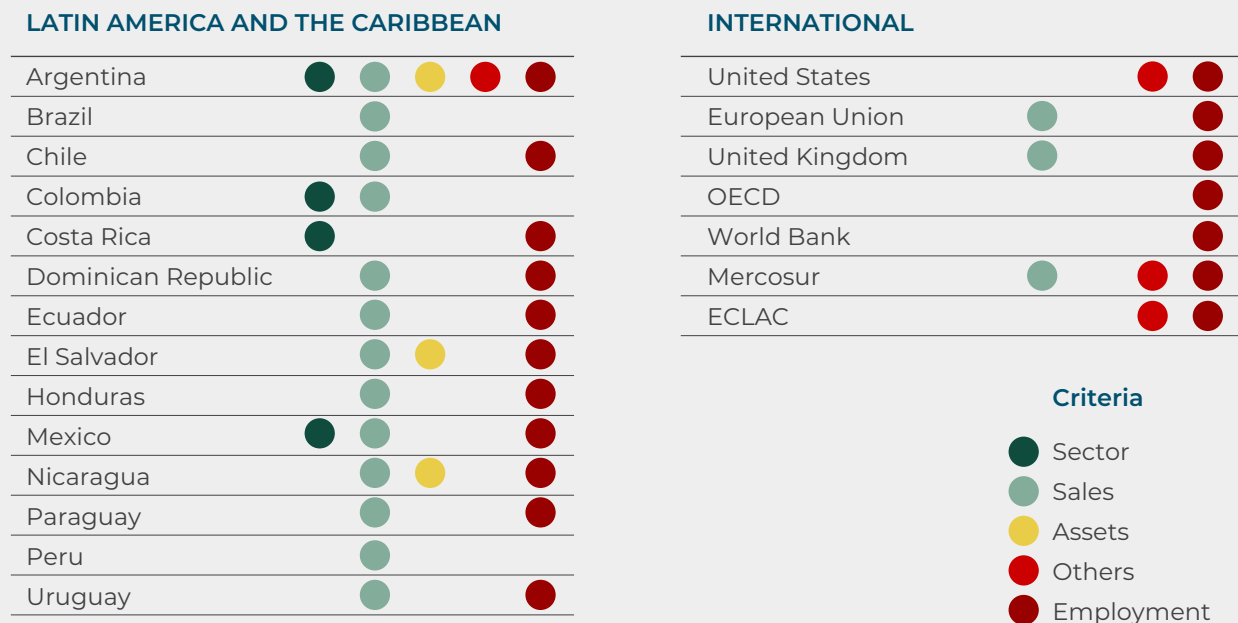
Such size-dependent regulations may lead to allocative inefficiencies. Garicano, Lelarge, and Van Reenen (2016) estimate that size-contingent labor laws in France result in a welfare loss of about 3.4 percent of GDP. Gourio and Roys (2014) find that size-based regulations in France impose costs equivalent to a payroll tax of 0.04 percent. Tax-contingent laws also induce behavioral changes, as Harju, Matikka, and Rauhanen (2019) find that simple value-added tax exemptions can create significant compliance costs, resulting in discontinuous changes in

sales. Ramaswamy (2021) analyzes the effect of size-dependent tax incentives within the Indian manufacturing sector, finding that the threshold burden of tax incentives induces firms to remain below the ceiling level set by the tax rules.

The inefficiency of size-dependent laws and regulations also may extend to credit markets. Financial institutions often implement segmented pricing strategies, with government-defined criteria for firm size classification affecting such segmentation. This is largely due to the differential tax and regulatory burden on firms, but also because public interventions in credit markets often align with these classifications. Empirical studies, such as those by Macnamara (2019) and Ali, Rangone, and Farooq (2022), find that tax regulations significantly impact firms' leverage ratios and other financial outcomes. However, size-dependent policies are directly applicable to credit markets as well. Zeng, Guo, and Li (2021) note that government subsidies on firms' debt financing affect their debt structure, and Jo, Hwan, and Senga (2019) estimate that credit subsidy policies lead to a net reduction in aggregate productivity.

The problems associated with governments' size-contingent laws and regulations influencing financial institutions' business strategies are exacerbated by the fact that firm size classifications are established without considering the firms' financial conditions or their level of informational transparency. This can be readily seen with a cursory inspection of size classifications, as presented in Figure 2.1, which shows how some countries and organizations use multiple criteria while others use just one. Figure 2.1 also shows that the most common variable to define size is the number of employees, followed by total sales.

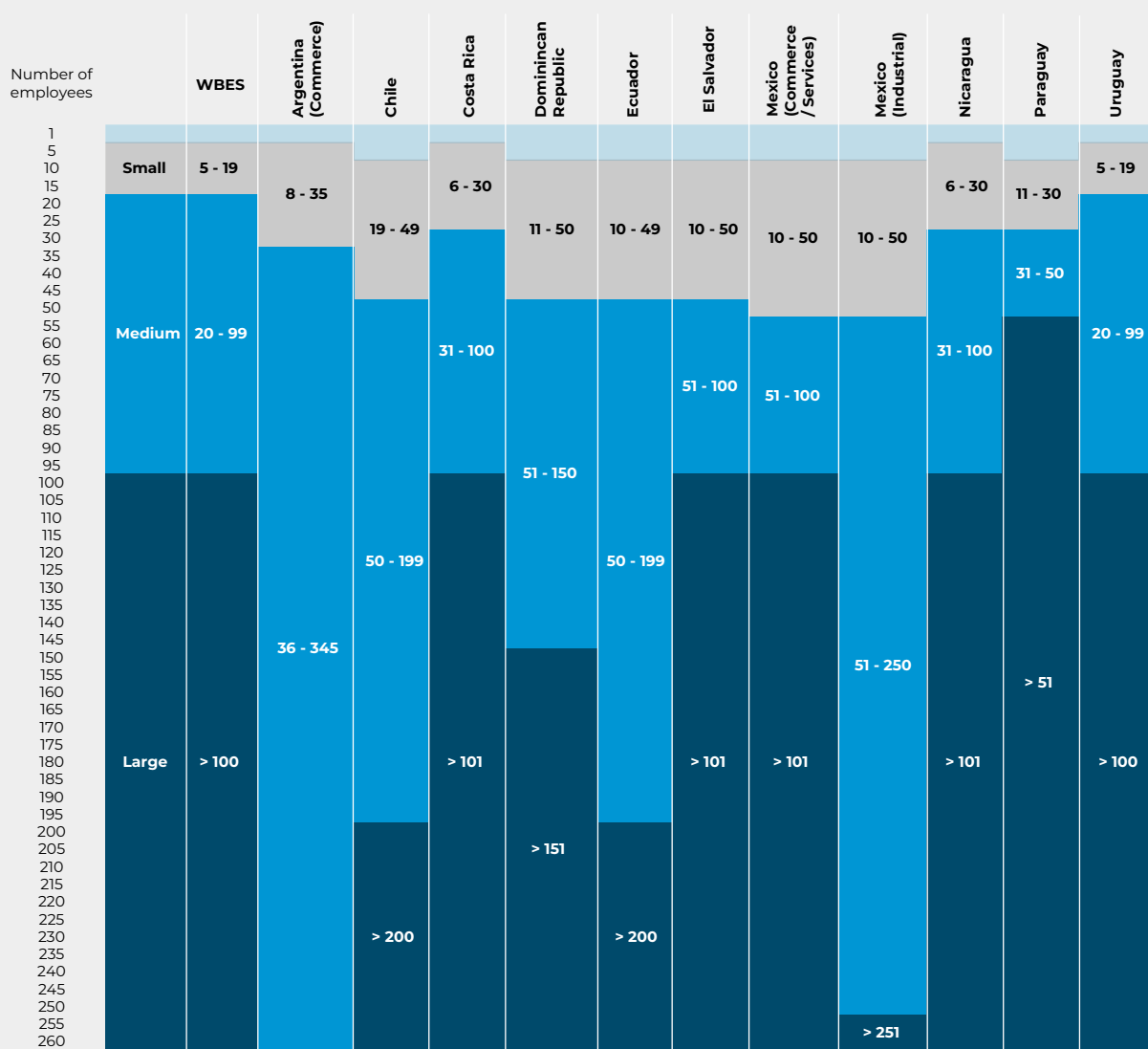
Figure 2.1 Selected Size Classification Criteria



Source: Authors' elaboration.

The internal heterogeneity displayed within each dimension further compounds the problem of size classification. This is shown in Figure 2.2, which displays the employment size cutoff for selected Latin American countries. It also includes the reference size cutoff used in the World Bank Enterprise Surveys (WBES). As can be seen, there is substantial heterogeneity in relation to the size cutoffs for the most common category used to classify firms by size. One extreme example is Paraguay, which has a low threshold for employment size for large firms, with 51 employees or more (every other country in the selected sample would still classify those firms as medium firms). At the other extreme is Argentina, with a very high threshold for size by employment. This lack of uniformity has profound implications for evidence-based diagnosis and policy design, particularly for multilateral development banks.

Figure 2.2 Distribution of Employment Size Cutoffs for Firm Size Classification in Selected Latin American Countries



Source: Authors' elaboration.

When empirical models use country-specific size categories, the inferences drawn should not be readily generalized to other samples. It could be argued that this problem would be solved by using a common classification for all countries. However, this alternative is problematic for at least two reasons. First, obtaining comparable firm-level data across different national classification systems is extremely challenging, if not impossible. While some datasets might include uniform measures of sales and employment, the difficulty increases when incorporating other dimensions for which information is not widely available. Second, a universal definition would invariably diverge from local definitions typically used in policy design. For example, the medium-size bracket in the WBES (Figure 2.2) intersects with the definitions of small and large firms for the countries considered, thereby diluting the relevance of potential results for those countries.

More importantly, these size classifications are established without directly considering the information frictions and other credit restrictions that affect firms' access and use of financial products and services. Official size thresholds are determined through political processes related to tax and labor regulations and neglect the impact of asymmetric information and other frictions that limit access to credit. Yet financial intermediaries routinely segment their credit offerings by firm size.

This apparent contradiction can be explained in three ways. First, even in the absence of official size classifications, banks and other financial intermediaries may choose to segment their offerings by simple observable characteristics such as sales, intended use, or type of borrower. This results from commercial and marketing strategies that simplify communication and management. Second, even if size thresholds are initially defined without considering credit-related conditions, varying regulations and tax considerations are likely to introduce meaningful differences for credit evaluations. This includes financial regulations that require differential treatment for firms of different sizes. Finally, public financial and non-financial programs provide different benefits and requirements based on firm size, and this permeates into financial intermediaries' credit strategies.

Another aspect to consider is that, although firm size may correlate with other firm characteristics affecting the demand for and access to financial services and products, banks and financial institutions typically use a broader and richer information set when evaluating a borrower's creditworthiness and risk. In fact, even in the absence of differential regulation, taxation, and public financing programs, firm size correlates with credit-relevant firm characteristics. The number of employees—the most common measure used to define size categories—typically correlates, to varying degrees, with sales and assets, two key variables for credit assessment. It also correlates with information availability and transparency, as larger firms tend to have better information systems. However, diligent credit screening routinely performed by financial intermediaries can measure all these variables far more precisely than the rough approximations offered by size classifications. Size classifications are likely to offer little if any relevant information for credit evaluation in the absence of differential treatment by the public sector.

The public sector sets size-contingent eligibility criteria (and they often permeate the criteria used by private institutions) primarily because it has less access to, and less capacity to process, the detailed information required for credit evaluation outside specialized financial institutions. However, the discontinuous cutoff points are likely to induce inefficiencies in the allocation of resources, particularly within the MSME group.⁴

Size-contingent eligibility criteria are often derived from tax or labor regulations and are not designed to reflect firms' actual financial constraints or informational transparency. Limitations of size-based targeting are: (i) misallocation of resources, where firms with real financing needs are overlooked; (ii) distortions in market incentives, encouraging firms to remain artificially small to qualify for support; and (iii) reduction of productivity and growth, especially when high-potential firms are denied access to finance.

⁴ It is worth noting that size-based restrictions that exclude large firms from eligibility for public funds channeled through private financial institutions may increase efficiency through a political-economy mechanism. Large firms are more likely to be politically connected than smaller firms and can attract financing by other means, including tax expenditures and lobbying for subsidies. Thus, policies that promote a larger role for local lenders on the grounds that they possess better information also risk those lenders' capture by large firms.

3 CREDIT RATIONING AMONG SMALL AND MEDIUM ENTERPRISES VERSUS LARGE FIRMS

This section critically evaluates the empirical validity of the implicit assumption of negligible presence of credit rationing among large firms, which underlies the size segmentation in many public intervention programs in credit markets. As previously mentioned, large firms are almost always excluded from these interventions, based on the assumption that they do not experience credit rationing. In line with the previous discussion, and despite the inability to replicate complex classifications due to data limitations, we categorize firms using the most employed dimension: employment.

Data and Variables

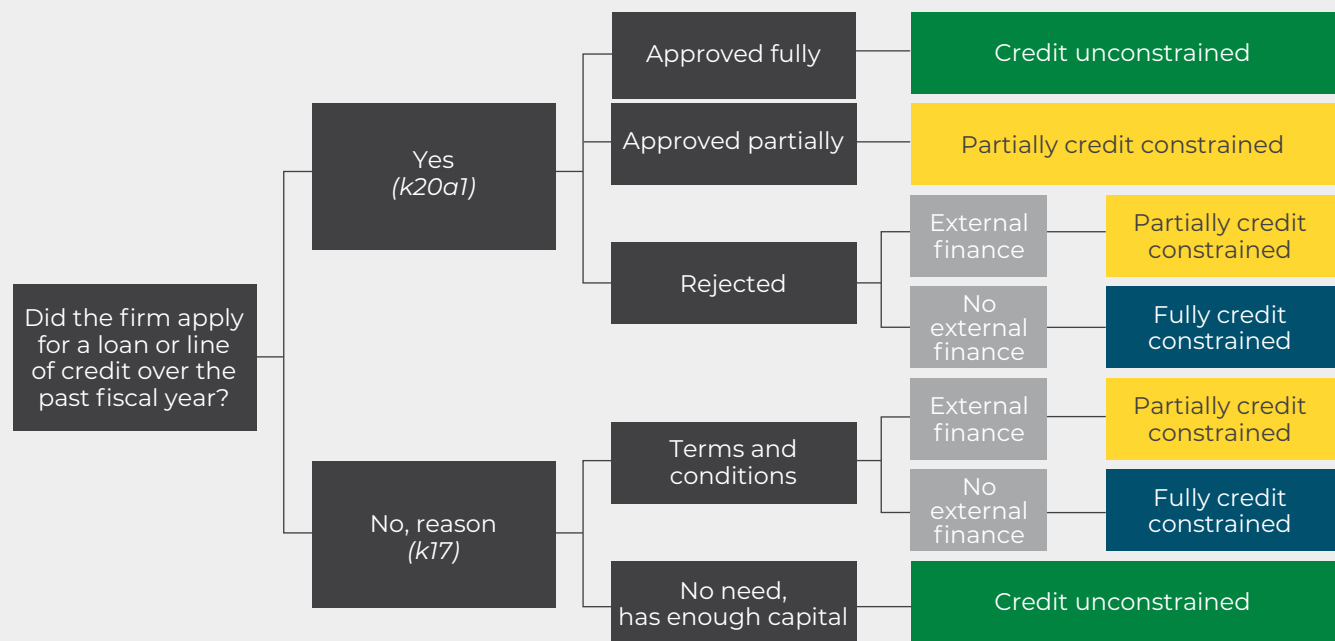
To assess the prevalence and distribution of credit rationing across firms of different sizes, we use firm-level data from the WBES. These surveys provide a rich dataset covering over 219,000 formal firms across 159 countries, stratified by sector, location, and firm size. The analysis excludes microenterprises, unregistered firms, and those in agriculture or extractive industries, focusing instead on small, medium, and large firms.⁵ Additionally, in some instances, we incorporate country-level data from the World Bank's World Development Indicators and the IMF Financial Development Index. A key aspect of our analysis is the classification of firms based on their credit rationing status. We adopted the categorization methodology outlined in Támara, Fernández, and Joaquín (2024), which divides firms into three groups according to their access to finance: fully credit constrained, partially credit constrained, and credit unconstrained. A firm is deemed fully credit constrained if it lacks access to external finance and either did not apply for a loan

⁵ For our calculations we typically use the last available information for each country.

for reasons other than necessity or was rejected for a loan application, despite having access to equity financing for investments.⁶ The partially credit constrained status applies to firms that received partial loan approval, were rejected for a loan while having access to external finance, or possess external finance but did not apply for a loan for reasons other than lack of necessity. Credit unconstrained firms are those that either successfully obtained a loan or did not apply due to no need. Figure 3.1 depicts this classification process.

Regarding size classification, we consider two alternatives for small, medium, and large firms based on employment. The first follows the WBES methodology, commonly used in empirical studies on credit rationing, with employment brackets of small (5–19 employees), medium (20–99), and large (100+). Additionally, for a selected sample of nine LAC countries, we compute statistics using country-specific classifications based on national definitions.⁷ This approach enables us to examine differences arising from alternative classifications.

Figure 3.1 Construction of Credit Constraint Categories



Source: Authors' elaboration based on WBES Indicators and Islam and Rodriguez Meza (2023).

Notes: The codes refer to the following questions in the WBES: k20a1: What Was the Outcome of That Most Recent Application for Loan/Line of Credit? k17: Main Reason for Not Applying for New Loans or New Lines of Credit. External finance includes borrowing for investment or working capital from banks and other financial institutions (microfinance institutions, credit cooperatives, credit unions, or finance companies). It also considers trade credit (purchases on credit from suppliers and advances from customers) and other external sources (e.g., moneylenders, friends, and relatives).

⁶ External finance includes borrowing for investment or working capital, from banks, and other financial institutions (e.g., microfinance institutions, credit cooperatives, credit unions, or finance companies). It also considers trade credit (purchases on credit from suppliers and advances from customers) and other external sources.

⁷ Argentina, Costa Rica, Dominican Republic, Ecuador, El Salvador, Mexico, Nicaragua, Paraguay, and Uruguay. As indicated, in some cases national definitions include dimensions other than employment. We base our country-specific classifications only on employment.

Empirical Results

Table 3.1 presents basic statistics on the distribution of medium and large firms across various samples and size definitions. The group labeled “All Sample” refers to data computed for all countries in the WBES (using the latest available data), while “LAC” pertains to all Latin American and Caribbean countries in the WBES. “LAC-9” shows statistics for a subsample of nine LAC countries, employing the WBES global methodology size classification (with employment brackets of 5–19 for small, 20–99 for medium, and 100 and over for large firms).⁸ “LAC-9, country-specific size” uses the same subsample but applies local definitions based on number of employees. The last two columns highlight the significance of size classifications, especially regarding large firms. Under the WBES size classification, approximately 58 percent of manufacturing and 42 percent of service firms in the LAC-9 sample are classified as large. However, using local definitions, the proportion of large manufacturing firms drops to 49 percent, while large service firms rise to nearly 51 percent.⁹

Table 3.1 Size Distributions by Sample and Size Classification

ALL sample		LAC		LAC-9		LAC-9 (country-specific size)	
	SME:		SME:		SME:		SME:
Manufacturing	40.63%	Manufacturing	37.31%	Manufacturing	40.85%	Manufacturing	44.08%
Services	59.37%	Services	62.69%	Services	59.15%	Services	55.92%
	Large:		Large:		Large:		Large:
Manufacturing	61.90%	Manufacturing	55.01%	Manufacturing	57.64%	Manufacturing	48.52%
Services	38.10%	Services	44.99%	Services	42.36%	Services	51.48%

Source: Authors' calculations based on the WBES data.

Note: “All Sample” and “LAC” refers to data computed, respectively, for all countries in the WBES (last available data) and Latin American and the Caribbean countries in the WBES from 2013 onwards.

“LAC-9” presents statistics for a subsample of 9 LAC countries (Argentina, Costa Rica, Dominican Republic, Ecuador, El Salvador, Mexico, Nicaragua, Paraguay, and Uruguay), using the WBES global methodology size classification of employment: small firms (5–19 employees), medium (20–99), and large (>100).

“LAC-9, country specific size” presents statistics for the same subsample of nine LAC countries, using the corresponding local definitions in relation to the number of employees.

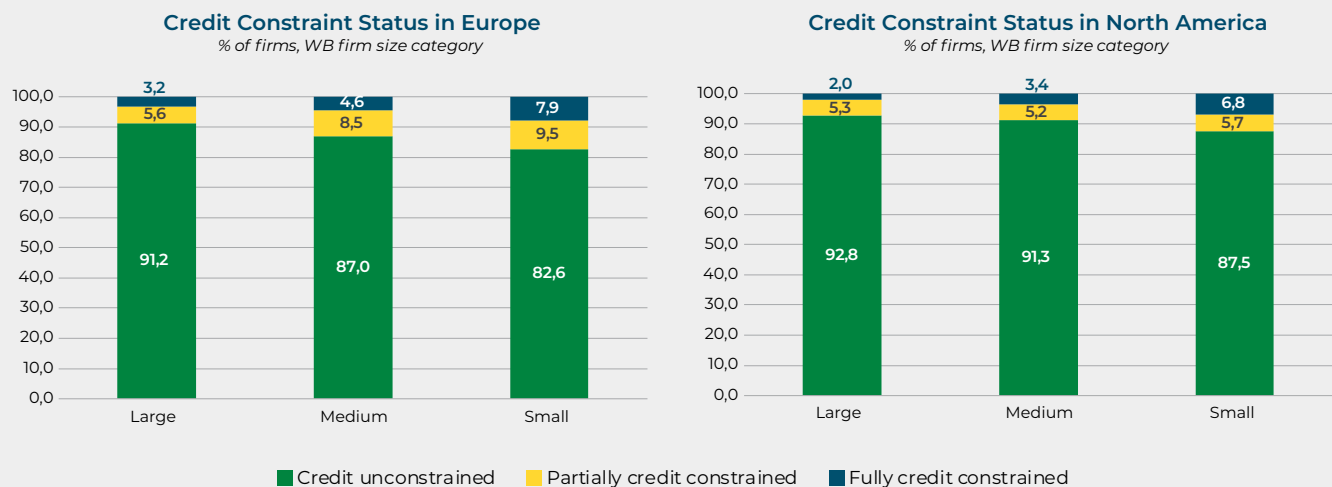
⁸ See the preceding footnote for the list of countries.

⁹ It is worth noting that the differences in estimated presence moved in opposite directions. The estimated proportion of large manufacturing firms decreased by 8 points while for service firms increased by 8 points.

Figure 3.2 illustrates the distribution of credit rationing by firm size, aggregated by regions. Two key observations emerge from this figure. First, while there is generally a decline in the prevalence of credit rationing as firm size (by employment) increases, this trend is not uniform across all regions, nor is the difference between size categories always pronounced. For example, the prevalence of credit rationing among SMEs is very similar in Europe and North America. In LAC countries, large firms are less rationed than smaller ones, highlighting the credit gap faced by small firms. Secondly, while small firms generally face higher rates of credit rationing, medium and large firms also experience significant credit constraints across all regions.

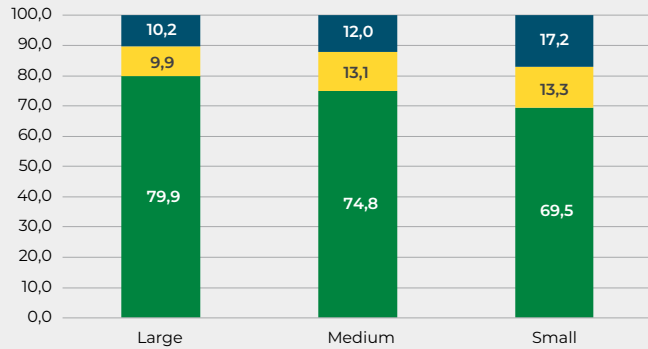
This last point is particularly noteworthy: *credit rationing among large firms is not negligible*. Moreover, although rationing among large firms is less frequent than among medium firms, the levels are comparably close. Across all regions, a non-negligible share of large firms report being credit rationed. The empirical evidence refutes the assumption that large firms do not face meaningful levels of credit rationing. This suggests that informational frictions, sectoral risks, or macroeconomic conditions may affect large firms' access to credit, especially in developing economies.

Figure 3.2 Prevalence of Credit Rationing by Firm Size across Regions



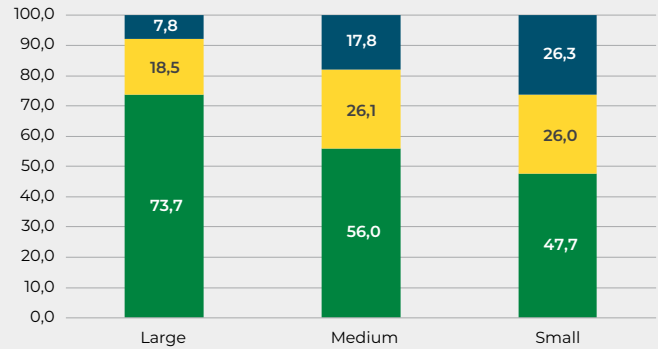
Credit Constraint Status in Asia

% of firms, WB firm size category



Credit Constraint Status in Africa

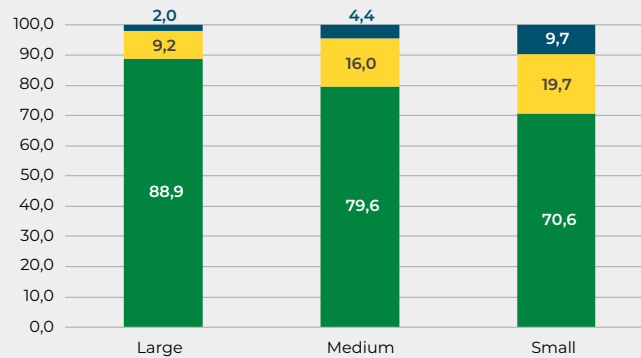
% of firms, WB firm size category



■ Credit unconstrained ■ Partially credit constrained ■ Fully credit constrained

Credit Constraint Status in Latin America and the Caribbean

% of firms, WB firm size category



Source: Authors' calculations based on WBES data.

Note: Size classifications using the WBES global methodology (employment bracket of 5–19, 20–99, and 100 and over for small, medium, and large firms, respectively). Simple average of economy-level point estimates. Sample considers WBES starting in 2013 with only the last available survey considered for each country.

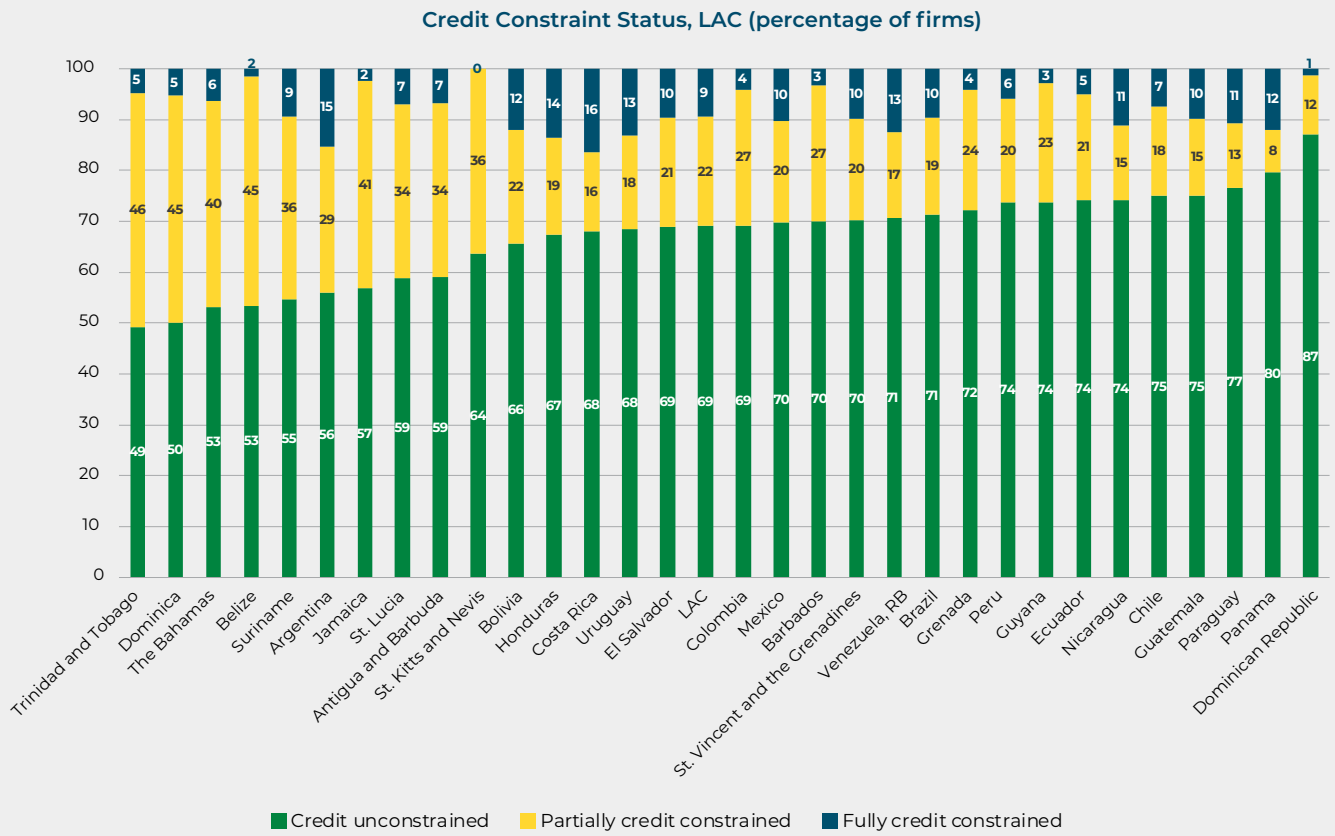
4 CREDIT RATIONING IN LATIN AMERICAN AND CARIBBEAN COUNTRIES: THE CONSEQUENCES OF SIZE CLASSIFICATIONS

We now focus on LAC countries to examine in greater detail the relevance of using different size classifications¹⁰ on policy diagnostics and design. Figure 4.1 displays the distribution of credit rationing rates for all firms across LAC countries. The data reveal significant heterogeneity among different countries. For instance, the prevalence of credit rationing (both partial and full) varies widely. Honduras shows a high prevalence of credit rationing (42 percent), and Mexico (36 percent) and Argentina (32 percent) also report elevated levels. Much lower rates prevail in Peru (15 percent), Uruguay (13 percent), and the Dominican Republic (6 percent), with the regional average being 26 percent. These differences underscore the importance of considering country-specific institutional and economic contexts when analyzing credit access.

The data shown in Figure 4.1 were derived using the following employment-based classification: small firms (5–19 employees), medium firms (20–99 employees), and large firms (100 employees and above). To assess the sensitivity of these findings to different size classifications, Figure 4.2 examines the case for four Latin American countries. The figures for the remaining 10 countries are presented in Annex I. On the left side of each quadrant, we display the distribution of estimated credit rationing rates by firm size, using the WBES size brackets. In the central part of each quadrant, the average credit rationing rate for all firms at the country level is presented, while the right side of each quadrant shows the distribution of estimated credit rationing rates using local classifications, which are based solely on firm size.

¹⁰ As a reminder, these and all other figures in this document exclude micro firms and are valid only for formal firms.

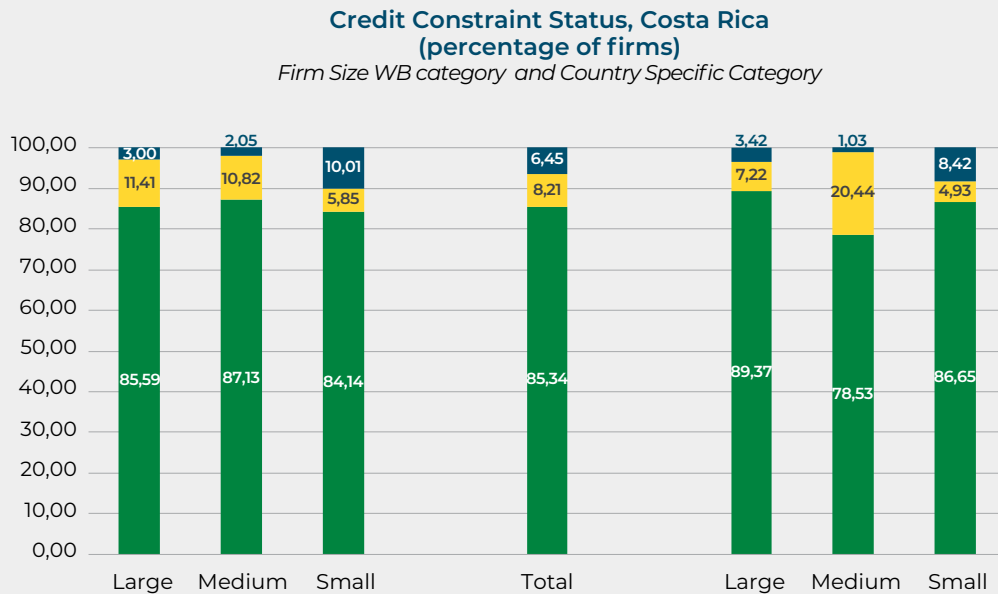
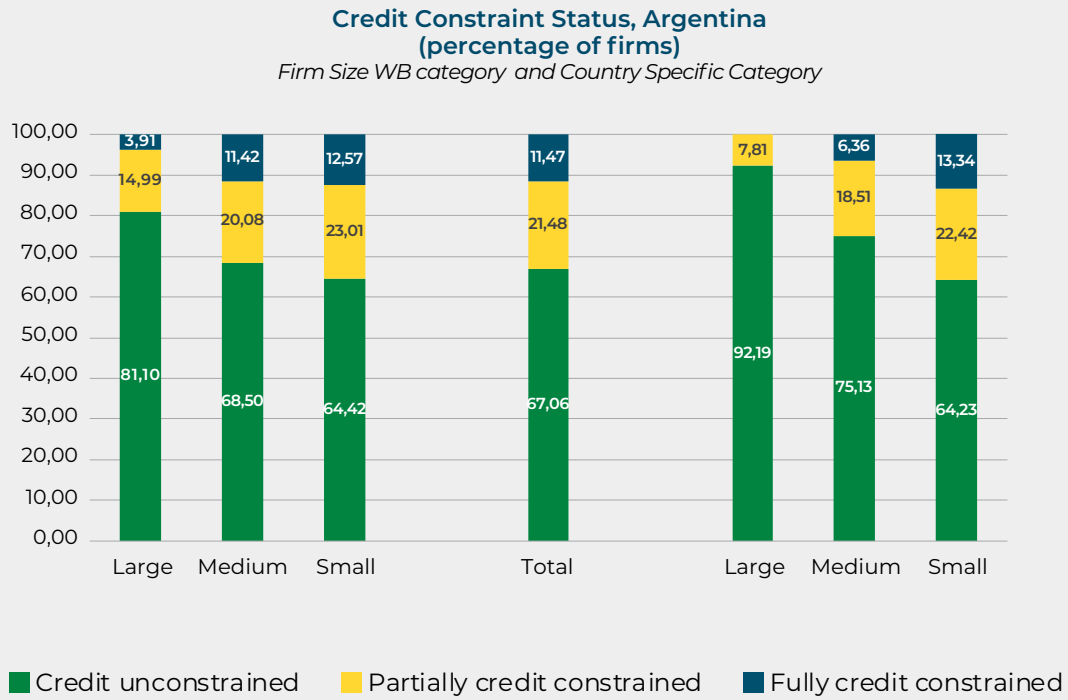
Figure 4.1 Distribution of Credit Rationing among Latin American and Caribbean Countries



Source: Authors' calculations based on WBES data.

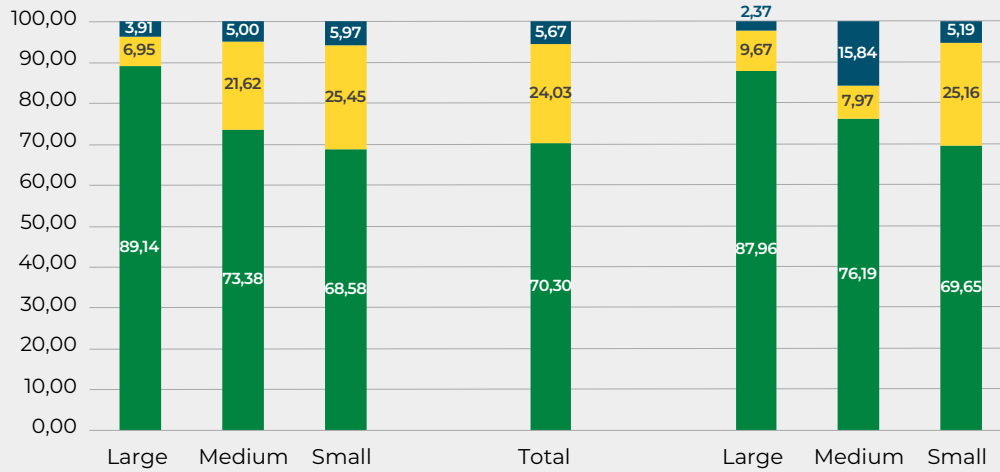
Notes: Size classifications using the WBES global methodology (employment bracket of 5–19, 20–99, and 100 and over for small, medium, and large firms, respectively). LAC = simple average of economy-level point estimates.

Figure 4.2 Alternative Size Categories and Changes in Measured Credit Rationing Rates



Credit Constraint Status, Ecuador
(percentage of firms)

Firm Size WB category and Country Specific Category



■ Credit unconstrained ■ Partially credit constrained ■ Fully credit constrained

Credit Constraint Status, Mexico
(percentage of firms)

Firm Size WB category and Country Specific Category



Source: Authors' calculations based on WBES data.

Note: Size classifications using the WBES global methodology (employment bracket of 5–19, 20–99, and 100 and over for small, medium, and large firms, respectively) and country specific size classification.

The choice of size classification affects the measurement of credit rationing. As illustrated in Figure 4.2, using alternative size classifications can lead to significant variations in the estimated distribution of credit rationing. One of the most notable differences is observed among large firms in Argentina. The size classifications in Argentina are unique in the region, and even compared to developed economies, with the threshold for a firm considered large being exceptionally high (ranging from 215 to 635 employees, depending on the sector). Consequently, the rate of credit rationing among large firms shifts from nearly 18.9 percent under the WBES classification to 7.8 percent using the local classification, while for medium, it changes from 31.5 to 24.9 percent, respectively. This case is particularly noteworthy as it demonstrates that credit rationing persists among large firms, despite the high thresholds set for being classified as such.¹¹

In the other three cases illustrated in Figure 4.2, the differences in credit rationing rates among large firms are not as stark as in Argentina, yet notable variations exist. In Costa Rica, for example, the rate of credit rationing among medium firms increases from 11.2 percent under the WBES classification to 21.4 percent when applying the local classification. A similar pattern is observed in Mexico, where credit rationing for medium firms falls from 25.0 percent with the WBES classification to 21.6 percent using country-specific criteria. In Ecuador, the difference in rationing under the local classification is notable as well: it is 1.18 percentage points larger for large firms and 2.81 points lower for medium firms compared to the WBES classification.

These results further affirm the fact that credit rationing among medium and large firms is not negligible. The empirical evidence refutes the assumption that large firms do not face meaningful levels of credit rationing. Alternative size classifications can have meaningful consequences in the measurement of credit rationing, particularly among medium and large firms. These findings support the argument that size-contingent eligibility criteria may be too blunt a tool for targeting credit interventions and reinforce the argument that rigid size-contingent eligibility criteria are an overly simplistic tool for targeting credit interventions.

Moving forward, it is essential to reassess these criteria and transition toward more flexible, evidence-based approaches. Rather than excluding large firms by default, eligibility frameworks should reflect the reality that credit rationing affects firms across the size spectrum—including large firms—particularly in sectors characterized by high uncertainty, innovation intensity, or limited financial infrastructure. A more nuanced approach would improve the targeting efficiency of public credit programs and ensure that support reaches firms with the greatest potential for productivity, employment, and innovation gains.

¹¹ The case of Argentina highlights the limitations of using the official size classification in the sample considered. Under any reasonable measure of size, large firms are always a minor fraction of the total number of firms in a country. For a similar population and total number of firms, an underdeveloped country will have fewer large firms than a developed country. In addition, Argentina has the highest cutoff point for large firms among the LAC countries considered, which leads to the situation depicted in Figure 4.2, where no large firms are classified as fully credit-constrained under the official definition. Given the results for other countries and the significant underdevelopment of Argentina's financial system, this finding likely reflects the small number of large-firm observations in the sample rather than the actual credit-rationing conditions that those firms face.

5

RETHINKING PUBLIC CREDIT INTERVENTIONS

Public credit programs are designed to correct market failures—particularly those stemming from information asymmetries that lead to credit rationing. However, the traditional reliance on firm size as a primary eligibility criterion has proven to be both empirically flawed and potentially counterproductive. This section proposes a shift toward more effective, inclusive, and evidence-based approaches to public credit interventions.

Implementing alternatives to size-based targeting presents practical challenges for the public sector, particularly in developing economies with limited institutional capacity. A key assumption behind public credit programs is that beneficiaries lack access to private credit due to market failures. This highlights the importance of targeting firms that are credit constrained due to frictions such as asymmetric information or lack of collateral. Efficient resource allocation is a key driver of total factor productivity, which in turn plays a central role in fostering economic growth and development. Market distortions, through the introduction of frictions, adversely affect this efficient allocation, impeding productivity growth. The imposition of size-contingent eligibility criteria in interventions aimed at alleviating credit rationing, especially when it leads to the complete exclusion of an entire category of firms primarily defined for tax and labor legislation and regulation, may further create artificial frictions and exacerbate resource allocation distortions.

An alternative approach that avoids such discontinuous and distortionary restrictions, could be framed around the following core principles: (i) avoid, or at least minimize, the introduction of new frictions that would further impair the efficient allocation of resources,

particularly imposing exogenous quantitative restrictions or price fixing; (ii) favor the use of decentralized market mechanisms to address localized informational frictions, as local financial institutions—given appropriate incentives and safeguards—can better identify and serve credit-constrained firms; and (iii) ensure a proper correspondence between instruments and policy objectives. That is, the choice of financial instruments (e.g., guarantees, concessional loans, technical assistance) should be tailored to the specific market failure being addressed. Although these principles are not novel, it is crucial to consider their specific implications for public interventions in credit markets, especially when implemented through multilateral development banks.

It is worth briefly discussing the first two principles. The first follows from fundamental ideas underpinned by well-established economic and financial principles. Markets are most efficient when prices reflect all available information and market participants can freely allocate their resources according to their objectives. However, public interventions in credit markets that exacerbate frictions and distortions—either directly or indirectly, for example through quantitative constraints—can impair the proper allocation of resources. Such distortions in credit markets often worsen moral hazard and adverse selection problems. Moreover, introducing these additional distortions can undermine long-term sustainability, creating artificial dependencies that may require ongoing public support.

The second principle, which emphasizes reliance on decentralized mechanisms to address localized informational frictions, is based on the notion that local knowledge can be crucial in overcoming information asymmetries between borrowers and lenders. As indicated earlier, a fundamental reason for the imposition of exogenous size categories in public interventions is that the public sector has limited access to, and capacity to process, the detailed information required for credit evaluation outside of specialized financial institutions. Therefore, relying on decentralized mechanisms implemented by financial institutions that operate directly in the markets of interest appears to be a sensible approach. This approach is likely to improve selection compared to the use of arbitrary size categories.

Implementing alternatives to size-based targeting may pose practical challenges for the public sector, especially in developing economies with limited institutional capacity. However, the empirical evidence presented here shows that, at least in terms of the prevalence of credit rationing, size classification is a very rough tool for identifying credit-constrained firms. If not complemented by more nuanced mechanisms, these classifications can introduce additional inefficiencies. Underlying frictions—such as incomplete information, limited risk absorption capacity, and structural market gaps—continue to hinder effective credit allocation. A more refined approach that considers firm transparency, sectoral dynamics, and regional financial development—and in particular the use of knowledge—could improve the effectiveness of public credit programs and provide more accurate targeting mechanisms.

Box 1. Implementing Public Financing Support through Public Development Banks

The previous discussion highlights the limitations of the public sector in gathering and analyzing information for credit evaluation. However, many national governments involve public commercial banks and/or DFIs—often development banks—in the design and implementation of public financing support programs.^a How does the argument change when public banks and DFIs are included in the discussion?

Credit programs may be designed to address the underlying development challenges—such as asymmetric information, incomplete markets, and risk absorption limitations—that affect firms across the size spectrum. In this context, DFIs can play a pivotal role. Their specialized mandate and technical expertise enable them to better identify market failures and tailor instruments to specific frictions. By leveraging local knowledge, sector insights, and transparency indicators, DFIs can help implement more effective and equitable credit allocation strategies—moving beyond arbitrary size thresholds and toward a more targeted, impact-driven approach.

In the case of public commercial banks, there is usually a risk of political influence in the allocation of credit, pricing, and other operational aspects (Carvalho, 2014; Sapienza, 2004; Shen and Lin, 2012). Adequate institutional arrangements (Ashraf, Arshad, and Yan, 2018; Hallerberg and Markgraf, 2018), including robust supervision (Quintyn and Taylor, 2003), can temper this influence. This suggests that public banks, when properly governed, may have the capacity to implement more sophisticated eligibility criteria. On the negative side, political influence on bank behavior is clearer under conditions of low institutional quality or weak supervision. Conversely, strong institutional conditions contain this influence, and the situation more closely resembles that of a public sector interacting with independent intermediaries.

A more transparent and potentially effective interaction may emerge when DFIs—especially development banks—play a significant role during the design and implementation of public financing programs within a framework of transparency and adequate institutional control. Development banks can improve credit allocation in various ways. First, they can make a significant contribution to the proper identification and quantification of market failures, with special emphasis on social returns (Fernández-Arias, Hausmann, and Panizza, 2020). Their advantage over public commercial banks lies in their specialization and alignment of objectives. Second, once the conditions that warrant public intervention are identified, it is essential to select and implement the most appropriate instrument tailored to the specific market failure or friction (Eslava and Freixas, 2021).^b Third, their ability to align repayment incentives with productive use of funds, leverage independent balance sheets, and apply local knowledge makes them well suited to address credit rationing, complementing legal reforms or fiscal subsidies, which face long implementation and targeting difficulties.

Thus, DFIs—development banks in particular—offer an appropriate institutional solution for designing and implementing more efficient selection criteria, avoiding the potential inefficiencies associated with arbitrary size cutoffs. By focusing on identifying market failures and tailoring instruments to specific frictions, public development banks can help implement more effective and equitable credit allocation strategies—moving beyond arbitrary size thresholds and toward a more targeted, impact-driven approach.

- a** State-owned commercial banks and DFIs are also present at the subnational level in many countries, particularly those with a federal structure.
- b** In instances of credit rationing, the initial step is to identify the underlying causes of information asymmetries, acknowledging that these vary across countries, sectors, and time. The next step is to deploy the most effective instrument—balancing alignment, efficacy, and efficiency—to achieve the intended objective. This might involve direct lending, concessional financing, public partial guarantees, credit enhancements, or other interventions such as technical assistance for institutional or regulatory reforms and improvements in risk-assessment systems.

6

CONCLUSIONS

Public interventions in credit markets play a pivotal role in economic and financial policies. Often, these interventions, aimed at addressing credit rationing due to informational frictions, are limited to MSMEs or SMEs and exclude large firms. This exclusion is based on the implicit or explicit assumption that large firms do not experience credit rationing. Large firms play an important role in stimulating the economy and creating jobs, among other things. Within the broad business spectrum, large firms have greater access to markets, technologies, and human capital, as well as linkages with other firms (generally small and micro), which make them key drivers of productivity, export capacity, and growth potential. Due to their configurations from the standpoint of supply chain needs, large firms are vital links in the economic development of the LAC region.

This study provides quantitative evidence that challenges the common assumption that large firms are not subject to credit rationing. Drawing on robust empirical evidence from the WBES, it demonstrates that credit constraints are not exclusive to MSMEs and SMEs, and large firms also face barriers to finance, particularly in the LAC region. We further argue that size-based eligibility criteria—originally designed for purposes such as tax administration and labor regulation—can have unintended negative consequences when applied to credit support programs, distorting resource allocation and undermining the developmental impact of public interventions. The analysis also highlights that firm size classifications are neither consistent nor universally comparable, as they vary considerably across countries and sectors.

The heterogeneity in firm size classifications across countries reflects deeper structural and historical factors. For instance, richer economies may adopt higher thresholds due to a broader distribution of firm sizes, while others may retain legacy classifications shaped by colonial administrative systems or trade policy alignments. This variation complicates cross-country comparisons, underscores the need for context-sensitive policy design, fails to capture informational frictions, and may exclude high-potential firms from receiving support. A more systematic exploration of these determinants could be a valuable avenue for future research.

Considering these findings, we argue against both the use of exogenous size cutoffs as a primary criterion for eligibility and the exclusion of large firms from public sector credit market interventions. These arguments are aligned with those presented in Crepon, El Komi, and Osman (2024), who propose optimal policies based on the importance of high-potential recipients and the specific outcomes that policymakers aim to maximize, such as job creation, investments in technology, and exports. Furthermore, it would be preferable to design an approach centered on identifying and quantifying market failures from a social perspective. The implementation of such solutions should use instruments that are precisely tailored to the identified market failures and frictions, especially in developing economies, where such frictions tend to persist.¹² DFIs play a central role in this transformation by identifying market failures, designing appropriate instruments, and ensuring that interventions are aligned with broader development goals.

Ultimately, expanding access to finance for all credit-constrained firms—regardless of size—is essential for fostering productivity, innovation, and inclusive economic growth. Future research should investigate the institutional and structural drivers of credit rationing and evaluate the long-term impacts of alternative policy approaches.

12 Thus, incomplete information makes it difficult to identify the intended beneficiaries; incomplete markets and structural conditions limit the ability to absorb or transfer risk; and social returns from public policy goals (e.g., regional employment or green technologies) are often less visible than private returns.

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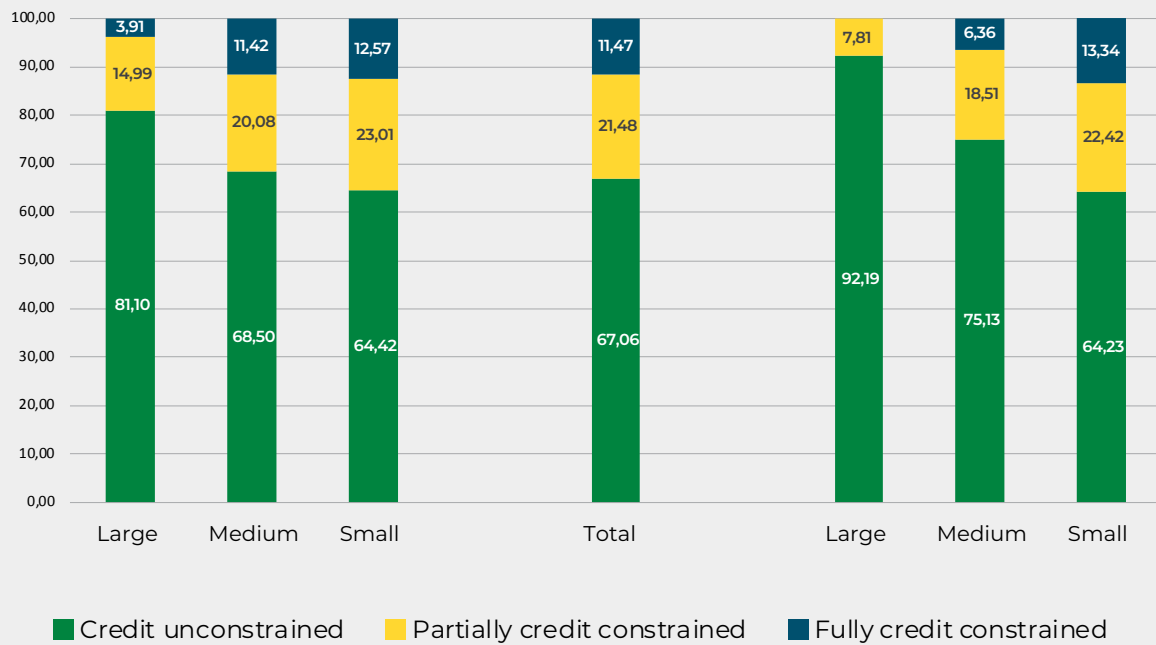
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ANNEX

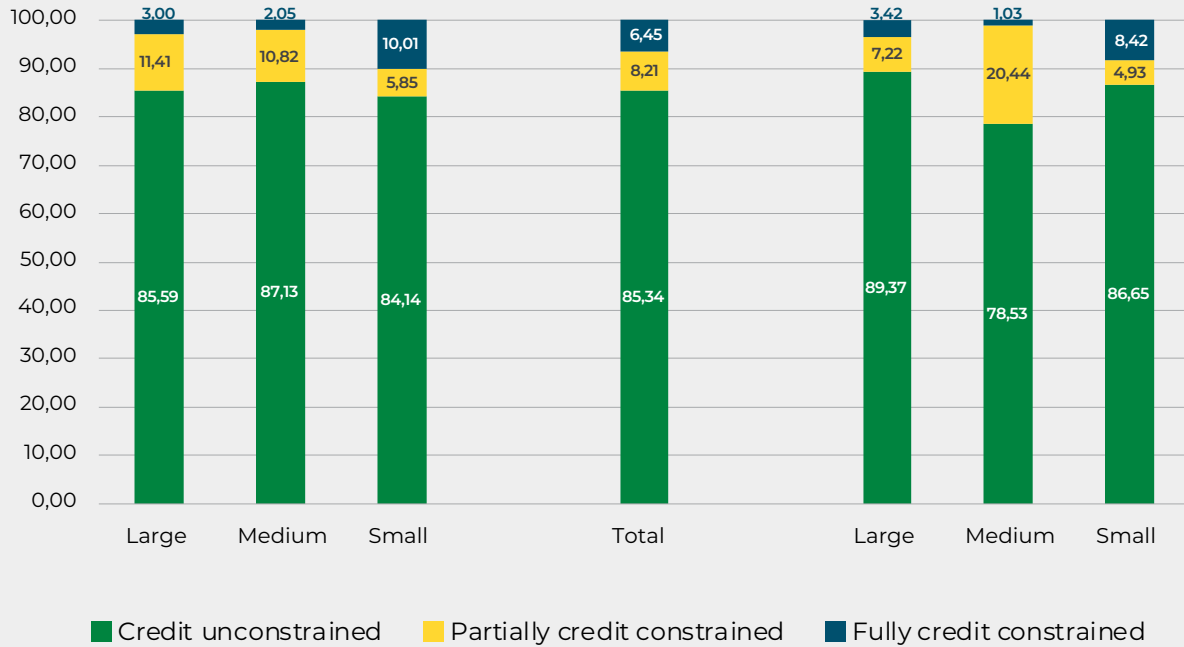
Alternative Size Categories and Changes in Measured Credit Rationing Rates

Credit Constraint Status, Argentina (percentage of firms)
Firm Size WB category and Country Specific Category



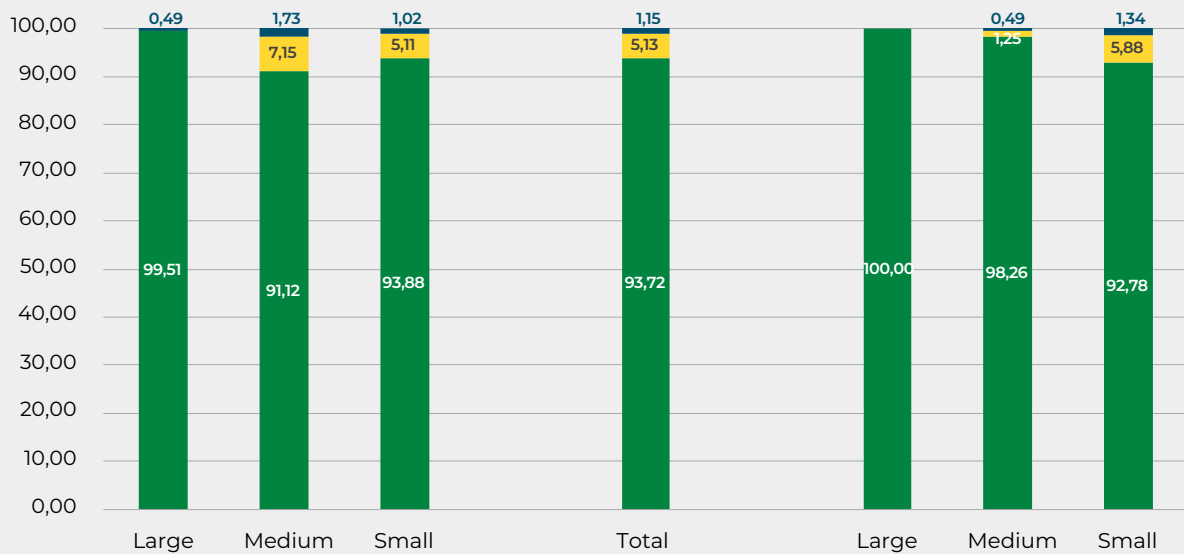
Credit Constraint Status, Costa Rica (percentage of firms)

Firm Size WB category and Country Specific Category

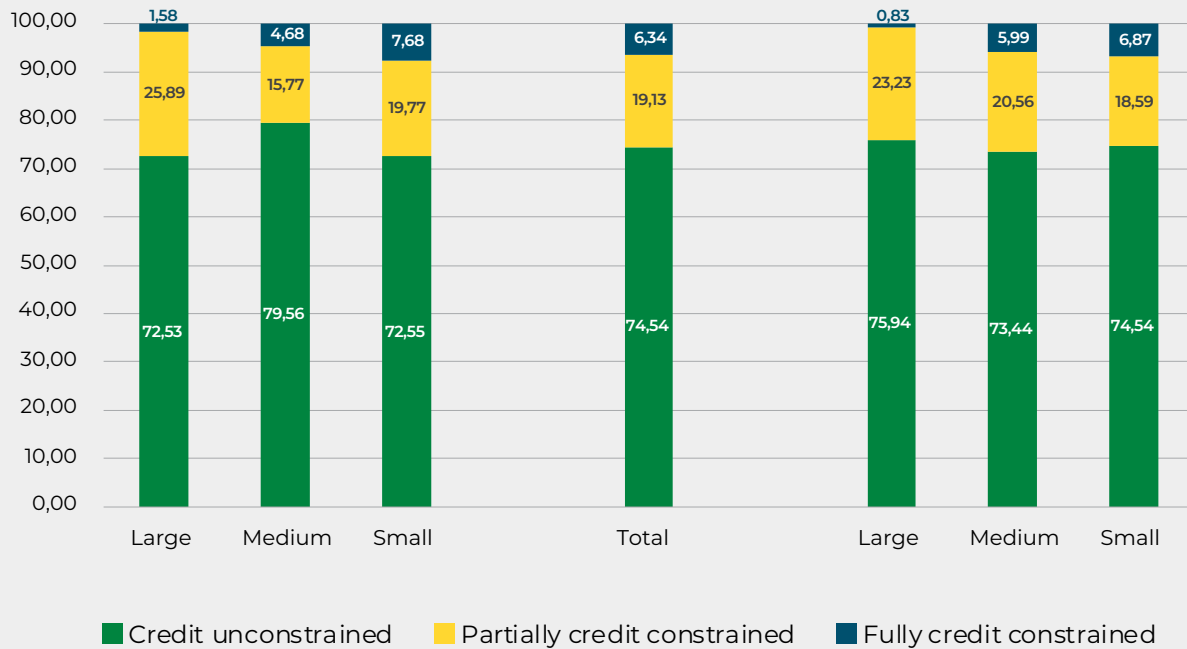


Credit Constraint Status, Dominican Republic (percentage of firms)

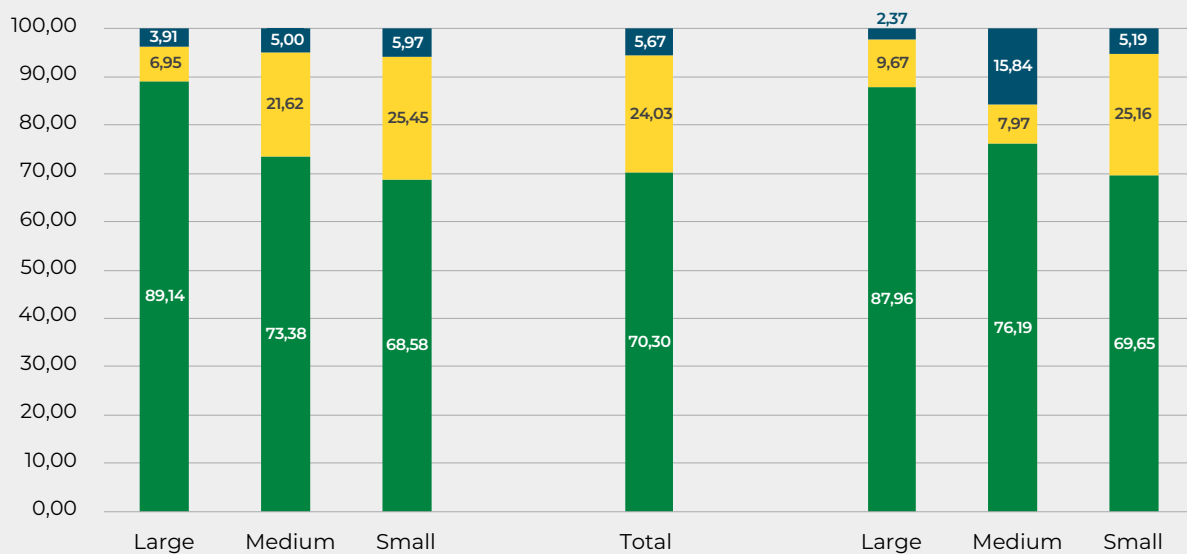
Firm Size WB category and Country Specific Category



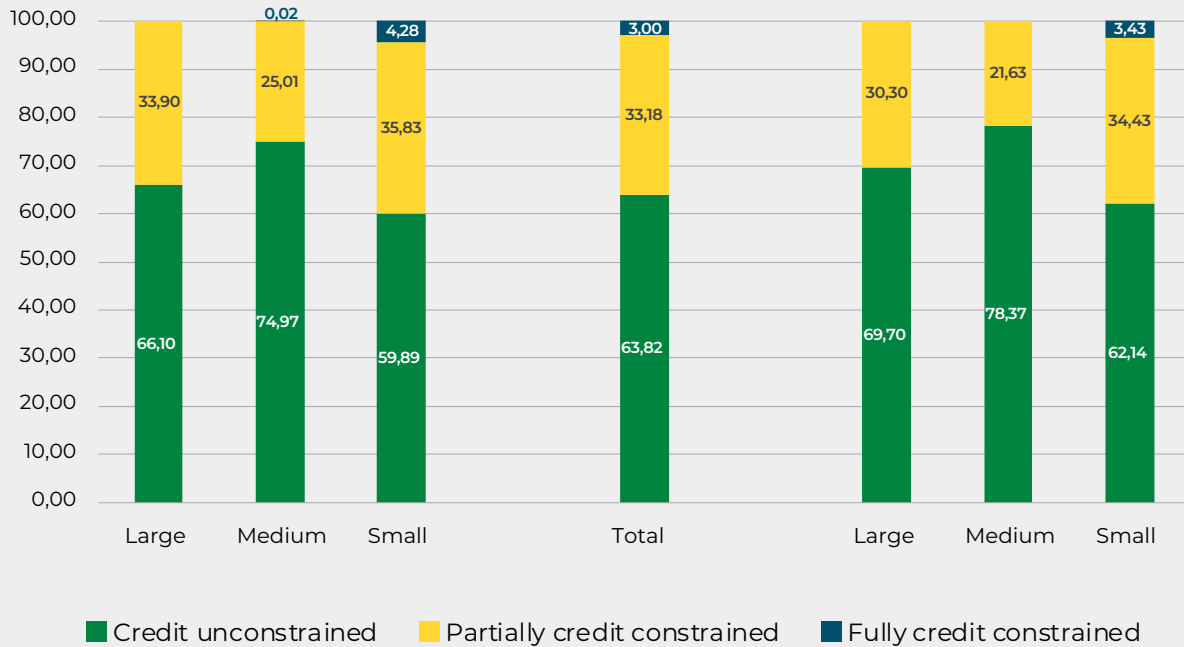
Credit Constraint Status, El Salvador (percentage of firms)
Firm Size WB category and Country Specific Category



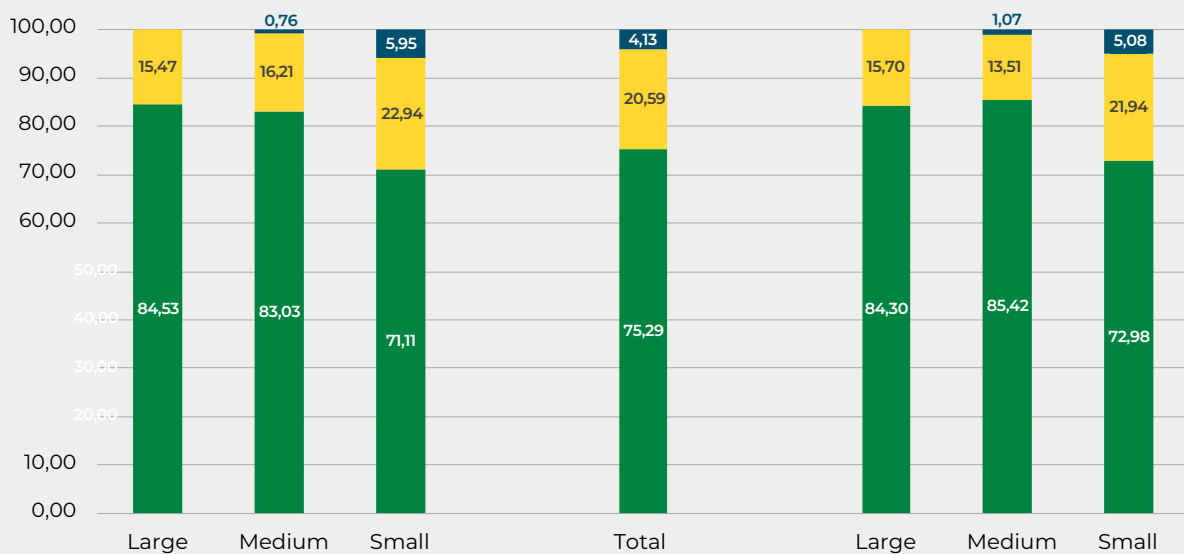
Credit Constraint Status, Ecuador (percentage of firms)
Firm Size WB category and Country Specific Category



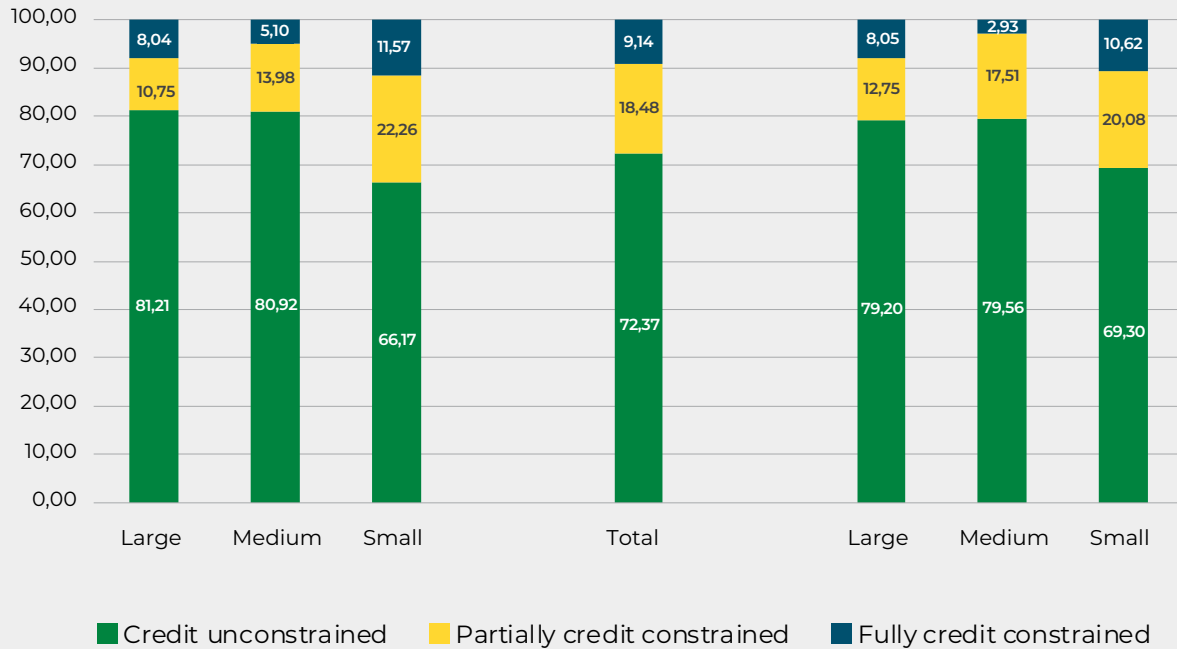
Credit Constraint Status, Mexico (percentage of firms)
Firm Size WB category and Country Specific Category



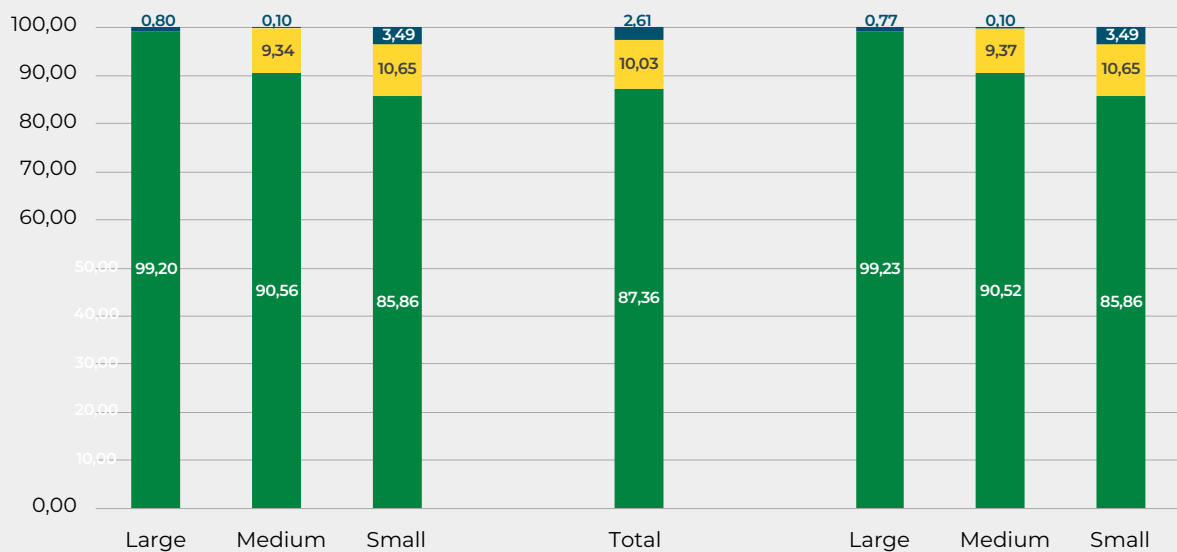
Credit Constraint Status, Nicaragua (percentage of firms)
Firm Size WB category and Country Specific Category



Credit Constraint Status, Paraguay (percentage of firms)
Firm Size WB category and Country Specific Category



Credit Constraint Status, Uruguay (percentage of firms)
Firm Size WB category and Country Specific Category



Source: Authors' calculations based on WBES data.

Note: Size classifications using the WBES global methodology (employment bracket of 5–19, 20–99, and 100 and over for small, medium, and large firms, respectively).

