Unlocking SME Finance in Fragile and Conflict Affected Situations

Pietro Calice

Abstract

Access to finance is a key obstacle for the growth and development of small and medium-sized enterprises in fragile and conflict affected situations. This paper provides empirical evidence on the key macrofinancial and institutional drivers of financial inclusion of small and medium-sized enterprises in a large sample of countries, highlighting the comparative importance of factors affecting countries with and without fragile and conflict affected situations. The results show that macroeconomic and institutional stability, along with reduced informality, banking sector soundness, and improved credit information environment, are associated with higher financial inclusion of small and medium-sized enterprises. The results also show that strengthening the rule of law, government effectiveness, and control of corruption while increasing financial depth and reducing public sector borrowing and banking market concentration could help close the small and medium-sized enterprise financial inclusion gap between fragile and conflict affected situation countries and the best performing countries. These effects are generally stronger in middle-income countries with fragile and conflict affected situations than in low-income countries with fragile and conflict affected situations. The results point to the importance of adopting comprehensive macrofinancial and institutional strategies to improve financial inclusion of small and medium-sized enterprises in countries with fragile and conflict affected situations, tailoring reforms to country contexts.

Unlocking SME Finance in Fragile and Conflict Affected Situations[¶]

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1. Introduction

There is growing recognition that the private sector, and more specifically small and medium-sized enterprises (SMEs), can play an impactful role in fragile and conflict affected situations (FCS). On the one hand, SMEs can contribute to improve people's livelihoods (Assaf et al 2021). SMEs can generate employment and directly provide necessity goods and services such as food, water, health, education, and transportation. They can also contribute to the resilience of local populations during periods of conflict. On the other hand, SMEs can play a positive role through noneconomic contributions. For example, increased employment and trade can generate positive social externalities, increasing the level of trust in society, while paying taxes can contribute to restoring the legitimacy of often weak states (Hoffmann and Lange 2016).

While SMEs have the potential to contribute in many ways to the foundations of social stability and resilience, the circumstances in which they operate make it very difficult for them to flourish. First, in conflict situations, businesses are constantly faced with lack of security, threatening their staff, assets and the infrastructure they rely on. Second, a high level of political volatility and weak legal frameworks and institutions create an unpredictable environment for doing business. Finally, difficulties in accessing critical resources often make it even more challenging for SMEs to operate in FCS countries (Peschka 2010). Chief among key inputs is external finance, especially bank finance, which is needed to fund SMEs' working capital and investment needs.

This paper seeks to identify the main constraints to SME financial inclusion in FCS countries, highlighting the key priority areas to reduce the financial inclusion gap of SMEs. Though access to finance is widely understood to represent a major obstacle to the development of SMEs in FCS countries, to our knowledge the topic remains relatively unexplored in the literature. Yet understanding the key drivers of SME financial inclusion in FCS countries can help policy makers design and implement more targeted interventions.[1] To that end, this paper looks at the impact of macroeconomic and financial sector variables, the legal and institutional constraints, and the role of the business environment. In particular, using the responses from formal SMEs in the World Bank Enterprise Surveys (WBES), this paper attempts an answer to the following question: to what extent do economic fundamentals and institutional characteristics affect SME financial inclusion in FCS countries *relative* to non-FCS countries?

Economic fundamentals matter for SME financial inclusion. Higher incomes and better physical infrastructure increase savings and the pool of funds in the economy and improve access to finance (Dabla-Norris et al 2015), while macroeconomic and financial stability can positively affect credit and other financial services to SMEs (Rojas-Suarez 2016). Banking market structure

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[1] Increasing support for private sector development is, among others, a critical pillar of the World Bank Group's strategy for FCS countries (WBG 2020).

and competition also play a role in spurring SME financial inclusion, though their effects remain ambiguous and largely dependent on country circumstances (see, for example, World Bank 2012).

Turning to institutional factors, it is well understood that institutions, i.e., the rules of the game in a society, influence the development of entrepreneurship (North 1990). Institutions can either be formal or informal, and while in FCS countries the latter tend to be subordinate to the former (Thornton et al 2011), primarily due to low levels of trust (Hoffmann and Lange 2016), ultimately solid formal institutions are needed to enhance SME financial inclusion, given their important role for the information environment and contract enforcement (see, for example, Beck et al 2005, and Djankov et al 2007) and for supporting equal treatment of firms in access to financial services (Faccio 2006).

Our analysis shows that both economic fundamentals and institutional features are key drivers of SME financial inclusion in all countries, with the relative importance of key variables higher for FCS countries compared to non-FCS countries. Therefore, our findings suggest that constraints affecting SME financial inclusion are similar across FCS countries and non-FCS countries, with differences *in degree* rather than *in kind*. The results show that macroeconomic and institutional stability along with reduced informality, banking sector soundness, and improved credit information environment are associated with higher SME financial inclusion. The results also show that strengthening the rule of law, government effectiveness and control of corruption while increasing financial depth and reducing public sector borrowing and banking market concentration could help close the SME financial inclusion gap between FCS countries and the best performing countries. These effects are stronger for middle income FCS countries than for low income FCS countries. Overall, the results suggest the need to implement comprehensive macrofinancial and institutional strategies to improve SME financial inclusion in FCS countries.

The rest of the paper is organized as follows. Section 2 presents stylized facts on SME finance in FCS countries, including the SME financial inclusion index, a composite indicator that captures both access and usage of financial services of SMEs. Section 3 presents the methodology and data used in the analysis as well as the main results, highlighting the relative importance of variables for FCS countries compared to non-FCS countries. Section 4 offers some concluding remarks.

2. Stylized facts

2.1. SME finance in FCS countries

To characterize SME finance in FCS countries, this paper relies on WBES data. WBES is a firm-level survey of a representative sample of an economy's private sector. The surveys cover a broad range of business environment topics including access to finance, corruption, infrastructure, competition, and various business performance measures. WBES are available for both large firms and SMEs and the survey is done typically about every four years per country though some gaps remain in the overall coverage. We focus in particular on WBES data related

to SME access and usage of finance as per the latest WBES available in a country. Our final sample is a cross-section of 153 countries around the world, including both advanced economies and emerging markets and developing countries, spanning 2006-2020.

FCS countries are defined as those countries with a Fund for Peace's Fragile States Index (FSI) above the cutoff point of 90, as in Assaf et al (2021). The FSI is a composite indicator based on 12 sub-indicators capturing a country's political and economic strength, internal cohesion, and social stability. Scoring is done with a 10-point scale, with 1 for least fragile and 10 for most fragile. These are then added up to give a total score for the country, which serves to determine country rankings.[2] This approach gives 31 countries classified as FCS (see Table 1 in the Annexes). Our classification of FCS countries is robust to alternative definitions such as the one provided by the World Bank Group.[3]

According to our data, SMEs represent an important share of firms and employment in FCS countries. In line with world averages, SMEs in FCS countries account for 85 percent of all registered companies, employing 60 percent of the total labor force, more than in non-FCS countries (Figure 1.a). However, a significant share of SMEs in FCS countries is likely to operate in the informal sector. Based on Elgin et al (2021), informal output in our sample of FCS countries accounts for more than 40 percent of official economic activity on average. For formal firms, access to finance is consistently ranked among the biggest business environment constraints for SMEs in FCS countries, especially for small-sized businesses (Figure 1.b).

SMEs in FCS countries lag their peers in non-FCS countries in terms of both access and usage of financial services. While SMEs in FCS countries perform relatively well in terms of access to accounts (78 percent of SMEs in FCS countries have a checking or savings account compared to 91 percent in non-FCS countries), they score particularly poorly when it comes to access to lending services, with only 19 percent having a bank loan/line of credit as opposed to 38 percent in non-FCS countries (Figure 1.c).

Usage of financial services shows similar trends, with the share of SMEs in FCS countries using banks to finance working capital and investment, and the proportion of working capital and investment financed by banks, at about half the levels observed for SMEs in non-FCS countries (Figure 1.c). No significant differences are observed between SMEs in FCS countries and those in non-FCS countries with regard to other variables of interest such as the value of collateral needed for a loan, the share of firms whose recent loan application was rejected, and the proportion of investment financed internally (Figure 1.d).

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[2] The FSI is publicly available at https://fragilestatesindex.org.
[3] The World Bank Group, similar to other international organizations that classify FCS countries, defines FCS countries based on the nature of issues they face. In particular, the classification uses the following categories: (i) countries with high levels of institutional and social fragility, identified based on indicators that measure the quality of policy and institutions, and manifestations of fragility; and (ii) countries affected by violent conflict, identified based on a threshold number of conflict-related deaths relative to the population. See https://www.worldbank.org/en/topic/fragilityconflictviolence/brief/harmonized-list-of-fragile-situations.

Figure 1: SME financial inclusion in FCS countries
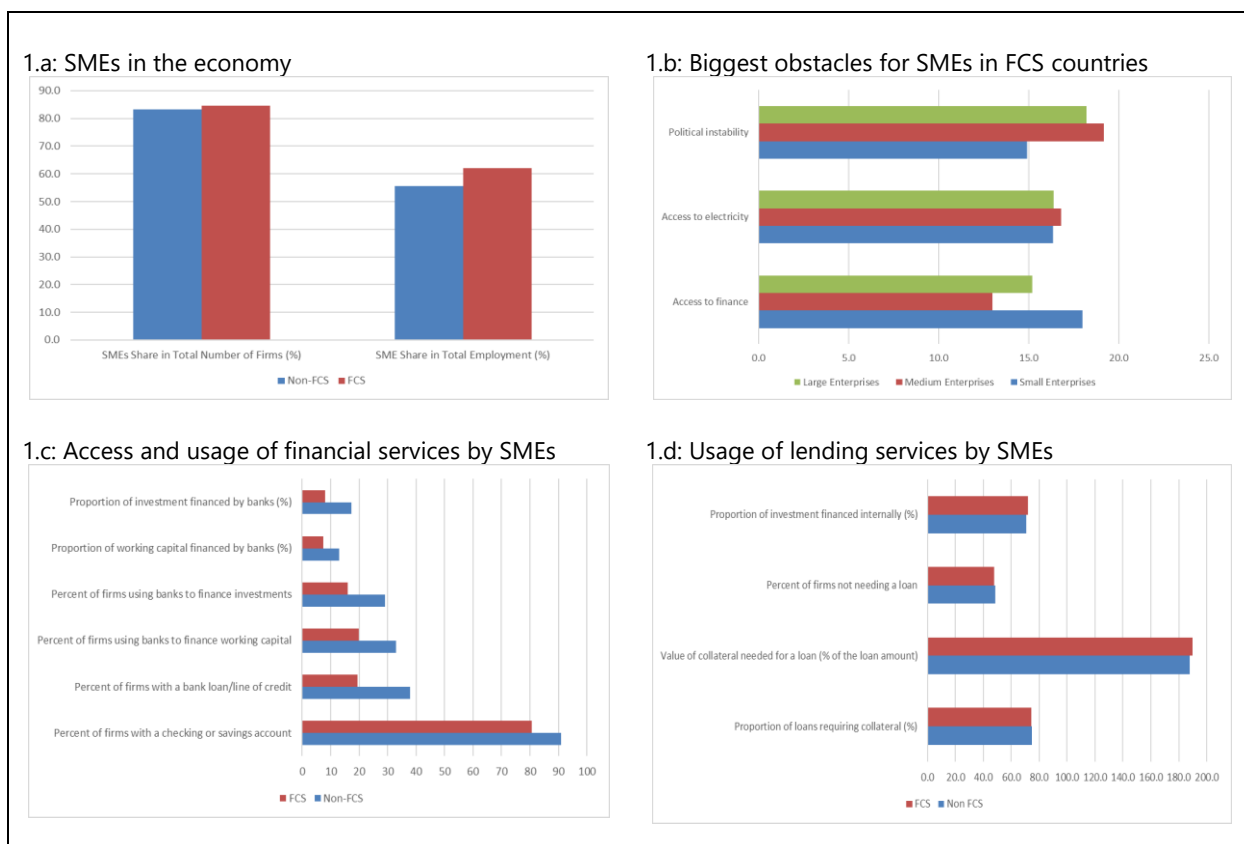
Source: Author's elaboration on WBES data

2.2. The SME financial inclusion index

To facilitate the analysis of the key constraints to SME financial inclusion in FCS countries, as in Fouejieu et al (2020), we constructed a composite index that captures both access and usage of financial services of SMEs using firm-level data from WBES. The SME financial inclusion index reduces multidimensional data from the WBES to a summary index using the following steps: (i) normalization of variables; (ii) aggregation of normalized variables into sub-indices by principal component analysis, using the first component; and (iii) aggregation of the subindices into the final index.

In the WBES, several questions are designed to evaluate financial conditions for firms. To construct the SME financial inclusion index, we select those most relevant to bank financing conditions, which are divided into the two categories of access and usage (Figure 2). By construction, the index is meant to capture the observed SME financial inclusion that reflects the equilibrium of supply and demand for financial services for SMEs.

The SME financial inclusion index is available for all the 153 countries in our sample, including the 31 classified as FCS countries based on our definition. It shows large variation within our sample of FCS countries, with the normalized index ranging from zero in the case of Afghanistan

to 0.78 for Sri Lanka (Figure 3.a).[4] This implies that FCS countries can in principle achieve relatively high levels of financial inclusion even within the prevailing economic and institutional environment. However, with fewer exceptions, overall gaps remain substantive compared to best performing countries worldwide (Figure 3.b).

Figure 2: SME Financial Inclusion Index
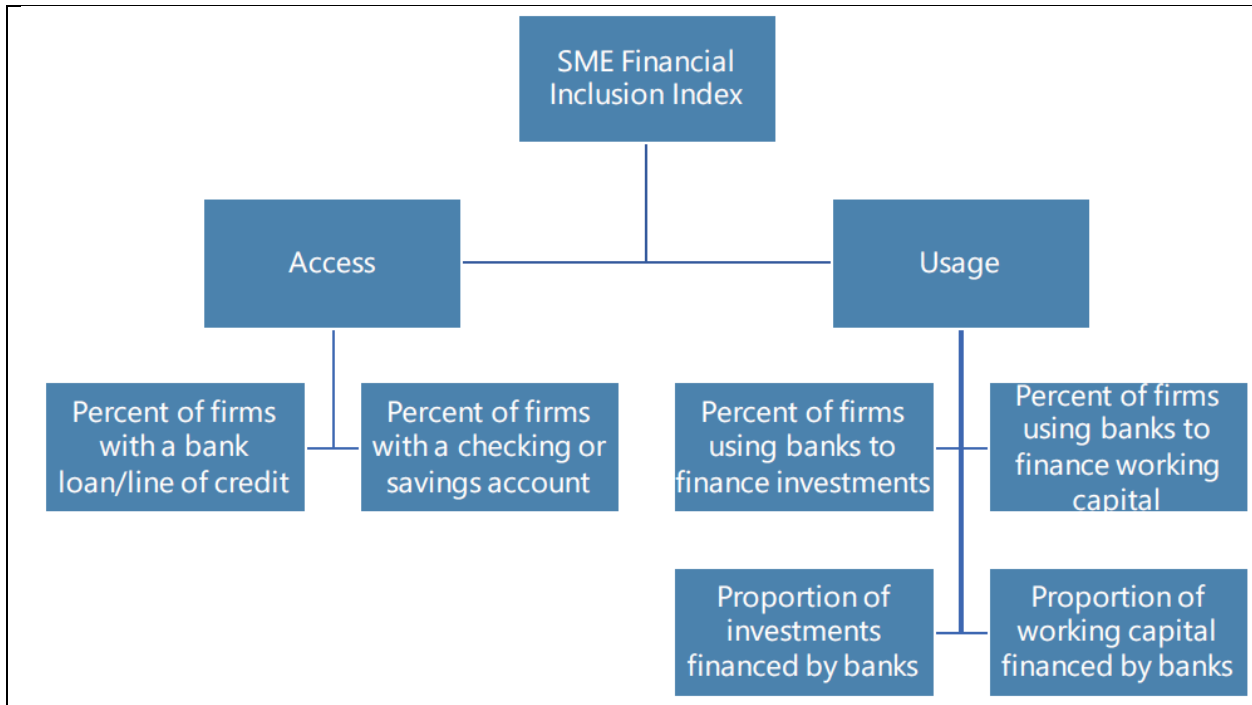
Source: Fouejieu et al (2020).

Figure 3: SME financial inclusion in FCS countries

3.a: SME Financial Inclusion Index – FCS countries

3.b: SME Financial Inclusion Index – Gap to 75th perc.
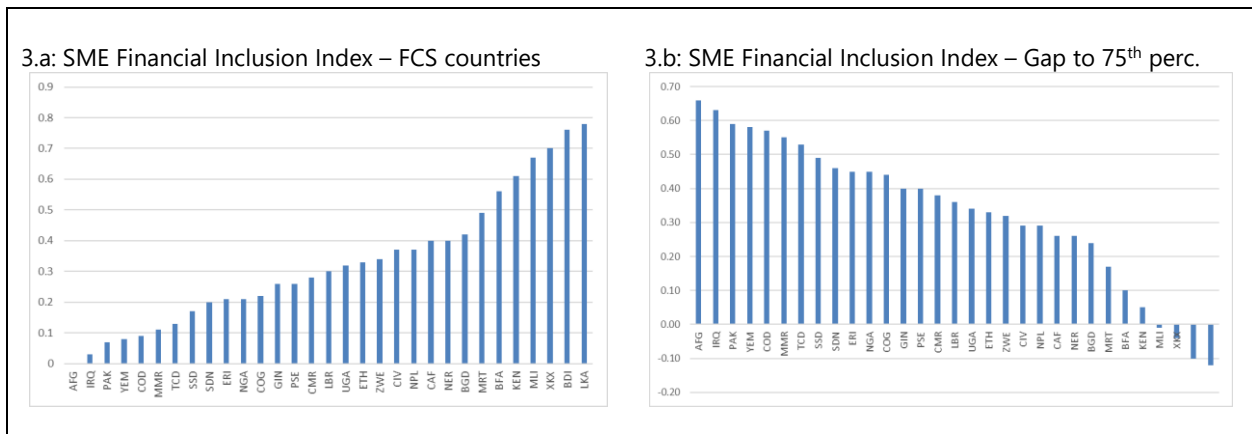
Source: Author's elaboration on WBES data

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[4] Higher values of the index indicate better SME financial inclusion.

3. Drivers of SME financial inclusion

3.1. Methodology and data

Our empirical framework largely follows Fouejieu et al (2020) and is based on the estimation of the following equation:

$$I_{i,t} = \alpha + \beta X_{i,t} + \gamma FCS_{i,t} + \delta Z_{i,t} + \theta FCS_{i,t} * Z_{i,t} + \varepsilon_{i,t} \qquad (1)$$

where $I_{i,t}$ is the SME financial inclusion index for country i at time t; $X_{i,t}$ is a vector of macroeconomic and structural variables; and $FCS_{i,t}$ is a dummy that takes value 1 if country i is classified as *FCS* at time t. This baseline equation is augmented to explore the impact of a broader set of determinants of SME financial inclusion ($Z_{i,t}$), including the macroeconomic environment, financial sector characteristics, institutional factors, and the business environment.[5]

Equation (1) is estimated using OLS with robust standard errors. We start with the baseline model with variables $X_{i,t}$, and then we add variables $Z_{i,t}$ and related interaction terms one at a time to reduce the risk of multicollinearity and control for limited degrees of freedom. Addressing potential endogeneity is a difficult exercise, given the large number of controls and difficulty to find relevant instruments, considering the cross-sectional nature of the sample. Therefore, our analysis cannot be considered an attempt to estimate causality between our covariates and the SME financial inclusion index but rather a simple effort to identify direction and strength of the relationships between variables.

The macroeconomic and structural variables considered in the estimation of our baseline model are as follows:

- **GDP growth**: real output growth reflects a positive economic outlook, leading to increased investment and demand for finance, including from SMEs. High GDP growth should therefore be positively correlated with our dependent variable. However, it is also possible that SME demand for finance increases at the time of lower or negative output growth, when countercyclical policy tools such as credit guarantees and directed lending are activated to contrast private lenders' risk aversion and retrenchment vis-a-vis riskier borrowers.

- **Inflation**: the rate of inflation, proxied by the yearly change in the consumer price index, is typically used as a measure of macroeconomic stability. High inflation reduces investment and capital accumulation and depresses private sector confidence, which leads to low economic growth and low credit supply, especially for riskier borrowers such as SMEs. We therefore expect a negative sign for this variable.

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[5] The set of variables used in this paper reflects data availability, especially for FCS countries. We discuss only those variables found to be the most statistically relevant; however, a larger set of controls were tested.

- **SME share of employment**: this variable measures the size of the SME sector in an economy, which should be reflected in overall SME demand for finance. The expected sign of this variable, is however, difficult to determine *a priori*. On the one hand, a large SME sector can contribute to diversify banks' loan composition and therefore be associated with more credit supply; on the other hand, a large SME sector may be prevalent in developing economies with relatively underdeveloped and constrained financial markets that limit access to finance by SMEs.

- **FCS**: this is a dummy variable that is meant to capture FCS countries, defined as those with an FSI above 90. To check the robustness of our results, we also employ the World Bank Group classification of FCS countries. As shown, SMEs in FCS countries have generally lower access and usage of financial services than SMEs in non-FCS countries. This dummy variable is therefore expected to be negatively correlated with the SME financial inclusion index.

Additional variables ($Z_{i,t}$) included in the augmented model are as follows:

Macroeconomic environment

- **Income level**: this is a categorical variable to capture the level of economic development of a country. It takes value of 0 if a country is classified as low income according to the World Bank Group classification; value of 1 if a country is listed as middle income, and value of 2 if a country is high income. SME financial inclusion is expected to improve as countries develop so this variable is expected to be positively correlated with our dependent variable. We do not include GDP per capita to reduce risks of collinearity with the other variables in the model.

- **Informality**: this variable proxies the degree of informality in an economy as measured by the estimated size of the shadow economy (as a share of official GDP). Economies with higher informality are likely to impose tighter constraints on SME financial inclusion due to opacity and traceability issues, hence the sign of this variable is expected to be negative.

- **Trade openness**: this is proxied by the sum of exports and imports of goods and services measured as a share of GDP. A more open economy is expected to be more favorable to SME development and growth thus facilitating their access and usage of financial services. This variable is therefore expected to be positively correlated with the SME financial inclusion index.

- **Natural resources rents**: In some countries, earnings from natural resources, especially from fossil fuels and minerals, account for a sizable share of GDP, and much of these earnings come in the form of economic rents, i.e. revenues above the cost of extracting the resources. Natural resources give rise to economic rents and as a result to a relatively large public sector that centralizes and controls them. Bank lending may then be

concentrated in these sectors, leaving SMEs underserved. This variable is therefore expected to show a negative sign.

Financial sector characteristics

- **Credit to GDP**: this is a typical measure of financial deepening, accounting for the share of credit to the private credit in terms of GDP. A deeper financial sector is expected to provide more investment opportunities and risk diversification possibilities, potentially increasing both access and usage of finance by SMEs. This covariate is therefore expected to be positively correlated with our dependent variable.

- **Concentration**: the structure of the banking sector in terms of concentration of assets proxied by the market share of the three largest banks has the potential to impact access and usage of financial services in an economy, including by SMEs. While higher market concentration is not necessarily associated with lower competition, it can restrict SME financial inclusion if it increases the cost of finance and reduces the availability of credit (market power hypothesis). However, higher market concentration can generate economies of scale, giving lenders an opportunity to internalize the returns from investing in relationships with opaque borrowers (information hypothesis). Therefore, we do not have a prior on the sign of this variable.

- **Crowding out**: when the government borrows heavily, it competes with the rest of the economy for scarce savings, potentially leading to lower credit supply and lower private investment, affecting especially riskier borrowers such as SMEs. Our proxy for the crowding out of the private sector by the state is the difference between credit to the private sector and credit to the public sector (both as a share of GDP), with higher levels expected to be positively correlated with increased SME financial inclusion.

- **NPL ratio**: bank asset quality, proxied by the ratio of non-performing loans (NPLs) to total loans, can affect the capacity and willingness of banks to lend. Specifically, high NPL ratios could reduce lending to smaller and riskier borrowers such as SMEs, hence this variable is expected to be negatively correlated with SME financial inclusion.

Institutional environment

- **Voice and accountability**: this variable captures perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well as freedom of expression, freedom of association, and a free media. Higher values signal more voice and accountability and therefore this variable is expected to enter our model with a positive sign.

- **Political stability**: this is proxied by a measure of perceptions of the likelihood of political instability and/or politically-motivated violence, including terrorism. Higher values are associated with more perceived political stability and therefore this variable should be positively correlated with SME financial inclusion.

- **Government effectiveness**: this variable captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies. Like other institutional variables, it is expected to be positively correlated with our SME financial inclusion index.

- **Control of corruption**: this captures perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests. Therefore, we expect a positive sign for this variable.

Business environment

- **Credit information**: this variable is proxied by the depth of credit information index, which measures rules and practices affecting the coverage, scope and accessibility of credit information available through either a credit bureau or a credit registry. The index ranges from 0 to 8, with higher values indicating the availability of more credit information to facilitate lending decisions. Given that reducing information asymmetries between lenders and borrowers is a critical step for improving access to finance by SMEs, we expect this variable to enter our model with a positive sign.

- **Rule of law**: this variable measures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts. These factors contribute to a stable and conducive business environment, facilitating transfer and collateralization of assets, ultimately easing access to finance constraints for SMEs. This variable should enter our model with a positive sign.

- **Tax burden**: this is proxied by a composite measure that reflects marginal tax rates on both personal and corporate income and the overall level of taxation (including direct and indirect taxes imposed by all levels of government) as a share of GDP. A high level of taxation can hamper private investment, increase incentives to informality, and negatively affect access and usage of finance by SMEs. We therefore expect this variable to be negatively correlated with SME financial inclusion.

- **Regulatory efficiency**: this variable captures the extent to which a country's regulatory and infrastructure environments constrain the efficient operation of businesses. A quantitative score on a 0-100 scale (with 100 indicating the freest business environment) is derived from an array of factors that affect the ease of starting, operating, and closing a business such as access to electricity, business environment risk, regulatory quality, and women's economic inclusion. This variable is expected to be positively correlated with our dependent variable.

Figure 4 graphically show all our covariates for both FCS countries and non-FCS countries. Overall, FCS countries have on average low income per capita, significantly less open than non-FCS countries in terms of trade, with a larger informal economy and more natural resources rents (Figure 4.a). FCS countries' financial sectors are on average shallow, with a higher level of NPLs compared to non-FCS countries, and with a significantly higher share of credit to the government relative to credit to the private sector, while the structure of the market in terms of concentration is similar to non-FCS countries (Figure 4.b). On the other hand, FCS countries significantly lag behind non-FCS countries on average in terms of institutional characteristics (Figure 4.c) as well as in terms of credit information and contract enforcement and property rights (Figure 4.d). Table 1 in the Annexes presents details about the variables and their sources.

Figure 4: Macroeconomic, financial sector, institutional and business environment features

Source: Author's elaboration on WDI, GFD, WGI, WDI, Heritage Foundation

3.2.   Results

The results of our regression analysis are presented in Tables 3-6 in the Annexes. In most specifications, we find that the variables enter the model with the expected sign at standard confidence levels. Starting with the baseline estimation, we find that output growth is negatively correlated with our SME financial inclusion index. As discussed above, this likely reflects demand

for countercyclical finance by financially constrained SMEs that otherwise tend to resort to internal funds to finance their operations and investment.[6] The compounded difficulties that SME face in accessing bank finance during an economic slowdown or, worse, in a crisis are well documented in the literature, reflecting banks' risk aversion against a backdrop of declining profitability and eroding capital. However, this is often counterbalanced by government interventions aimed at maintaining access to finance for SMEs through public guarantees or directed lending, as seen in the wake of the global financial crisis and more recently in the context of the COVID-19 pandemic.

On the other hand, price stability (low inflation), a key sign of macroeconomic stability, is negatively correlated with SME financial inclusion, that is, higher inflation impacts negatively on private sector expectations and incentives, reducing loan supply to riskier borrowers such as SMEs. The share of SME employment in total employment, a proxy for the economic structure of a country, enters the model with a negative sign but is not statistically significant at standard intervals. The relationships between our FCS dummy and the SME financial inclusion index show a strongly negative correlation, suggesting that on average SMEs in FCS countries are relatively more constrained in terms access to and usage of formal financial services. Finally, estimates on income level dummies suggest that SMEs financial inclusion tends to increase with economic development, i.e., higher income levels.

Turning to the macroeconomic environment, our results show the statistically significant importance of informality. SMEs in countries with a sizeable informal economy (as a share of official GDP) tend to have less access and usage of financial services, in light of the negative sign of our proxy for informality. Another statistically significant correlate with SME financial inclusion is natural resources rents (as a share of GDP), our measure of economic diversification. The coefficient for natural resources rents enters our regression with a negative sign, implying that SMEs in countries with higher economic rents find it more difficult to access bank finance, as expected. The coefficient for trade openness enters with a positive sign but is not statistically significant at standard confidence levels.

Financial sector characteristics also affect SME access and usage of finance. The quantity of financial intermediation helps enhance SME financial inclusion, and this is particularly important in FCS countries. Financial depth, measured by the credit to GDP ratio is positively correlated with SME financial inclusion, probably reflecting greater availability of resources for lending. This is more relevant for FCS countries. The quality of financial intermediation is equally important as large government and state-owned enterprise financing can crowd out credit to the private sector, including SMEs. Our results show that countries where the crowding out effect is larger present lower SME financial inclusion outcomes (our proxy for the crowding out effect is positively correlated with the SME financial inclusion index), and this relationship is especially strong for FCS countries. Our results also show that SME financial inclusion is associated with

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[6] The share of investment that is financed internally by SMEs in our sample based on WBES data is 72 percent on average, with no statistically significant difference between FCS countries and non-FCS countries.

more concentrated banking markets on average, but this relationship is inverted for FCS countries, where reduced market concentration is associated with higher SME financial inclusion. Finally, we find that banking sector soundness, as measured by the quality of lending (NPL ratio), can significantly support SME financial inclusion. Countries with lower bank NPLs deliver better SME financial inclusion outcomes.

As expected, our results show that strong governance and stable institutions exert a significant influence on SME access and usage of formal financial services, and this effect is stronger in FCS countries. Voice and accountability, political stability, government effectiveness, and control of corruption are all positively correlated with SME financial inclusion. The importance of government effectiveness and control of corruption is particularly strong for FCS countries, with the coefficients for the interaction terms twice as large as those for the sample average. This is unsurprising as the lack of strong institutional and governance arrangements are an intrinsic feature of FCS countries.

With regard to the business environment, our results show that rules affecting the scope, accessibility, and quality of credit information can greatly facilitate access and usage of financial services by SMEs. Similarly, constraints to contract enforcement and property rights negatively correlate with SME financial inclusion, with this relationship is stronger for FCS countries. Our results also show that a lower business environment risk is positively correlated with SME financial inclusion. Finally, a less restrictive tax system is positively associated with more access and usage of finance by SMEs though the coefficient for our variable is not statistically significant.

To check the robustness of our results to the baseline definition of FCS countries employed in the regressions, we ran a comprehensive sensitivity analysis. Specifically, we replicated the whole set of regressions using an alternative classification of FCS countries based on the World Bank Group definition. The results, presented in Tables 7-10 in the Annexes, are aligned with those discussed above.

We also run a sub-sample analysis to investigate whether the significance of SME financial inclusion drivers differs between FCS countries that are classified as low income countries (LICs) and those that are middle income countries (MICs). This is not a trivial question. It is commonly assumed that LICs are more prone to fragility and conflict than MICs, yet the evidence is that over the past decade more people have been killed from political violence and homicides in MICs than in LICs ([World Bank 2022](#)). Therefore, understanding the specific macrofinancial and institutional factors affecting SME financial inclusion in FCS countries across income groups can help tailor policy action.

To dig deeper in this question, we split our sample in two groups, one containing FCS LICs only (17 countries) and one including FCS MICs only (14 countries). We then replicated the set of regressions presented above. The results, which are presented in Tables 11-12 in the Annexes, show that the relationship between financial sector characteristics and SME financial inclusion is

stronger for FCS MICs than for FCS LICs. Specifically, the effect of more financial depth and lower crowding out effects of state financing on SME financial inclusion is stronger in FCS MICs, while market concentration is not significant for FCS LICs, suggesting that FCS MICs drive the general finding that lower concentration is associated with higher access and usage of finance by SMEs. The results also show that the importance of government effectiveness is particularly strong in FCS MICs, and that contract enforcement and property rights are only significant for FCS MICs.

4. Concluding Remarks

SME development can contribute in many ways to the foundations of social stability and resilience. To achieve this outcome, it is important, among others, to facilitate access and usage of finance by SMEs, addressing the key macrofinancial and institutional bottlenecks. This paper provides empirical evidence of the economic fundamentals and institutional characteristics associated with SME financial inclusion in a large sample of countries, highlighting the comparative importance of those factors for FCS countries.

Our analysis shows that the macrofinancial and institutional constraints that affect SME access and usage of formal financial services are similar across FCS countries and non-FCS countries, with differences *in degree* rather than *in kind*, i.e., the relative importance of constraints is greater in FCS countries (Figure 5). An important message is, therefore, that advancing SME financial inclusion requires designing and implementing comprehensive strategies encompassing proper macroeconomic and financial policy frameworks and conducive governance, institutional and regulatory arrangements.

Figure 5: Key constraints to SME financial inclusion in FCS countries
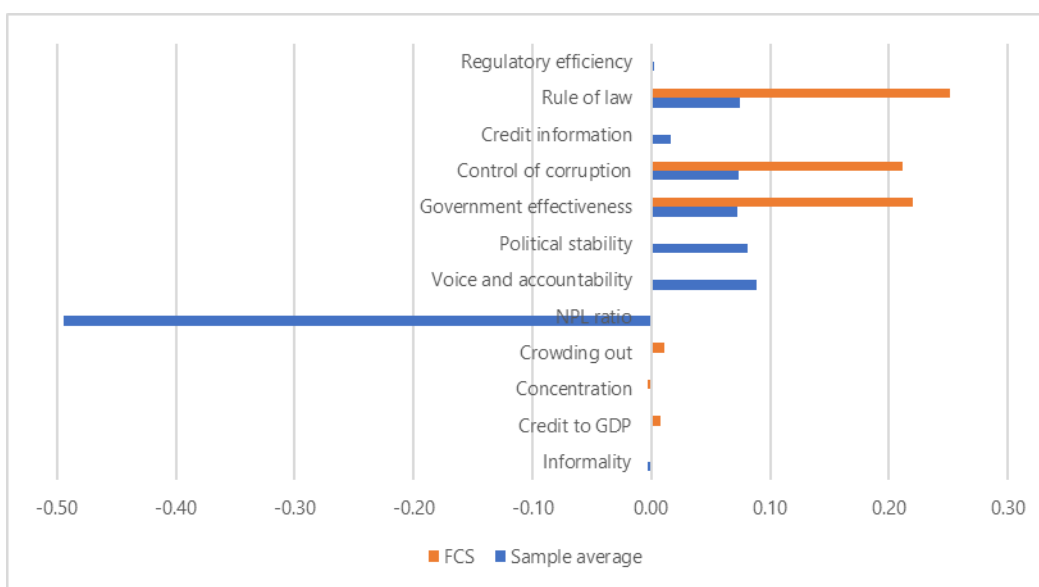
Note: Coefficient estimates based on OLS (see Annexes). The coefficients are statistically significant at a minimum level of 10%, with robust standard errors.
Source: Author.

With all its limitations, especially related to causality, our analysis highlights the relative importance of certain areas for economic and institutional reform, which could help prioritize interventions to reduce the SME financial inclusion gap between FCS countries and best-performing countries. While reform strategies should be tailored to a country's specific circumstances, some key principles can guide policy makers in FCS countries, including prioritizing the need for: (i) strengthening institutional quality, thus addressing some of the very root causes of fragility and conflict, (ii) improving the credit information environment, (iii) promoting financial sector deepening and soundness while reducing market concentration, and (iv) gradually removing any distortions that may crowd out the private sector from the state such as financial repression policies and state-owned banks (see also Barajas et al 2021).

If implemented effectively, these policies have the potential to contribute to greater SME financial inclusion, and economic growth and productivity enhancement in the long run. However, these policies are best suited to countries where fragility is declining or countries that are emerging from conflict. For countries where fragility or conflict are still a reality, it would be important to strengthen the resilience of SMEs by easing access and usage of formal finance through targeted interventions.

In that respect, two policies, which are often employed in FCS countries with the support of international organizations, stand out. First, credit guarantee schemes (CGSs) can contribute to reduce banks' expected losses on their SME lending, thus providing incentives to serve the SME segment, especially when the lack of collateral is a major constraint. However, it is essential that CGSs are designed to preserve market discipline in credit allocation.[7] Second, fintech and digital technologies in general can help ameliorate the credit information environment and spur competition, lowering the costs of financial intermediation and opening new channels of SME financing. However, these interventions should carefully internalize and address the risks they pose, especially in terms of anti-money laundering/counter-terrorism financing, and consumer protection. Future research could assess these types of interventions in FCS countries.

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[7] See World Bank 2015 for good practices in designing and implementing CGSs for SMEs.

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Annexes

Table 1: List of FCS countries used in the analysis

Country name	Country code	Year
Afghanistan	AFG	2014
Bangladesh	BGD	2013
Burkina Faso	BFA	2009
Burundi	BDI	2014
Cameroon	CMR	2016
Central African Republic	CAF	2011
Chad	TCD	2018
Congo, Dem. Rep.	COD	2013
Congo, Rep.	COG	2009
Côte d'Ivoire	CIV	2016
Eritrea	ERI	2009
Ethiopia	ETH	2015
Guinea	GIN	2016
Iraq	IRQ	2011
Kenya	KEN	2018
Kosovo	XKX	2019
Liberia	LBR	2017
Mali	MLI	2016
Mauritania	MRT	2014
Myanmar	MMR	2016
Nepal	NPL	2013
Niger	NER	2017
Nigeria	NGA	2014
Pakistan	PAK	2013
South Sudan	SSD	2014
Sri Lanka	LKA	2011
Sudan	SDN	2014
Uganda	UGA	2013
West Bank and Gaza	PSE	2019
Yemen, Rep.	YEM	2013
Zimbabwe	ZWE	2016

Table 2: Data definitions and sources

Variable	Definition	Source
GDP growth	Yearly rate of change in real GDP.	World Development Indicators
Inflation	Yearly rate of change in the consumer price index.	World Development Indicators
SME share of employment	Employment in SMEs as a share of total employment.	World Bank Enterprise Surveys
FCS	Dummy taking the value of 1 if a country is classified as FCS and 0 otherwise.	Fund for Peace's Fragile States Index; World Bank
Income level	Categorical variable taking value of 0 id a country is classified as Low Income, 1 if it is classified as Middle Income, and 2 if it is classified as High Income.	World Bank
Informality	Shadow economy as a share of official GDP.	Elgin et al (2021)
Trade openness	Sum of exports and imports of goods and services measured as a share of GDP.	World Development Indicators
Natural resources rents	Sum of oil rents, natural gas rents, coal rents (hard and soft), mineral rents, and forest rents as a share of GDP.	World Development Indicators
Credit to GDP	Private credit as a share of GDP.	World Development Indicators
Concentration	Share of total bank assets held by the three largest banks.	Global Financial Development Database
Crowding out	Difference between credit to the private sector and credit to the public sector, both as a share of GDP.	Global Financial Development Database
NPL ratio	Ratio of non-performing loans to total loans.	Global Financial Development Database
Voice and accountability	Perceptions of the extent to which a country's citizens are able to participate in selecting their government, as well freedom of expression, freedom of association, and a free media.	World Governance Indicators
Political stability	Perceptions of the likelihood of political instability and/or politically-motivated violence, including terrorism.	World Governance Indicators
Government effectiveness	Perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.	World Governance Indicators
Control of corruption	Perceptions of the extent to which public power is exercised for private gain, including both petty and grand forms of corruption, as well as "capture" of the state by elites and private interests	World Governance Indicators
Credit information	Depth of credit information index, which measures rules and practices affecting the coverage, scope and accessibility of credit information available through either a credit bureau or a credit registry.	Doing Business
Rule of law	Perceptions of the extent to which agents have confidence in and abide by the rules of society,	World Governance Indicators

	and in particular the quality of contract enforcement, property rights, the police, and the courts.	
Tax burden	Composite measure that reflects marginal tax rates on both personal and corporate income and the overall level of taxation as a share of GDP.	Heritage Foundation
Regulatory efficiency	Extent to which a country's regulatory and infrastructure environments constrain the efficient operation of businesses.	Heritage Foundation

Table 3: SME financial inclusion and the macroeconomic environment

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Dependent variable: SME Financial Inclusion Index							
GDP growth	-0.0125**	-0.0109**	-0.0101*	-0.0101*	-0.0122**	-0.0117**	-0.0109**	-0.0106**
	(0.00493)	(0.00491)	(0.00520)	(0.00521)	(0.00495)	(0.00514)	(0.00522)	(0.00523)
Inflation	-0.00434**	-0.00344*	-0.00468*	-0.00480**	-0.00412*	-0.00451*	-0.00387**	-0.00435**
	(0.00195)	(0.00188)	(0.00237)	(0.00240)	(0.00224)	(0.00237)	(0.00192)	(0.00204)
SME share of employment	-0.000802	-0.000904	-0.000614	-0.000577	-0.00126	-0.00124	-0.000582	-0.000481
	(0.00104)	(0.00101)	(0.00115)	(0.00117)	(0.00111)	(0.00111)	(0.00104)	(0.00105)
FCS	-0.174***	-0.120**	-0.129***	-0.0597	-0.122**	-0.0791	-0.142***	-0.112*
	(0.0456)	(0.0511)	(0.0481)	(0.209)	(0.0492)	(0.0788)	(0.0492)	(0.0633)
Income level		0.0831***						
		(0.0296)						
Informality			-0.00338**	-0.00324*				
			(0.00160)	(0.00170)				
FCS*Informality				-0.00172				
				(0.00478)				
Trade openness					0.0421	0.0463		
					(0.0388)	(0.0405)		
FCS*Trade openness						-0.0774		
						(0.111)		
Natural resources rents							-0.412*	-0.252
							(0.209)	(0.301)
FCS*Natural resources rents								-0.355
								(0.401)
Constant	0.646***	0.546***	0.738***	0.732***	0.616***	0.611***	0.641***	0.630***
	(0.0634)	(0.0692)	(0.0800)	(0.0840)	(0.0766)	(0.0776)	(0.0621)	(0.0632)
Observations	152	152	131	131	133	133	144	144
R-squared	0.197	0.238	0.192	0.193	0.193	0.195	0.215	0.219

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 4: SME financial inclusion and financial sector characteristics

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Dependent variable: SME Financial Inclusion Index								
GDP growth	-0.0125**	-0.00810	-0.00781	-0.00977*	-0.00830	-0.0176**	-0.0165**	-0.0121*	-0.0125*
	(0.00493)	(0.00635)	(0.00617)	(0.00519)	(0.00527)	(0.00705)	(0.00689)	(0.00693)	(0.00702)
Inflation	-0.00434**	-0.00234	-0.00236	-0.00476**	-0.00423*	-0.00213	-0.00214	-0.00255	-0.00257
	(0.00195)	(0.00207)	(0.00203)	(0.00222)	(0.00234)	(0.00231)	(0.00221)	(0.00269)	(0.00270)
SME share of employment	-0.000802	-0.000319	-5.29e-05	-0.000997	-0.000919	-0.000796	-0.000710	0.000473	0.000383
	(0.00104)	(0.00107)	(0.00108)	(0.00108)	(0.00108)	(0.00117)	(0.00116)	(0.00139)	(0.00141)
FCS	-0.174***	-0.153***	-0.311***	-0.176***	0.0291	-0.109**	-0.226***	-0.141**	-0.0776
	(0.0456)	(0.0496)	(0.0681)	(0.0493)	(0.123)	(0.0539)	(0.0575)	(0.0697)	(0.132)
Credit to GDP		0.00132*	0.000997						
		(0.000720)	(0.000710)						
FCS*Credit to GDP			0.00781**						
			(0.00307)						
Concentration				0.000913	0.00166*				
				(0.000827)	(0.000945)				
FCS*Concentration					-0.00316*				
					(0.00185)				
Crowding out						0.00177**	0.00144		
						(0.000879)	(0.000878)		
FCS*Crowding out							0.0112**		
							(0.00553)		
NPL ratio								-0.576***	-0.494***
								(0.195)	(0.185)
FCS*NPL ratio									-0.548
									(0.798)
Constant	0.646***	0.532***	0.534***	0.583***	0.520***	0.600***	0.603***	0.617***	0.618***
	(0.0634)	(0.0783)	(0.0770)	(0.0799)	(0.0838)	(0.0845)	(0.0833)	(0.0891)	(0.0901)
Observations	152	140	140	133	133	122	122	94	94
R-squared	0.197	0.220	0.261	0.201	0.216	0.217	0.263	0.191	0.195

Robust standard errors in parentheses

*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 5: SME financial inclusion and institutional aspects

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Dependent variable: SME Financial Inclusion Index								
GDP growth	-0.0125**	-0.00600	-0.00637	-0.0116**	-0.0119**	-0.00882*	-0.00992**	-0.00729	-0.00823*
	(0.00493)	(0.00501)	(0.00498)	(0.00492)	(0.00494)	(0.00486)	(0.00480)	(0.00489)	(0.00484)
Inflation	-0.00434**	-0.00197	-0.00113	-0.00245	-0.00251	-0.00231	-0.00166	-0.00259	-0.00286
	(0.00195)	(0.00204)	(0.00228)	(0.00225)	(0.00232)	(0.00200)	(0.00207)	(0.00209)	(0.00233)
SME share of employment	-0.000802	-0.000421	-0.000203	-0.00106	-0.000959	-0.000475	1.32e-05	-0.000565	-0.000213
	(0.00104)	(0.000951)	(0.000995)	(0.000957)	(0.000986)	(0.000960)	(0.00103)	(0.000949)	(0.000975)
FCS	-0.174***	-0.103**	-0.0330	-0.0566	-0.0129	-0.100*	0.112	-0.116**	0.0763
	(0.0456)	(0.0451)	(0.0698)	(0.0546)	(0.0674)	(0.0517)	(0.0915)	(0.0473)	(0.0981)
Voice and accountability		0.0948***	0.0886***						
		(0.0188)	(0.0197)						
FCS*Voice and accountability			0.0900						
			(0.0663)						
Political stability				0.0919***	0.0808***				
				(0.0254)	(0.0307)				
FCS*Political stability					0.0460				
					(0.0488)				
Government effectiveness						0.0838***	0.0721***		
						(0.0243)	(0.0250)		
FCS*Government effectiveness							0.220**		
							(0.0849)		
Control of corruption								0.0826***	0.0732***
								(0.0215)	(0.0220)
FCS*Control of corruption									0.211**
									(0.0993)
Constant	0.646***	0.583***	0.570***	0.643***	0.640***	0.604***	0.579***	0.611***	0.596***
	(0.0634)	(0.0582)	(0.0610)	(0.0587)	(0.0596)	(0.0595)	(0.0627)	(0.0593)	(0.0605)
Observations	152	147	147	147	147	147	147	147	147
R-squared	0.197	0.293	0.299	0.271	0.274	0.264	0.287	0.276	0.294

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 6: SME financial inclusion and the business environment

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Dependent variable: SME Financial Inclusion Index								
GDP growth	-0.0125**	-0.00630	-0.00640	-0.00757	-0.00835*	-0.0124**	-0.0119**	-0.00888*	-0.00898*
	(0.00493)	(0.00808)	(0.00816)	(0.00483)	(0.00473)	(0.00510)	(0.00515)	(0.00524)	(0.00535)
Inflation	-0.00434**	-0.00479**	-0.00483**	-0.00205	-0.00204	-0.00402**	-0.00438**	-0.00318	-0.00320
	(0.00195)	(0.00226)	(0.00229)	(0.00215)	(0.00209)	(0.00192)	(0.00211)	(0.00210)	(0.00212)
SME share of employment	-0.000802	-7.07e-05	-5.68e-05	-0.000622	-1.63e-05	-0.000844	-0.000818	-0.000697	-0.000684
	(0.00104)	(0.00126)	(0.00126)	(0.000929)	(0.00100)	(0.00105)	(0.00105)	(0.00102)	(0.00104)
FCS	-0.174***	-0.112*	-0.101	-0.108**	0.117	-0.160***	-0.361	-0.126**	-0.154
	(0.0456)	(0.0607)	(0.0761)	(0.0476)	(0.0811)	(0.0472)	(0.349)	(0.0525)	(0.179)
Credit information		0.0149*	0.0160*						
		(0.00799)	(0.00888)						
FCS*Credit information			-0.00419						
			(0.0182)						
Rule of law				0.0898***	0.0745***				
				(0.0229)	(0.0237)				
FCS*Rule of law					0.251***				
					(0.0776)				
Tax burden						-0.00165	-0.00211		
						(0.00165)	(0.00176)		
FCS*Tax burden							0.00262		
							(0.00459)		
Regulatory efficiency								0.00301**	0.00288*
								(0.00147)	(0.00171)
FCS*Regulatory efficiency									0.000514
									(0.00348)
Constant	0.646***	0.473***	0.466***	0.612***	0.581***	0.772***	0.805***	0.422***	0.429***
	(0.0634)	(0.0849)	(0.0864)	(0.0579)	(0.0607)	(0.139)	(0.148)	(0.116)	(0.127)
Observations	152	100	100	147	147	141	141	142	142
R-squared	0.197	0.246	0.246	0.280	0.313	0.199	0.201	0.205	0.205

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 7: SME financial inclusion and the macroeconomic environment

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
				Dependent variable: SME Financial Inclusion Index				
GDP growth	-0.0190***	-0.0148***	-0.0145***	-0.0142***	-0.0176***	-0.0176***	-0.0161***	-0.0158***
	(0.00516)	(0.00526)	(0.00535)	(0.00533)	(0.00523)	(0.00525)	(0.00550)	(0.00551)
Inflation	-0.00444**	-0.00310	-0.00465*	-0.00469*	-0.00297	-0.00278	-0.00383*	-0.00399*
	(0.00221)	(0.00203)	(0.00264)	(0.00266)	(0.00252)	(0.00267)	(0.00218)	(0.00227)
SME share of employment	-0.000829	-0.000833	-0.000558	-0.000425	-0.00108	-0.00106	-0.000612	-0.000551
	(0.000993)	(0.000971)	(0.00108)	(0.00109)	(0.00106)	(0.00107)	(0.00104)	(0.00105)
FCS	-0.154***	-0.124***	-0.113**	0.00256	-0.150***	-0.173*	-0.138***	-0.121*
	(0.0453)	(0.0436)	(0.0457)	(0.125)	(0.0454)	(0.0881)	(0.0522)	(0.0649)
Income level		0.0972***						
		(0.0249)						
Informality			-0.00419***	-0.00370**				
			(0.00156)	(0.00174)				
FCS*Informality				-0.00327				
				(0.00308)				
Trade openness					0.0659*	0.0625		
					(0.0389)	(0.0420)		
FCS*Trade openness						0.0275		
						(0.0796)		
Natural resources rents							-0.380*	-0.271
							(0.220)	(0.345)
FCS*Natural resources rents								-0.210
								(0.416)
Constant	0.665***	0.539***	0.774***	0.749***	0.601***	0.602***	0.655***	0.646***
	(0.0630)	(0.0705)	(0.0757)	(0.0850)	(0.0787)	(0.0792)	(0.0631)	(0.0657)
Observations	152	152	131	131	133	133	144	144
R-squared	0.184	0.247	0.182	0.186	0.218	0.219	0.211	0.213

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 8: SME financial inclusion and financial sector characteristics

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Dependent variable: SME Financial Inclusion Index								
GDP growth	-0.0190***	-0.0137**	-0.0125*	-0.0156***	-0.0153***	-0.0237***	-0.0203**	-0.0191**	-0.0187**
	(0.00516)	(0.00667)	(0.00682)	(0.00549)	(0.00565)	(0.00688)	(0.00781)	(0.00767)	(0.00779)
Inflation	-0.00444**	-0.00215	-0.00201	-0.00447	-0.00463*	-0.00170	-0.00132	-0.00264	-0.00253
	(0.00221)	(0.00226)	(0.00230)	(0.00270)	(0.00255)	(0.00233)	(0.00238)	(0.00325)	(0.00303)
SME share of employment	-0.000829	-0.000496	-0.000312	-0.00114	-0.00130	-0.00103	-0.000699	1.85e-05	0.000159
	(0.000993)	(0.00103)	(0.00105)	(0.00103)	(0.00106)	(0.00110)	(0.00114)	(0.00137)	(0.00141)
FCS	-0.154***	-0.152***	-0.201***	-0.170***	0.0652	-0.132**	-0.188***	-0.148***	-0.0829
	(0.0453)	(0.0473)	(0.0683)	(0.0551)	(0.245)	(0.0507)	(0.0618)	(0.0543)	(0.0719)
Credit to GDP		0.00142**	0.00121*						
		(0.000669)	(0.000682)						
FCS*Credit to GDP			0.00162						
			(0.00215)						
Concentration				0.00183**	0.00221**				
				(0.000868)	(0.000911)				
FCS*Concentration					-0.00296				
					(0.00308)				
Crowding out						0.00183**	0.00162*		
						(0.000838)	(0.000855)		
FCS*Crowding out							0.00354		
							(0.00219)		
NPL ratio								-0.681***	-0.574***
								(0.182)	(0.179)
FCS*NPL ratio									-0.708
									(0.452)
Constant	0.665***	0.553***	0.549***	0.542***	0.525***	0.633***	0.608***	0.669***	0.653***
	(0.0630)	(0.0831)	(0.0828)	(0.0811)	(0.0795)	(0.0878)	(0.0913)	(0.0921)	(0.0959)
Observations	152	140	140	133	133	122	122	94	94
R-squared	0.184	0.223	0.230	0.186	0.194	0.234	0.245	0.195	0.203

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 9: SME financial inclusion and institutional aspects

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Dependent variable: SME Financial Inclusion Index								
GDP growth	-0.0190***	-0.00949*	-0.00950*	-0.0140***	-0.0139***	-0.0123**	-0.0123**	-0.0113**	-0.0112**
	(0.00516)	(0.00536)	(0.00538)	(0.00517)	(0.00511)	(0.00515)	(0.00516)	(0.00533)	(0.00538)
Inflation	-0.00444**	-0.00153	-0.00144	-0.00159	-0.00184	-0.00198	-0.00192	-0.00228	-0.00223
	(0.00221)	(0.00231)	(0.00251)	(0.00246)	(0.00244)	(0.00218)	(0.00220)	(0.00233)	(0.00237)
SME share of employment	-0.000829	-0.000349	-0.000328	-0.000882	-0.00104	-0.000434	-0.000395	-0.000533	-0.000505
	(0.000993)	(0.000913)	(0.000965)	(0.000878)	(0.000928)	(0.000934)	(0.000960)	(0.000914)	(0.000929)
FCS	-0.154***	-0.112**	-0.110**	-0.114**	-0.123**	-0.0993**	-0.0938*	-0.115**	-0.111**
	(0.0453)	(0.0445)	(0.0485)	(0.0444)	(0.0477)	(0.0463)	(0.0508)	(0.0452)	(0.0513)
Voice and accountability		0.101***	0.100***						
		(0.0183)	(0.0201)						
FCS*Voice and accountability			0.00505						
			(0.0461)						
Political stability				0.0960***	0.106***				
				(0.0198)	(0.0226)				
FCS*Political stability					-0.0287				
					(0.0420)				
Government effectiveness						0.0900***	0.0872***		
						(0.0214)	(0.0248)		
FCS*Government effectiveness							0.0115		
							(0.0448)		
Control of corruption								0.0890***	0.0872***
								(0.0205)	(0.0217)
FCS*Control of corruption									0.00890
									(0.0496)
Constant	0.665***	0.590***	0.588***	0.648***	0.658***	0.611***	0.609***	0.621***	0.619***
	(0.0630)	(0.0585)	(0.0620)	(0.0560)	(0.0592)	(0.0601)	(0.0613)	(0.0596)	(0.0609)
Observations	152	147	147	147	147	147	147	147	147
R-squared	0.184	0.302	0.302	0.299	0.301	0.268	0.268	0.279	0.279

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 10: SME financial inclusion and the business environment

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Dependent variable: SME Financial Inclusion Index								
GDP growth	-0.0190***	-0.00953	-0.00919	-0.0113**	-0.0113**	-0.0184***	-0.0180***	-0.0134**	-0.0132**
	(0.00516)	(0.00871)	(0.00847)	(0.00522)	(0.00524)	(0.00525)	(0.00530)	(0.00565)	(0.00567)
Inflation	-0.00444**	-0.00496**	-0.00480**	-0.00171	-0.00172	-0.00376*	-0.00399	-0.00309	-0.00320
	(0.00221)	(0.00224)	(0.00231)	(0.00236)	(0.00235)	(0.00222)	(0.00243)	(0.00229)	(0.00232)
SME share of employment	-0.000829	-0.000489	-0.000448	-0.000591	-0.000597	-0.000847	-0.000890	-0.000711	-0.000789
	(0.000993)	(0.00124)	(0.00127)	(0.000903)	(0.000929)	(0.00100)	(0.00102)	(0.00101)	(0.00106)
FCS	-0.154***	-0.0418	-0.0643	-0.108**	-0.108**	-0.165***	-0.293	-0.122**	-0.0561
	(0.0453)	(0.0547)	(0.0849)	(0.0451)	(0.0491)	(0.0489)	(0.280)	(0.0502)	(0.168)
Credit information		0.0215***	0.0201***						
		(0.00614)	(0.00650)						
FCS*Credit information			0.00706						
			(0.0171)						
Rule of law				0.0960***	0.0963***				
				(0.0210)	(0.0243)				
FCS*Rule of law					-0.00145				
					(0.0436)				
Tax burden						-0.00183	-0.00234		
						(0.00162)	(0.00181)		
FCS*Tax burden							0.00172		
							(0.00385)		
Regulatory efficiency								0.00304**	0.00334**
								(0.00133)	(0.00152)
FCS*Regulatory efficiency									-0.00115
									(0.00288)
Constant	0.665***	0.459***	0.461***	0.621***	0.621***	0.802***	0.844***	0.432***	0.417***
	(0.0630)	(0.0895)	(0.0893)	(0.0583)	(0.0596)	(0.135)	(0.154)	(0.116)	(0.118)
Observations	152	100	100	147	147	141	141	142	142
R-squared	0.184	0.216	0.218	0.283	0.283	0.203	0.204	0.202	0.203

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 11: SME financial inclusion and FCS LICs

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
	Dependent variable: SME Financial Inclusion Index														
Informality	-0.00351**														
	(0.00167)														
FCS LICs*Informality	-0.00899														
	(0.00575)														
Trade openness		0.0650													
		(0.0412)													
FCS LICs*Trade openness		-0.307													
		(0.198)													
Natural resources rents			-0.530**												
			(0.215)												
FCS LICs*Natural resources rents			0.197												
			(0.597)												
Credit to GDP				0.00148**											
				(0.000731)											
FCS LICs*Credit to GDP				0.00562											
				(0.00372)											
Concentration					0.00107										
					(0.000971)										
FCS LICs*Concentration					-0.000871										
					(0.00228)										
Crowding out						0.00202**									
						(0.000893)									
FCS LICs*Crowding out						0.00519									
						(0.00526)									
NPL ratio							-0.660***								
							(0.211)								
FCS LICs*NPL ratio							-0.445								
							(0.584)								
Voice and accountability								0.105***							
								(0.0196)							
FCS LICs*Voice and accountability								0.0265							
								(0.0667)							
Political stability									0.104***						
									(0.0238)						
FCS LICs*Political stability									-0.00642						
									(0.0609)						
Government effectiveness										0.0945***					
										(0.0240)					
FCS LICs*Government effectiveness										0.143*					
										(0.0781)					
Control of corruption											0.0895***				
											(0.0219)				
FCS LICs*Control of corruption											0.132				
											(0.125)				
Credit information												0.0219***			
												(0.00741)			
FCS LICs*Credit information												-0.0340**			
												(0.0161)			
Rule of law													0.0974***		
													(0.0231)		
FCS LICs*Rule of law													0.130*		
													(0.0778)		
Tax burden														-0.00213	
														(0.00174)	
FCS LICs*Tax burden														0.00373	
														(0.00530)	
Regulatory efficiency															0.00360**
															(0.00154)
FCS LICs*Regulatory efficiency															-0.00200
															(0.00357)
Constant	0.742***	0.597***	0.649***	0.529***	0.581***	0.598***	0.618***	0.580***	0.647***	0.596***	0.611***	0.450***	0.608***	0.808***	0.384***
	(0.0818)	(0.0816)	(0.0641)	(0.0828)	(0.0911)	(0.0872)	(0.0931)	(0.0619)	(0.0584)	(0.0627)	(0.0617)	(0.0869)	(0.0607)	(0.146)	(0.117)
Observations	131	133	144	140	133	122	94	147	147	147	147	100	147	141	142
R-squared	0.167	0.174	0.190	0.194	0.145	0.203	0.173	0.275	0.266	0.252	0.258	0.220	0.265	0.177	0.185

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 12: SME financial inclusion and FCS MICs

VARIABLES	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
							Dependent variable: SME Financial Inclusion Index								
Informality	-0.00414**														
	(0.00164)														
FCS MICs*Informality	0.00359														
	(0.00650)														
Trade openness		0.0610													
		(0.0391)													
FCS MICs*Trade openness		0.0420													
		(0.148)													
Natural resources rents			-0.485*												
			(0.272)												
FCS MICs*Natural resources rents			-0.184												
			(0.390)												
Credit to GDP				0.00170**											
				(0.000709)											
FCS MICs*Credit to GDP				0.00932**											
				(0.00426)											
Concentration					0.00156*										
					(0.000881)										
FCS MICs*Concentration					-0.00475*										
					(0.00254)										
Crowding out						0.00192**									
						(0.000844)									
FCS MICs*Crowding out						0.0217***									
						(0.00420)									
NPL ratio							-0.657***								
							(0.216)								
FCS MICs*NPL ratio							-0.438								
							(1.371)								
Voice and accountability								0.105***							
								(0.0188)							
FCS MICs*Voice and accountability								0.180							
								(0.136)							
Political stability									0.0963***						
									(0.0230)						
FCS MICs*Political stability									0.0627						
									(0.0668)						
Government effectiveness										0.0953***					
										(0.0217)					
FCS MICs*Government effectiveness										0.335***					
										(0.121)					
Control of corruption											0.0917***				
											(0.0212)				
FCS MICs*Control of corruption											0.297				
											(0.190)				
Credit information												0.0219***			
												(0.00667)			
FCS MICs*Credit information												0.000597			
												(0.0182)			
Rule of law													0.0972***		
													(0.0216)		
FCS MICs*Rule of law													0.391***		
													(0.0810)		
Tax burden														-0.000876	
														(0.00183)	
FCS MICs*Tax burden														-0.00186	
														(0.00838)	
Regulatory efficiency															0.00381***
															(0.00129)
FCS MICs*Regulatory efficiency															0.00256
															(0.00575)
Constant	0.782***	0.615***	0.653***	0.518***	0.548***	0.614***	0.648***	0.579***	0.645***	0.587***	0.601***	0.443***	0.592***	0.736***	0.380***
	(0.0810)	(0.0776)	(0.0637)	(0.0785)	(0.0801)	(0.0825)	(0.0922)	(0.0574)	(0.0578)	(0.0597)	(0.0603)	(0.0831)	(0.0583)	(0.150)	(0.111)
Observations	131	133	144	140	133	122	94	147	147	147	147	100	147	141	142
R-squared	0.174	0.174	0.181	0.215	0.176	0.265	0.161	0.293	0.272	0.283	0.276	0.236	0.303	0.143	0.179

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1