MSMEs Distress in COVID-19 Pandemic in Bangladesh: An Analysis of the Stimulus Package Design and Implementation Options

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Abstract

Micro, small and medium enterprises (MSMEs) faced the worst hurdles during the Covid-19 pandemic and subsequent lockdowns. To support the recovery of losses, the Bangladesh government declared a credit-based stimulus package of Tk. 200000 million in the middle of 2020 to support employment and working capital of MSMEs. The government incurred a 5% interest subsidy out of a 9% interest. Given the poor access of MSMEs to bank finance due to stringent rules and the lack of a database of MSMEs, the bank-dependent stimulus would not likely be successful. To this end, this paper provides an estimate of the projected number of MSMEs in 2020 using the inter-census and available survey data that could help outline a reasonable stimulus package for this sector. Furthermore, it highlights two financing strategies that could help reach out to the most distressing MSMEs involving banks and micro-finance institutions.

Keywords: Micro, Small, and Medium Enterprises (MSMEs); stimulus package; bank loan; database of MSMEs; micro-finance institutions

1. Introduction

The COVID-19 crisis affects micro, small and medium enterprises (MSMEs) enormously worldwide. They were the worst hit by the COVID-19 pandemic because of suppressed domestic and international demand and supply-side constraints, such as lockdown and social-distance measures and autonomous suspension of demand due to fear of infection among the people. The production

of the firms was affected to a great extent. The situation in Bangladesh was not different. The government enforced social-distancing measures for the citizens by declaring general holidays (a relaxed lockdown) since March 25, 2020, which ended on May 30, 2020, after 67 days. Similar lockdowns were imposed in 2021 and 2022 to face the second and third waves of Covid infections, respectively. Most of the people stayed at home during the lockdown period; therefore, MSMEs' products and services were significantly disrupted (Hossain and Chowdhury, 2021/2022).¹ During this challenging time of economic stalemate caused by the COVID-19 pandemic, finding an effective policy response to address MSME distresses is among the priority policy agenda of the government.

It is to be noted that MSMEs are the mainstay of developing economies like Bangladesh in creating employment for millions as they are quite predominant in the industrial structure, comprising over 97% of all economic units (Economic Census, BBS 2013). More than 8 million workers are being employed in these sectors. The contribution of the MSME sector to GDP is estimated at about 25% (ADB, 2015), which makes the sector an engine of growth. However, the pandemic placed the MSME sector in jeopardy. The lack of organized trade bodies often deprives MSMEs of policy support, as realized by strong trade associations for other sectors. Many countries in the world have designed various stimulus packages for SMEs to foster their recovery (World Bank, 2020). For example, the Government of Bangladesh has declared a subsidized credit package worth \$1 billion, while India announced \$87 billion in cheap finance for the SME sector (Hossain 2020; Bhagwati 2020). ADB helped the Government of Nepal to implement its pandemic response plan through \$250 million in budget support under the CARES Program. The program supports health response measures, social protection and relief programs, and economic recovery. Similarly, considering the importance of SMEs in developing economies. countries worldwide attempted to lend support to SMEs in their capacities.

The government of Bangladesh declared a stimulus package worth Tk. 200000 million (or US\$1 billion) in the middle of 2020 to help MSMEs recover their losses and maintain the economy's vibrancy. The government intends to provide loans to MSMEs under this stimulus at a 4% interest rate and the rest 5% interest subsidy from the government². Therefore, the whole stimulus is a credit package, of which the government's contribution is about Tk. 10000 million as interest

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¹ In a telephone survey of 500 SMEs, they find that SMEs lost 66% of their revenue in the first month of lockdown compared to the same month in the previous year.

 $^{^2}$ In Bangladesh, the government has fixed interest rate for lending at 9% and deposit at 6% since April 2020 for all purposes except consumer credit.

subsidy in a year. The central bank (Bangladesh Bank) has relaxed the cash reserve ratio (CRR) and advance-deposit ratio (ADR) and created refinancing schemes to ensure a greater supply of liquidity in the banking sector to implement the stimulus package. In particular, Bangladesh Bank created a refinancing scheme of Tk. 100000 million so that the bank can implement the stimulus package (Bangladesh Bank, SMESPD circular no. 2, April 26, 2020). The pertinent questions are: whether and to what extent MSMEs would benefit from the declared bank-based stimulus package. And, what are the ways to make the stimulus more effective for this sector? This article will reflect on these aspects and some workable financing modes to make the stimulus more inclusive and effective. For this purpose, this paper estimates the losses incurred by the MSMEs during the lockdown period based on survey data in the absence of official statistics on MSMEs in Bangladesh. The exercises in this paper could set an example to design any support measure in the context of either a crisis or sectoral incentives.

Implementing any support measure or stimulus package successfully, the first and foremost condition is to have a comprehensive database of MSMEs. Because most of the MSMEs are out of the formal registration system and it is not easy to reach them. Moreover, there is a dearth of updated data on MSMEs in Bangladesh, which is one of the impediments to devising an effective incentive package for this sector. After every ten years, a census of economic enterprises is conducted by the government's statistical agency, the Bangladesh Bureau of Statistics (BBS) though the census lacks adequate information on firms' production/revenue and other flow data. The latest Economic Census was conducted in 2013 that identified about 7.8 million economic enterprises, of which roughly one million are MSMEs. This is the only available information on MSMEs, which is surely outdated. Among them, 11% are micro, 88% are small, and 1% are medium enterprises. Two other organizations working on MSMEs, namely SME Foundation (SMEF) and Bangladesh Small and Cottage Industries Corporation (BSCIC), but they do not have a comprehensive list of MSMEs. Therefore, to estimate the aggregate losses of the MSMEs in the face of covid-19 crisis, it is necessary to have an updated estimate of the number of MSMEs, such as their numbers, productions/revenues, their employees, and wage bills at the outset.

The second aspect of the stimulus implementation is related to its design and modalities. It is to be noted that the lack of access to bank finance is the main obstacle to the development and growth of MSMEs. This is true not only for Bangladesh but also for the whole world (Beck et al., 2006). A recent study

(Hossain et al., 2017) found that less than 40% of SMEs have access to bank finance in Bangladesh and 49% got finance from NGOs/MFIs. If microbusinesses are included, the percentage of small enterprises staying out of banks' coverage is much bigger. MSMEs find it hard to comply with complicated loan procedures to get a stimulus loan. Banks will ask for collateral, guarantee, papers, etc. that they usually don't have. So, only the firms that have access to bank finance can only take benefit from the stimulus credit package. The banking sector is not yet in its full capacity to serve the MSMEs, which is evident from a recent study (Hossain et al., 2020). In this context, more than 70% of MSMEs will likely be left out of the benefit of the government's COVID-19 stimulus for the MSME sector. It is thus important to look into the suitability of alternative models of SME financing to make the stimulus workable during the pandemic.

The paper is organized as follows. Section 2 provides an estimate of the number of MSMEs, their revenues and wage payments, etc. Section 3 estimates the potential losses of MSMEs and proposes an outline of stimulus packages. Section 4 discusses how to make the stimulus workable by focusing on some innovative financing strategies. Finally, in section 5, some policy recommendations are made to address the distress of MSMEs in inclusive and effective ways.

2. An Estimation of the number of MSMEs in Bangladesh in 2019

In the context of the unavailability of updated information about MSMEs in Bangladesh, in this section, an attempt has been made to estimate the number of MSMEs and other relevant indicators that could be the first step to understand the need for the MSMEs. The estimates would aid the policymakers in devising a workable stimulus package for the MSME sector. The latest official statistics on MSMEs is the Economic Census, 2013. It is observed that MSMEs grew at an annual rate of 7.2%, and workers grew at a 6% rate during the inter-census period, 2001/3 and 2013. Using these growth rates, the number of MSMEs in 2019 is estimated at 1.35 million, and the estimated number of the cottage and household economic units (employee<10 persons) is estimated at 9.58 million units, and the corresponding workers are 17.3 million. In total, smaller economic units are estimated at about 11 million, and the total number of persons engaged is over 34 million (Table 1).

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	Number of enterprises2013201920192019			Number of employees (workers)		
				13	2019	2019*
MSMEs	970431	1,358,603	7,306	5,797	9,937,244	8,744,775
Economic Household, cottage, and others	6848134	9,587,388	17,19	4,053	24,363,946	17,324,130
Total	7,818,565	10,945,991	24,50	0,850	34,301,190	26,068,904

Table 1: Estimated number of MSMEs and their employees in 2019

*Adjusted by deducting unpaid family workers (at 3%); (Manufacturing Units= 54,344; Trade & service= 1,304,259)

The size distribution of units is as follows: 11% are Micro, 88.9% are small, and 0.8% are medium. Regarding employment, 7.1% of jobs are in micro firms, 83.9% in small firms, and 9% in medium firms (Table 2). So, there is the overwhelming dominance of small firms in the MSME sectors.

Table 2: Distribution of units and their workers

	Number of units	Percentage	Number of workers	Percentage
Micro (TPE: 10-24)	145,610	10.7	706,059	7.1
Small (TPE: 25-99)	1,203,045	88.5	8,339,104	83.9
Medium (TPE: 100-249)	9948	0.8	892,080	9.0
Total	1,358,603	100	9,937,243	100

*TPE: Total persons engaged

Wage payment and production:

Using data from the MSME surveys conducted by a survey of BIDS in 2017, the average salary paid to over 8 million workers based on skill level is estimated. The wages paid by the MSMEs are estimated at Tk. 642.7 million per month (Table 3).

Table 3: Estimated monthly wage payment by MSMEs

Types of workers	% of types	Total workers	Average monthly salary	Monthly amount paid (in Tk.)
Skilled	58	5,071,969	8500	43,111,739,023
Semi-skilled	32	279,833	6000	16,789,967,327
Unskilled	10	874,477	5000	4,372,387,325
Total		8,744,774		64,274,093,675

Source: BIDS Survey, 2017.

We further estimated the wage payments according to the size of the firms (Table 4). Monthly wage payments made by firms are as follows: Micro: Tk. 4612 million; Small: Tk. 54472 million; and Medium: Tk. 5827 million. The estimated production/sales of MSMEs per month is estimated at Tk. 400,650

million (Table 4), which did not estimate the production/sales of the smallest units (the cottage and household economic units). The estimated production of different categories of manufacturing firms is as follows: Micro-Tk. 1812 million; Small-Tk. 165,069 million; and Medium: Tk. 54325 million.

Table 4: Estimated sales/production of the manufacturing MSMEs across the size

Size	Average annual sales	Average monthly sales	number of firms adjusted	Total monthly sales/production	Average monthly sales of trading and service firms	Grand total (monthly average sales)
Micro/Cottage	20.01	1667500.00	1086.88	1,812,372,400	Total firms:	
Small	40.5	3375000.00	48909.6	165,069,900,000	1304259	
Medium	149.95	12495833.33	4347.52	54,325,885,333	Monthly average	
					sales: 1,37,500	
					Taka	
Total	48.87	4072500.00	54344	221,315,940,000	179,335,648,800	400,651,588,800

Loan and Interest payment:

In addition to wage and production losses, interest payment on bank loans is also a loss as the capital doesn't generate rent during the lockdown. Based on survey data of MSMEs, we estimated the interest payment and total outstanding loans to this sector (Table 5). A BIDS survey in 2017 revealed that about 40% of MSMEs have access to a bank loan. Considering this figure, we estimated that about 543441 enterprises had access to bank loans. On an average, a micro firm had an outstanding loan of Tk. 8.56 million, a small firm had Tk.12.94 million, and a medium-sized firm had Tk. 37.25 million. The total outstanding loan in the MSME sector stood at Tk. 2192939 million (as of October 2019). Using the survey data, it is estimated that the MSME sector paid interest worth Tk. 21929 million every month.

Table 5: Outstanding bank loan and interest payment by the MSMEs

Size	Average amount of outstanding loan (Tk. in million)	Average bank interest rate	Number of firms	40% of firms have access to bank loan	Total interest to be paid per month	Total outstanding loan to be repaid (Bangladesh bank 2019)
Micro/Cottage	8.59	12.25	145609.8	58243.92		
Small	12.94	11.91	1203045.2	481218.1		
Medium	37.25	12.35	9948.4	3979.36		
Average	13.15	12.0	1358603.4	543441.4	21,929,397,000	2192939,700,000

Note: The figures are estimated based on firms' survey data in 2017. This figure may not be accurate, but it might give an idea about the incentive package planning. Source: BIDS Survey (2017) and Bangladesh Bank In sum, as the 2013 Economic Census data is outdated, updated data are required to understand the needs of the MSME sector. Based on the inter-census growth of MSMEs and their employees, the total number of MSMEs is estimated at 1.35 million, of which 0.54 million are manufacturing units and the rest 1.30 million are trading and service units. Trading and service units comprise about 96% of the total MSMEs. In 2019, the total number of employees (persons engaged) was estimated at 9.9 million in the MSME sector, which was 7.3 million in 2013. After deducting unpaid family workers, roughly 8.74 million wage/salaried workers were engaged in this sector. The sector paid a monthly salary of an amount of Tk. 60000 million, and it produced goods and services worth Tk. 400000 million. Those who have bank loans paid interest worth Tk. 20000 million per month (information on loans from MFIs is not available).

3. Estimated Losses of MSMEs and an outline of a stimulus package

The estimated loss of the MSMEs could have varied, considering the level of strictness of the lockdown. In Bangladesh, initially, the government imposed a 67-day lockdown (Scenario I). After that, zone-based (red zones) lockdowns were imposed with dictated health protocols in other zones (yellow and green), which is Scenario II.

The losses in scenario-I are estimated by accumulating wage payments, production, revenues, and interest payments for two months³. The loss is therefore estimated at Tk. 960000 million based on the estimates in the previous section.

The estimate of losses in scenario II is a bit tricky because correct information on the operational status of firms was not available after reopening. Thus an assumption is made that about 60% of the capacities of MSMEs are being realized. The reason is that the service sectors (for example, hotels and restaurants) are not in full operation due to the health protocol of social distancing. Some sectors could not start its operation due to the unavailability of raw materials (either import-dependent or locally produced). Under scenario II, the estimated monthly loss would be Tk. 192000 million. This scenario of losses in this sector depends on the availability of an effective vaccination drive and a semblance of normality.

An outline of the stimulus package:

A stimulus package under Scenario I is derived considering the fact that during the

complete lockdown, enterprises paid a 50% salary to their employees and realized 50% of profit (on average, it is 20% of revenue as per the BIDS survey, 2017) to continue employment and maintain their livelihood. Thus, for the owner, 10% of revenue is considered compensation for their losses. It would be a reasonable approach to waive interest payments for about six months for all the MSMEs considering their distresses in the Covid-19 crisis. Furthermore, it is assumed that scenario II will continue for six months (July-November, 2020). Based on these assumptions, the estimated size of the stimulus package would be as follows.

>>For Scenario-I: During complete lockdown (2 months: April-May 2020):

- Wage support: 50% wage payment for two months
- Employer support: 10% of revenue support for two months for their livelihoods
- Interest payment waiver: 100% for two months
- Suspension of Interest payment: 100% for two months

>> For Scenario-II: Limited operation with zone-based lockdown (June-November)—Assuming 60% of capacity is realized

- Wage support: 50% of 40% of employees, i.e. 20% wage payment for six months
- Revenue support: 10% of 40% of firms, i.e. 4% of revenue support for six months
- Interest payment waiver: 50% of the total for six months
- Suspension of interest payment: for six months

Table 6: Summary of the proposed incentive/stimulus packages

Support areas of	Scenario-I (Strict lockdown): applicable to all enterprises			Scenario-II lockdown): aj 40% of ent	Grand total	
compensation	Modalities of compensation [A]	Duration [B]	Amount in a million Tk. [C]	Duration [D]	Amount in a million Tk. [E]	Amount in a million Tk. [F]
Employee support (Salary compensation)	50% of the total salary payment	Two months	60000	Six months	72000	132000
Employer support (debt relief or capital finance)	10% of total revenue/ production	Two months	800000	Six months	96000	176000
Interest waived	100%	Two months	40000	50% waiver for six months (gross)	90000	150000
Total			180000		258000	438000

Note: Assuming that 60% of MSMEs get back to operation during the reopening period and the rest 40% are struggling due to various reasons, such as zone-wise lockdown, limited operation for health protocol (say,

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³ Interest payment is considered as loss because this is the rental price of capital that has not been employed in production during the lockdown.

restaurants), or nature of businesses that need to be in contact with customers (say, household painting, etc.). Source: Author's estimate.

Thus, for Scenario I, the estimated support needed for the sector is about Tk. 180000 million, and for Scenario II, the estimated support needed for the sector is about Tk. 258000 million. Therefore, according to our estimation, the total support package for the MSMEs required is estimated at Tk. 438000 million for eight months, which is about 1.5% of GDP. However, the stimulus package declared by the government was Tk. 200000 million; which might compensate only 40% or less of the distressed MSMEs during the lockdown period under Scenario II.

Therefore, it may be concluded that the declared stimulus packages of the government were not based on a proper estimation of losses under different predictable scenarios, presumably due to the lack of proper data on the MSME sector.

4. Making the stimulus workable

As already mentioned, the government of Bangladesh has declared a credit-based stimulus of an amount of Tk. 200000 million for the MSME sector. While access to finance is the main impediment to the development and growth of this sector (Hossain et al., 2020), a credit-based stimulus package is hardly accessible to most MSMEs. In Bangladesh, a recent survey suggests that about 38% of MSMEs have access to bank finance, while 49% have access to finance from NGOs and MFIs (BIDS-SMEF Survey, 2018). Further, during the pandemic, it is difficult for the firms to manage collateral and guarantor as required for securing a bank loan. Even without credit guarantees from the government, banks are reluctant to implement stimulus loans. Considering loan default culture in the Bangladeshi banking sector (at present, 11% of the total loan is non-performing, and for the state-owned commercial banks, the non-performing loan ratio is much higher), and with a high probability of moral hazard, it may not be a feasible option for the government to implement a credit guarantee scheme to operationalize stimulus packages. Unlike India, Pakistan, and other countries, in the absence of a dedicated SME bank in Bangladesh, two alternative modes of financing are suggested here. The involvement of the SME Foundation through its Credit Wholesale Program and NGO/MFIs can be an option to reach out to the majority of the smaller firms with a low risk of loan default.

A. Credit wholesale program of the SME Foundation: An innovative and very successful SME financing program is the 'credit wholesale program' of the SME Foundation, which was initiated in 2009 to provide collateral-free

credit to the clustered MSMEs in Bangladesh. The program has been implemented in 177 SME clusters in Bangladesh, with 50-70 enterprises in each cluster. The program has several interesting features: (i) it charges a single-digit interest rate, which is lower than the market rate and does not require any collateral and guarantor; (ii) the program is steered through banks and non-bank financial institutions (NBFIs), which are called partner financial institutions (PFIs). SME Foundation provides funds to PFIs at 4-5% interest, which they later disburse to SMEF beneficiary firms at 9%⁴; (iii) in the absence of any credit guarantee from SMEF, PFI adopts a group-based lending approach, which works as a joint liability-type arrangement used in micro-credit programs. The repayment rate under the program is about 95% (SME Foundation, 2017).

The experience of the CWS program can be used to disburse stimulus credit to MSMEs. SME Foundation can get funds from Bangladesh Bank's refinancing window, and then the fund can be disbursed through PFIs under the modalities of the CWS program. Adopting the CWS mechanism for stimulus package implementation might reduce the risk of defaults and facilitate easy access to stimulus finance for MSMEs.

B. Involving NGO/MFIs in disbursing stimulus: Another option to enhance the implementation of stimulus credit to MSMEs would be to involve microfinance institutions (MFIs) in disbursing funds to MSMEs as long as 50% of MSMEs having a loan from these institutions. Moreover, the MFI network at the grass-root level can be used to identify good borrower firms, which will help reduce the asymmetry of information about the borrower firms and the default risks. MFIs can be entrusted to disburse funds to only cottage, micro, and smaller firms up to a certain limit. Bangladesh Bank might engage the Palli Karma-Shahayak Foundation (PKSF), a quasi-government organization that handles MFIs as the nodal point of NGO/MFI networks⁵. To involve NGOs/MFIs, it would be necessary to increase the subsidized interest rate to incentivize the NGOs/MFIs to disburse the government's declared stimulus credit.

⁴ The program targets the firms that are non-financial beneficiaries of SMEF (e.g those received training and other capacity building initiatives) and located in clusters/clientele only (such as technology based potential SME manufacturing industries, agro-based industries)

⁵ Established in 1990, and being a network of MFIs, PKSF provides financial services (Micro-credit, Agricultural credit, Micro-Enterprise credit, Micro-Insurance), technical knowhow, capacity building, and comprehensive community development services through a network of Partner Organizations.

5. Policy recommendations

This paper provides an estimation of the number of MSMEs in 2020 in the absence of updated official statistics. The analysis underscores the importance of an updated MSMEs database for implementing government-sponsored incentive packages or policy supports.

The discussion and analysis in this paper draw some policy suggestions to make the government-declared stimulus more inclusive and effective for the revival of the MSMEs.

First, identifying and targeting MSMEs for a new loan under the stimulus is a complex and cumbersome task. If BSCIC and SME Foundation could devise a database of MSMEs, that could be helpful to bring them under the credit-based stimulus package. In BSCIC industrial estates, about 5000 MSMEs are in operation. SME Foundation provides various interventions in 177 natural clusters of MSMEs having more or less 8000 firms. These cluster-based firms, thus can easily be identified for the stimulus loan following the CWS method. BSCIC also provides small credit to MSMEs for their capacity building, which also gives BSCIC leverage to identify some MSMEs outside BSCIC estates. Coordination from Bangladesh Bank with SME Foundation and BSCIC is therefore important, mainly to make the stimulus package more effective.

Second, as a large section of MSMEs has access to MFIs and NGOs, it is suggested to implement a part of the stimulus through NGOs/MFIs. The PKSF can be given the responsibility to implement a part of the stimulus through MFIs.

Third, as part of modalities, the credit amount can be divided into wage payment and capital financing. A 50-50 ratio can be considered for smaller firms. Following the experience of the ready-made garment sector's package, wage bills can be disbursed directly to employees' bank/mobile accounts. Otherwise, there will remain possibilities of employee retrenchment and layoff situations.

Fourth, a one-stop service window facility for the MSME sector is a need of the hour to tackle the difficulties of the pandemic. Though a one-stop service center is included in the mandated activities of the SME Foundation, it has not yet been established. Therefore, it is an urgent call to develop a one-stop service facility in each district with a central one in Dhaka.

Fifth, a lack of statistics on MSMEs is a significant limitation for developing this sector in Bangladesh. Moreover, an updated MSME database is important

for providing policy support to this sector and estimating the sector's contribution to the economy. Therefore, a periodical update of the MSMEs database is needed. The BBS and the SME Foundation may be given the responsibility to maintain and update the MSME database.

Finally, the analysis in this paper suggests, if any bank-based stimulus package is not properly implementable under the "business as usual" policy, some innovative financial mechanism needs to be adopted to reach out to distressed COVID-19 firms. With estimated figures, this paper outlines the feasible stimulus package and some policy responses with lessons from innovative financing approaches to address the woes of the MSMEs. The policy options highlighted in this paper would work as a guideline for managing the MSME sector's distress in other developing countries in any crisis.

References:

- Asian Development Bank (ADB) (2015). Asia SME Finance Monitor, Asian Development Bank, Manila.
- Asian Development bank (2022). Economic Stimulus Helps Micro, Medium and Small Enterprises, Jobless to Weather COVID-19 Crisis in Nepal, 2022. file:///C:/Users/HP/Downloads/adb-node-768531.pdf
- Bangladesh Bureau of Statistics (BBS) (2001). Economic Census (2001). Dhaka: Bangladesh Bureau of Statistics.
- Bangladesh Bureau of Statistics (BBS) (2013). Economic Census (2013). Dhaka: Bangladesh Bureau of Statistics.
- Bangladesh Bank (2020). *Quarterly Report on Outstanding Loans to SMEs*, SME and Special Programs Department.
- BIDS Survey (2017). The survey conducted to aid the report on the Impact of SME Foundation's Activities on SME Development (Hossain et al. 2017), Bangladesh Institute of Development Studies.
- Beck, T., and A. Demirgüç-Kunt. (2006). Small and Medium-size Enterprises: Access to Finance as a Growth Constraint. *Journal of Banking and Finance* 30: 2931–2943.
- Hossain, M., Yoshino, N. and Taghizadeh-Hesary, F (2020). Optimal branching strategy, local financial development and SMEs performances: Evidence from Bangladesh, Economic Modelling, forthcoming, online available on March 28, 2020, https://doi.org/10.1016/j.econmod.2020.03.027
- Hossain, M., Mondal, AH, Ahmed, N., and Sahana, S (2017). Impact of SME Foundation's Activities on SMEs' Development in Bangladesh, unpublished report, 2017, Bangladesh Institute of Development Studies.
- Hossain, M. and T. T. Chowdhury (2022). COVID-19, Fintech, and the Recovery of Micro, Small, and Medium-Sized Enterprises: Evidence from Bangladesh. ADBI Working Paper 1305. Tokyo: Asian Development Bank Institute. Available: https://www.adb.org/publications/covid-19-fintech-and-the-recoveryof-micro-small-andmedium-sized-enterprises-evidence-from-bangladesh

- -----(2022). COVID-19, Fintech, and the Recovery of Micro, Small, and Medium-Sized Enterprises: Evidence from Bangladesh, in Fintech and COVID-19: Impacts, Challenges, and Policy Priorities for Asia, Beirne, J., James, V. and Bryan, Z. (Eds.), Chapter 4, ADBI Publications
- Ministry of Finance (2016). Bangladesh Economic Review, 2016. Dhaka: Ministry of Finance. The Government of Bangladesh.
- SME Foundation (2017): Credit wholesale program: accessible at: https://www.slideshare.net/Suman_saha/credit-wholesaling-program-of-smefoundation
- World Bank (2020). Map of SME-Support Measures in Response to COVID-19, https://www.worldbank.org/en/data/interactive/2020/04/14/map-of-sme-supportmeasures-in-response-to-covid-19