Development and access to finance of small and medium-sized enterprises in Mongolia

Doojav, Gan-Ochir and Luvsannyam, Davaajargal and Sukhbaatar, Bilguun and Sodnomdarjaa, Bilguunzul and Otgonbat, Tsolmon and Batmunkh, Khuslen and Gantumur, Munkhbayar and Enkh-Amgalan, Elbegjargal

The Bank of Mongolia

2019

Development and access to finance of small and medium-sized enterprises in Mongolia

Gan-Ochir Doojav, Davaajargal Luvsannyam, Bilguun Sukhbaatar, Bilguunzul Sodnomdarjaa, Tsolmon Otgonbat, Khuslen Batmunkh, Munkhbayar Gantumur, Elbegjargal Enkh-Amgalan

Abstract

This paper presents a recent survey on development and access to finance of small and medium-size enterprises (SMEs) in Mongolia. The survey covers a sample of 1922 SMEs from Ulaanbaatar (capital city) and 21 provinces. We find that banks and local government administration are the most supportive institution for SME development. Political instability, corruption and labour supply, high lending rate, short maturity loans, service fees are perceived as the major obstacles that SMEs face in their business environments. Our results also suggest that SMEs in Mongolia are less likely to have access to external finance because of tight credit condition, potentially explaining the lack of SMEs' growth. Implementing country-specific reform strategy for SME development covering key building blocks is needed to promote SME financial inclusion and facilitate SMEs to contribute the economic growth.

Keywords: Small and medium-size enterprises, Business environment, Access to finance, Economic development

JEL classification: G20, M13, O10

1. Introduction

Small and medium-sized enterprises (SMEs) play an important role in most countries, particularly in developing countries. A number of papers find that (i) SMEs are closely linked with economic growth (e.g., Beck et al. 2005, Ayyagari et al. 2007), and (ii) the majority of jobs created by SMEs, specifically in low-income countries (e.g., Beck et al. 2008, Dietrich 2010, Ayyagari et al. 2011). Therefore, SMEs are the engine of economic development, reduced economic vulnerability for individual households, poverty alleviation, and SME financial inclusion is at the core of the economic diversification and growth challenges. Improving SME financial inclusion can help increase economic growth and job creation. However, SMEs are financially more constrained than large firms and are less likely to have access to formal finance (Beck and Demirgüç-Kunt 2006). Improving SME financial inclusion can help increase economic growth, job creation and the effectiveness of fiscal and monetary policy and could also contribute to financial stability. Blancher et al. (2019) argue that economic fundamentals and financial sector characteristics (i.e., macroeconomic stability, limited public sector size, financial sector soundness, a competitive banking system) and institutional factors (i.e., strong governance and financial regulatory and supervisory capacity, credit information availability, and supportive business environment and legal systems that allow to adequately enforce property rights and contracts) can help scale up SME bank credit.

This paper presents a recent survey on development and access to finance of small and medium-size enterprises (SMEs) in Mongolia, developing and commodity dependent economy. This survey aims to examine the current development, access to finance and other challenges faced by SMEs. The target group of respondents is business owners and/or management level employees (CEO, general manager and accountant) of the SMEs. According to Doing Business Report 2019 published by World Bank, Mongolia is ranked in 74 out of 190 economies. Though ease of doing business score (67.74) is higher than East Asia and Pacific regional average (63.41), the score is far below from other economies (i.e., China, Japan, Kazakhstan and South Korea). As the economy is heavily dependent on the resource sector accounting for 90% of total exports and 25% of budget revenues, there is essential need of economic diversification. The economy also faces challenges to strengthen its resilience to transform its natural resource wealth into assets that support sustainable growth and prosperity. There is no doubt that SME development can contribute to economic diversification and resilience. Hence, evidence (and lessons) from the Mongolian case would be of high relevance formulating policies in scaling-up SME access to financial services and lowering barriers to SME development for resource-rich developing countries.

The present survey is conducted in October 2018, and the Bank of Mongolia has successfully conducted nationwide SMEs survey for the last 7 consecutive years in oder to create the SME database. Without reliable SME data, it is difficult for policy makers to implement policies aimed at expending and strengthening the SME sector. Highlights of this year's survey are as follows: i) Increased coverage of SMEs operating in soums within 50 km from the province center, ii) The World Bank tablet-based CAPI (Computer Assisted Personal Interview) system was first used nationwide, and iii) SMEs producing value-added products were targeted. The survey creates database for SME development in Mongolia, and the survey questionnaire follows international practices. Sampling takes location, number of employees into account in terms of representation. Total sample is determined with 95% confidence and with 5% significance level. Population for the survey is determined by the overall number of businesses (83,086) registered at the National Statistics Office's database as of 2018. According to the statistical calculations, optimal sample size is 850-1000 for Ulaanbaatar and 30-50 for each province, respectively. However, realization of sampling has been altered during the process of interviewing due to quality of responses. As a consequence, 1922 samples, exceeding critical number by 5%, is sampled in this survey. Geographically, 54% of the participation is sampled from Ulaanbaatar and the rest is from the provinces.

The reminder of the paper is structured as follows. Section 2 discusses the characteristics of SMEs including types and age of business operation, number of employee and ownership structure. Section 3 discusses the business environment in terms of macroeconomic, social, political, financial, market and infrastructure conditions. Section 4 discusses SMEs' access to finance and financing obstacles. Section 5 explores operational challenges faced by SMEs and discusses SMEs' financial performances. Finally, section concludes the paper with some policy implications to foster SMEs' development and access to finance in Mongolia.

2. Literature review

Development and access to finance of SMEs has been focus of researchers and policy makers over last three decades. A number of papers (e.g., Levy 1993, Beck et al. 2005, Ayyagari et al. 2007 and Beck et al. 2013) find that SMEs are the engine of economic development, reduced economic vulnerability for individual households, poverty alleviation and economic diversification. SMEs also create majority of jobs, specifically in low-income. Harwood and Konidaris (2015) find that SMEs account for more than 60% of all jobs in developing countries. Ayyagari et al. (2007) emphasize that employment in SMEs constitutes over 60% of total employment in manufacturing in developed economies. According to the IFC (2013), the private sector is the main engine of job creation and the source of 9 out of every 10 jobs in the world. Within the private sector, SMEs account for more than half of all jobs worldwide. However, Beck et al. (2005) do not find any evidence for any association of a large SME sector with faster income growth of the lowest income quintile and faster rates of poverty reduction.

Our paper is closely related the growing literature on firms' access to external finance. The existing literature emphasizes that access to finance of SMEs has become critical in many developing countries. Lack of access to finance emerges as the binding constraint for smaller, less established firms in Sri Lanka and for all of Tanzania's SMEs (Levy 1993). SMEs are financially more constrained than large firms and are less likely to have access to formal finance (Beck and Demirgüç-Kunt 2006, Ayyagari et al. 2007). Schiffer and Weder (2001) show that small firms consistently report higher growth obstacles than medium-size or large firms. Demirgüç-Kunt and Maksimovic (1998) find that financing constraints are lower in countries with more efficient legal systems. Ardic et al. (2012) find income per, private credit to GDP, the legal and business environment, and the efficiency of the banking system are among the factors that influence SME lending. Berger and Udell (2006) show that specific financing forms such as leasing or factoring have been promoted as conducive to easing financing constraints of SMEs, as they are based on the underlying assets and cash flows rather than borrower's financial history. Taiwo et al. (2012) reveal that the most common constraints hindering small and medium scale business growth in Nigeria are lack of financial support, poor management, corruption, lack of training and experience, poor infrastructure, insufficient profits, and low demand for product and services. Beck et al. (2013) find that (i) dominance of the financial system by banks is associated with lower use of financial services by firms of all sizes, and (ii) there is no evidence that smaller institutions are better in providing access to finance. Financial development allows existing firms to exploit growth and investment opportunities (Beck et al. 2005), and SMEs do not only report higher financing obstacles, they are also more adversely affected by these obstacles in their operation and growth (Beck et al. 2008).

Market structure and innovative lending tools also drives SME-friendly financial development. Improving financial market infrastructure greatly reduces costs for financial institutions to access SME ability and willingness to repay, and broadens the range of assets SMEs can use to support their borrowing (IFC 2013). Frame et al. (2001) show that the use of credit-scoring techniques has increased small business lending by banks in the United States. There are mixed results concerning the effect of bank concentration and competitiveness on the availability of SME financing (Berger et al. 2004). Clarke et al. (2003) show that the entry of foreign banks is mostly associated with greater SME credit availability. By competing with domestic banks for large corporate clients, they can force domestic banks to go down market to cater to SMEs (De Haans and Naaborg 2005).

There is a few number of studies focused on the SME issues in Mongolia. Lkhagvasuren (2014) finds that branding is especially crucial in Mongolia where the population is heterogeneous in terms of composition and needs, and this could be beneficial for various business sectors in Mongolia. Tuul and Bing (2019) find that SMEs in Mongolia face many challenges including high employee turnover, shortage of funds, lack of facilities and inferior training policy. OECD report (2016) states that access to finance is one of the major barriers to micro, small and medium enterprise (MSME) competitiveness in Mongolia, and recommends five policy measures to help mitigate market failures affecting MSME access to finance: (i) Enhancing the quality of data on SMEs, (ii) Improving the product offer and scope of the SME Development Fund (SMEDF), (iii) Improving the Mongolian Credit Guarantee Fund's risk assessment techniques and operational reliability, (iv) Establishing one-stop shops for MSMEs and streamlining the process between SMEDF and banks, and (v) Joining the OECD International Network for financial education and adding MSME specific actions to the National strategy for financial literacy. Jargalsaikhan (2019) argues that supporting SMEs by developing hard and soft infrastructures is necessary for SMEs more than loans in Mongolia. Hard infrastructures such as roads, telecommunication, and electricity play a crucial role. In addition, he claims that soft infrastructures can be improved, for instance, by measuring the transaction cost. If a transaction is slow and cost is high, or even if it fails, the circulation of money will cease.

3. Characteristics of SMEs in Mongolia

In this section, we present general characteristics of SMEs. The majority of businesses surveyed (75%) operate in one sector, whereas remaining (25%) operate in multiple sectors. Thus, the questionnaire is further interviewed only for the main operation of SMEs. Figure 1 shows the number of employees in the core business of the surveyed entities.

Figure 1. Number of employees

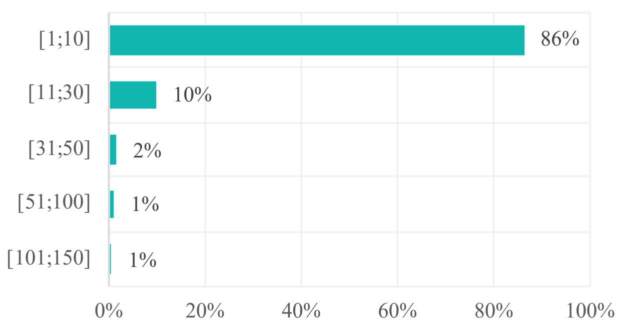
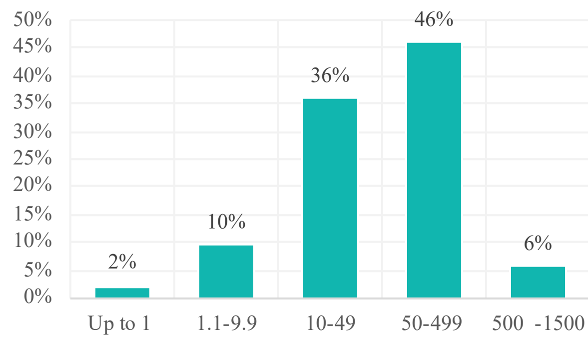


Figure 2. Sales income, in millions MNT



Source: SME survey 2018

SMEs having 1-10 employees constitute the clear majority (86%) followed by SMEs with 11-30 employees (10%). Only 2% of SMEs can be regarded as medium-sized enterprises with more than 50 employees (Figure 1).

Figure 3. Corporate structure

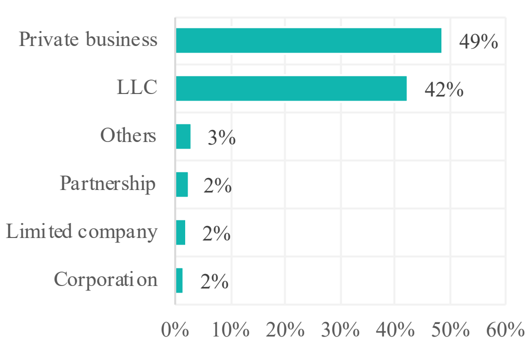
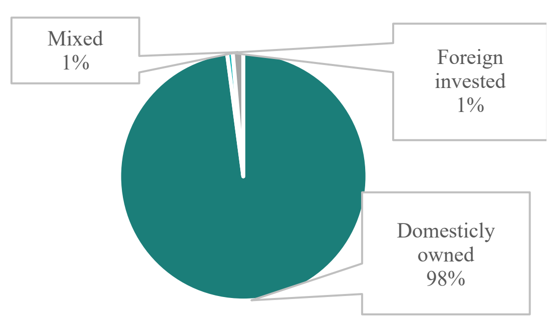


Figure 4. Ownership structure



Source: SME survey 2018

About half of the SMEs have annual sales revenue of 50-499 million MNT, and 36% of SMEs has sales revenue of 10-49 million MNT. 12% of SMEs surveyed has sales revenue of below 9.9 million MNT (Figure 2). Out of total SMEs surveyed, 49% of them are private business owners, 42% are limited liability companies (Figure 3). Regarding to the ownership type, a clear majority of the SMEs (98%) have domestically invested enterprises, while remaining are foreign and mixed invested enterprises (Figure 4).

Figure 5. Sector of main activities

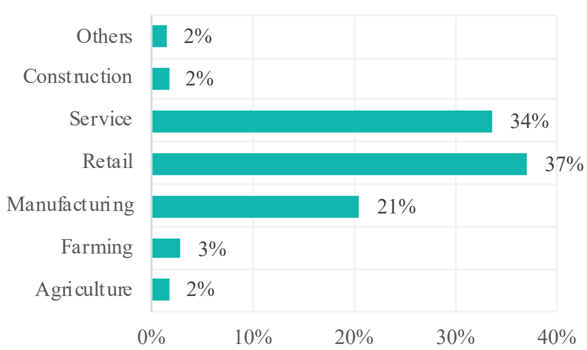
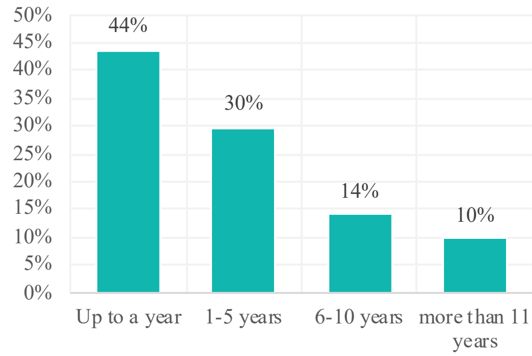


Figure 6. Years in operation



Source: SME survey 2018

Beck et al. (2006) show that size, age and ownership are most reliable predictors of firms' financing obstacles. Schiffer and Weder (2001) find that small firms consistently report higher growth obstacles then medium-size or large firms. As the surveyed SMEs are young and their size is relatively small in terms of number of employees and sales revenues, it may be expected that higher growth and financing obstacles are reported within the survey. However, we believe that the identified growth and financing obstacles would reflect the real facts faced by the SMEs.

The survey for 2018 aims to cover more value-added producers (manufacturing), making up 21% of the surveyed SMEs. Coverage of manufacturing sector is increased by 8 percentage point from last year's survey. Majority of SMEs operate in retail trade (37%) and service (34%) sectors, while 5% of them operate in the agricultural sectors (Figure 5). The surveyed SMEs are asked how long they had been operating, and results are as follows: 44% of SMEs have been operating for less than 1 year, 30% for 1-5 years, another 14% for 6-10 years, and remaining 10% for more than 11 years (Figure 6). The results may imply that SMEs are young and operate on retail and service sectors, which require a relatively low level of investment and expertise.

Figure 7. Holdings of licenses

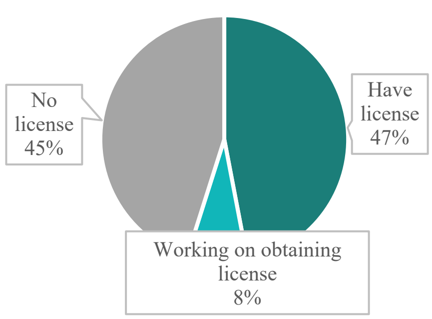
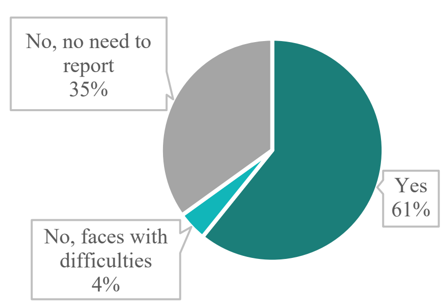


Figure 8. Preparation of financial statements



Source: SME survey 2018

Of all the surveyed SMEs, 47% has obtained a business license, while 45% have not and 8% are in application procedure (Figure 7). We also ask whether SMEs keep records of financial statements. The results show that 61% of the SMEs surveyed prepare general-purpose financial statements, whereas 39% do not. Of those enterprises which do not, 35% of them reports that they do not have to report, and only 4% of are incapable of preparing the statements (Figure 8). We also find that majority of surveyed SMEs (95%) do not export, and only 5% export their products and services to foreign markets.

Figure 9. Types of supports to SMEs

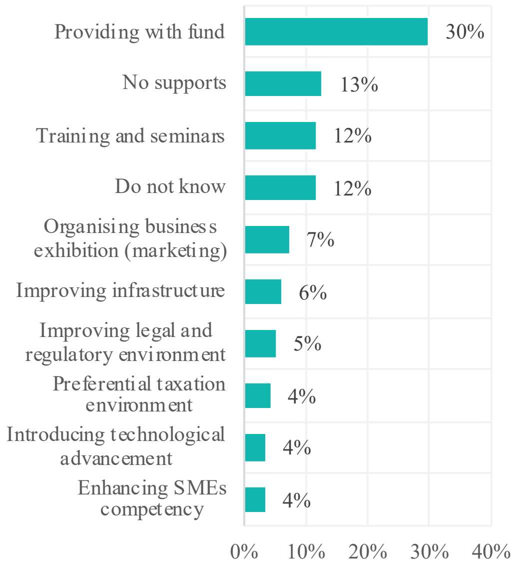
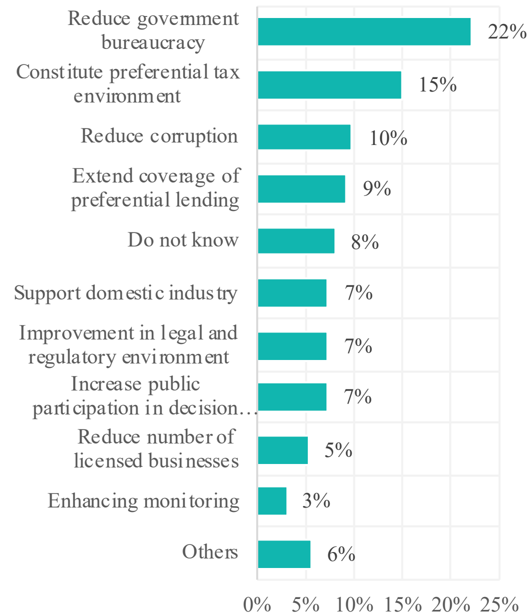


Figure 10. Necessary measures to support SMEs



Source: SME survey 2018

When asking how the government and other organizations support SMEs, they answer that much support is provided by commercial banks to SMEs (29%) followed by local government (12%), other financial institutions (7%), chamber of commerce (7%) and the government (6%). However, SMEs report that supports from consulting firms and international organizations are not satisfactory. They highlight the importance of the establishment of SME promotion agency. International practices show that establishing SME promotion agency is more efficient than spreading resources over numerous supporting organizations.

SMEs mostly receive supports in the form of financing, training, consultancy, organizing business exhibition and providing infrastructure. However, they receive less support in the forms of enhancing business competitiveness, introducing technological advances and exemption from VAT (Figure 9). Regarding to necessary policy measures and actions demanded to support SMEs, they place a higher priority on reducing government bureaucracy, creating a favorable tax regime, reducing corruption and extending coverage of concessional lending (Figure 10). SMEs demand more effective and transparent regulatory environment as they face with more difficulties compared to larger companies. In line with other studies conducted in the case of Mongolia, over 30% of responders highlight that bureaucracy of government agencies and corruption at all levels are standing issues in doing business. This implies that the government's recent measures on tackling corruption and introducing e-governance were in right direction, but the implementation of the measures is highly demanded.

4. Business environment

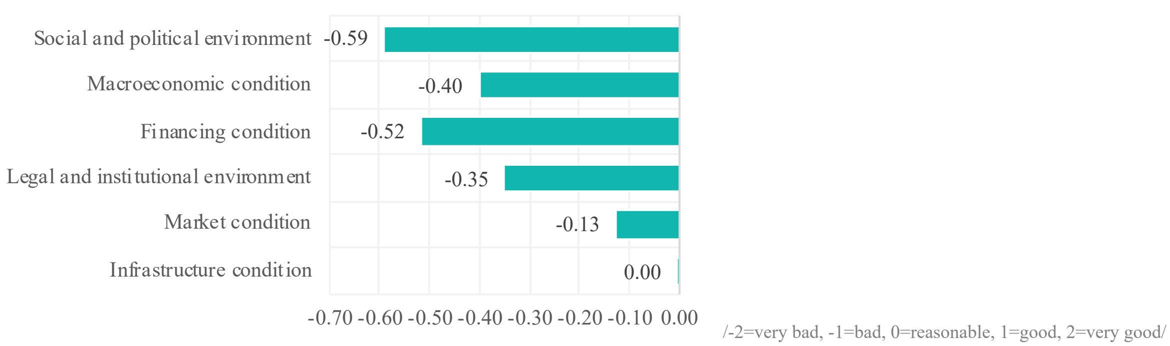
This section focuses on business environment for SMEs. Factors potentially determining the business environment are classified into 6 sub groups:

- Social, political environment
- Macroeconomic environment
- Financial environment
- Legal and institutional environment
- Market condition
- Infrastructure condition

In total, 33 factors are considered under the sub groups. For each of 33 factors, indexes are calculated based on qualitative answers ranging from very bad (-2) to very good (+2) and sub group index is estimated as average index of individual factors within the sub-group.

Results show that social and political environment (-0.59), macroeconomic environment (-0.40), financing environment (-0.52), legal and institutional condition (-0.35) and market condition (-0.13) are evaluated as reasonable (but vulnerable to become unfavorable) for SME business environment (Figure 11). There is also some feedback effects: legal frameworks and the business environment are important factors affecting the level of SME financing (i.e., Chavis et al. 2010 and Ardic et al. 2012).

Figure 11. SME business environment



Source: SME survey 2018

Social and political environment index is calculated by broad range of factors namely poverty, unemployment, corruption, crime and political situation that may hinder the SME operation. The overall evaluation of social and political environment is relatively unfavorable (-0.59) compared to other sub groups, but with significant improvement compared to previous 7 years (Figure 12). Political situation and corruption stand out as the most challenging factors in the social and political environment for 2018. According to the Transparency International Survey (2017), Mongolia ranked in 103 out of 180 countries in terms of the corruption perception index. Poverty and unemployment is found as the leading concern for SMEs, and both factors undermine sales, revenue (Figure 13).

Figure 12. Social and political environment index

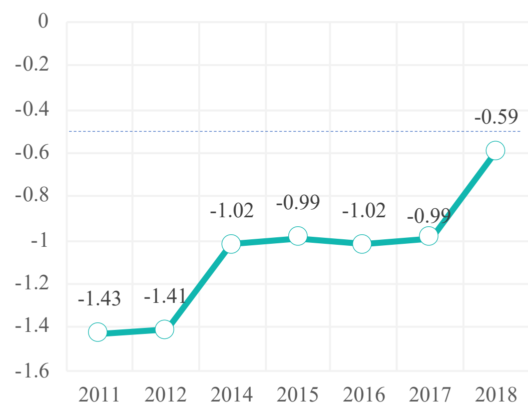
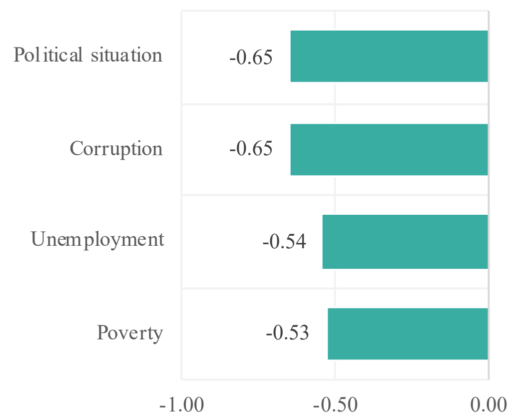


Figure 13. Social and political environment by factors



/-2=very bad, -1=bad, 0=reasonable, 1=good, 2=very good/

Source: SME survey 2018

In this survey, macroeconomic environment is represented by five factors, namely economic growth, inflation, exchange rate, foreign direct investment (FDI) and foreign debt. Overall macroeconomic condition for 2018 is evaluated as reasonable (-0.40), but with little improvement compared to the last year (Figure 14). Result of the survey for 2018 suggests that exchange rate and inflation are the most challenging factors, whereas economic growth, foreign debt level and FDI are referred to as having less negative impact on the SME operation (Figure 15).

Figure 14. Macroeconomic environment index

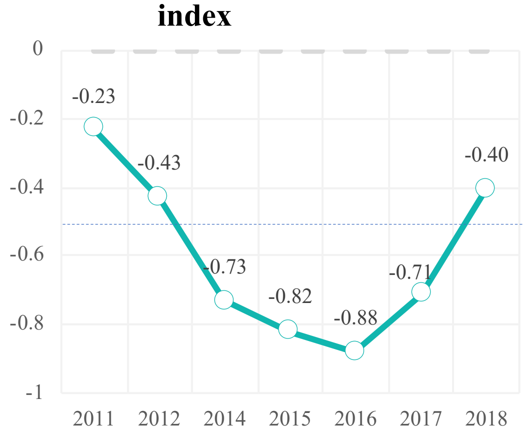
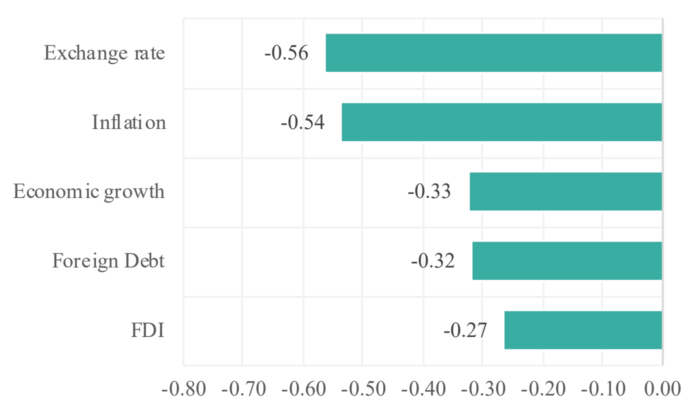


Figure 15. Macroeconomic environment by factors



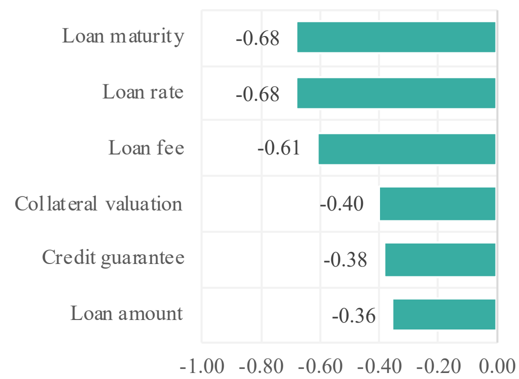
/-2=very bad, -1=bad, 0=reasonable, 1=good, 2=very good/

Source: SME survey 2018

The financial environment index has improved to (-0.52) in 2018, however it still indicates unfavorable financing condition (Figure 16). It is also observed that access to finance is a significant obstacle for SMEs during the economic recession. Among the factors, high loan rate and short loan maturity are the worst factors for the financial environment. SMEs find that it difficult to obtain financing, especially loan-term loans, for several reasons, including high risk premiums, high loan fee, lack of collateral and credit guarantees (inadequate credit history) and inadequate loan amount (Figure 17).

Figure 16. Financial environment index

Figure 17. Financial environment by factors



/-2=very bad, -1=bad, 0=reasonable, 1=good, 2=very good/

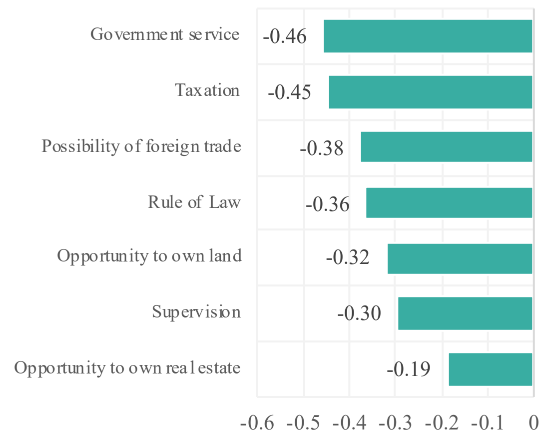
Source: SME survey 2018

Even though numerous efforts targeting to strengthen SMEs' legal and institutional environment In terms of external financing, 48% of SMEs operating in manufacturing sector, 45% of agriculture SMEs have obtained external financing, and the shares are higher compared to that of others sectors. This result may also reflect the fact that financial need for agriculture and manufacturing sectors are higher. Moreover, finance for Agri-SMEs faces special challenges since farmers are risky borrowers and all agriculture has seasonal ebbs and flows, with irregular cash flows. Majority of SMEs had access to funding through banks, and 12% of them were able to fund with subsidized rates (Figure 24). The major share of external funding (57%) is used to purchase current asset, and 17% is used as machinery investment (Figure 25).

over the past years, the enterprises expect further improvements in this regard. Legal and institutional environment index was evaluated at a reasonable level (-0.35) with significant improvement from previous year (Figure 18). A deeper look into the legal and institutional environment suggests that public service, taxation framework and possibility of foreign trade stands out as the greatest concerns (Figure 19).

Figure 18. Legal and institutional environment index

Figure 19. Legal and institutional environment by factors



/-2=very bad, -1=bad, 0=reasonable, 1=good, 2=very good/

Source: SME survey 2018

Market condition index has improved in 2018 and evalued as the most favorable in last 4 years (Figure 20). Results of the survey for 2018 points out that low purchasing power of consumers and market capacity are worst market factors affecting SME operation, while market competition and technological advancements are at satisfactory level (Figure 21).

Figure 20. Market condition index

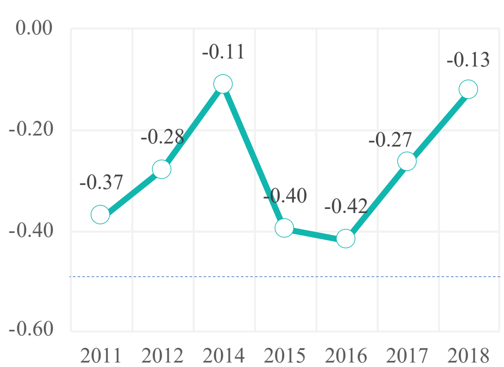
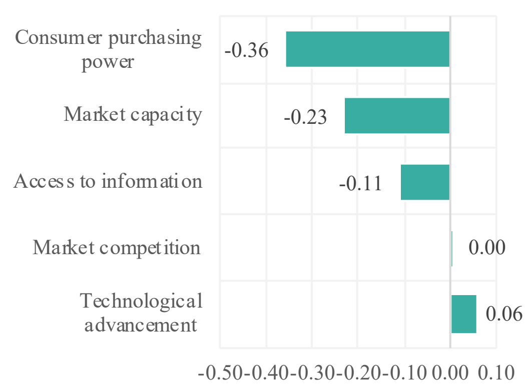


Figure 21. Market condition by factors



/-2=very bad, -1=bad, 0=reasonable, 1=good, 2=very good/

Source: SME survey 2018

Infrastructure is no doubt a key component for business development. In this survey, infrastructure condition is represented by road access, heat supply, transportation, water supply, electricity supply and communication technology. Amongst other group of factors infrastructure is the least troublesome in Mongolia (Figure 22). The weakest factors of infrastructure seems to be road access and transportation, while there is no problem for communication technology and electricity supply (Figure 23).

Figure 22. Infrastructure condition index

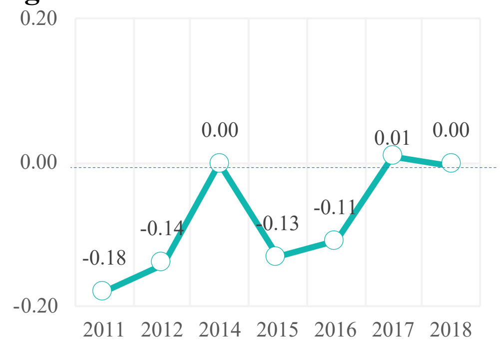
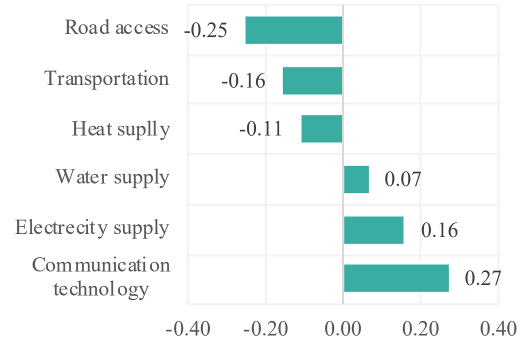


Figure 23. infrastructure condition by factors



/-2=very bad, -1=bad, 0=reasonable, 1=good, 2=very good/

Source: SME survey 2018

5. Access to finance and financing obstacles

In line with the literature (i.e., Berger and Udell 1998, Calindo and Schiantarelli 2003), SMEs in Mongolia have less access to external finance and to be more constrained in their operation and growth. For instance, amongst 1864 SMEs responded, 41% of them obtain external financing, whereas 54% did not get any external financing. The low level of financial inclusion for SMEs is a result of weak economic fundamentals, weak governance, weak financial regulation and supervision, undiversified and uncompetitive financial system in Mongolia.

Figure 24. Sources of financing
(share in total responses)

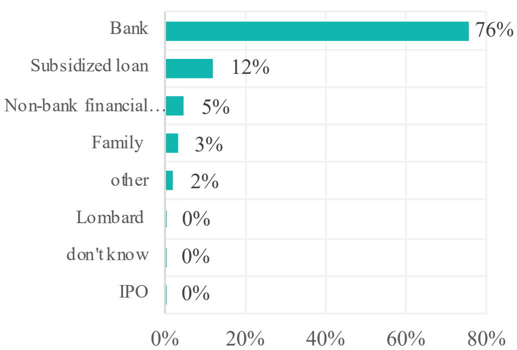
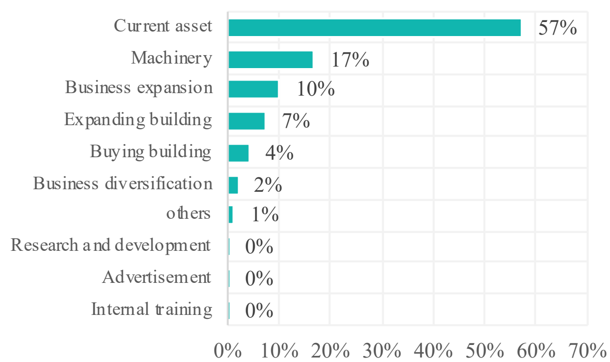


Figure 25. Purpose of financing



Source: SME survey 2018

SMEs mostly take loans from commercial banks, and 12% of SMEs obtain financing from the SME development fund of the government (Figure 24). For last couple of years, the structure of financing purposes has remained similar with slight tilt toward machinery investment from current asset financing. In terms of repayment, 13% of the SMEs surveyed have delayed their loan repayment.

From the SMEs that have not obtained external finance, we also ask reasons: 21% of SMEs respond that they did not obtain external financing because of tight credit condition, and 9% of them could not meet the credit criteria. The remaining SMEs use their own capital. The result is in line with the view that entrepreneurs in transition economies are more likely to reinvest their profits (i.e., Johnson et al. 2002, Cull and Xu 2005).

SMEs operating in trade and service sectors take more external financing compared to those working in manufacturing sector. This may be partially explained by the fact that the firms need high level of financial resources to operate in manufacturing and agriculture sectors. In addition, the share of responses for not obtaining external financing because of tight credit condition is the highest in manufacturing and agricultural sectors. SMEs in agriculture have more limited collateral, and operate in high risks since they tend to be very concentrated in one activity or have a portfolio of activities all exposed to similar risks (drought, disease, etc.). Therefore, credit condition for Agri-SMEs is tight compared to those in operating other sectors.

It is crucial to understand obstacles to SMEs' operation and growth. For responders that did not obtain external financing because tight credit condition, we also asked why credit condition is evaluated as tight for them. Most pressing issue in tight credit condition is high interest rate. The 43% of them points that lending rate is high, and 20% of them responds that maturity is short and collateral valuation is unfair (Figure 26). This result is in line with the fact that SMEs worldwide consider access to finance their greatest obstacle to growth (i.e., IFC 2013). In the bank dominated financial system, SMEs have difficulty accessing cheap finance.

Figure 26. Reasons for tight credit condition

(share in total responses)

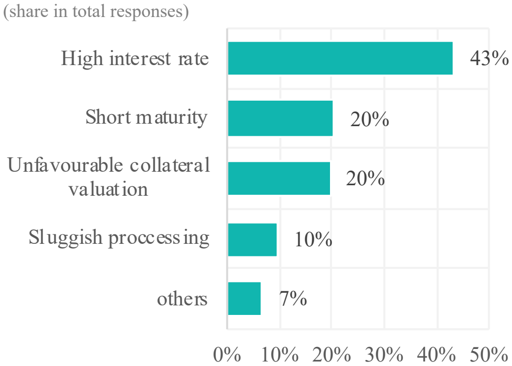
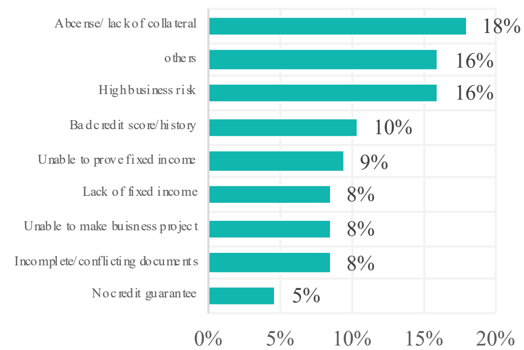


Figure 27. Reasons for rejected applications



Source: SME survey 2018

For SMEs (106 of the total sample) applying for external financing, but got rejected, we also asked reasons. The most common reason for rejection is lack of or absence of collateral (18%) followed by high business risk (16%) and bad credit history (16%). In terms of need for financing, half of the SMEs are certain to seek for external financing for upcoming year's operation, whereas 39% of them claim that there is no need for it. Therefore, improving financial market infrastructure, particularly credit information, movable collateral and secured transactions systems greatly reduce costs for financial institutions to assess SME ability and willingness to repay and broadens the range of assets SMEs can use to support their borrowing.

Share of business owners in agriculture and manufacturing sectors that require financing is considerably larger than in trade and service sectors. It is clear that financial necessity is considerably larger in agriculture and manufacturing compared with other sectors.

Figure 28. Sources of financing

(share in total responses)

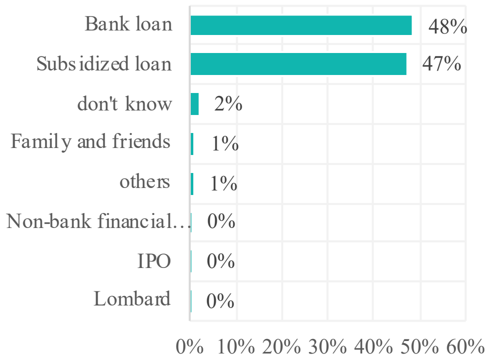
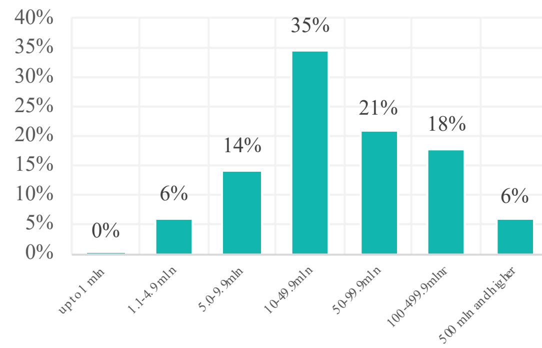


Figure 29. Amount of necessary funding

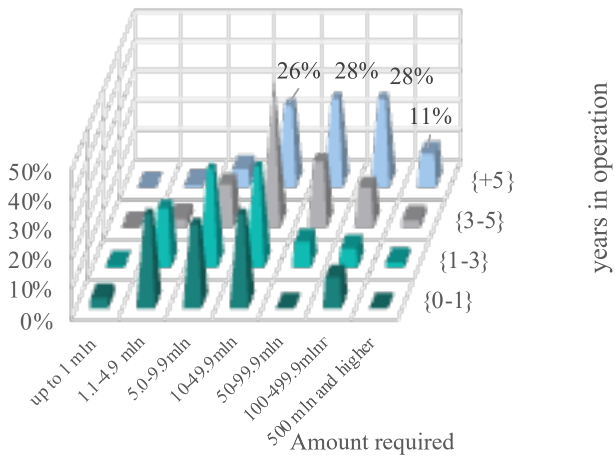


Source: SME survey 2018

Regarding to source of financing, 48% of SMEs that seek financing in the upcoming year is planning to take bank loans and another 47% of them looks for subsidized loans from the SME development fund (Figure 28). In last couple of years, the government of Mongolia has implemented partial approaches such as policies focusing solely on direct public financing or guarantees for SMEs, which have been ineffective and unlikely to yield larger benefits. Instead, the policies make the SMEs more dependent on the public supports, which are limited and not inclusive enough. The public financing for SMEs also lead to political corruption issues.

In terms of required financing for SMEs, 56% of SMEs covered in the survey seeks for financing between 10-100 million MNT (equivalent to 4000-40000 USD) for their operation. The clients are too large for microfinance institutions, and too small, risky and remote for commercial banks. Only 24% of them need more than 100 million MNT of financing (Figure 29). Closing the SME finance gap can bring about significant gains in growth potential as well. Hence, public interventions (ensuring that the legal system can quickly and reliably resolve issues of contract and property rights strengthens value chain financing options, providing alternative collateral possibilities) will be crucial in scaling up promising SME-finance innovations. Supporting guarantee funds, particularly those focused on SMEs with massive potential cam complement improved risk management in banks and other financial institutions.

Figure 30. Amount of necessary financing by years in operation
(share in total responses)



Source: SME survey 2018

There is considerable positive correlation between obtained amount of financing and SMEs' years in operation. This implies that banks are cautious in SME lending and more concerned about risks associated with SMEs. SMEs that are relatively younger (under 3 years in operation) seek for financing under 50 million MNT, while more mature businesses seek for loan up to 500 million MNT (Figure 30). Younger SMEs are financially more constrained since creditors have not had enough time to monitor such SMEs (i.e., the information asymmetries are likely to be especially large for them).

6. SME operational challenges

Operational challenges are evaluated based on a scoring with a range from -2.0 (the worst) to +2.0 (the best). Surveyed SMEs respond that the most difficult operational challenges are labour supply, building supply and sales (Figure 31).

Figure 31. Operational challenges by factors

/-2 = very bad, -1 = bad, 0 = neutral, 1 = good, 2 = very good/

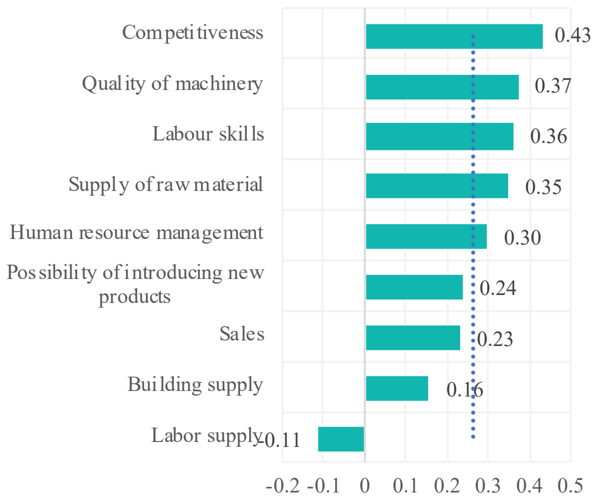
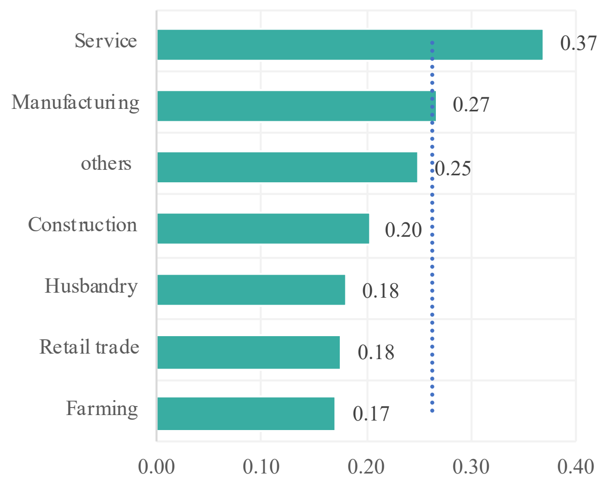


Figure 32. Amount of necessary funding



Source: SME survey 2018

Regarding to sector-level operational challenges for SMEs, there are relatively less operational obstacles in service, manufacturing and construction sectors. However, trade and farming sectors tend to face more difficulties, but in manageable levels (Figure 32).

Figure 33. Annual revenue

(share in total responses)

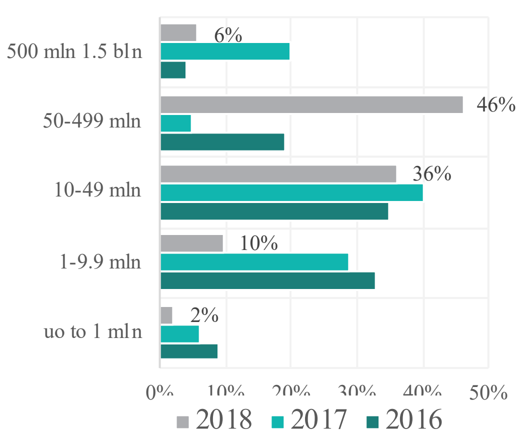
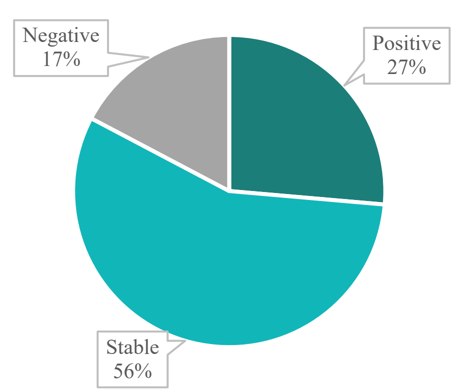


Figure 34. Changes in annual revenue



Source: SME survey 2018

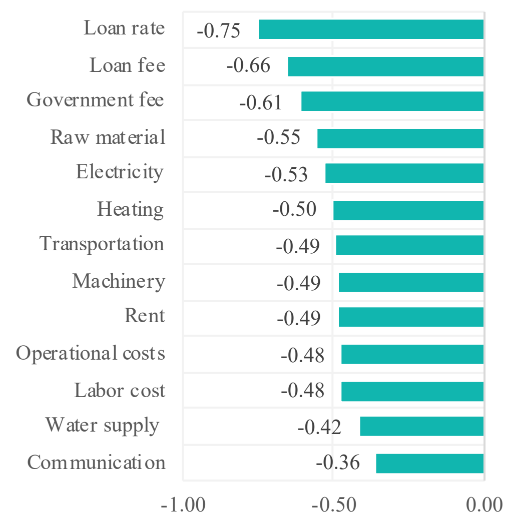
From all SMEs surveyed, 61% of them respond that they produce a balance sheet in their operation (Figure 8). Figure 33 shows annual revenues of surveyed SMEs for last three years. Almost half (of all SMEs 48%) has revenue up to 50 million MNT in which 36% of them has 10-49 million MNT revenues, 10% of them has 1.1- 9.9 million MNT revenues and 2% of them has only up to 1 million MNT revenues. The most frequently observed revenue range for 2018 (46%) is 50-499 million MNT with an increase of 41 percentage point compared to previous year.

In terms of changes in annual revenue, 27% of surveyed SMEs have positive revenues growth and 17% of them has negative revenues growth, while 56% of them has not changed for 2018 (Figure 34). Manufacturing sector leads with highest positive revenues growth followed by service and agriculture.

Costs related to business operations of SMEs and their pressing issues are also considered in this survey. The cost index for 2018 is evaluated at (-0.52), gaining 0.46 points from the previous year's index value, but still remaining in concerning zone (Figure 35).

Figure 35. SMEs' total cost index

Figure 36. Total cost index by factors



/-2= Very troublesome, -1= Troublesome, 0= No trouble/

Source: SME survey 2018

A deeper look suggests that interest rate costs are the most pressing one followed by loan fees, government service fees, raw material costs, heating costs and transportation costs. Communication cost, water supply cost and labor costs seem to be the least troubling costs (Figure 36).

Regarding to cost decomposition, main production costs like labour costs and raw material costs are taking the largest portion, 45.6% of all costs for SMEs. Other operational costs are accounting for 24.0%, while non-operational costs like interest payment and service fees takes up 11.5% of total costs (Figure 37). As for manufacturers, 90% of the revenues is dedicated to additional operational costs such as machinery, rent, transportation, electricity, heat, water supply, and communication.

Figure 37. Total cost decomposition

(share in total responses)

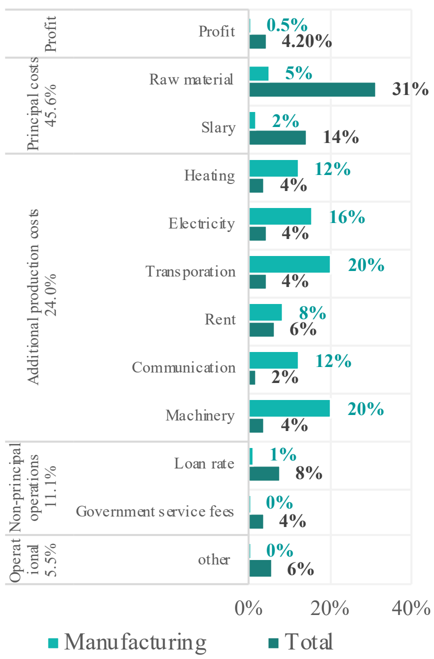
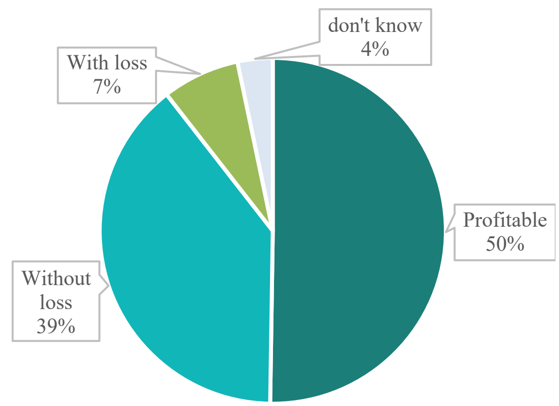


Figure 38. Profitability for 2018



In terms of profitability, 50% of the SMEs have reported profit and 7% of them have operated with loss for 2018. Meantime 39% of SMEs have operated with neither loss nor profit (Figure 38). 57% of SMEs in manufacturing sector have operated with profit, while 44% of SMEs in trade sector have reported profit.

7. Conclusion

This paper has presented results of the survey on development and access to finance of SMEs in Mongolia. A number of important findings stand out. First, supports from government, international organization, financial organizations and non-governmental organizations play a crucial role in the SME development. In particular, banks and local government administration are the most supportive institutions. The institutions provide financing, training, assistance for SMEs. Second, SMEs are more constrained by different obstacles. They demand the government to take some policy measures in cutting out bureaucracy, creating a favorable tax regime and combating corruption. Social and political environment, particularly political instability and corruption are perceived as one of the major obstacles that SMEs face in their business environments. Third, SMEs think that business environment has improved for 2018. For instance, macroeconomic, legal and market conditions tend to favor the SME operation. Fourth, like many other emerging economies, SMEs in Mongolia are less likely to have access to formal finance. Only 40% of SMEs has been able to access external financing through bank loans or subsidized financing. External financing are used mainly on current asset, expanding operation and purchasing machinery. SMEs argue that financing condition is tight, hence does not sufficiently support the SME operation. In particular, lending rate is too high, loan maturity is short and fees are still unfavorable. The SME survey conducted by the Bank of Mongolia (BOM) for the last 7 years constantly shows that the high lending rate is the worst financial factor affecting business environment in Mongolia. About 10% of SMEs obtained external financing have faced with difficulties for paying debt on time. Fifth, more than half of the SMEs need external financing in the upcoming years. For most SMEs, the amount of required financing is 10-50 million MNT (4000-8000 USD) with maturity of 4-5 years. Relatively younger SMEs (under 3 years in operation), for instance, seek for financing under 50 million MNT, while more mature businesses seek for loan up to 500 million MNT. Finally, for operational challenges, labor supply stands out as the biggest obstacle, while competitiveness of the businesses, skill of labor force and quality of machinery are at reasonable level. A deeper look at the costs of SMEs suggests that interest rate cost is the most troubling one followed by loan and government service fees. Main production costs such as labour costs and raw material costs are taking the largest portion (46%), while non-operational costs like interest payment and service fees account for 11.5% of total costs for SMEs. About 50% of the SMEs have reported profit and 7% of them has operated with loss for 2018.

These findings provide some policy implications. The measures and reforms may include (i) improving institutions (including low corruption and political stability) and the overall business environment is the most effective way of relaxing the growth constraints SMEs face, (ii) building diversified and competitive financial system, higher levels of financial intermediary development, adequate financial infrastructure and more efficient legal system would lower financing obstacles, and (iii) Designing country-specific reform strategy for SME development and SME access to financing is important to promote safe and stable SME financial inclusion and facilitate SMEs to contribute the economic growth.

Though the results have yielded significant insights about development and access to finance of SMEs in Mongolia, future research should further investigate the impact of access to finance on growth of SMEs based on the accumulated SME survey data using a formal econometric analysis. It is also possible to conduct a survey to deepen the understanding of what types of financing (i.e., trade credit, industry specific financing forms such as leasing or factoring, etc.) is really needed for SMEs as an alternative to bank financing. Nevertheless, these were out of the scope of this paper.

References

Ardic, O, Mylemko, N and Saltane, V 2012, 'Access to finance by small and medium enterprises: A cross-country analysis with a new data set', *Pacific Economic Review,* vol. 17, no. 4, pp. 491-513.

Ayyagari, M, Beck, T and Demirgüç-Kunt, A 2007, 'Small and medium enterprises across the globe', *Small Business Economics,* vol. 29, no. 4, pp. 415-434.

Ayyagari, M, Demirgüç-Kunt, A and V. Maksimovic 2011, 'Small vs. Young firms across the World: Contribution to employment, job creation and growth', Policy Research Working Paper 5631, World Bank, Washington, DC.

Beck, T, Demirgüç-Kunt, A and Levine, R 2005, 'SMEs, growth, poverty: Cross-country evidence', *Journal of Economic Growth,* vol. 10, no. 3, pp. 197-227.

Beck, T and Demirgüç-Kunt, A 2006, 'Small and medium-size enterprises: Access to finance as a growth constant', *Journal of Banking & Finance,* vol. 30, no. 11, pp. 2931-2943.

Beck, T, A. Demirgüç-Kunt, L. Laeven and V. Maksimovic 2006, 'The determinants of financing obstacles', *Journal of International Money and Finance,* vol. 25, no. 6, pp. 932-952.

Beck, T, Demirgüç-Kunt, A and Peria, M 2008, 'Bank financing for SMEs around the World: Drivers, obstacles, business models, and lending practices', Policy Research Working Paper 4785, World Bank, Washington, DC.

Beck, T, Demirgüç-Kunt, A and Singer, D 2013, 'Is small Beautiful? Financial structure, size and access to finance', *World Development,* vol. 52, pp. 19-33.

Berger, A and Udell, G 1998, 'The economics of small business finance: The role of private equity and debt markets in the financial growth cycle', *Journal of Banking and Finance,* vol. 22, no. 6-8, pp. 613-673.

Berger, A, Demirgüç-Kunt, A and Haubrich, J, Levine, R 2004, 'Bank concentration and competition: An evolution in the making', *Journal of Money, Banking and Credit,* vol. 36, pp. 433-453.

Blancher, N, Appendino, M, Bibolov, A, Fouejieu, A, Li, J, Ndoye, A, Panagiatakopoulou, A, Shi, W and Sydorenko, T 2019, *Financial inclusion of small and medium-sized enterprises in the Middle East and Central Asia*, Middle East and Central Asia Department, International Monetary Fund.

Calindo, A and Schiantarelli, F (Eds) 2003, *Credit constraints and investment in Latin America,* Inter-American Development Bank, Washington, DC.

Chavis, L, Klapper, L and Love, I 2010, 'The impact of the business environment on young firm financing', Policy Research Working Paper 5322, World Bank, Washington, DC.

Clarke, G, Cull, R, Soledad, M, Peria, M and Sanchez, S 2003, 'Foreign bank entry: Experience, implications for developing economies and agenda for further research', *Work Bank Research Observer,* vol. 18, no. 1, pp. 25-59.

Cull, R and Xu, L 2005, 'Institutions, ownership, and finance: The determinants of profit reinvestment among Chinese firms', *Journal of Financial Economics,* vol. 77, no. 1, pp. 117-146.

De Haas, R and Naaborg, I 2005, 'Does foreign bank entry reduce small firms' access to credit? Evidence from European transition economies', De Nederlandsche Bank Working Paper 50.

Demirgüç-Kunt, A and Maksimovic, V 1998, 'Law, finance, and firm growth', *Journal of Finance,* vol. 53, no. 6, pp. 2107-2137.

Harwood, A and Konidaris, T 2015, 'SME exchanges in emerging market economies: A stocktaking of development practices', Policy Research Working Paper 7160, The World Bank.

IFC 2013, *Small and medium enterprise finance: new findings, trends and G-20/global partnership for financial inclusion progress*, International Finance Corporation (IFC) and Global Partnership for Financial Inclusion (GPFI).

Jargalsaikhan, D 2019, 'SMEs are the reflection of the development', The Facto Gazette, 2019.10.03 №1 (113).

Johnson, S, McMillan, J and Woodruff, C 2002, 'Property rights and finance', *American Economic Review*, vol. 92, no. 5, pp. 1335-1356.

Levy, B 1993, 'Obstacles to Developing Indigenous Small and Medium Enterprises: An Empirical Assessment', *The World Bank Economic Review*, vol. 7, no. 1, pp. 65-83.

Lkhagvasuren, T 2014, 'Marketing of small and medium-sized enterprises in Mongolia', *International Journal of Technology Enhancements and Emerging Engineering Research*, vol. 2, no. 5, pp. 33-35.

OECD 2016, 'Enhancing access to finance for micro, small and medium-sized enterprises in Mongolia', Peer Review Note, OECD Eurasia Competitiveness Programme.

Schiffer, M and Weder, B 2001, 'Firm size and the business environment: Worldwide survey results', Discussion Paper no. 43, International Finance Cooperation, Washington, DC.

Taiwo, M, Ayodeji, A and Yusuf, B 2012, 'Impact of small and medium enterprises on economic growth and development', *American Journal of Business and Management,* vol. 1, no. 1, pp. 18-22.

Tuul, O and Bing, S 2019, ‘Employee training in small and medium-sized enterprises in Mongolia’, Proceedings of the Mongolian Academy of Sciences, vol. 59, no. 1, pp. 75-84.

World Bank 2019, *Doing Business 2019*, 16th Edition, World Bank Group.