

The Effectiveness of Bank Financing to the Productivity of Agriculture Sector in South Sumatera

Achmad Soediro^a, Inten Meutia^b, Liliana^c

¹Accounting Department, Sriwijaya University, 30662, Indonesia, email: asoediro@yahoo.co.uk

²Accounting Department, Sriwijaya University, 30662, Indonesia, email: inten26@yahoo.com

³Economic Development Department, Sriwijaya University, 30662, Indonesia, email: lilia_0303@yahoo.com

ABSTRACT

Purpose – This study aims to identify the effect of financing provided by banks (both conventional and Islamic bank) to the productivity in the agricultural sector in South Sumatera. This study analysed the forms and mechanisms of finance used by bank in order to find out whether the financing provides the benefit effectively in supporting the productivity of the agricultural sector in South Sumatra or not.

Design/methodology/approach – The research used the preliminary data to trace the number of the debtor farmers. The data is from both conventional and Islamic banks in South Sumatera which distributed financing product to MSMEs in Agriculture sector. The secondary data collection was obtained from the banks while primary data was grounded from farmers both through the structured questionnaires and the depth interview. The analysis of this research is in both the descriptive quantitative and the qualitative methods.

Findings – The financing in the agricultural sector in South Sumatra is relatively effective for farmers both in terms of increasing their financial gains and in terms of expanding the agricultural property. The results of this study are expected to give the significant figure about how far the financing product of the banks contributes to the increase of productivity of the agricultural sector in South Sumatera.

Research limitations/implications – Effectiveness is analyzed by qualitative and descriptive quantitative methods in general, not included in the analysis per farmer. In addition, this study does not use financial ratios in measuring the effectiveness of the provision of financing.

Originality/value – The effectiveness of financing in the agricultural sector, especially in sharia banking in Indonesia is still relatively minimal. This research is one way to initiate research which is expected to contribute to the implementation of wider sharia financing in the agricultural sector which now seems not to be the priority of the sharia banking sector in Indonesia.

Keywords : financing, MSMEs, agricultural

BACKGROUND

Recently the Otoritas Jasa Keuangan (Financial Services Authority) of the Republic of Indonesia launched the "AKSI Pangan" which is an effort to synergize the policies in accelerating financial inclusion to create the national food sovereignty. AKSI Pangan which is an acronym of Akselerasi, Sinergi, Inklusi Keuangan (Acceleration, Synergy and Financial Inclusion) in the food sector was the part of the follow-up program of the "Program Sinergi Aksi untuk Ekonomi Rakyat" that launched by the President of the Republic of Indonesia in Brebes, Central Java, in April 2016 and also the part of the implementation of the National Strategy of Inclusive Finance (Strategi Nasional Keuangan Inklusif) which was also launched by the President of the Republic of Indonesia in November 2016. OJK hopes the AKSI Pangan Program can become a national movement in introducing and implementing the value chain financing scheme that is expected to be the momentum of accelerating access to finance in the food sector. (Kompas, March 24, 2017).

The importance of the role of the banking industry as an intermediary institution in an economy that channeled public funds to productive asset investments that have an impact on the

productivity of the real sector, the accumulation of capital, and the growth of aggregate output have been proposed by Bencivenga and Smith (1991); and Hung and Cothren (2002).

Financing has many benefits for the agricultural sector. According to Ridhwan (2013), the main purpose of using bank financing facilities is to get the working capital to start a new farm or expand the existing ones. Financing in the agricultural sector has a major role in increasing economic activity by producing agricultural goods and services using the local resources.

However, according to Aziz and Yusoff (2014), agriculture is a very risky economic activity. There are some uncontrollable matters in the agricultural sector that cause unexpected results for farmers. Farmers, especially in developing countries, have limited access to local risk management instruments and bank financing facilities that force them to use inefficient traditional methods. Local farmers living in villages or other remote areas lack access to reliable and affordable agricultural financing due to low levels of education and inability to access financing instruments. As proof, the data of Bank Indonesia (the Central Bank of the Republic of Indonesia) shows that the average growth of credits in the agricultural sector of food crops and plantations in Indonesia in 2011-2015 only reached 13.84%. The growth rate is relatively low compared to other sectors.

In addition, in terms of financing contribution, financing to the agricultural and forestry sectors is still relatively low. In August 2015, the portion of credit distribution to agriculture and forestry sector was only Rp 231.4 trillion or 5.96% of total loans (OJK, 2015), while in April 2016, the amount of financing of national banking (to agriculture) was recorded at Rp 257.8 trillion or 6.4% of the total national banking credit of Rp 4.003.1 trillion. Although there was an increase from the previous year, but the increase was not very significant. It only increased 0.15% - 0.45%. The volume of financing distribution is still so necessary to be improved.

Meanwhile, by the Peraturan Bank Indonesia (the regulation of the Central Bank of the Republic of Indonesia) No. 17/12/PBI/2015 on June 25, 2015 about the Amendment on the Peraturan Bank Indonesia (PBI) No. 14/22/PBI/2012, and PBI No. 14/22/PBI/2012 about the Financing by Commercial Banks and the Technical Assistance for the Development of Micro, Small and Medium Enterprises with its supporting provisions, the government requires banks to allocate financing to MSMEs, gradually starting from 5% by 2015 until it reaches 20% by the end of 2018.

The access to bank financing is still a classic problem in terms of financing and business development for MSMEs in Indonesia. The government notes that, in 2014, of the 56.4 million MSEs in Indonesia, only 30% are able to access financing. From that percentage, 76.1% get financing from banks and 23.9% access from non-banks including co-ops. In other words, around 60% -70% of all MSME sectors do not yet have access to financing through banking (LPPI & BI, 2015)

Nevertheless, MSMEs have an important role in the economy of Indonesia. MSMEs have a proportion of 99.99% of the total number of entrepreneurs in Indonesia; contribute for 60% of PDB. Furthermore, the Agriculture, Livestock, Forestry and Fishery sectors contributed the largest share of PBD (48.85%) compared to other sectors.

This study intends to identify the effect of financing provided by both conventional and Islamic banks on Micro, Small, and Medium Enterprises in the agricultural sector in South Sumatra. Furthermore, the main objective of this study is to analyze the effectiveness of financing provided to MSMEs in the agricultural sector in South Sumatra. The effectiveness to be assessed includes the financing mechanisms and schemes; the determination of interest rates or margins; and their impact on productivity in the agricultural sector.

LITERATURE REVIEW

Theoretical Framework

Hartarska, Nadolnyak, and Shen (2015) said that the theory that shows the importance of the relationship between financing and growth in the economic sector begins with Schumpeter (1911), which says that entrepreneurs need financing to finance the adoption of new

technologies. The Bank is a key agent in facilitating capital flows and at the same time promoting economic growth. The literature on the bank-based financial system also offers insight into the mechanisms by which agricultural sector financing will tend to influence rural economic development.

In a bank-based financial system, firms prefer to have the financing sourced from banks other than financial markets (Allen and Gale, 1999, 2000; Beck and Levine, 2002; Ergungor, 2004; Levine, 2005). Banks tend to provide long-term loans because they can monitor more intense on the owners and the firms rarely change the ownership. It has the same characteristics as in the agricultural sector.

Previous Studies

Empirically, the causal relationship between the developments of the banking sector and the economic growth has been shown in previous studies. At the country level, King and Levine (1993) support the positive impact of bank credit on per capita income growth, both in developed and developing countries. Separately, Athanasios and Antonios (2012) in their study showed that the financed firms tend to have an increase in their revenue. The next study in 2014 by Beck, Buyukkkarabacak, Rioja, and Valev indicated that only working capital loans have a positive impact on economic growth in various countries. This study analyzed the impact of banks financing on economic growth, where financing is categorized into financing to the enterprises and financing to the households. Especially in the agricultural sector, Akwaa-sekyi (2013) investigated the effect of microcredit on agricultural activities in Ghana especially on workers, working capital output and farmer income. The results of the study found that there was a significant increase in the four variables after crediting in the agricultural sector. The following year, 2015, Hartarska et al. stated that the financing provided by commercial banks and other institutions to farmers is associated with higher GDP growth rates in the agricultural sector. Based on this study, they also proposed that a positive relationship between credit and economic growth in rural areas were caused by loans from commercial banks and farmer credit system institutions.

In addition to the studies on conventional bank financing to the agricultural sector, the authors also collected some studies related to the financing to the agricultural sector by Islamic banking. It can be seen on Ridhwan (2013), which found that there is a need for shari'ah compliant financing to finance a farming project in an Islamic bank derived from a contract in Fiqh Muamalah. His study is aimed to propose a financing mechanism for Muslim entrepreneurs in financing their agrarian projects through shari'a compliant instruments in Islamic banks based on Fiqh Muamalah contacts. Remarkably, Shafiai and Moi (2015) found that Islamic financing mode applications in agriculture through financial institutions can be very effective in providing financing to ensure that the partnership process works effectively and efficiently. They suggested that it is an urgent needs to develop a system of financing for the agricultural sector under an Islamic contract to increase and sustain the income of farmers and landowners and reduce poverty. In the case of an aqad or the shari'ah based contract, Saqib et al. (2015) examined Qardhul Hasan to comprehend the possibility of its application to the agricultural sector that intended to add a source of riba-free agricultural finance to Muslim farmers in Pakistan. His findings reported that riba-free financing is urgently needed by farmers who do not use riba-based financing caused by the prohibition of usury. The study also shows that Qardhul Hasan is a viable and useful option for the farmers and Islamic banks. Particularly in the agricultural sector Hassan et al. (2012) found a significant relationship between Islamic banking and the agricultural sector, nevertheless banks should adopt effective marketing techniques to make farmers more interested in Islamic banks. This is because the majorities of farmers live in rural areas and are poorly educated so that the knowledge about products and services offered by Islamic banking is little known. Banks should adopt the simple procedures and terminology to improve financing for farmers.

Previous studies have analyzed to what extent the benefits of financing provided to the agricultural sector. However, no one has analyzed the two types of banks simultaneously or

compared the effectiveness of the financing provided by the two types of banks in the agricultural sector. This study evaluated the financing provided by both types of banks and performed a more comprehensive analysis either from the banking as a financing institution and from the farmer as the party receiving finance.

RESEARCH METHOD

Research Focus

This research focused on conventional and Islamic banks that channel the financing allocated to MSMEs in the agricultural sector in South Sumatra. The productive business activities referred to include the food crops, the horticultural crops, the plantations and the livestock.

Data Source

This research used quantitative and qualitative approach in analyzing data. The data is used in the form of secondary data and primary data.

Secondary data to be used in this research is data in the form of the total financing disbursed by banks (conventional and Islamic) to the agricultural sector in South Sumatra for the last two years (2015-2016); Systems of financing provided by banks to farmers; Primary data to be used in this research are the data on financing benefits from the farmers and te data on increasing agricultural production derived from financing received by farmers.

Data Collection Technique

Secondary data was obtained through the banks or other data sources, while the primary data was collected through the structured interview techniques with the financed farmers.

Population and Sample

Table 1.
MSMEs Credits in Agriculture, Livestock, Forestry and Fishery sectors
Based on Region Level II in South Sumatera (In Million Rupiah)

	Dati II dan Sektor Ekonomi	2014	2015	2016	2017
					Jun
1	Kab. Musi Banyuasin	970.006	1.250.799	1.143.772	1.172.404
2	Kab. Ogan Komering Ulu	565.207	425.292	350.030	345.577
3	Kab. Lematang Ilir Ogan Tengah (Muara Enim)	470.442	463.895	396.932	402.574
4	Kab. Lahat	99.981	115.974	107.685	126.162
5	Kab. Musi Rawas	558.422	508.390	409.078	510.145
6	Kab. Ogan Komering Ilir	1.349.435	1.324.783	1.172.702	1.148.016
7	Kab. Banyuasin	224.584	261.381	309.910	268.508
8	Kab. Ogan Komeing Ulu Selatan	17.270	21.843	31.547	44.611
9	Kab. Ogan Komeing Ulu Timur	131.038	138.529	146.498	182.118
10	Kab. Ogan Ilir	39.993	47.891	43.020	50.076
11	Kab. Empat Lawang	8.203	12.840	11.222	13.628
12	Kota Palembang	876.834	460.909	575.966	458.719
13	Kota Lubuklinggau	46.836	73.332	49.594	39.313
14	Kota Prabumulih	67.725	61.052	48.817	45.483
15	Kota Pagar Alam	8.354	16.498	18.804	24.698
16	SUMATERA SELATAN	5.434.329	5.183.408	4.815.576	4.832.032

Source: BI (2017)

Based on the above data, Ogan Komering Ulu (OKU) and East OKU regencies are selected as the research area by considering the following: The data shows that there is a decrease in the number of MSMEs financing for the agricultural sector in Ogan Komering Ulu

regency every year from 2014 until June 2017. While in East OKU regency this conversely happens; there is an increase in the amount of financing every year, from 2014 until June 2017. In other regencies that occur varies, ie sometimes up and down in every year. Therefore, this study selected OKU and OKU Timur regencies as the research area to obtain the best and useful results.

The research population in this case is the actors of MSMEs in the agricultural sector that received the financing. Research sample was chosen by using random sampling. Since the number of MSMEs receiving financing is unknown, the snowball technique was used to determine the sample.

Data Analysis Technique

Data was analyzed by using descriptive qualitative and quantitative methods. Quantitative analysis is required in identifying the effect of the amount of financing given to the productivity of the agricultural sector in order to comprehend the effectiveness of credit financing given, while qualitative analysis is a necessary way to apprehend deeply the mechanism and problems faced by farmers regarding the process of obtaining the financing.

FINDINGS AND DISCUSSION

Findings

Profile of Respondent

Using the questionnaires, data was mined from 100 respondents. The respondents provided information related to the financing obtained in starting or expanding their business; and other demographic information of the respondents. Some information is explored below:

Table 2. Age

N	Valid	101
	Missing	0
Mean	43.06	
Minimum	23	
Maximum	77	

Tabel 3. Gender

	Gender	Frequency	Percent
Valid	Male	64	64.0
	Female	36	36.0
	Total	100	100.0

The Table above shows that from around 100 respondents, the average age of respondents is 43 years with the youngest is 23 years old while the oldest is 77 years. There are 64 male and 36 female respondents.

Tabel 4. The Level of Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No School	6	6.0	6.0	6.0
	Elementary School	43	43.0	43.0	49.0
	Junior High School	24	24.0	24.0	73.0
	Senior High School	18	18.0	18.0	91.0
	Diploma	1	1.0	1.0	92.0
	Undergraduate	8	8.0	8.0	100.0
	Total	100	100.0	100.0	

Table 3 displays that there are 6 respondents who do not graduate from any level of education, 43 respondents have an elementary degree, 24 and 18 respondents respectively graduated from junior high school and senior high school, 1 respondent has diploma certificate and 8 respondents hold undergraduate degree. From the data, it can be seen that the majority of

the respondents only graduated from junior high school, constituted 43% of the total respondents.

Tabel 4. Marital Status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Single	5	5.0	5.0	5.0
	Married	94	94.0	94.0	99.0
	Divorced, Widow/widower	1	1.0	1.0	100.0
	Total	100	100.0	100.0	

Tabel 5. Number of Dependants

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	2	2.0	2.0	2.0
	1	5	5.0	5.0	7.0
	2	20	20.0	20.0	27.0
	3	43	43.0	43.0	70.0
	4	21	21.0	21.0	91.0
	5	6	6.0	6.0	97.0
	6	3	3.0	3.0	100.0
	Total	100	100.0	100.0	

In the marital status, there are 5 (5%) respondents have not married yet, 1 person who is a widow, and the rest, 94 respondents (94%), are married. Further, the majority of the respondents have 3 dependants. About 43 respondents or 43% from the total respondents have 3 dependants while 3 respondents have 6 dependants at most and 2 respondents with no dependants.

Discussion

Table 6. Status of the home ownership

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Self-Ownership	95	95.0	95.0	95.0
	Rent	5	5.0	5.0	100.0
	Total	100	100.0	100.0	

Table 7. Status of the land ownership

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Self-ownership	90	90.0	90.0	90.0
	Family-ownership	6	6.0	6.0	96.0
	Others	4	4.0	4.0	100.0
	Total	100	100.0	100.0	

Table 6 indicates that 95 respondents (95%) live at their own homes, while 5 respondents are renting for their accommodation. Meanwhile, from Table 7, it can be seen that at 90% or 90 respondents have their own land, 6% or 6 respondents run their agricultural business on their

family-owned land, and 4% of respondents manage their agricultural activities on the land owned by others.

Table 8. Year of Starting a Business

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	<1985	3	3.0	3.0	3.0
	1986-1990	3	3.0	3.0	6.0
	1991-2000	19	19.0	19.0	25.0
	2001-2010	50	50.0	50.0	75.0
	2011-2015	22	22.0	22.0	97.0
	>2016	3	3.0	3.0	100.0
	Total	100	100.0	100.0	

Relating to the year of starting a business, both before 1985 and after 2016 there are 3% of the total respondents respectively who started their business in those years. Interestingly, most of the respondents started their business in the range of 2001 to 2010. That constitutes 50% of the total respondents or around 50 respondents.

Furthermore, concerning the financing in their business, respondents were required to give the information about the source of financing, the type of guarantee, the length of disbursement process, the monthly installment (burdened or not), the respondent's perception on the benefit of financing, and the intention to earn more financing. For the source of financing, most of the respondents got their financing from a loan. It is 42% of the total respondents or 42 respondents. All respondents also have to submit a guarantee in form of the ownership certificate of property (house, building, land and others) and the employment appointment letter. Related to the length of disbursement process, 39 respondents or 39%, stated that the disbursement process took between 6-8 working days. For the shortest, the disbursement process took 2-5 days (18 respondents) whereas for the longest it required at least 90 working days (1 respondent). Meanwhile, for the perception of respondents regarding the burden of the monthly installment, around 50 respondents (50%) said the monthly installment is quite burdensome. Nevertheless, almost all respondents (97%) said that the financing benefits them well but 3% of the total respondents stated that business loans have less benefits for them. After all, there are 55 respondents who still intend to earn more financing and there are about 45 respondents who do not want to get more due to various factors.

CONCLUSION

The use of financing from banks has become the largest share of all resources of financing in the agricultural sector in South Sumatra. Interestingly, almost half of the beneficiaries in this sector are those who only graduated from Elementary School. Based on this data can be understood that the financing channeled to the agricultural sector in South Sumatra is simple, safe and profitable. This is supported by data that almost all respondents get a good profit from financing and most respondents feel facilitated by the process of rapid disbursement; and also want to get more financing. Although the respondents have to submit the guarantee over the financing; and there is a minority who burdened by monthly installments but that does not diminish the benefits of the financing. In addition, the decrease of financing after 2010 does not indicate that the financing is not profitable but it can be caused by the decline of the rubber prices. Finally, it can be concluded that financing in the agricultural sector in South Sumatra is relatively effective for farmers both in terms of increasing their financial gains and in terms of expanding the agricultural property.

RESEARCH LIMITATIONS AND FUTURE RESEARCH

This study does not analyze the effectiveness of financing in the agricultural sector for each sample of farmers. Effectiveness is analyzed by qualitative and descriptive quantitative methods in general, not included in the analysis per farmer. In addition, this study does not use financial ratios in measuring the effectiveness of the provision of financing. Therefore it is necessary to do further research that analyzes the effectiveness of financing in each sample of farmers in particular and perform financial analysis of any financing provided.

REFERENCES

- Akwaa-sekyi, E. K. (2013). Impact of Micro Credit on Rural Farming Activities : The Case of Farming Communities Within Sunyani Area, 7(4), 23–29. <https://doi.org/10.3968/j.mse.1913035X20130704.2975>
- Athanasios, V., & Antonios, A. (2012). Stock market development and economic growth an empirical analysis for Greece. *American Journal of Economics and Business Administration*, 4(2), 135–143.
- Aziz, M. R. A., & Yusoff, M. M. (2014). Identifying Risk of Financing For Agro Projects in Islamic Banks. *International Journal of Technical Research and Applications*, 2(4), 29–33.
- Beck, T., Buyukkkarabacak, B., Rioja, F. K., & Valev, N. T. (2014). Who gets the credit? and does it matter? Household vs. firm lending across countries. *B.E. Journal of Macroeconomics*, 12(1). <https://doi.org/10.1515/1935-1690.2262>
- Bencivenga, V., & Smith, B. (1991). Financial intermediation and endogenous growth. *The Review of Economic Studies*, 58(2), 195–209. <https://doi.org/10.2307/2297964>
- Hartarska, V., Nadolnyak, D., & Shen, X. (2015). Agricultural credit and economic growth in rural areas. *Agricultural Finance Review*, 75(3), 302–312. <https://doi.org/10.1108/AFR-04-2015-0018>
- Hassan, M. T., Sattar, M. A., Tousif, M. A., Nasir, N., Sadiq, M., & Yasmeen, M. (2012). Role of Islamic Banking in Agriculture Development in Bahawalpur, Pakistan. *International Journal of Learning and Development*, 2(3), 123–138. <https://doi.org/10.5296/ijld.v2i3.1817>
- Hung, F.-S., & Cothren, R. (2002). Credit market development and economic growth. *Journal of Economics and Business*, 54(2), 219–237. [https://doi.org/10.1016/S0148-6195\(01\)00063-7](https://doi.org/10.1016/S0148-6195(01)00063-7)
- King, R., & Levine, R. (1993). Finance and Growth Schumpeter Might Be Right. *The Quarterly Journal of Economics*, 108(3), 717–737. <https://doi.org/10.2307/2118406>
- LPPI, & BI. (2015). *Profil Bisnis Usaha Mikro, Kecil dan Menengah (umkm)*. Jakarta.
- Mohd Shafiai, M. H., & Moi, M. R. (2015). Fitting Islamic Financial Contracts in Developing Agricultural Land. *Global Journal Al Thaqafah*, 5(1), 43–49. <https://doi.org/10.7187/GJAT772015.05.01>
- OJK. (2015). *Potensi Pertumbuhan Ekonomi ditinjau dari Penyaluran Kredit Perbankan Kepada Sektor Prioritas Ekonomi Pemerintah*. Jakarta.
- Otoritas Jasa Keuangan. (2015). *Buku Saku Otoritas Jasa Keuangan* (2nd ed.). Jakarta: OJK.
- Ridhwan, M. (2013). A Review of Islamic Banking Products Offered by Agro Bank between 2008 and 2012, (4), 243–259.
- Saqib, L., Zafar, M. A., Khan, K., Roberts, K. W., & Zafar, A. M. (2015). Local agricultural financing and Islamic banks: is Qard-al-Hassan a possible solution? *Journal of Islamic Accounting and Business Research*, 6(1), 122–147. <https://doi.org/10.1108/JIABR-04-2012-0018>