LEADING SECTOR DEVELOPMENT AND IT'S IMPLICATONS ON THE LENDING PORTFOLIO AND NON-PERFORMING LOAN OF SMALL MEDIUM ENTERPRISES

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ABSTRACT

The research objectives were to analyze the condition of the SMEs lending portfolio and a comprehensive strategy to ensure that the SMEs Line of Business could grow sustainably. There are several analytical methods employed in this study, such as Location Quotient (LQ) and Klassen Typology methods. The consolidated results of both analyses will be developed as a leading sector. The sectors that will be selected based on the result from the Location Quotient analysis include the sectors in the 4th quadrant and the 1st Quadrant. The analysis showed that 12 economic sectors spread throughout 33 provinces are considered to be the leading sectors, where the Transportation, Financial Intermediaries and Fisheries are the sectors that have the highest distribution in the 4th Quadrant while the Fisheries, Wholesale and Retail, as well as the Agriculture are the sectors which also have a high level of distribution in the 1st quadrant. The sectors that will be chosen based on the results from the Klassen Typology analysis include the sectors in the 1st quadrant. The analysis showed that there are 12 economic sectors spread throughout 31 provinces considered to be developed and fast-growing sectors, where the Agriculture, Fisheries, and Construction are the sectors that have the highest distribution. The consolidated results of the both analyses showed that the leading sectors consist of 10 economic sectors, namely, Agriculture, Fisheries, Processing industry, Social services, Construction, Electricity, Gas and Water, the Provider of accommodation and eating and drinking, Mining, Wholesale and Retail, and Transportation spread throughout 27 provinces. Leading sectors are not the same in every province, although there are certain sectors that excel in several provinces, but there is also one dominant sector that exists only in certain provinces.

Keywords: location quotient, klassen typology, leading sector, SMEs, portfolio

ABSTRAK

Penelitian ini bertujuan melakukan analisis terhadap kondisi portofolio UKM dan merumuskan strategi yang komprehensif agar Lini Bisnis UKM dapat bertumbuh dengan kwalitas kredit yang sehat. Alat analisis yang digunakan dalam penelitian ini, yaitu analisis Location Quotient (LQ) dan analisis Klassen Typologi. Hasil konsolidasi berupa irisan sektor dari kedua analisis akan dikembangkan sebagai sektor unggulan. Sektor yang akan dipilih dari hasil analisis LQ adalah sektor yang berada pada kuadran 4 dan kuadran 1. Terdapat 12 sektor yang tersebar di 33 provinsi, dimana sektor Transportasi, Perantara Keuangan, dan Perikanan merupakan sektor yang penyebarannya tertinggi di Kuadran 4 sementara sektor Perikanan, Perdagangan Besar dan Eceran, serta Pertanian merupakan sektor yang penyebarannya tertinggi di kuadran 1. Sektor yang akan dipilih dari hasil analisis Klassen Typologi adalah sektor yang berada pada kuadran 1. Terdapat 12 sektor yang tersebar di 31 provinsi, dimana sektor Pertanian, Perikanan, dan Konstruksi merupakan sektor yang penyebarannya tertinggi. Hasil konsolidasi analisis LQ dan Klassen Typologi menunjukkan bahwa terdapat 10 sektor unggulan yang tersebar di 27 provinsi yaitu sektor pertanian, perikanan, industri pengolahan, jasa kemasyarakatan, konstruksi, listrik, gas dan air, penyedia akomodasi dan makan minum, pertambangan, perdagangan, dan transportasi. Sektor unggulan tidak sama di setiap provinsi, meskipun ada sektor-sektor tertentu yang unggul di beberapa provinsi namun ada juga sektor yang dominan hanya di provinsi tertentu saja.

Kata kunci: location quotient, klassen typologi, sektor unggulan, UKM, portofolio

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INTRODUCTION

In the first semester of 2014, Indonesia's financial system stability was maintained although it faced new challenges in the form of a slowdown growth in the domestic economy as a result of the continuation of some of the external and internal problems in the previous semester. External problems were triggered by the uncertainty of global economic growth and a downward trend in commodity prices, especially crude palm oil and global oil which also have implications for the economic slowdown in many emerging market countries, including Indonesia. Other issues related to the internal current account deficit and some risks, e.g. the potential financial imbalances, the potential occurrence of the downturn in the financial cycle could trigger a further slowdown in domestic economy.

Economic conditions have an impact on the Indonesian banking performance in which the total bank credit experienced slow growth from 21,73% (year on year in 2013 versus 2012) to 17% (year on year Juni'14 versus June 2013). This slowing growth was also experienced by the loans of SMEs. In the first semester of 2014, the market share of SMEs loans toward the total bank credit declined like last year of the same period from 15,96% to 14,97%. Outstanding of SMEs in the first semester of 2014 amounted to Rp. 520,473 billion where its growth experienced a slowdown from 14,15% (year on year in 2013 versus 2012) to 9.6% (year on year in June versus 2014 in June 2013). While credit risk is likely to increase as reflected in the increase in the ratio of Non-Performing Loan (NPL), SMEs loans increased from 3.39% in December 2013 to 4.05% in December 2014. There are allegations that the above pattern is not natural, yet it will be specific to a particular industrial sector that needs to be studied more regarding the specific nature of the sector.

Development of SMEs becomes a crucial thing since SMEs have such an important role for the economic growth of a country, including in the State of Indonesia (Husband and Purnendu, 1999; Tambunan, 2005). The development of leading sectors can help banks to know the industry sector which has a huge market potential in certain provinces along with the level of risk.

This research needs to be conducted to address these following issues: (1) How is the condition of SMEs lending portfolio at this time? (2) How is it to determine the economic sector of great potential in the province with a level of risk that is still well managed? (3) How is it to determine the potential sectors based on economic growth and PDRB in each province? (4) How is it to determine the development of leading sector?

Adhitama R (2012) examined the development of economic sectors in each District in Magelang. Location Quotient analysis results showed that agriculture, finance, leasing and business services as well as the services sector are the dominant sectors in the district of Magelang. Shift Share analysis results showed that the sectors of construction, transport, and communication, mining, trade and agriculture have the highest competitive advantage compared to other sectors. Klasse Typology analysis results showed that the agricultural and service sectors dominate the leading sectors in each district in Magelang. The results showed that the sectors of agriculture, service, and trade are the leading sectors in Magelang District. There are 9 districts which have a dominant sector in the service sector, 8 districts which have advantages in the agricultural sector, and 7 districts which have advantages in the trade sector.

Kadek Ayu Novita Prahasta Dewi and Eko Budi Santoso (2014) examined the development of leading commodities in the sector of agriculture in Karangasem through sustainability approach. Location Quotient analysis results indicate that the leading sector in Karangasem regency is the agricultural sector with the food crops as its sub-sector. Types of leading commodities in the field of crop farming sector that have the potential to be developed further include the rice commodities in the Districts of Manggis, Bebandem and Selat; cassava in Kubu SubDistrict,and soybeans in Manggis Sub-district.

Rahmana, Iriani, and Oktarina (2012) examined the development strategy for SMEs manufacturing sector. The results of count value of LQ in the form of an index value show an outstanding sector from the SME sectors i.e. the manufacturing sector with the value of index of LQ amounting to 4.277. Index value of SMEs LQ in the sector of manufacturing is the largest of all indices of other sectors.

Ratnasari ED (2014) examined the Sector Forming Analysis of PDRB and Determination of Outstanding sector in Kebumen Regency. Location Quotient analysis results show the basic sectors in Kebumen include the 4 sectors Agriculture, Mining and Quarrying, Finance,

Leasing and Business Services, as well as the services of the outstanding sectors. Analysis results indicate the sectors of Mining and Quarrying and services are the sectors that develop and grow faster. Overlay analysis results show 5 sectors, i.e. Mining and Quarrying, Agriculture, Industry of Processing, Finance, and Services. The leading sectors that can drive the economy of Kebumen Regency and will be developed are Mining and Quarrying and Service sectors.

Tabrani A (2008) examined the analysis of leading sector in Mandailing Natal Regency, North Sumatra Province. Location Quotient analysis results indicate that the agricultural sector and mining and quarrying sector are the dominant sectors which are indicated by very high numbers of LQ. This suggests that the ability of these two sectors in generating revenue streams into the economy is great.

This research was conducted in the framework of a comprehensive analytical study by considering various factors which are very influential. However, this study has limitations on the followings:

a. The object of this research is a portfolio of SMEs lending
b. Discussion of the elements that will be analyzed for the development of leading sectors are based on the secondary data of Bank Indonesia (BI) and the Central Bureau of Statistics (BPS) and equipped with secondary data of literature.

METHODS

The research was conducted by using secondary data which is in the form of data analysis and literature studies from the data of debit balance and SMEs non-performing loans per sector in each province, as well as PDRB data from the provincial and national governments. The Sources of Data were taken from Bank Indonesia (BI) and the Central Bureau of Statistics (BPS).

This research was using analysis of quantitative by using two methods i.e. analysis of growth patterns of economic sectors of Klassen Typology and analysis of Location Quotient. The data which were used for the analysis of Klassen Typology would ideally come from the SMEs data; however, due to the circumstances in which they were not provided, this research used National PDRB data as the approach.

There are twelve (12) SMEs economic sectors to be developed, i.e.: (a) agriculture, hunting, and forestry, (b) mining and quarrying, (c) processing industry, (d) electricity, gas and water, (e) construction, (f) the provider of accommodation and eating and drinking, (g) transport, storage and communications, (h) financial intermediaries, (i) social services, socio-cultural, entertainment, and other persons, (j) fisheries, (k) wholesale and retail trade, (l) real estate, leasing, and business services.

Calculation and analysis of the Location Quotient (LQ) was based on the comparing data from Outstanding Balance and NPL in every sector of the economy of the 33 provinces nationwide to determine the sectors with great economic potentials in the province with a level of risk still well managed. Outstanding Balance and NPL used on the base of calculation were the data of Outstanding Balance and SMEs NPL of each sector of the economy in each province from 2010–2014.

Isserman (1977) and Hood (1998) suggested that the method of Location Quotient (LQ) is used to identify the main commodities in the province. LQ technique is one approach which is commonly used in the economic model base as the first step to understand the activity sector of growth driver. This technique presents a relative comparison between the ability of sectors in an area that was investigated with the same capabilities on a wider area. The assumptions used in the analysis of LQ were: 1) relatively uniform geographical conditions, 2) uniform activity patterns, 3) uniform products produced by each activity.

Calculation and analysis of Klassen Typology were conducted by comparing the PDRB data of every sector of the economy of the 33 provinces nationwide to determine the potential sectors based on their PDRB contribution and growth rate in each province. The value of PDRB on which to base the calculation was the value of PDRB at constant prices of year 2009 to 2013. The consolidated results of the analysis of these two approaches will be developed into an outstanding strategy that becomes the strategy for SME banking business lines in Indonesia in enhancing the lending portfolio and lowering the NPL.

The pattern of economic growth in the region can be determined by the analysis of Klassen Typology sector approach by systematically combining the PDRB growth rate and PDRB contribution by sector, and they

are then classified into groups/characteristics based on Klassen Typology (Table 1). By using Klassen Typology analysis, it will show the four classifications of growth economic sectors, i.e. the developed and fast growing sectors, developed but pressured sectors, potential sectors or sector that can still thrive (grow), and relatively underdeveloped sectors (Sjafrizal, 2008). Stages of the process of data analysis with the approach of Klassen Typology and Location Quotient (LQ) can be seen in Table 2.

The research framework (Figure 1) was constructed from a portfolio of lending conditions of Small and Medium Enterprises (SME) in Indonesia, which slowed the growth of lending portfolio in the first semester of 2014, and they also experienced worsening credit quality by the increase of the collectability by ≥ 3 (Non-Performing Loan). This research aimed to develop the leading sectors of SMEs by integrating the two approaches, i.e. Location Quotient (LQ) and Klassen Typology. Location Quotient approach is a method used to analyze the economic sectors with the potential market size in each province along with the quality of credit. At the macro level, Klassen Typology approach in this study was started by analyzing the pattern of economic growth in the region by systematically combining the growth rate of PDRB and PDRB contribution by sectors; therefore, sector which have potentials to be developed can be identified.

RESULTS

Conditions of SMEs Loan Portfolio

In 2013, SMEs banking recorded a significant growth. SMEs lending increased by 14% i.e. Rp. 489,934 billion compared to that in the year of 2012 with a reasonably high risk with the NPL ratio of 3.4%. Nevertheless, in the first semester of 2014, the movement of outstanding loans decreased compared to that in 2013. In June 2014 outstanding reached Rp. 520,473 billion and decreased growth from 14.15% (year on year in 2013 versus 2012) to 9,6% (year on year in June versus 214 in June 2013). Even in the second semester of 2014, it decreased even more, reaching 8,47% in December 2014. In terms of quality, the credit experienced the worst condition of Collectability 3–5 (NPL). SMEs NPL increased from 3,39% in December 2013 to 4.05% in December 2014. The decline in growth occurred in all economic sectors except for the electricity sector, and gas and water that increase their growth from 1,62% (year on year January 2014 versus January 2013) to 24,21% (year on year in December 2014 versus December 2013) while the NPL became worse in nearly all sectors except for fisheries sector (declining from 5.97% in January 2014 to 4,36% in December 2014) and electricity, gas and water (declining from 1,42% in January 2014 to 1,13% in December 2014)

Data distribution of Debit Balance LQ of 10 SMEs sector shows the value of LQ Debit Balance was > 1 less than the value of LQ of Debit Balance which was <1 because it was more dominated by small values, including agricultural sector, fisheries, mining and quarrying, manufacturing, electricity, gas and water, accommodation, eating and drinking providers, transportation, financial intermediaries, social services, and real estates. Meanwhile, the data distribution of 2 (two) other SMEs sectors i.e. the trade sector showing the value of LQ of Debit Balance of > 1 is greater than the value of LQ Debit Balance of <1, and the construction sector has a normal distribution with a uniform distribution in each province.

Table 1. Klassen Typology

Indicator	Quadrant	
Contribution of PDRB (s)	Type II Developed but Pressured Sector si > s (+), gi < g (-)	Type I Developed and Fast Growing Sector si > s (+), gi > g (+)
Growth Rate (g)	Type III Relatively underdeveloped sector si < s (-), gi < g (-)	Type IV Fast growing sector (Potential) si < s (-), gi > g (+)

Description: gi (PDRB growth rate of the region i), si (Contributions of PDRB sectoral area i), g (PDRB growth rate of national sectoral), s (Contributions of PDRB national sectoral)

Table 2. Process of data analysis stage

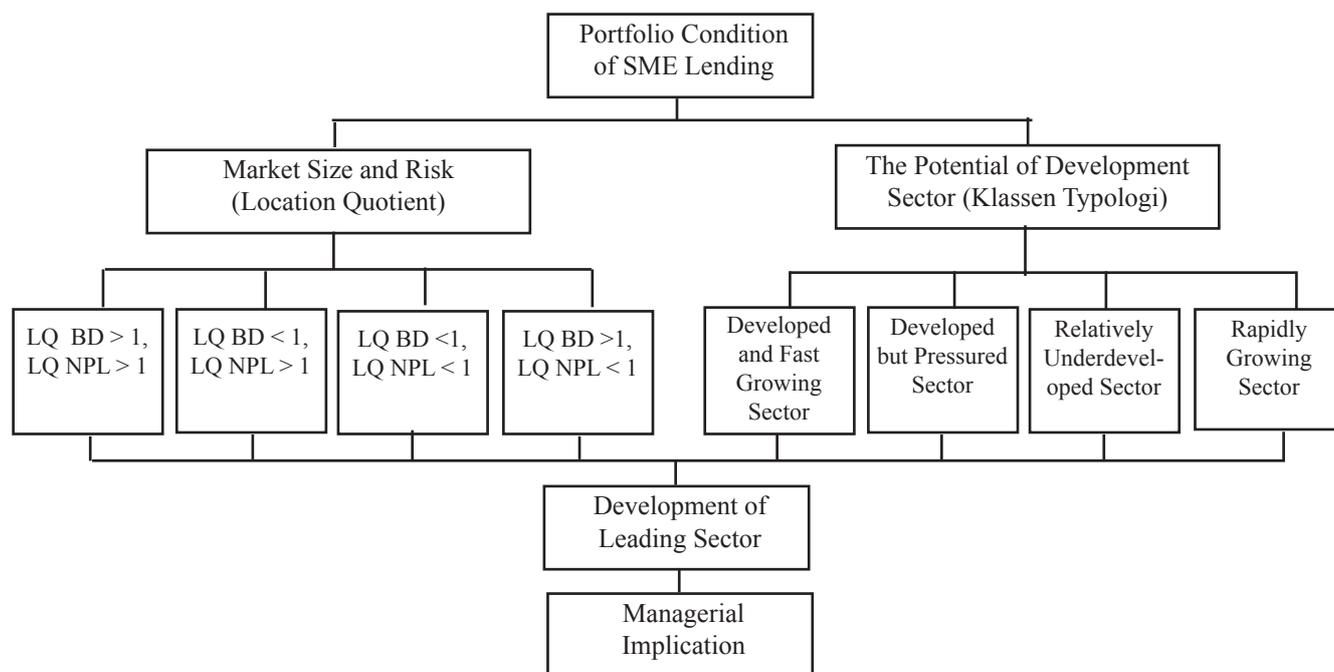| Analysis Stage	Type of Data		Data Source	Data Processing	Information obtained or Results Expected
	Primary Data	Secondary Data			
Analysis of the SMEs Loan Portfolio (Growth Portfolio and Portfolio of Quality)		Outstanding Data, SMEs NPL per region and industrial sector	SMEs Portfolio Report Bank Indonesia December 2013, 2014	Analysis of the SMEs Growth Portfolio	Conditions of the loan portfolio growth decreased from 14.15% in December 2013 to 9.6% in June 2014, and at the end of the second semester 2014 the growth kept on declining and reached to 8.47%. Credit quality worsening, NPLs increased to 4.05% in December 2014
				Analysis of NPL trend	
Analysis of Market and Risk (Location Quotient)	-	Outstanding SME Data per sector industry in each province	Bank Indonesia	The analysis conducted on outstanding and NPL of the industrial sector in each province in 2010-2014	Determining the leading sector that has great potential with a level of risk that can be managed well in each province
		SME NPL Data per sector industry in each province		Calculating the value of LQ BD and LQ NPL by entering the notation obtained in LQ formula	1) LQ BD>1, LQ NPL >1 with good market size and a high level of risk
				Calculating average value of LQ	2) LQ BD<1, LQ NPL >1 with unfavorable market size and a high level of risk
				Interpretation of the LQ value to determine which sector has great potential (outstanding sector) with a level of risk that can be managed well in the respective province	3) LQ BD<1, LQ NPL <1 with unfavorable market size and level of risk can be managed properly
					4) LQ BD>1, LQ NPL <1 with good market size and level of risk can be managed properly
Analysis of Potential of Sectoral Development (Klassen Typologi)	-	National and Provincial PDRB Data	Central Bureau Of Statistics (BPS)	Analysis of the PDRB economic sector of the provincial economy in the year of 2009-2013	4 classification mapping of sector growth : 1) Developed and Fast Growing Sector
		Data of rate of growth and the contribution of provincial PDRB		PDRB growth rate of each sector and the contribution of each sector to the PDRB of the province in the year of 2009-2013 is calculated and sought for its average value	2) Developed but depressed Sector
				Of the average found then sought for the sectors that have the highest value of either of the parameters rate of growth of PDRB and the contribution of each sector	3) Relatively underdeveloped Sector
				Compare the average of PDRB growth rate and the contribution of each sector in every province and national	4) Rapidly growing Sector (Potential)
				Determine the position of each sector in quadrant I, II, III, or IV	
Analysis of Leading Sector Development and Managerial Implications	-	Analysis results of Location Quotient and Klassen Typologi	Research	Enter into consolidation the results of the analysis of two models that seek slice of sectors in quadrant 1 and 4 (Location Quotient) and Quadrant 1 (Klassen Typologi)	Leading sector based on two approaches and Managerial Implications

Figure 1. The research framework

10 NPL data distribution of LQ SMEs sector showed that the LQ value of NPL of > 1 is less than that of LQ NPL of <1 because it is more dominated by small values of agriculture, fisheries, mining and quarrying, manufacturing industry, electricity, gas and water, construction, transportation, financial intermediaries, social services and real estate sectors. Meanwhile, the sectors of trade and accommodation providers have distribution of LQ NPL value of > 1 which is greater than the value of LQ NPL <1.

The relationship between market size and NPL is positively correlated (+) i.e. 0.436, which means the increase in the variable x (Debit Balance) will be followed by a rise in the value of variable y (NPL). This condition is in accordance with the concept of high-risk high return where the higher level of risk (NPL), the higher the income earned (debit balance).

There are some deviations from the general pattern above that there is a point where Debit Balance is small, yet also high in NPL, and these sectors include electricity, gas and water in Lampung with Debit Balance LQ of 0,578 and LQ NPL of 6,845. Debit Balance in electricity sector, gas and water experienced a decrease by 56% in the growth (yoy). This decline is in line with the data from PLN Lampung province indicating that the number of customers of PLN and sales volume have decreased from 250 million kWh to 229 million kWh, and this is associated with the

fact that if the electricity rates rise, consumers will be encouraged to save their electricity power. Meanwhile, NPL has increased significantly as a result of a decrease in debit balance from 10.51% in December 2013 (consisting of 21.96% of small and medium-sized businesses of 4.74%) to 15.87% in December 2014 (consisting of small businesses of 24.51% and medium ones of 1,98% medium)

Analysis Results of Location Quotient (Quadrant)

The data of Location Quotient (LQ) is grouped into four (4) quadrants with the results described in Table 3. Leading sectors that will be selected are the sectors in quadrant 4 (LQ Debit Balance> 1, LQ NPL <1) and Quadrant 1 (LQ Debit Balance> 1, LQ NPL> 1). The analysis shows that of the 396 economic sectors (12 x 33 provincial economic sectors), 91 sectors of the economy (23%) are located in quadrant 1 and 47 economic sectors (12%) are located in quadrant 4.

Table 3. The distribution of the number of points in 4 (four) quadrants of location Quotient

Quadrants	Total	%
1	91	23%
2	56	14%
3	202	51%
4	47	12%
Total	396	100%

Analysis Results of Klassen Typology

The analysis results of Klassen Typology will be grouped into 4 (four) quadrants with the results described in Table 4. Leading sectors that will be chosen are the sectors in quadrant 1 ($gi > g$, $si > s$). The analysis showed that of the 396 sectors (12 x 33 provincial economic sectors), 58 sectors of the economic sectors (15%) are located in Quadrant 1. Not all provinces have the leading sectors in quadrant 1 and the provinces of DI Yogyakarta and East Nusa Tenggara are included in the category that do not have the leading sectors in quadrant 1.

Table 4. The distribution of the number of points in 4 (four) quadrants of Klassen typology

Quadrants	Total	%
1	58	15%
2	60	15%
3	116	29%
4	162	41%
Total	396	100%

Consolidated Results Analysis (Outstanding Sector)

This analysis is used to draw conclusions by combining the two results of the analysis i.e. the slices of the leading sectors in each location quotient approach (quadrants 4 and 1) and Klassen typology (quadrant 1) as described in Table 5. Table 5 shows the presence of two dominant sectors that can be developed, including:

- L(4) K : letter L (4) indicates the 4 LQ quadrant and letter K indicates the 1 Klassen typology quadrant
- L(1) K : the first letter L (1) indicates the 1 LQ quadrant and letter K indicates the 1 Klassen typology quadrant

The consolidated results of the location quotient analysis and Klassen typology indicate that there are 10 leading economic sectors in the 27 provinces. The sectors of Financial Intermediaries and Real Estate, Leasing, and Business Services are not included in the classification of the leading sectors while the provinces of Bali, DI Yogyakarta, Aceh, West Nusa Tenggara, East Nusa Tenggara and Central Sulawesi are classified as provinces that do not have the leading sectors. Slowdown in the growth of the SMEs loan portfolio and an increased risk of NPL in 2014 require a new breakthrough in the form of determination of leading economic sector and a comprehensive strategy in its development.

Based on the research results, there are some suggested steps for the SMEs line of business to improve the loan portfolio and lower the risk of non-performing loan as follows:

1. For the leading sectors in the quadrant of L (4) K, SMEs line of business is able to carry out aggressive acquisitions and addition of human resources marketing adjusted to the target loan volume and number of branches. This strategy can immediately be executed in 2015.

2. For the leading sectors in the quadrant of L (1) K, loan portfolio is carried out by improving management of tighter control in running the selection process and verification of borrowers to assess the collateral and prospect of business, by improving the competence of Sales Person to perform refreshment training specifically related to the Credit Analysis, and the approval process of credit proposal applies one level up approval. This strategy is recommended to be run in 2016.

3. In regards to high levels of risk in the quadrant of L (1) K, the Bank is expected to decrease the existing NPL by the restructuring of the debtors that are cooperative and still have a source of repayment, and by conducting asset sales or auctions for borrowers who are not billable.

4. The current condition of the mining and quarrying sector especially coal is still not good; therefore, the proposed strategy includes funding the mining loan for the old debtors who have good historical payments, and performing loan construction by lengthening the loan term of average loans, thus it will enable the borrowers to repay their installments of the loan.

5. For agriculture and fisheries as a group of specific economic sectors, the proposed strategy is to extend credit to a business group of farmers or farmer cooperatives or through cooperative of fishery, to perform acquisitions on freshwater marine fisheries, to set up the schedule for the obligation payment in advance adapted to the harvesting period or adjusted the weather or season factor based on the existing pattern, cooperation with Perum Jamkrindo for agricultural insurance to mitigate the risk of NPL in the event of crop failure or in the event of bad weather leading to the declining productivity of fishing, to improve human resource competencies by recruiting the agricultural graduates for the position of sales person and credit analyst.

Table 5. Results of the analysis of location quotient consolidation and Klassen typology

Province	Processing Industry	Social services, social cultural, entertainment, and other individual	Construction	Electricity, Gas and Water	Provision of accommodation, meals and drink	Financial intermediaries	Wholesale and Retail Seller	Fisheries	Mining	Agriculture, hunting and forestry	Real estate, leasing and corporate services	Transportation, warehousing and communication
Banten				L(4) K								
Bengkulu										L(4) K		
DKI Jakarta		L(1) K										
Gorontalo								L(1) K				
Papua Barat			L(1) K									
Jambi										L(1) K		
Jawa Barat	L(1) K											
Jawa Tengah	L(1) K											
Jawa Timur							L(1) K					
Kalimantan Barat										L(1) K		
Kalimantan Selatan									L(1) K			
Kalimantan tengah										L(4) K		
Kalimantan Timur									L(1) K			
Kep. Bangka Belitung			L(1) K					L(4) K				
Kepulauan Riau	L(4) K				L(1) K					L(1) K		
Lampung			L(1) K									
Maluku								L(4) K				
Maluku Utara							L(4) K					
Papua										L(1) K		
Riau										L(1) K		
Sulawesi Barat			L(1) K									
Sulawesi Selatan			L(1) K					L(4) K				
Sulawesi Tenggara												L(4) K
Sulawesi Utara								L(1) K				
Sulawesi Barat										L(1) K		
Sulawesi Selatan										L(1) K		
Sulawesi Utara										L(1) K		

6. Specifically for Agriculture and Fisheries sectors which are still Non-Target Market, the majority of private banks intend to expand their business into the sectors that can be done gradually while considering the branch network, competence of human resources, and risk appetite, and its implementation can be carried out via Credit Test with the following strategy:

   a. Conducting tests for a certain period of 6 months

   b. Determining the minimum loan disbursement that must be successfully acquired over the Test period

   c. Setting a maximum limit for a test period of 5% of the total portfolio

   d. Tracking and monitoring the disbursement of the loan account during the test period, including the current account, number of accounts in arrears of 30 days, 60 days, 90 days both for the number of NOA (Number of Accounts) and nominal.

   e. Setting a benchmark for measuring the quality of the portfolio

   f. Considering the fact that if the quality is higher than the benchmark test, the test will be considered as a failure and the program will be terminated, while if the quality of the disbursement of the loan portfolio during the test period is at a lower level than the benchmark, then the test is considered to be successful and a policy change can be proposed.

Theoretical Implications

The findings in this study reinforce that the higher level of risk, the higher rate of return. The results of this study reinforce the opinions expressed by Keown AJ, Martin JD, Petty JW, and Scott DF (2005) that define "Risk is the likely variability associated with the expected revenue or income streams". Risk is the possibility of variability of returns generated. Risk and return have a direct and linear relationship. Keown (2005) also states that there is a principle underlying the learning of Financial Management namely "The Risk-Return Trade-Off: We will not take on additional risk unless we expect to be compensated with additional return". Expected rate of return reflects the investment risk level. If a form of investment has a higher risk, then of course this investment will generate higher returns anyway.

Managerial Implications

Small and Medium Enterprises (SMEs) are the bank's line of business where the growth of its loan portfolio is very dependent on the market potential and quality of the acquired industrial sector. Therefore, the determination of the strategy by the SMEs line of business is an important step in the achievement of the performance. In order to achieve the required performance targets, the companies certainly need the support of strategic planning and resources. The study provides positive implications for the growth of SMEs line of business and can be taken into consideration in increasing the loan portfolio and lowering non-performing loans. Managerial implications obtained in this study can be described as follows:

1. Banking has a policy in setting the industrial sector into the target market. The existence of the leading sectors helps the banking industry to determine the sector that has a huge market potential in certain provinces along with the level of risk. Banking business line of SMEs in particular can take the strategy of the two existing considerations i.e. the existing policy and leading sectors. Thus, the strategy is more appropriate, and risk of non-performing loans can be avoided.

2. Agriculture and Fisheries sectors are still non-target markets, especially for private banks; however, the results of research show that they become the leading sectors with the highest distribution across the provinces compared to other sectors.

CONCLUSIONS AND RECOMMENDATION

Conclusions

Debit balance loan growth and sound credit quality are a decisive indicator for the growth of the loan portfolio on an ongoing basis (sustainable), and this condition applies to any loan segment including SMEs line of business of a bank. SMEs loan portfolio growth slowdown and an increased risk of non-performing loans in 2014 require a new breakthrough in the form of determination of the leading economic sector and a comprehensive strategy in its development.

Leading sectors are not the same in every province, although there are certain sectors that are outstanding in several provinces, but there is also one dominant sector found only in certain provinces and not all of the leading sectors according to the Location Quotient

(LQ) have a good growth rate from the perspective of Klassen Typology, thus the slices of the analysis of the two (2) approaches must be searched.

The results of Location Quotient (LQ) indicate that there 12 economic leading sectors in the 33 provinces, where the sectors of fisheries, Wholesale and Retail, Agriculture, Hunting and Forestry are those with the highest distribution in quadrant 1 while the sectors of transport, Warehousing and communication, Financial Intermediaries and Fisheries are those with the highest distribution in Quadrant 4.

Klassen Typology analysis results indicate that the leading sectors growing rapidly (quadrant 1) consist of 12 economic sectors existing in 31 provinces, while the sectors of Agriculture, Hunting and Forestry, Fishing, and Construction are the sectors with the highest distribution.

Consolidated results based on the two tools of analysis show that there are 10 outstanding sectors, namely, Agriculture, Fisheries, processing industry, Community Services, Construction, Electricity, Gas, and Water, Eating and Drinking Accommodation Providers, Trade, Mining, and Transportation, with the criteria of rapid growing and leading sectors with a large market size with a high level of risk, and sectors with a large market size to the level of risk which can be managed properly. The 10 leading sectors are scattered in 27 provinces where the Agriculture and Construction sectors are sectors with a large market size at high risk with the highest prevalence rate while the sectors of Fisheries and Agriculture are the sectors which have a large market size and risks that can be managed well and with the highest level of distribution if compared to other sectors.

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