THE STRUCTURE OF CONSUMER FINANCE INDUSTRY IN EMERGING MARKET (EMPIRICAL EVIDENCE: INDONESIA 2000-2015)

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Abstract: This paper aims to study the structure of the Indonesia Finance Company Industry over the period 2001-2015. The finance company industry is growing rapidly from Rp. 37 trillion in 2001 to Rp. 425 trillion in 2015 with a compounded annual growth rate (CAGR) of 18%. At the same time, the number company in the industry has reduced from 245 in 2001 to 203 in 2015. We use the Concentration Ratio (CR) and Herfindahl-Hirschman Index (HHI) to measure the structure of the industry. Our sample consists of 97 companies in 2001 to 125 companies in 2015. The empirical results show that the Indonesian finance company industry is not highly concentrated. The HHI has reached 451 in 2015 from 313 in 2010. There has been a significant increase in the concentration ratio from 2000 to 2015, especially the concentration in CR4, CR8, and CR12. The CR4 has reached 34,12%, CR8 has reached 51,15%, CR12 61,72%, and CR20 by 76,57%. The CR4 means that the top 4 finance companies have controlled 34,12% of the total productive assets of the financing industry by 2015. The CR4 has almost reached the oligopoly category. However, there is a potential for higher concentration if we group the companies by the shareholders' ownership, due to the controlling issue of the shareholders.
Keywords: Anti-Trust, Monopoly, Market Structure, Concentration Ratio, Regulation
JEL: L1, L4, L8

INTRODUCTION

The financing industry appears along with the development of automotive in Indonesia in 1974s. The joint decree of three ministers, which are the Minister of Finance, the Minister of Industry, and the Minister of Trade, became the foundation for the presence of the financing industry. The first financing company was PT Pembangunan Armada Niaga Nasional (PANN) in 1975.

The permit of the finance company is extended by the government through Presidential Decree (Keppres) No. 61/1988, which is followed up by the Decree of the Minister of Finance No. 1251/KMK.013/1988. Business permits include leasing, factoring, consumer finance, venture capital, and credit cards.

Financing companies have ups and downs in line with the national economy. Types of goods that are financed by financing companies have increased significantly over time. Financing companies focus on financing in the transportation industry such as 4 wheelers and 2 wheels at an early stage. Financing has also grown in manufacturing equipment, construction, mining, agriculture, offices, medical equipment, and shipping.

Financing companies have funding sources for the past 40 years. Funding of financing companies faced major impacts with the issuance of SE BI 28/11/UUPB 1996. Bank Indonesia issued a regulation that prohibits finance companies from issuing promissory notes. The financing company had almost 100% funding dependency on the banking industry at the time.

Funding can only be obtained from two sources which are banking and equity from shareholders. Fund dependency determines the competitiveness of a financing company.

The government has allowed the financing company to issue bonds since 2006. These bonds must be rated by a rating agency that is recognized by the authorities. The minimum issuance amount is Rp. 1 billion. This limitation of value limits the retail investors who can participate in providing funds to financing companies.

The financing industry also depends on the manufacturing industry that sells its products through financing. The financing industry is an industry that is derived from demand (Hutabarat, 2012). Financing can only be done if a product or service is being transacted (underlying product or service).

The financing industry under the Presidential Regulation No. 9 of 2009 is the highest law in Indonesia. The financing industry has not yet had an Act or law until now. The financing industry contributed 3.59% to the gross domestic product (Nuryartono, 2012). The financing industry contributed 12.5% to the total lending of Indonesia in 2011.

Since 2012, the financing industry has been under the supervision of the Financial Services Authority (OJK). The Financial Services Authority has renewed the industry's financing industry through the POJK.28-31/POJK/2014. The business permit of the financing company has been expanded into working capital financing, investment financing, and multipurpose financing. This is an extension of previous consumer financing, leasing, credit card financing, and factoring. With this expansion, the financing industry becomes more attractive to investors.

This study focused on the measurement of concentration ratio and Herfindahl index of financing industries in Indonesia from 2000 to 2015. During this period, mergers and acquisitions that occurred in the finance industry reached more than 30 transactions. This research is interesting because it examines the concentration development of industry in Indonesia for 15 years back and its development potential in the future.

Furthermore, this study will proceed with the previous studies in the second part, followed by an explanation of the data and methodology in the third section, then followed by discussion and analysis in the fourth section. The fifth part will give a conclusion.

PREVIOUS RESEARCHES

The structure-conduct-performance approach was formulated by Edward S. Mason (1939) with his colleague, Joe S. Bain (1956). Structure-conduct-performance is a method for analyzing industrial organization. Industrial organizations are part of the economics that explain how a market or industry is formed by a particular organization and how it affects market performance. Mason and Bain assert that there is a direct and strong connection between market structure, market conduct, and market performance (Muslim et al., 2008).

Berger and Humprey (1994) study the cost and profit functions of the banking industry in the United States. The study found that concentrated markets will provide less favorable prices for customers, but have little effect on profits.

Another approach is the non-structural approach. Competitive conditions such as efficient prices can be achieved in market conditions that are unconcentrated or concentrated, hence, the relationship between market structure and performance is not linear. This point of view suggests focusing on competitive conduct rather than market structure (Bikker & Haaf, 2002).

Bikker and Haaf (2002) studied 23 banking industries in 23 countries. This study indicates a monopolistic competition. Competition shows low levels in the domestic market and higher in the international market. The study found that concentration would lead to unbalanced competition.

Al-Muharrami (2008) examined the banking industry in 6 Gulf countries from 1993 to 2002 by using the Herfindahl-Hirschman Index and K Bank Concentration Ratio. This study found that there is no concentration of banking in the Gulf countries. Four countries experienced a decreased concentration ratio in the banking industry and two countries had a concentration ratio in the banking industry that was stable.

From 73 studies on the structure-conduct-performance of banks in the United States from 1961 to 1991, can be concluded that the most common measurement used is the deposit concentration ratio from 3 largest companies. This measurement was used in 37 studies from 73 studies. The second most common measurement used is the Herfindahl index, followed by the number of existing companies in the industry (Al-Muharrami, 2008; Altunbaş et al., 2001).

Alfarisi (2009) found that the performance of the Indonesian pulp and paper industry is a function of market structure elements which are entry barriers, market structure, output growth, and efficiency. The results of this study support conventional thinking. This research was conducted on the pulp and paper industry from 1993 to 2002.

In contrast, Casu and Girardone (2006) found that banking concentration levels were not directly related to the level of competition. The study also found no evidence that a highly efficient banking system would be more competitive. This study was conducted on the European Union from 1997-2003.

Fu and Heffernan (2009) examined the relationship between market structure and performance in the banking system in China in 1985-2002. The current banking reformation has low implications for banking efficiency. The decline in interest rate should be followed by a decrease in industry concentration to achieve efficiency.

Bhatti and Hussain (2010) conducted research on the banking industry in Pakistan. They found that there was a negative correlation between profitability and competition. The big banks still enjoy a monopoly in Pakistan. The trend shows that the concentration decreases from year to year. The research also shows that concentrations do not support an efficient market structure.

Mulyaningsih and Daly (2012) examined the Indonesian banking industry from 2001-2009. Their research results support the conventional thinking, that a concentrated market leads to unbalanced competition. The most competitive market is the middle-class banking market because of low concentration. On the contrary, large banks with more concentration resulted in decreased levels of competition. The central bank's consolidation policy reduces the level of concentration. Consolidation policy occurs in medium and small banks. The increasing market share and capacity distribution of merged banks will increase competition in the Indonesian banking industry.

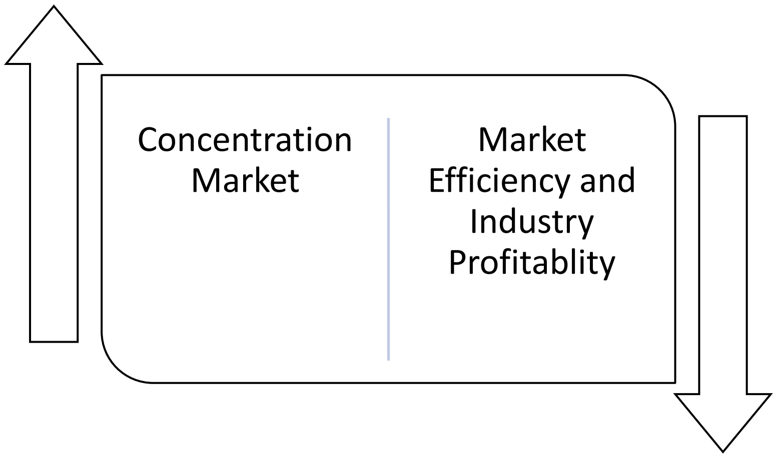
Johan (2017) conducted research on the financing industry from 2000-2010. This study found that there was an increase in concentration from 2000 to 2010. This increase occurred at the concentration of 4, 8, and 12 big companies.

RESEARCH FRAMEWORK, METHODOLOGY, VARIABLE, AND DATA

Research Framework

Figure 1

Research Framework



Source: Researcher (2017)

Methodology

Concentration Ratio (CR)

Concentration Ratio is an accumulation of market share obtained by the number of N companies that have the largest market share in the industry. Formula as follows:

$$\boldsymbol{CR}\,\mathrm{n} = \sum_{k=1}^{n} MSi$$

Note: MS: Market Share
i: company

Market Character

Market characteristics can be identified as either the category of monopoly, oligopoly, or perfect competition. A market is categorized as a monopoly if CR4 (concentration ratio for 4 largest players) is more than 70%. While a market is categorized as oligopoly if CR4 is at 40% to 70% (Muslim et al., 2008).

Herfindahl-Hirschman Index

Herfindahl-Hirschman Index or HHI is an index that measures the size of the firms compared to the industry. This measure is an indicator of competition among the players in the industry. This index was discovered by Orris C. Herfindahl and Albert O. Hirschman. It is widely used in competition and anti-monopoly law. This index sums the square of companies' total market share in the same industry.

$$\boldsymbol{HHI} = \sum_{k=1}^{n} (MSi)^{2}$$

Note: MS: Market Share

Hypothesis

This research has the following hypothesis:

Ho: Industrial financing companies have not concentrated yet.

H_1: Industrial financing companies have concentrated.

Table 1

Hypothesis

No.	Index	Measurement	Impact to Consumer
1.	Concentration Ratio	Higher	Negative
2.	HH Index	Higher	Negative

Source: Researcher (2017)

Variables

In this research, researchers used market share variables as a research variable. The formulation of market share is as follows:

$$MS_i = \frac{Amount\ Financing\ Receivables\ of\ Financing\ Companies\ i}{Total\ Financing\ Receivables\ of\ Industrial\ Financing\ Companies}$$

Data

This research uses secondary data collected from various institutions and official literature, i.e. financial data of each company's publications in various mass media, annual reports for companies that have been open, research reports from various securities, research reports from magazines and databases In Bloomberg in particular regarding merger and acquisition transactions.

The object of research is all finance companies in Indonesia from 2001 to 2015 that publish financial statements. The number of companies listed in Bapepam LK is 191 companies. Sampling criteria:

1. Financing companies listed in the Capital Market and Financial Institution Supervisory Agency (Bapepam LK) and the Financial Services Authority from 2010 to 2015.
2. The financing companies that actively publish their financial statements for the period of 2001-2015.
3. Financing companies that announce corporate acquisition action from 2001 to 2015 in various mass media or annual reports.

The sampling unit is the financing company. The sampling frame is a list of names of companies listed in Bapepam LK and published financial reports during the period 2001-2015. The sampling size is the number of all financing companies that are listed in Bapepam LK and meet the specific criteria. This research used purposive sampling with judgment sampling.

RESULT AND DISCUSSION

Concentration Ratio 4 (CR4)

The measurement of the Concentration Ratio by using the total assets owned by the financing company is presented in Table 2. Table 2 shows the increase of concentration ratio 4 (CR4) by 11.17% from 22.95% in 2000 to 34.12% in 2015. CR4 Shows a year-over-year increase since 2000. It represents four major players having 34.12% of the total assets in the financing industry. The market share of 34.12% is close to 40%, of which 40% market share can be categorized as close to the oligopoly market (Muslim et al., 2008).

Table 2
Concentration Ratio (CR) and HH Index (2000-2015)

Year	CR4	CR8	CR12	CR20	HHI	No. of Company
2000	22.95%	35.86%	48.69%	68.46%	313	245
2001	29.24%	41.80%	51.87%	71.43%	359	245
2002	25.75%	43.59%	54.33%	70.22%	354	244
2003	29.43%	45.29%	57.15%	72.79%	385	239
2004	31.24%	48.97%	58.32%	72.40%	419	237
2005	27.71%	47.24%	56.59%	71.48%	368	236
2006	30.23%	49.27%	60.46%	73.58%	443	214
2007	27.90%	44.75%	55.31%	69.77%	351	217
2008	26.24%	42.30%	52.68%	69.31%	325	212
2009	28.77%	46.53%	55.37%	69.41%	359	203
2010	29.45%	50.05%	57.94%	71.30%	383	191
2011	31.78%	52.74%	62.19%	76.47%	430	195
2012	35.03%	51.96%	61.52%	76.49%	453	200
2013	35.11%	52.94%	62.72%	77.82%	472	202
2014	34.47%	51.22%	61.13%	75.70%	451	201
2015	34.12%	51.15%	61.72%	76.57%	445	203

Source: Researcher (2017)

Concentration Ratio 8 (CR8)

Concentration Ratio 8 (CR8) increased significantly by 15.29% from 35.86% in 2000 to 51.15% in 2015. Increased by 41% compared to year 2000. The biggest increase occurred in the control of 8 major players from 2010 Until 2015 compared to CR4, CR12, and CR20. It illustrates that the 8 biggest players in the finance industry have controlled 51.15% of total industry assets. These eight major players allow for compromise in pricing and fees to be charged to the consumers.

Concentration Ratio (CR12)

Concentration Ratio 12 (CR12) increased by 13.03% from 48.69% in 2000 to 61.72% in 2015. Twelve financing companies held 61.72% of total financing industry assets. These twelve companies will be able to coordinate in market share.

Concentration Ratio (CR20)

CR20 did not show any significant increase, only 8.11% from 68.46% in 2010 and reached 76.57% in 2015. It shows that the financing industry is more concentrated in Indonesia among the 20 largest companies. It will require the attention of related parties, especially regulators in managing business competition, particularly if there are merger and acquisition transactions that will occur.

Table 3
Group Related Finance Company

Group of Company	*Finance Company Affiliate*
Astra Group	Astra Sedaya Finance, Federal International Finance, Komats Astra Finance, Surya Artha Nusantara Finance, Toyota Astra Finance, Astra Multi Finance, Astra Auto Finance, Swadharma Estika Sedaya Finance, Staco Estika Sedaya Finance, Pratama Sedaya Finance
Sumitomo Group	Oto Multiartha, Summit Oto, Sumitomo Mitsui Financial Lease
CIMB Niaga Group	CIMB Niaga Auto Finance / Saseka Gelora, KITA Finance
CT Corp	Mega Finance, Mega Auto Finance, Mega Central Finance
Mitsui Group	Bussan Auto Finance, Mitsui Finance
Indomobil Group	Indomobil Finance, Shinhan Finance, Bringin Indotama Finance
Mitsubishi Group	Tigaberlian Auto Finance, Dipo Finance, Bringin Srikandi Finance
BTMUFJ Group	U Finance, BTMU BRI Finance, Mitsubishi Lease
Panin Group	Clipan Finance, Verena Finance, IBJ Verena Finance

Source: Researcher (2017)

Herfindahl-Hirschman Index (HHI)

Table 2 shows the HH Index increased from 313 in 2010 to 445 in 2015. In 2013, it reached the highest HH Index of 472. This increase in concentration was in line with a decline in the number of companies by 42 companies from 245 companies to 203 financing companies by 2015. HH Index of 472 indicates that the Indonesian financing company industry has a low concentration level. With a low category of HHI, then, it is possible to initiate transactions with mergers and acquisitions and also financing industries.

Along with the unregulated single presence policy as in banking, the potential for higher concentration may occur from the calculation in Table 2. Single Presence Policy (SPP) is a sole proprietorship policy to the bank, where the owner is not allowed to own more than 1 bank.

Industrial financing companies have this SPP policy. The relevant authorities need to consider the SPP policy in line with the increase in the ownership of the financing companies as shown in Table 3.

CONCLUSION

This study examines the structure of the Indonesian financing industry from 2000-2015. The number of companies in the industry has decreased from 245 to 203 by 2015. During this period, 66 licenses of finance companies have been revoked by the Minister of Finance. Merger and acquisition transactions also occurred during this period.

This research uses the concentration ratio and the Herfindahl-Hirschman Index to measure industrial structure. The sample of this study ranged from 97 companies in 2001 to 125 companies by 2015.

This study finds Indonesia’s financing industry still has a low concentration level, but has the potential for oligopoly, especially in the 4 largest players in the financing industry. Significant increases in concentration ratios have occurred over the past 15 years, especially on CR4, CR8, and CR12. However, concentration will increase, if it combines financing companies that have the same shareholders as the banking industry. This merger of ownership is known as the single presence policy (SPP). The concentration of the financing industry also needs to consider the captive relationship between the subsidiary companies with the parent companies of banking and automotive.

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