

Analysis of Market Domination Concentration Collectors of Clove in Bulukumba Regency

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Abstract: This study aimed to analyze the concentration of market domination of collectors in Bulukumba Regency. This research used quantitative approach and implemented in Gantarang Sub-district, Bulukumba Regency, location determination was performed purposively, from February until March 2018. Respondents in this research were 37 collectors who were selected by using census methods. Primary datas in this study were obtained from interviews of collectors, the while secondary data were obtained from various government agencies in Bulukumba Regency. The data analysis used was CR4 analysis. The results showed The concentration of clove commodity market dominance in Bulukumba Regency is classified as oligopsony with loose concentration level with CR4 value of 0.48.

Keywords: Concentration, Market Domination, Collectors, Clove

1. Introduction

Indonesia is the largest clove producing country in the world, the economic value of cloves lies in flower, flower stalk and clove leaf as a raw material of tobacco mixture in the manufacture of clove cigarettes, spices, essential oils, pharmaceutical industry raw materials, perfumes and various foods (Rukmana, 2016)

According to Rukmana (2016) Clove is one of the leading commodities that have an important role in the economy of Indonesia. Since 1998 until now the role of cloves as a supplier of the cigarette industry and government revenue from cigarette excise duty tend to increase. Similarly, the contribution of cloves to the provision of jobs that can absorb a power in the clove and tobacco cultivation sector, clove cigarette industry, and clove cigarette trade sector that reaches about 3 million people every year.

Cloves used as raw materials of clove cigarettes contributed the most to the revenue from excise, with an average of 98 percent of the total excise revenue in 2005 (Siregar and Suhendi, 2006) and according to data from the Association of Indonesian Cigarette Manufacturers (GAPPRI) 2007 the use of clove cigarette excise band in 2006 reached Rp 35,073 trillion. Apart from the cigarette excise, Indonesia also exports cloves that provide state revenue through foreign exchange even though at certain times Indonesia also imports.

Potential the development of clove commodity in Bulukumba Regency is big enough, but not all areas are developed. Besides, the system of trading is also inefficient. This can be done from the prevailing price stability, the profit from the farmers is low, mechanism of price formation on all companies in the commodity.

Farmers, collectors, wholesalers, to cigarette producers who become consumers will automatically give impact affected by price volatility. How big the effect of price volatility on

the profitability of any existing marketing agency depends on the strength of each marketing agency involved. Price is one of the main indicators that reflect the level of market efficiency. (Meyer & Taubedel, in Carolina 2016). Here is the clove commodity price information information at the level of producers (farmers) in the Year 2016.

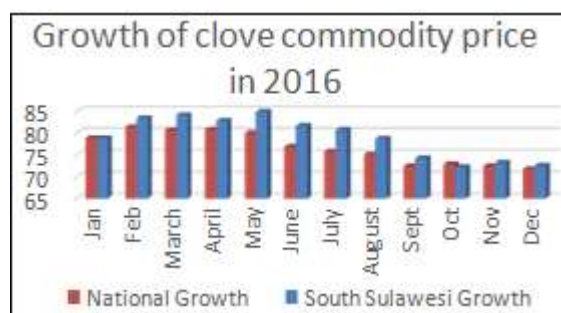


Figure 1: Growth of Clove Commodity Price at Producer Level 2016 (Ministry of Agriculture, 2017)

Based on Figure 1, it founds that the growth of clove prices at both the national and provincial levels of South Sulawesi fluctuated per month with the highest price level occurring in May for the price at the provincial level and in February for the price at the National level. Figure 1 also shows that prices at the South Sulawesi level are higher than those at the national level except in January and October. Theoretically, the price of cloves is determined by the market structure, the established market structure will determine the pricing system when viewed from the many institutions involved and the institution's position on the market.

In the practice of competition the market domination of collectors have the power to determine the price so that it tends to conduct monopolistic practices that lead to unhealthy competition. In addition, the issue of how market role plays a major role in determining commodity prices, the condition of market structures faced by oligopolist or monopolist producers has exacerbated the position of clove farmers and is often the cause of the lack of smallholder

businesses to increase their selling prices, thus the problems studied in This research is how the concentration of market control of clove collecting traders in Bulukumba Regency. Based on these descriptions, a study of market control is important to answer the question. Therefore, this study aims to analyze the concentration of market domination of collectors in Bulukumba Regency.

2. Review of Literature

Keep in mind the concentration of industries that are always in contact with the discussion of the market structure. The market structure according to Law No. 5 of 1999 is a market condition that provides guidance on aspects related to performance and market performance. The aspects that determine the market structure are the number of sellers and buyers, barriers in and out of markets, diversity, distribution systems and market dominance. In economic theory there are four forms of market structure that are perfect competition markets, competitive markets, and monopolistic competition. The difference occurs at the level of market forces in each market structure

2.1 Market Structure

Structure is the arrangement of parts in a building (Hasibuan, 1993). Gwin (2000) defines "structure" as a market structure in an industry that indicates the degree of competition in the industry. The market structure in the industry tends to change slowly, even can be considered permanent or relatively permanent in the short term (Lipzynski., 2005)

The structure of the market can be explained as a competitive environment which the company is located to perform its operations within a particular market (Salvatore, 2008). Koch (1974) explains that the market structure is the strategic environmental elements of a company that have an influence and is influenced by the behavior and performance of the company in the market, where it operates. Theoretically the market structure can be distinguished into two extreme conditions, namely perfect competition market and imperfect competition market. But this extreme condition is rare, in general the market is segmented in both currents (Willyo Marsden, 2014).

The main types of market structure can be spelled out as follows: Perfect competition market is a market in which there are numerous buyers and sellers, because of such a large number that each seller and buyer can not influence the price. The price level used in this market is the price level that is formed by market mechanism. Monopoly market is a market condition where there is only one seller who dominates the market. The producer in the monopoly market has no competitor so as to increase and decrease the price by varying the amount of goods he sells. The oligopoly is a form of market in which there are only a few sellers, not just one seller alone in the market. Each seller has an influence on the price of the goods it sells, but not as much as the monopolist's influence

Next is a theory that has a monopolistic competition structure if it has the following conditions (Baye, 2006):

- 1) There are many sellers and buyers.
 - 2) Every company in the industry produces a differentiated product.
 - 3) There is freedom to enter the industry.
- In a monopolistic competition market the resulting product almost has a similarity or when it different is not very significant, and the resulting product can not mutually substitute. To sell more products then the company should lower the price

2.2 Concentration of market domination

Concentration is an indicator that is often used to know the market structure. Many economists use concentration index and concentration ratios as analytical tools. Bain concentrations are defined as the ownership or control of a large number of economic resources by a small number of economic units. By knowing the level of concentration in an industry then can be determined the market structure. Measurement of concentration level can also be used to know the concentration of ownership of resources or assets among individual in a market or economy as a whole, to know the concentration of control or management control over the resources or income in the economy and to know the concentration of the control of company activity in an industry

In market concentration The number and size of a company is one of the important factors by which the number and size of the market will determine the level of concentration within an industry.

1) Number of sellers

The most important factor in determining power is the number of sellers. Where, in a perfectly competitive market there are many sellers. Many in a relative sense, where with many sellers result in them not having market power. The number of sellers will affect behavior because the amount will affect the expectations of each company against the behavior of its competitors.

2) Market Share

Market share is the ratio between a company's sales revenue and total industry sales. Market share represents a relatively better market structure compared to only seeing the number of companies competing within the industry. This element is an indicator in determining the level of market power (market power) of a company. The higher the market share, the higher the market power owned (Jaya, 2001).

CR is defined as a percentage of overall industrial output generated by the largest companies. Usually the number of N corporations calculated the proportion of its market share is 4, so it is known as CR4. If P_i represents market share, and if the proportion of output, turnover, number of employees or asset value of total industry represented by firm $i = 1, 2, \dots$, with $P_1 > P_2 > P_3 > \dots$, then Concentration Ratio, CRN, for N the company is calculated as:

$$CRN = P_1 + P_2 + P_3 + \dots + P_N$$

The concentration ratio ranges from zero to one and is usually expressed as a percentage. Concentration values

close to zero indicate that a number of n firms have relatively small market shares. Conversely, a concentration ratio close to 1 indicates a relatively high concentration level. CRN is highly dependent on the total number of companies in the industry. CRN will decrease if the number of companies in the industry increases. CRN can give an idea of the role of n companies in the industry, but CRN is not enough to provide information about inter-firm linkages within the industry. As noted above, CR4 represents four companies. According to Arianto (2008) some market categories can be defined using CR4 to describe the level of competition.

3. Research Methods

This research used quantitative approach and implemented in Gantarang Sub-district, Bulukumba Regency, location determination was performed purposively, from February until March 2018. Respondents in this research were 37 collectors who were selected by using census methods. Primary data in this study were obtained from interviews of traders, while secondary data were obtained from various government agencies in Bulukumba Regency. The data analysis used were CR4 analysis.

Concentration Ratio for Biggest Four atau CR4 is an analytical tool to determine the degree of concentration of the four largest market shares of a market area (Anindita dan Baladina, 2017).

$$CR4 = \frac{\text{The Purchase of Biggest Four Collectors}}{\text{All Purchasing Collectors}} \times 100\%$$

Measurement criteria:

1. When $CR4 < 0.4$, then the market structure is perfectly competitive (competitive) or monopolistic competition.
2. When $0.4 \leq CR4 \leq 0.6$, the market structure is oligopsoni loose.
3. When $0.6 \leq CR4 \leq 0.8$, the market structure is strictly oligopsonian
4. Saat $CR4 > 0.8$, then the market structure tends to be monopsony.

4. Results

4.1. Characteristics of Respondents

Characteristics of respondents are used to determine the diversity of respondents by age, gender, education, address, number of dependents and experience. Those are expected to provide a fairly clear picture of the condition of the respondent and its relation to the problem and purpose of the research

Table 1: Characteristics of Respondents of Clove Collectors in Bulukumba Regency, Year 2018

No	Characteristics	The Number of Collectors Respondents (People)	Percentage (%)
1	Age group		
	a. 32-39	13	35,14
	b. 40-47	12	32,43
	c. 48-55	12	32,43

2	Sex		
	a. Male	34	91,89
	a. Female	3	8,11
3	Level Of Education		
	a. No School	2	5,41
	b. Elementary / Equivalent	21	56,76
	c. Junior High School/Equivalent	9	24,32
	d. Senior High School/Equivalent	4	10,81
	e. Bachelor degree	1	2,70
4.	Address		
	a. Barombong	1	2,70
	b. Benteng Gantarang	4	10,81
	c. Benteng Malewang	3	8,11
	d. Bontonyeleng	3	8,11
	e. Gattareng	4	10,81
	f. Paenre Lompoe	2	5,41
	g. Mariorennu	2	5,41
	h. Jalanjang	1	2,70
	i. Dampang	6	16,21
	j. Padang	2	5,41
	k. Bontomacinna	3	8,11
	l. Bonto sungu	1	2,70
	m. Bukit Harapan	1	2,70
	n. Bonto Raja	4	10,81
5.	Total Family Count (People)		
	a. 1-2	12	32,43
	b. 3-4	19	51,35
	c. 5-6	6	16,22
6	Experience (Year)		
	a. 10-18	18	48,65
	b. 19-27	14	37,84
	c. 28-35	5	13,51

Based on Table 1, shows that the age of the largest respondents dominated by respondents aged 32-39 years as many as 13 people with a percentage of 35.14%. As for the age of 40-47 and 48-55 as many as 12 people with a percentage of 32.43%

The respondent's sex was dominated by male with 34 people or 91,89%. As for the gender of women as much as 3 people or by 8.11%.

One's level of education will affect the creativity and ability of a person in accepting new innovations, and affect the behavior of farmers in managing their farming activities. The highest level of education achieved by clove farmers is 21 people as much as 21 people as much as 56.76%. The average level of education is the smallest at the level of education S1 which amounted to 1 person with a percentage of 2.70%

The biggest respondent address is located in Dampang area for 6 people with percentage rate 16,21%, followed by Benteng Gantarang, Gattareng, and Bonto Raja area 4 people with percentage level 10,81%. While for the smallest respondent area is found in Barombong, Jalanjang, Bonto Sungu, and Bukit Harapan area as much as 1 person with percentage level 2,70%.

The number of family is the total number of people who are in a house that becomes dependent on the head of the household. The largest number of dependents of the family is in the number of dependents 3 - 4 dependence with the number of 19 people or 51.34%. While the smallest number of dependents is on the average number of dependents of 5 -

6 dependents with the number of 6 people or equal to 16.22%.

Experience is one indicator that indirectly affects the success of the clove business by the whole trader. Experienced traders will be better able to improve the bargaining position in buying cloves to farmers. Based on the characteristics of respondents, the largest experience of respondents on average is the largest in 10-18 years with the number of respondents by 18 people or by 48.65%.

4.2. Concentration of market domination

The concentration of market dominance in this study compared the purchase of merchant traders with the largest market share with the purchase of all traders. The 4 merchants' market share can be seen in Table 4 below

Table 2: Market Share of four largest collectors

No.	Adresss	Volume (Kg)	Market share (%)
1	Gattareng	5.800	9.09
2	Dampang	6.600	10.34
3	Padang	10.000	15.67
4	Bontoraja	8.500	13.32
		30.900	86.42

Based on Table 4 above shows the market share of the four largest collectors with a purchase volume of 30,900 Kg. That is 48.42%.

5. Discussion

The market concentration is known by comparing the market share of each collecting merchant, the market share is the size of the market that the trader controls by comparing the purchaser's own purchase with the overall purchase. The purchase of collecting merchants is the volume of cloves purchased from farmers in Gantarang Sub-district. While the purchase as a whole is the total purchase of all traders in the district Gantarang.

The market concentration is known by calculating the degree of concentration of the four largest market shares of a market area. The concentration of market domination of collecting traders in Gantarang District can be seen in the following equation:

$$CR4 = \frac{Px1(5.800) + Px2(6600) + Px3(10.000) + Px4(8.500)}{63.830}$$

$$CR4 = \frac{30.900}{63.830}$$

$$CR4 = 0,48$$

Based on the analysis shows that the concentration value of the 4 largest collectors is 0.48%. This shows that market structure is classified into loose oligopsoni market structure. In accordance with the CR4 analysis measurement criteria, if CR4 0.4 0.6, then the market structure is loose oligopsoni.

The strength of each collecting merchant in competing to dominate the market is not too tight, thus although there are 4 traders who control 48% of market share but the other competitor's opportunity to enter the market and seize the

market share controlled by 4 traders is quite open in Gantarang Sub-district.

The result of calculation showing that market structure is oligopsoni market structure, in law number 5 of 1995 oligopsoni is one form of agreement which is prohibited in Article 13 paragraph 1 which reads "business actor is prohibited to make agreement with other business actors which aims to collectively equally controlling the purchase or receipt of supplies in order to control the price of goods and or services in the relevant market, which may result in monopolistic practices and / or unfair competition".

6. Conclusions

The concentration of competition in Clove commodity market dominance in Bulukumba Regency is included in oligopsoni competition with loose concentration level. This is in accordance with CR4 calculation results of 0.48

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Author Profile



Agustrai was born in Mangngai, Maros Regency, South Sulawesi, Indonesia on June 8, 1994. He got his bachelor degree (S.P) in 2015 at faculty of Agriculture of Muslim University of Indonesia. From 2016 up to present, he continued his study to get his master degree on Agribusiness Study Program at post graduate Hasanuddin University, Makassar, Indonesia. This paper is part of his thesis which is supervised by Prof. Dr. Ir. Ahmad Ramadhan Siregar, MS. And Prof. Dr. Syamsu Alam, SE., M.Si