

# Barriers to the Implementation of One-Price Policy on Cement Commodities and Possible Policy Options

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**Abstract**— This study aims to address barriers that will arise if a single price cement policy is implemented and propose policy to reduce cement prices disparity between regions. Questionnaires and Focus group Discussion (FGD) are the instruments to collect data. These data were analysed using Regulatory Impact Assessment (RIA). The study found that the cement price disparity only occurs in some remote and border areas where logistics facilities are left far behind. Also, it was found that one price cement policy would be difficult to be implemented. The reasons were due to six barriers: (i) logistical costs from factories to consumers; (ii) differences in the policies for regulating freight transport that vary between regions; (iii) production centers in Java while consumption spread throughout Indonesia; (iv) ownership status of private cement factories; (v) limited of frequency transportation and variation of transportation modes; (vi) consumers' perceptions of cement brands vary in each region. However, from the perspective of CBA of RIA approach, there are only two policies that need to be considered seriously: regional targeted subsidy and ceiling regional retail price policies. This study recommends that regional targeted subsidy can be implemented to target region example Papua as the best option policy.

**Keywords**— *cement, price disparity, one-price policy, cost and benefit analysis*

## I. INTRODUCTION

Cement is an important commodity for infrastructure development in the modern society. The availability and the affordability of cement are important and be required in accelerating infrastructure development such as ports, highways, bridges, dams, houses, schools, office buildings and so on throughout the nation. Nowadays, the cement industry in Indonesia continues to grow along with the growing demand. With production of 58,339 million tons, cement production continues to increase at a rate of 3.15% per year, while consumption increases at a rate of 2.56% per year (ICA, 2017).

The cement market share on the Java island reached 54.3%. The cement sales market share has expanded to areas outside Java such as Sulawesi and Maluku & Papua (ICA, 2016). Consumption areas spread outside Java certainly cause differences in logistics costs that vary between regions and have an impact on selling prices at the consumer level. According to Marsden (2014) the structure of determining the price of cement in each company is determined by people's purchasing power, the level of demand for cement,

the level of competition in the market, the increase in production costs and the rupiah exchange rate.

As one of the strategic and important commodity, Cement faces a main problem in the market, namely the the reality there are a high prices differences (price disparity) between regions, especially in some remote areas. For example, the average price of cement in Java during 2017 was Rp 56,929/bag, in Sumatra Rp 58,677 /bag, and in Kalimantan Rp 57,294 /bag. While the price of cement in Jayapura reached Rp 84,541 /bag, even in Wamena it reached around Rp 510,000 /bag (Directorate General of Domestic Trade, 2017). The price of the goods is more expensive because it involves various modes such as land, sea, and air modes (Juniati, 2017). The large disparity in the price of cement between these regions has caused people who have to buy at a much higher price to feel treated unfairly.

Referring to the determination of one price on fuel, the government plans to make a price determination on the cement commodity. However, the determination of one price on cement will be a question for those who will support subsidies, considering that cement companies do not only belong to state-owned entities (SOE/BUMN) but also private companies. Based on ICA (2016) data, there are 13 cement industry companies in Indonesia owned by 4 SOEs and 9 private companies. The five companies in cement industry have controlled 83% of the market share in the domestic market, namely PT Indocement Tunggul Prakarsa, PT. Semen Gresik, PT. Holcim Indonesia, PT. Semen Padang and PT. Semen Tonasa. The market share of 83% of 5 companies can be said that the cement industry is an oligopoly market structure. Although the cement market structure is oligopolistic, the behavior in the cement industry has never been proven to carry out cartels or anti-competitive actions (Marsden, 2014).

Cement prices that are too high in some regions, especially in eastern Indonesia, are issues that will have a potential impact on the infrastructure development in Indonesia. In realizing one price or the same price for all regions, the government will face various problems and obstacles. This is because production concentrated on Java, while consumption spread throughout the nation. When the government sets a price, determining the price amount will certainly require in-depth analysis due to differences in production costs and distribution costs. In addition to the one-price policy, this study also prepares several policy alternatives in reducing

price disparity with supporting data obtained from in-depth interviews, focused group discussions and questionnaires.

Furthermore, when the policy formulation can be established, the mechanism for implementing it also needs to be formulated so that the policy can run effectively. Policies in addressing the high price disparity will involve many stakeholders, so the application of this policy also needs to be supported by mechanisms and supported by various policies or regulations.

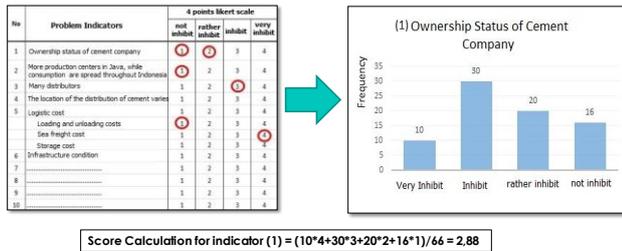


Fig. 1 Determining the level of importance of problems that hinder the implementation of a one-price policy

Therefore, a comprehensive study is needed before the policy is implemented. This paper aims to (a) analyze the obstacles in implementing a one-price policy and (2) formulate policy options in reducing price disparity between regions.

## II. METHOD

### A. Analytical Method

This study has two purposes. First purpose, to identified the problems in implementing a one-price policy and second purpose, to determine policy options in an effort to reduce price disparity. For the first purpose, a survey and FGD was carried out to determine the problems that will hinder the implementation of a one-price policy. Questionnaire used to identification problems by respondent. The evaluate to the result assessment based on 4 points likert scale<sup>1</sup>. The result can be showed into frequency distribution and histogram graph. Furthermore, the value of each indicator is calculated by the score and ranked according to the highest score. The main problem that impedes the implementation of the one-price policy is carried out through focus group discussions with expert justments. The details are described as in Figure 1.

The second purpose, cost and benefit analysis (CBA) in the regulatory impact assessment (RIA) framework was carried out to determine policy options in an effort to reduce price disparities between regions.

<sup>1</sup> 1: Not inhibit; 2: rather inhibit; 3:inhibit; 4: very inhibit



Source: Refers to the RIA method that has been carried out by ADB, 2018

Fig. 2 Regulatory Impact Assesment

The policy options developed aim to get a policy that will overcome the problem of price disparity with maximum benefits and minimum costs. Alternative options to be analyzed using the CBA method are the highest regional retail prices, regional targeted subsidies and distribution clusters. CBA instruments used to select options are (1) government subsidies, (2) problems and obstacles in implementation, (3) effectiveness of achievement in reducing price disparity, (4) possible implementation risks, (5) supervision, (6) compatibility between the scope of the problem and the scope of the policy and stakeholder interests.

### B. Data Source

The data used are primary data and secondary data. Primary data was obtained by conducting field surveys and focused group discussions (FGD). The survey was conducted in DKI Jakarta, Papua (Wamena), East Java, North Kalimantan, North Sulawesi, and Lampung. While secondary data used include cement prices, production, consumption, market share and the number of cement companies / industries in Indonesia. Primary data collection is carried out through limited surveys and discussions. The survey was conducted to several respondents through a questionnaire with open questions. Respondents of this study were cement producers (factories/industries), distributors, agents, building material stores, consumers and government agencies. The data collection method in this study is stratified random sampling except for factories and government agencies. The number of respondents is 15 respondents for each region, consists of 1 factory (industry), 2 distributors, 2 agents, 3 building material stores, 6 consumers and 1 government agency.

## III. RESULTS AND DISCUSSION

### A. Problems that hinder the implementation of a one-price policy

Based on the results of the scoring, the rank level of the problem is considered to be inhibiting in applying one price based on the priority scale. The implementation of a one-price policy that is implemented equally in all regions of Indonesia is very difficult. Although the government has succeeded in implementing a one-price policy for fuel, in fact cement commodities cannot be equated with fuel both in terms of the type of commodity, the ownership of the business, the distribution costs and the distribution channels. Some of the problem points that hinder the implementation of the policy of one commodity price of cement have been

identified and rated by the scoring method using a 4-point Likert scale, where the value 1 indicates that the problem does not impede the implementation of one cement price policy and value 4 indicates that the problem is very hampering the implementation of the one price commodity cement policy.

Based on the results of a focused group discussion with respondents there were 10 problems in the implementation of one price policy on cement commodities, namely infrastructure / logistics costs from factories to consumers varied, policies on the arrangement of freight transportation in each region were different, ownership status was 75% private, production centers 55% there are in Java, the frequency of transport modes in each region is different, consumer perceptions of brands vary, prices in each company/factory are different, implementation of transportation policies is not optimal, selling prices are determined by each producer, and the number of distributors in each region. The ten inhibiting factors for the price implementation are as follows:

- 1) Logistics infrastructure from factories to distributors varies/logistics costs between provinces vary. This will result in higher logistics costs in areas where the infrastructure is not good.
- 2) Differences in the policy of schedule for goods transportation in each region. Policies on the schedule of goods transportation can vary for each region. This has an impact on distribution costs and logistics costs that vary by region so that it will hinder the implementation of the one-price policy.
- 3) 75% private ownership status. The cement companies/factories in Indonesia are divided into two, namely State and Private Enterprises.
- 4) 55% production centers are located in Java. With the majority of cement plant locations located in the western part of Indonesia, which is on the island of Java, the cost of cement distribution to eastern Indonesia is greater, so the selling price to end consumers in the region will be higher.
- 5) The frequency of transportation modes can vary between regions. The more frequent the frequency of transportation will reduce distribution costs because the amount transported can be more and reduce the delivery lead-time. Regions where the frequency of transportation modes are less will tend to bear higher costs, thereby encouraging price differences between regions (Permana, 2014)
- 6) Consumer perceptions of brands vary. Cement users or consumers in different regions tend to have different perceptions of cement brands. For example, most people on the island of Sumatra will tend to perceive the Semen Padang brand as a higher quality cement compared to Tiga Roda Cement. Consumer perceptions of the quality of a cement brand will be an obstacle in implementing a one-price policy, because of the product strategy through brands is inherent to consumers (Marsden, 2014 and Rismayani, 2017).
- 7) Each company/factory sets a different price. Each company will set cement prices based on the production process with different levels of efficiency.
- 8) Implementation of transportation policies is not optimal. Transportation policies that have not been optimal will increase the distribution and logistics costs of cement commodities.
- 9) Determination of selling prices is determined by each producer. In selling their products, each producer offers different prices by paying attention to the production costs and consumer preferences for the company's brand in question or based on the pricing strategy so that cement can be accepted by the market (market penetration)
- 10) Number of distributors in each region. The number of distributors in one region is sometimes different from other regions. The fewer the number of distributors in an area, the easier it will be for producers to set relatively high prices (Sucofindo, 2010).

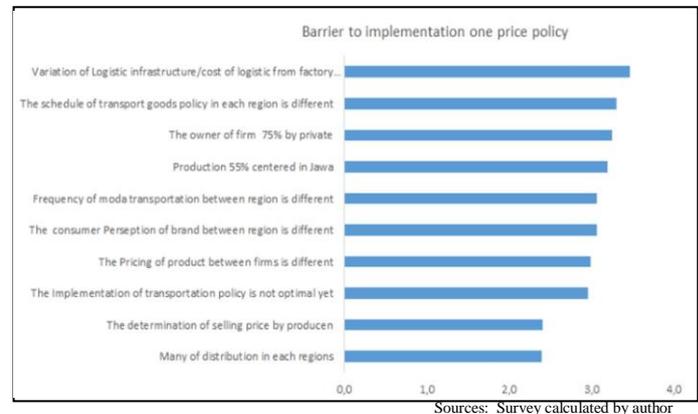


Fig. 3 Barrier to Implementation one price policy

Figure 3 shows the results of scoring from respondents about the barriers to implementing a one-price policy on cement. There are six problems that significantly hamper the implementation of a one-price policy because the value is more than 3. The six factors include: logistics infrastructure, policies on schedule for regulating goods transportation, ownership status of cement factories, cement production centers, frequency of transportation modes and consumer perceptions of brands.

**B. Policy Option Selection in Reducing Price Disparity**

The selection of policy options using cost and benefit analysis aims to see the advantages and disadvantages of each policy option that has been determined through the FGD with experts who are competent in their fields. Based on the CBA instruments that have been determined, the results of CBA analysis of each policy option are:

The one price policy has the advantage that the government does not need to prepare subsidized funds & effectively reduce the same price disparity for all regions, but there are also weaknesses namely (i) difficult to implement because of 10 problems there are 6 problems in difficult/very difficult categories; (ii) the potential for very large risks because it will greatly affect the performance of cement producers; and (iii) difficult supervision. Markets that have an oligopoly structure will be difficult to set one price

(Rismayani, 2017) although in cement commodity a cartel issue has not been proven (Marsden, 2014).

Regional HET policies, similar to option policies (1) but price levels are limited by region to accommodate the varying logistical cost differences; does not require government subsidies; but the effectiveness in reducing price disparity is still lower than option (1). Obstacles or problems of implementation have a lower degree and the possibility for violations is relatively small because variations in regional logistics costs have been considered. In calculating regional HET, it can be used the range of highest and lowest prices in a region or use the average of prices contained in the region concerned. In calculating regional HET, it can be used the range of highest and lowest prices in a region or use the average of prices contained in the region concerned.

The Regional Targeted Subsidy policy is generally considered the most likely to be implemented in Indonesia because it is a truly solution for high-priced regions. The advantage of this option is that this option has been implemented by the government through transportation subsidies by the Ministry of Transportation so that implementation is easier. The disadvantage of this option is that the government must provide subsidized funds for regions with too high prices. Based on these considerations and areas that are too high in price not so much. According to Iswidodo (2013) cement transportation using the multiport method can be applied to eastern Indonesia region because the transportation costs is cheaper than it using the direct port method.

In its application, subsidies are given to regions with the highest price disparities. The highest price at the time of the survey was in Wamena City with a price level of Rp. 530,000. The subsidy provided is a transportation cost subsidy that is targeted to reach a certain price. The lower the desired price target, the greater the subsidy. When referring to the wishes of the Wamena people, the desired target price is IDR 300,000 / bag. So with the annual cement demand in Wamena area of 2500 tons, the annual subsidy value is Rp. 8.75 billion. However, if the government wants the price of cement to be reduced to a price of 200,000 / bag, then the annual subsidy value is Rp. 13.75 billion

Distribution by region. The advantage of this option is that there is no subsidy fund and the effectiveness of reducing price disparity is almost the same as option (2). The weakness of this option is that 10 obstacles will still be faced; distribution restrictions are difficult to implement; forcing producers to only distribute to certain regions so that they must change existing distribution mechanisms. According to Permana (2014) cement distributors have different marketing targets in each region.

#### IV. CONCLUSION AND POLICY RECOMMENDATIONS

The main obstacles in the implementation of a one price policy to reduce disparity on cement prices are logistical

costs/logistics infrastructure from factories to consumers are very varied; differences in the policy of shipping goods schedules that vary between regions; production centers in Java while consumption spread throughout Indonesia; Ownership status of private cement factories reaches 75%; Limited and varied in term of frequency and modes transportation; and Consumer perceptions of brands in each region is different.

Taking into account the main obstacles to the implementation of the one-price policy on the cement commodity above, then the policy options considered to be able to reduce the cement price disparity between regions are the highest regional retail pricing (regional HET) to accommodate differences in logistics costs that vary greatly in each region; regional targeted subsidy, namely the government focusing on subsidies prices (transportation costs) only for regions where cement prices are far above the national average price (target areas) such as in Papua (Wamena), outermost and border areas with high logistical barriers, such as mountain areas, landlocks and Distribution by region (distribution cluster). The evaluation of the four policy options is that the regional targeted subsidy option was chosen as the top priority and regional HET as second option.

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