POLICY OPTIONS TO LOWER RICE PRICES IN INDONESIA

Pilihan Kebijakan Untuk Menurunkan Harga Beras di Indonesia

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Naskah diterima: 28/09/2017; Naskah direvisi: 01/03/2018; Disetujui diterbitkan: 21/06/2018 Dipublikasikan online: 31/07/2018

Abstrak

Di Indonesia, harga beras membuat 28 juta masyarakat pra-sejahtera menghabiskan nyaris separuh penghasilannya. Menanggapi hal ini, pemerintah menerapkan Harga Eceran Tertinggi (HET) dan menugaskan Badan Urusan Logistik (Bulog) untuk menstabilkan harga beras. Sebagai salah satu perwujudan tugasnya. Bulog ditunjuk menjadi importir tunggal beras. Kajian ini menganalisis efektifitas HET, kinerja Bulog sebagai importir beras, dan korelasi antara harga beras di Indonesia dan pasar internasional. Penelitian ini mengusulkan opsi kebijakan untuk menurunkan harga beras dengan menggarisbawahi potensi perdagangan internasional. Dengan menggunakan Error Correction Model (ECM) dan hasil wawancara. Hasilnya: (1) HET menekan para pedagang eceran, sementara para tengkulak, pemilik penggilingan, dan pedagang grosir yang mengambil laba terbesar dari sistem distribusi beras dalam negeri; (2) Akibat kendala birokrasi, Bulog kerap mengimpor beras ketika harga internasional sudah telanjur meningkat; (3) Harga beras di Indonesia terdeviasi dan lebih mahal dibandingkan pasar internasional. Penelitian ini merekomendasikan agar pemerintah mengkaji HET, memberikan kebebasan kepada Bulog untuk menentukan waktu maupun kuantitas beras yang perlu diimpornya dengan berdasarkan pada analisis pasar, dan membentuk forum konsultasi dengan sektor swasta yang memenuhi syarat. Hal ini akan menjaga harga beras senantiasa kompetitif baik bagi konsumen maupun pedagang eceran, serta akan membawa Indonesia lebih dekat dengan rantai nilai regional.

Kata Kunci: Perdagangan Beras, Sistem Distribusi, Korelasi Harga Domestik dan Internasional, Harga Eceran Tertinggi, Sektor Swasta

Abstract

In Indonesia, rice prices cost around 28 million poor nearly half of their income. In response, the government implements price ceiling (HET) and assigns National Logistics Agency (Bulog) to stabilize rice prices. As part of its duties, Bulog was appointed as the sole rice importer. This study analyzed the effectiveness of HET, Bulog's performance as rice importer, and the correlation between rice prices in Indonesia and in international market. This studi explores policy options to lower rice prices by highlighting the potential of international trade. This study used Error Correction Models (ECM) and semi-structured interviews. The results: (1) HET pressures retailers, while middlemen, rice millers, and wholesalers benefit the most from domestic rice distribution; (2) Due to bureaucratic constraints, Bulog frequently imported rice when international prices were already rising; (3) Rice prices in Indonesia deviate away from and higher than the international market. This study recommends the government to review HET, to give freedom to Bulog to determine the timing and quantity of rice importation based on its market analysis, and to organize consultative forums with qualified private sector. This will keep the prices competitive for both consumers and retailers and bring Indonesia closer to the regional value chain.

Keywords: Rice Trade, Distribution System, Domestic-International Price Correlation, Price Ceiling, Private Sector

JEL Classification: F1, F4, H4, H5

INTRODUCTION

Rice is the staple food for most Indonesian people with the annual national consumption estimated at around 45.7 million tons (OECD and FAO, 2015). According to the joint report of OECD and FAO (2015), the annual rice consumption per capita in Indonesia is 163 kg¹, higher than some other Asian countries such as Thailand (142.5 kg), China (76.4 kg), and India (73.4 kg). Meanwhile. the National Socio-Economic Survey conducted bv Statistics Indonesia recorded the rice consumption per capita reached up to 1.56 kg per week, or estimated at 81.4 kg per year (Statistics Indonesia, 2017b). With such high demand, rice prices have significant impact on the livelihood of many Indonesian people, especially those with low income.

Currently, there are approximately 28 million poor people residing in the country with the average monthly income of IDR 300,000 (The World Bank, 2015). Meanwhile, the national average of rice prices in early May 2017 reached IDR 10,600 (USD 0.8) per kg (Ministry of Trade, 2017), which is twice of the World Bank

¹ The estimated number is generated from Food Balance Sheets (UN-FAO, 2001) reference – that use Thai rice – during the same period (The World Bank, 2017). At this price, combined with the consumption level mentioned before, we could statistically estimate that each poor person spends approximately 47.9% of their monthly income on rice.

A. Domestic rice distribution system in Indonesia

The Indonesian government argues that rice high prices is due to the long distribution chain of domestic rice in the country (Ariyanti, 2016; Jefriando, 2016). As illustrated in Figure 1, rice from the farmers must go through at least five different distribution actors before it could reach the consumers.



Figure 1. Levels of Domestic Rice Distribution in Indonesia

Source: KPPU (2016)

Indonesian Competition Commission (Komisi Persaingan Pengawas Usaha/KPPU) (2016)states that imperfect and monopolistic competitions are part of domestic rice distribution system in Indonesia. Imperfect competition refers to two different situations. At the level of farmers, middlemen, and rice millers, it refers to the situation where the purchasing actors (e.g. the middlemen) collude and agree among themselves to buy the rice from the selling actors (e.g. the farmers) at a predetermined price, regardless of the market price at that moment. At the wholesaler levels, imperfect competition refers to oligopolistic competition where only a handful of corporations control the distribution process (Bhinadi, 2012), and therefore, control the prices as well (Pradana, 2015).

Meanwhile, monopolistic competition in the retailers-consumers level relates to the situation where despite the number of retailers in the market, there is little to no difference in prices between retailers in the same area, mostly due to the oligopolistic competition between the wholesalers mentioned above (KPPU, 2016). The government attempts to address this issue by imposing state control on both domestic and international trade of rice.

B. Price ceiling policy

On the domestic trade, the government implements price ceiling policy (*Harga Eceran Tertinggi/*HET) at IDR 9,500 per kg from 2016. This price serves as the maximum retail price for the consumers as stipulated in the Regulation of the Minister of Trade (MOT) 63/2016, which then later renewed in MOT 27/2017.

To implement price ceiling policy, government assigns the Bulog to conduct market monitoring activity called Market Operations (Operasi Pasar) (Ministry of Trade, 2016). This activity aims to ensure all retailers sell their rice to the consumers without exceeding the maximum price as stipulated in the current regulation, and failure to comply would result in their licenses being revoked (Masa, 2017). According to the officials from the Ministry of Trade, this policy serves as an indicator when the government needs to intervene in the market (Interviews, 21 March 2017).

C. Rice import monopoly by Bulog

On the international trade, the government restricts rice importation as it argues that it needs to balance between ensuring the farmers' welfare and keeping the prices affordable for the consumers (Presidential Office, 2017). The government expects the price ceiling policy to keep the rice prices sufficiently low for the consumers (Budiyanti, 2017). As for the farmers, the government argues that by restricting imported rice, the domestic rice will stay dominant in the market, and benefit the farmers (Bulog, 2012; Hakim, 2016; The Jakarta Post, 2017).

The government implements the restrictions by granting the rights to import rice only to Bulog in accordance with its duty in price stabilization, disaster relief, and poverty alleviation as stipulated in MOT 103/2015 article 9 (1.b.). Prior to importing the rice, Bulog must receive formal authorization from the Ministry of Trade. This authorization can only be made after the ministerial coordination meeting on economic affairs as stipulated in the MOT 103/2015 article 9 (2) and article 10 (3). In several circumstances, the decision about rice import also depends on the direct order from the President (Fagih, 2015; Melani, 2015). This regulation stated that the private companies can only import specific types of rice for industrial purposes (article 12) and special dietary needs (article 18). As the result, this policy practically paves the way for Bulog to monopolize the business of rice import, while allowing

the government to decide the timing of the import.

This study aims to explore policy options to lower rice prices in Indonesia by highlighting the potential of international trade. It also analyzes the shortcomings of price ceiling policy, and how Bulog could better perform its mandate in stabilizing rice prices by forming strategic partnerships with qualified private sector.

METHODS

A. Data description

The data for this study were derived from secondary sources. In selecting the variables, our model replicates Ravallion (1986) as well as Varela and Taniguchi (2014). We analyze the relationship between the logarithm (log) of domestic retail price (which means, same as consumer price, PD) of the food items in Indonesia expressed in Rp/kg and the log world price for same food items (PW) expressed in USD/kg, while controlling for movements expressed in Rupiah/US Dollar exchange rates (ER) also in logarithm form and all logarithms are natural. The average monthly data on retail prices (PD) were obtained from the Statistics Indonesia (BPS) for the period May 2009 until May 2017 (97

observations). World prices (*PW*) were obtained from The World Bank Database (The Pink Sheet) for the same period. The nominal rupiah/dollar exchange rates (**ER**) were obtained from the X-Rates for same period.

B. Estimation approach

This paper combines the qualitative method and the quantitative method. For the qualitative method, we used secondary data from various textbooks, academic papers, and official reports as the main sources. This paper was also conducted by using semistructured interviews and focus group discussion with Indonesian Traditional Market Retailers Association (APPSI), Directorate General of Domestic Trade, Ministry of Trade, and ten rice retailers in the traditional markets of Blok A and DKI in Jakarta. For the Cipete quantitative method, we apply timeseries modelling techniques and use error correction models (ECM). An ECM is a dynamic model in which the movement of the variables in any periods is related to the previous period's gap from long-run equilibrium (cointegrated). Furthermore, if the series is cointegrated, and the ECM validated, then it will encompass any other dynamic specification - such as the partial adjustment mechanism.

First step of the analysis entails testing the series of domestic and world prices and nominal exchange rates for unit roots, both in levels and first differences by using the Augmented Dickey-Fuller (ADF) tests. If both time series are not stationary, they are suitable to test for cointegration relationship between them. The next step entails estimating a long-run relationship between domestic prices (PD) and world prices (PW), while controlling for foreign exchange rates (ER) is to use two-step method of (Engle and Granger, 1987), called symmetric ECM test. According to this approach, if the variables are cointegrated of the same order, then for those variables integrated of order one (I(1)) with a cointegration relation of the form as in equation (1):

 $PD_t = \alpha_0 + \beta_1 PW_t + \beta_2 ER_t + \varepsilon_t \dots (1)$

would produce a stationary $\hat{\varepsilon}_t$ term (error term/residuals) after estimating this equation with an OLS (ordinary least square) procedure, where α and β are estimated parameters. If the residuals of equation (1) are stationary, then an error correction mechanism exists.

Then, the ECM is specified by using lagged residuals from the cointegrating regression in equation (1) as error correction terms (ECT) and using Δ as the difference indicator (differencing

means subtracting P_{t-1} from P_t) as follows in equation (2):

 $\Delta PD_{t} = \alpha_{0} + \beta_{1}\Delta PD_{t-1} + \beta_{2}\Delta PW_{t} + \beta_{3}(L)\Delta PW_{t-1} + \beta_{4}\Delta ER_{t} + \beta_{5}(L)\Delta ER_{t-1} + \beta_{6}ECT_{t-1} + \nu_{t}.....(2)$

RESULTS AND DISCUSSION

A. Rice in Indonesian economy and politics

As the staple food, rice has strategic values in economy and politics of Indonesia. High rice prices potentially generate domestic political instability as they form expectations on inflation and economic stability (Mariyono, 2014). These circumstances put the government in a delicate situation amidst the ongoing debate between those who are in favor of achieving food security via lower prices and trade liberalization, and those who prefer food self-sufficiency via greater import restrictions and high prices as they claim to protect local farmers from foreign competition (McCulloch & Timmer, 2008).

This paper argues that there is more merit to food security than food selfsufficiency. Existing studies show that increasing rice prices do not translate into the increase of small farmers' family income and instead it hurts them along with all poor Indonesians (Cantrell, 2015; Makbul, Ratnaningtyas, & Dwiyantoro, 2015; Patunru & Basri, 2012). More than three-quarters of agricultural workers consume more rice than they produce, so the increase of rice prices would hurt rather than help them (McCulloch & Timmer, 2008). In these circumstances, imposing food self-sufficiency may threaten to reverse the impact poverty alleviation programs, thus increasing the number of poor people in the country (Alavi, Htenas, Kopicki, Shepherd, & Clarete, 2012).

Despite its negative impact on the poor, rice self-sufficiency is still part of the government's top priorities. President Joko Widodo even used rice self-sufficiency in his political campaign to presidency in 2014 (Widodo & Kalla, 2014). Therefore, it is worth noting that Indonesian rice trade policy is driven not only by economic factors mentioned in the previous paragraph, but also by politics. In politics, most of the advocates of self-sufficiency maintain key positions in both government and private sectors (Basri & Patunru, 2012, as cited in Cantrell, 2015). It also receives support from national farming and agricultural advocacy groups (Purwanto, 2013). While lacking in number compared to the poor (including small-scale farmers) who feel the negative impact of increasing rice prices, these groups are much more organized and influential in steering government policy (Patunru & Basri, 2012). As the result, import restrictions on rice remain part of the current government food trade policy.



B. Rice prices in Indonesia and in the international market



Source: Statistics Indonesia (2009 - 2017), The World Bank (2009 - 2017), and X-rates.com (2017)

As mentioned in the previous section, rice self-sufficiency policy contributes to high rice prices in Indonesia compared to the international market. From May 2009 to May 2017, rice prices in Indonesia had different trajectories with the rice prices in the international market. In May 2009, rice prices in Indonesia were comparable with the international market at IDR 6,641 and IDR 5,546.77 respectively (Figure 2). In May 2013, rice prices in Indonesia increased by around 60.3% to IDR 10,646 per kg, while the international market decreased by 4.4% to IDR 5,300.37 per kg. In May 2017, rice prices in Indonesia rose even further to IDR 13,125 per kg, or nearly twice of its price in May 2009. On the other hand, the international market just increased by 1.12% to IDR 5,609.28 per kg. This amount was less than half of rice price in Indonesia in the same period. The disparity between rice prices in Indonesia and in the international market shows that Indonesian rice market is not integrated with its international counterpart.

Rice self-sufficiency policy imposed by the government forces the Indonesian market to primarily rely on the domestic production and diminishes the benefit of lower price offered by the international market. As the demand steadily increases along with the annual population growth of 1.14% (The World Bank, 2016). the domestic rice production is unable to meet it. These circumstances contribute to the increasing rice prices in Indonesian market against the trend in the international market. The disparity of rice prices in both markets will be further explained in the cointegration analysis below.

C. Cointegration results

Our observation shows that the relationships between the rice prices in Indonesia and in the international market in the long term (Equation 1) is different with their relationships in the short term (Equation 2).

As shown Equation 2, in the short term, for every 10% of price changes in

the international market previous period, it will be followed by 1.09% of price changes in Indonesia current period. These changes occur when the prices either increase or decrease.

In the long term (Equation 1), the of rice prices the changes in International market does not have significant impact on the rice prices in Indonesia. These circumstances make rice prices in Indonesia deviate away from the prices in the international market, causing disconnection between them. Therefore, in the long term, rice prices in Indonesia are not determined by the international market. Other factors such as harvest failures, increasing prices of fertilizers, poor-quality of seeds, and the decreasing size of arable lands also play into factor. This would require further research to determine their impacts on rice prices in Indonesia.

 $P\widehat{Drice}_{t} = -0.313 + 0.101 PWrice_{t} + 1.038^{***} ER_{t} \qquad (1)$ (***): denotes significance at 1% of confident level

$\Delta P \widehat{Drice}_t = 0.004^{**} + 0.417^{***} \Delta P Drice_{t-1} + 0.023 \Delta P W rice_t + 0.109^{***}$	$\Delta PWrice_{t-1}$
+ 0.191 ^{**} $\triangle ER_t$ - 0.033 ^{**} ECT_{t-1}	(2)
(**): denotes significance at 5% of confident level	

D. The ineffective price ceiling policy

The price ceiling policy is unable to lower rice prices in the market. As this policy set rice prices below the equilibrium price, it distorts the markets and reduces economic welfare (McEachern, 2014). While specific academic studies on price ceiling in Indonesia has not been widely circulated, there are several existing studies highlighting the failure of similar policy in other countries. In Venezuela, government-imposed price controls on essential consumer products (including food) triggered black market activities and increased shortages from an average of 5% in 2003 to 41.3% in 2016 (Wu, 2016). These shortages contributed to the sharp price increase of maize flour, a staple food in Venezuela. Its prices rose tenfold from VEF 19 (USD 1.9) per kilogram in February 2015 to VEF 190 (USD 19) in May 2016 (Charner & Clarke, 2016). In Ethiopia from January to May 2011, the government imposed price ceilings on 18 products, including sugar, palm oil, and wheat (Assefa, Abebe, Lamoot, & Minten, 2016). Instead of lowering prices, this policy triggered shortages due to rationing issues, creating long queue in many parts of the country's capital in Addis Ababa.

The implementations of price ceilings on rice in Indonesia carry similar risk: If the production and distribution costs become higher than the price ceiling, the producers may reduce their outputs, and the distributors potentially hoard their supply to avoid losses. This will create supply shortage for the consumers, which will force them to turn to the black market where prices rise above the government price ceiling (Budiyanti, 2017; Fontinelle, 2017).



Figure 3. Monthly Average Rice Prices in the Consumers Market and Government Price ceiling

Source: Ministry of Trade (2017), MOT 63/2016 and MOT 27/2017 on Reference for Government Procurement and Maximum Retail Prices

Figure 3 shows that from September 2016 (the starting month of this policy) to May 2017, the monthly average prices in the consumer market were 12.07% more expensive than the price ceiling.

Rice retailers in several traditional markets in Jakarta were concerned that they would not be able to gain profit from their business if they sold the products using the price ceiling (Interviews, June 15-16, 2017). These rice retailers also expressed their reluctance because the wholesaler prices were already higher than the price ceiling. There is a risk of retailers blending the rice using low quality rice (such as Bulog's subsidized rice) in order for them to avoid losses.

Indonesian Traditional Market Retailers Association (Asosiasi Pedagang Pasar Seluruh Indonesia/APPSI) that their stated members cannot comply with price ceiling policy as they must deal with various surcharges such as transportation and labor cost in their transactions with the wholesalers (Medianti, 2017). Furthermore, these retailers must pay the wholesalers upfront. As the result, if the wholesalers sell their products to the retailers above the price ceiling, then the retailers must sell those products to the consumers at higher prices to gain profit (M. Maulana, Personal Interview, May 25, 2017).

 E. Domestic rice distribution system is long, but does not truly benefit the retailers

One of the underlying problems with domestic rice is its long distribution system, involving different actors before rice could reach the consumers. At the farmers level as producers, since most of them are small-scale and poor (White, 2015), they rely on the services of middlemen and rice millers to get their harvested rice paddy processed and enter the next stage in the distribution system. In the aspect of distribution the archipelagic nature itself. of Indonesia requires the services of interisland rice traders to get rice across different parts of the country. Furthermore, such long transport would require storage, in which only major wholesalers with warehouses could provide it. These actors are integral part of domestic rice distribution system in Indonesia.

Domestic rice from the farmers must go through between four to six distribution actors before it could reach the consumers. First, the farmers sell their harvested rice paddy to the middlemen or to the paddy cutters, who dry the rice and sell them to the rice millers. After the rice is milled, the millers sell them to the major wholesalers who own warehouses to store the rice stock. These wholesalers then sell the rice to the smaller scale wholesalers the provincial-level in markets (such as Central Rice Market of Cipinang in DKI Jakarta Province), or to those who sell the rice to the different islands in Indonesia. These wholesalers sell the rice to the retailers, or in the case of Central Rice Market of Cipinang, the rice must go through the selling agents before they could reach the retailers. Only then, the consumers can purchase the rice in the market (Ariwibowo, 2013; Mahardika, 2013; Tambunan, 2008).

In each distribution system, either the middlemen, the rice millers, or the wholesalers receive the largest profit margin. In Java Island, their profit margin ranged around 60% to 80% per kg. Meanwhile, the retailers' profit margin only reached between 1.8% and 9.1% per (Ariwibowo, kg 2013; Mahardika. 2013: Ruauw. 2015: Saragih, 2014). This situation shows that those who gains the largest profit are involved in the current distribution system before the rice gets into the retail market. In these circumstances, price ceiling policy would be ineffective since it only pushes the retailers to lower their rice prices while they are not the ones setting the price high. These circumstances show that domestic rice distribution system does not benefit either the farmers, retailers, or the consumers.

F. The potential of imported rice

As a large developing country, Indonesia has seen its economies transformed by trade as it becomes the engine of growth (Pangestu, 2014). Recent studies show that international trade openness in Indonesia has significant effect in both increasing economic growth (Tahir & Azid, 2015) and decreasing poverty rate in the long run (Agusalim, 2017; Nursini, 2017).

In rice trade, however, those who favor trade liberalization and less import restrictions are often accused of betraying Indonesian farmers and acting in the interest of import mafia, rice mafia, or foreign groups (McCulloch & Timmer, 2008). Yet historical record shows that Indonesia has been a rice importer for at least the past 100 years (Rosner & McCulloch, 2008), with the share of imported rice compared to total rice in the country reached nearly 3% from 2011 to 2015 (Table 1).

Year	Domestic Paddy Production (tonnes)	Converted Paddy into Rice (x 0.63) (tonnes)	Total Imported Rice (tonnes)	Total Rice (Domestic Rice + Imported Rice) (tonnes)	Proportion of Imported Rice to Total Rice
2011	65,756,904	41,426,850	2,750,476	44,177,325	6.23%
2012	69.056.126	43.505.359	1,810,372	45,315,731	4.00%
2013	71,279,709	44,906,217	472,664	45,378,881	1.04%
2014	70,846,465	44,633,273	844,163	45,477,436	1.86%
2015	75,397,841	47,500,640	861,601	48,362,240	1.78%
AVERAGE	70,467,409	44,394,468	1,347,855	45,742,323	2.98%

Table 1. Average Number of Domestic Production and Import of Rice, 2011 –2015

Sources: Statistics Indonesia (2016, 2017c) and Patunru (2017)

As for the allegation of import mafia or rice mafia, if we look at the prices, it is difficult to prove the existence of such mafia. For example, rice prices in DKI Jakarta reached IDR 11,450 per kilogram in September 2017, and continued to increase up to IDR 12,850 per kilogram in January 2018 Central (Indonesian Bank PIHPS. 2018). If such mafia exists, they should have released their rice stock into the market in January to collect their considerable profits of IDR 1,400 per kilogram, especially considering rice is perishable commodities. Afterwards, rice prices should have gone down in the following months. However, it did not happen as rice prices increased again in

² This logic was proposed by Berly Martawijaya, an economist from the University of Indonesia and Program Director of Institute for February 2018 up to IDR 14,000 per kilogram.²

Without hard evidence of the existence of mafia, it would be wise if we look at the economic potential of imported rice. Compared to domestic imported has rice, rice shorter distribution system. While domestic rice needs between four to six distribution actors, imported rice only need at most three distribution actors to reach the consumers (Figure 4). From the importers, rice go either to the wholesalers/agents the or supermarkets. From wholesalers, the rice will go to the sub agents, then retailers, or it could even go straight from the wholesalers to the retailers. Afterwards. the consumers could

Developments of Economics and Finance (INDEF) (Martawijaya, 2018).

purchase the rice from the retailers or the supermarkets (Kitano, Ariga, & Shimato, 1999; Surjasa, Gumbira-Sa'id, Arifin, Sukardi, & Jie, 2013) This short distribution system is possible because the imported rice is a processed, readyto-cook product, and therefore it does not require the role of paddy cutters, middlemen, nor rice millers in its distribution system.



Figure 4. Distribution Supply Chain of Imported Rice in Indonesia

Source: Kitano et al. (1999) and Statistics Indonesia (2009), as cited in Surjasa et al. (2013)

While the reliable data for analyzing the profit margin of each distribution actors are yet to be available, the short length of imported rice distribution system shows that there are fewer distribution actors who may take advantage and gain profit from this system. Therefore, providing better access to imported rice may allow the consumers to purchase them at more affordable prices.

G. Bulog's bureaucratic constraints and financial situation

While the imported rice offers an alternative to lower rice prices for the consumers, Bulog is unable to seize this opportunity due to the bureaucratic constraints. While Bulog is mandated as the sole rice importer as part of its task in stabilizing rice prices, it must wait for the instruction from the President or from the ministerial coordination meeting before it could import the rice.

Consequently, Bulog could not decide when to import only by following the market situation, in which the best time to import a product is when its international prices are low as it would cost less compared to when the prices are high. As the result (Table 2), rice import by Bulog becomes a high-cost operation as it frequently imports rice at a large quantity when the international prices are already higher than the previous months (Statistics Indonesia, 2010 - 2017; The World Bank, 2010 -2017).

The high prices Bulog pays for imported rice endanger its financial health. From the beginning of January 2010 to the end of December 2015,

Policy Options To Lower Rice Prices in Indonesia, <]n_]UF YgdU]UX]ž<UbUBUV]U| 107

Bulog's debt grew by 74% from IDR 12.7 million to more than 22.1 million (Bulog, 2011 - 2015). During this period, Bulog's debts formed more than threequarter of its overall assets as its debts nearly four times higher than its equity on average. This situation shows that Bulog's financial situation is at high risk, signifying its inability to generate sufficient revenues from its business operations to sustain itself without relying on the government budget.

Time Period	Estimated Cost of Import Spent by Bulog (Billion IDR)	Estimated Cost if the Import Were Done One Month Earlier (Billion IDR)	Estimated Potential Savings (Billion IDR)
Nov 2010	890.88	840.02	50.87
Dec 2010	1,398.92	1,341.42	57.50
Sept 2011	1,296.82	1,197.13	99.69
Dec 2012	2,601.43	2,601.37	0.06
Jan 2013	252.69	249.45	3.24
Oct 2014	482.37	478.98	3.39
Dec 2014	1,210.64	1,180.99	29.64
June 2015	341.41	340.76	0.65
Jan 2016	1,957.04	1,921.89	35.15
Feb 2016	1,538.11	1,516.18	21.93
Mar 2017	155.07	153.79	1.29
TOTAL	12,125.38	11,821.97	303.41

Table 2. Est	imated Cost and Potent	ial Savings from	Bulog's Rice In	port, Nov
201	10 – Mar 2017			

Sources: Statistics Indonesia (2010 – 2017), The World Bank (2010 – 2017), and x-rates.com (2017)

H. Partnership with the private sector

While Bulog must deal with its risky financial situation, there are private companies – that might include small and medium enterprises (SMEs) – who possess the capability to import rice, including the regular rice commonly consumed as staple food. In 2014, the government issued import permits for 13 private companies to import rice for industrial purposes (Agus, 2014; Handoyo and Santosa, 2014; Mohamad, 2014). In the same year, they also grant import permits for 40 private companies to import rice for special dietary needs (Herlinda, 2014; JituNews.com, 2014; Kabar Bisnis.com, 2014).

These circumstances warrant the necessity for the government to make two key policy changes on the role of Bulog in importing rice. Firstly, since the government mandates Bulog to stabilize rice prices as stipulated in MOT 103/2015 article 9 (b), then it should justify that policy by giving Bulog more freedom to determine the timing and quantity of rice import. The government should also reduce the bureaucratic procedures that Bulog must go through before it could import the rice. Therefore, the government should trust Bulog's judgment and its analysis on the rice market. Afterwards, they should allow this SOE to import rice without having to wait for instruction from the President or the coordination meeting between relevant ministries.

Secondly, to empower Bulog's decision-making process and to improve its market analysis on rice import, the government should establish publicprivate partnership between Bulog and qualified private sector.³ In this case, Indonesian government could learn from the experiences of Malaysia (Alavi et al., Malaysian 2012). government commissioned Malaysian Institute of Economic Research (MIER) to conduct focus group meetings with key stakeholders from the private sector, such as farmers, seed producers, rice

millers, wholesalers, and retailers at separate occasions across the country. It also initiated meetings with relevant government officials at different times. The various inputs that MIER received from both public and private sector allowed them to formulate a comprehensive recommendation to the government on the best way to conduct rice trade policy in Malaysia.

Indonesia could follow along this approach, albeit in a slightly different way. While Indonesia already has multistakeholder Food Security Agency (Badan Ketahanan Pangan/BKP) that deals with the issues of domestic production and distribution, there is no formal consultative forum between Bulog and the private sector when it comes to the decision of importing rice. Therefore, Bulog should initiate coordination and consultative meetings with other only government not agencies, but also with the gualified private sector, including private rice importers, international trade analysts, and experts on the regional agricultural economic issues. By doing this, Bulog would be better equipped in determining the timing and quantity of rice import,

³ By qualified, it means the private companies involved in this partnership must at least have positive track record in rice trading, clear

balance sheet showing its profit/loss in the recent years, as well as high quality human resources to do their job.

and eventually helping Indonesia to be more integrated with the international rice market.

CONCLUSION AND POLICY RECOMMENDATION

Price ceiling policy on rice has not worked as intended as the average market price of this food item are still above the price ceiling. Furthermore, this policy unfairly puts the responsibility of lowering rice prices on retailers, while they only have much slimmer profit margins compared to the middlemen, the rice millers, and the wholesalers.

Considering the circumstances, it is recommended that the government conduct review on the effectiveness of this policy, especially to avoid any unintended consequences (e.g. black market activities) like what happened in Venezuela and Ethiopia.

Indonesia needs to take advantage of lower rice prices offered by the international market. Therefore, the government should authorize Bulog to make its own decision about the timing and the quantity of rice import without cumbersome bureaucratic procedures. To complement this, Bulog needs to improve its understanding and analysis the rice on market situation bv conducting coordination and consultative meetings with the qualified private sector as what Malaysian government does via MIER. The private sector should at least include private importers. international rice trade analysts, and experts on the regional agricultural economic issues. By doing this. Indonesia would be more integrated with regional rice market, which then would allow rice prices in Indonesia to follow the low rice prices in the international market.

ACKNOWLEDGEMENT

We would like to extend our sincere gratitude to our colleagues at the Ministry of Trade and the Indonesian Traditional Market Retailers Association (APPSI) for sharing their expertise, experience, and information during our research. We also would like to convey our heartfelt thankfulness to our colleagues at the Center for Indonesian Policy Studies (CIPS) for their immense support and contribution in conducting this study.

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