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Beefing Up the Stock:
Policy Reform to Lower Beef Prices in Indonesia

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Executive Summary

Beef is nearly twice as expensive in Indonesia as in the international market. This creates a massive challenge for around 28 million poor people in the country and contributes to Indonesia's low beef consumption compared to its neighbors, including the Philippines, Malaysia, and Vietnam. Low beef consumption in turn contributes to the fact that around 29% of children under the age of five in Indonesia suffer from chronic malnutrition

The government claims that domestic supply is able to meet most of the demand for beef, but it is expensive due to a long and complicated distribution process. They argue that the solution to high beef prices is to shorten the distribution process by making government agencies responsible for most distribution and imposing a nationwide price ceiling for consumers. However, this centralized approach is difficult to implement. Carrying out distribution alone would drain the government's budget, costing nearly IDR 713 billion (USD 52.8 million) to cover the complicated transportation needed to reach the Indonesian archipelago. If the government instead leaves distribution to retailers, then retailers will be left unable to comply with the price ceiling if they are to cover production and transportation costs, which would make the ceiling ineffective.

A better alternative is relying more on imported beef. Imported beef has a much shorter distribution chain, and beef in the international market is nearly half the price of domestic beef in Indonesia. Imported beef would provide consumers with more affordable supply as domestic beef retailers struggle to comply with the price ceiling. Therefore, we recommend four regulatory policy changes.

First, the government should remove Regulation of the Minister of Trade (MOT) 27/2017, which imposes a price ceiling on beef, and instead use international trade to lower consumer prices. Second, the government should revise MOT 59/2016 Article 10 (1) and Article 11, which results in a long import licensing process that takes more than 30 working days to complete. This procedure must be simplified and shortened, and import licensing should focus on the speedy and reasonable processes of identification and quality checks. Third, the government should revise MOT 59/2016 Article 9 (1 and 2), which allows beef from countries that are not entirely free of animal diseases to be imported only by state-owned enterprises. As stipulated in Indonesia's agreements with the World Trade Organization (WTO), all qualified beef importers, private or state-owned, must have the same opportunities to import beef into the country. Fourth, the government should remove MOT 59/2016 Article 19, which forbids imported beef in traditional markets. A large majority (70.5%) of markets in Indonesia are traditional markets, so this regulation hampers the ability to access imported beef. Allowing imported beef into traditional markets will ensure a more reliable beef supply because it will come from various sources. This will help beef prices stay competitive and eventually benefit consumers.

Current Situation

Beef is one of the most widely consumed sources of animal protein in Indonesia, with annual national consumption estimated at 709,540 tons (OECD and UN-FAO, 2017). In contrast, poultry consumption reached more than 1.9 million tons in 2017 (OECD and UN-FAO, 2017), but beef holds additional value as a favorite dish during holiday and festival seasons such as the fasting period, Eid Al-Fitr and Eid Al-Adha, when demand increased by around 20% to 25% in 2016 (Nuryati & Haryana, 2017, p.7).

The national average beef price reached IDR 108,072 in August 2017 (Statistics Indonesia, 2017, p.95), nearly twice the World Bank reference price, which uses Australian and New Zealand beef,[1] of IDR 55,704/kilogram[2] in the same period. For around 28 million poor Indonesians (The World Bank, 2015, p.8), high beef prices present a massive challenge, contributing to Indonesia's low per capita beef consumption (1.9 kilogram) compared to neighboring countries such as the Philippines (3.25 kilogram), Malaysia (4.80 kilogram), and Vietnam (7.31 kilogram) (OECD and UN-FAO, 2017). Such low consumption of animal protein contributes to the chronic malnutrition suffered by around 29% of children under the age of five in Indonesia (WFP, 2017).

> "Such low consumption of animal protein contributes to the chronic malnutrition suffered by around 29% of children under the age of five in Indonesia"

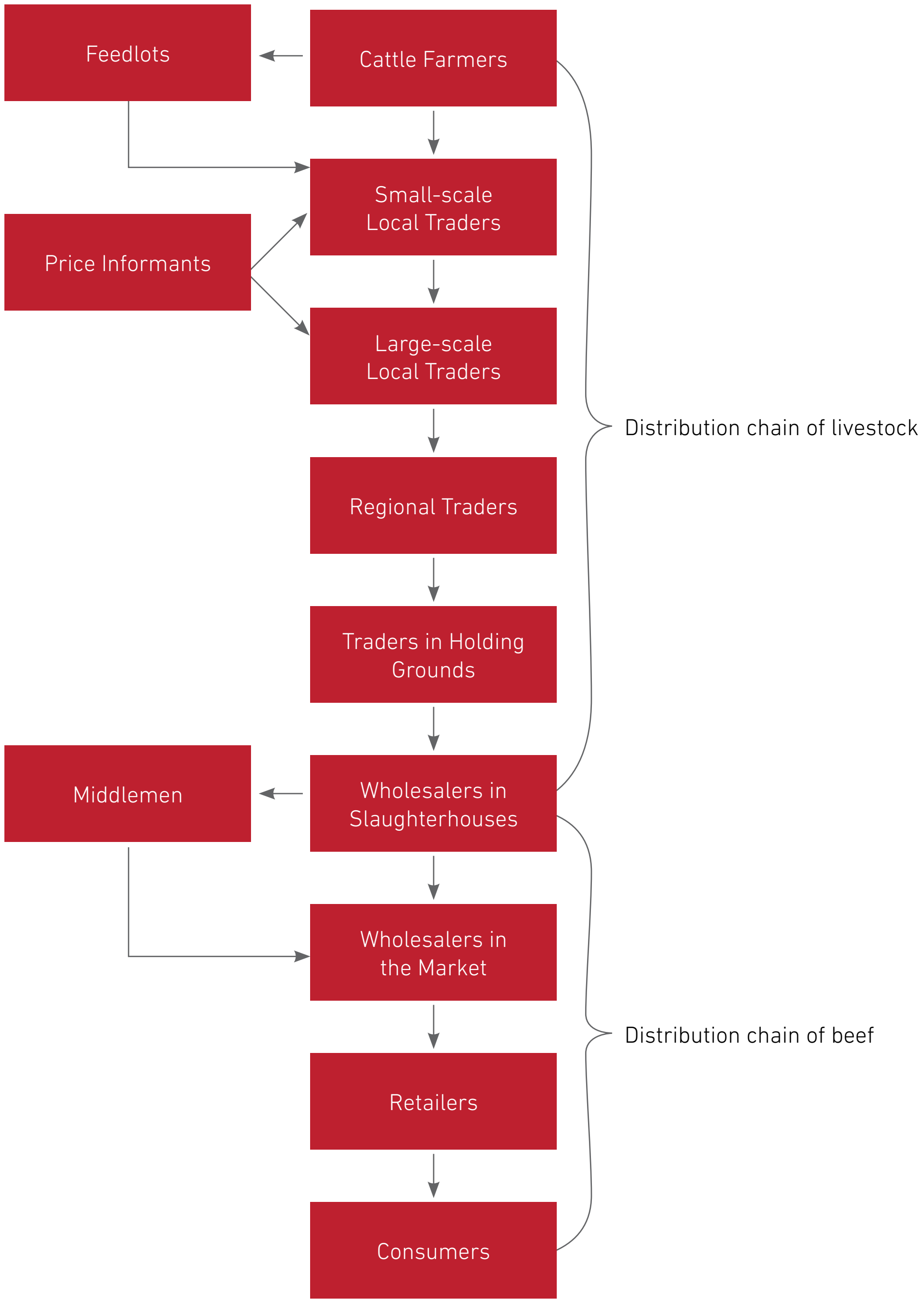
The government claims that 572,989 tons (76.05% of the beef in the country) is supplied by domestic production (Ministry of Trade, 2016b, p.38) and that beef prices remain high due to a long and complex distribution chain for domestic beef (Anti-Monopoly Commission, 2016) (Masbulan et al., 2000, p.165; Supply Chain Indonesia, 2015, p.4), illustrated in Figure 1. Livestock from cattle farmers passes through between seven and nine distribution stages before reaching consumers as beef.

The distribution process starts with cattle farmers, who sell their livestock either directly to the small-scale local traders in their villages or to feedlots, which increase the weight of the livestock by feeding them intensively before sending them to small-scale local traders. After that, livestock is sold to large-scale local traders, whose trading area usually covers several villages. Both small-scale and large-scale local traders use price informants to advise them about the current livestock prices in the market. Large-scale local traders sell their livestock to regional traders whose trading area covers several districts, provinces, or small islands. After that, livestock is sold to traders in holding grounds, which serve as a transit area while traders wait for wholesalers in slaughterhouses to choose which livestock will be purchased and turned into beef. The resulting beef is sold either directly to large-scale wholesalers in the market or to middlemen who help the slaughterhouses find buyers, and then to smaller scale wholesalers, who sell it again to retailers in either traditional markets or supermarkets. Only then can the consumers purchase the beef (Masbulan et al., 2000, p.169; Rachman, 2016, p.24). The distribution process is shown in Figure 1.

[1] For chucks and cow forequarters part, frozen beef.

[2] With the exchange rate USD 1 = IDR 13,326.39 (x-rates.com).

Figure 1
Distribution Chain of Domestic Beef and Livestock in Indonesia



Sources are collated from Masbulan et al. (2000, p.165) and Rachman (2016, p.24)

Existing Policies

A. Domestic trade policies

To reduce the complexity of the beef distribution chain, the government urges the National Logistics Agency (*Badan Urusan Logistik* / Bulog) to take over the whole distribution process (Permana, 2016). This is possible because of Presidential Regulation 48/2016, which authorizes Bulog to take any required steps to stabilize the supply and price of beef as long as it is officially mandated by the ministerial coordination meeting on economic affairs.

To reduce high beef prices, the government implemented another centralized approach by imposing a nationwide price ceiling in September 2016. Regulation of the Minister of Trade (MOT) 63/2016, renewed via MOT 27/2017, sets the per kilogram price ceiling at IDR 80,000 for frozen beef and IDR 98,000 for fresh beef.[3] According to Ministry of Trade officials, the price ceiling serves as an indicator for when the government needs to further intervene the market by conducting a monitoring activity called Market Operations (*Operasi Pasar*) (Sagala & Adri, 2017). Conducted by Bulog (Ministry of Trade, 2016a), Market Operations aims to ensure that all retailers sell their beef at or below the price ceiling by revoking licenses from those who fail to comply (Masa, 2017).

> "The government expects the price ceiling to keep beef prices sufficiently low, while it expects restricted beef imports to ensure that domestic beef dominates the market, eventually benefitting cattle farmers."

B. International trade policies

The government's stated reasons for restricting beef imports are to support cattle farmers' income and to push down prices to keep beef affordable for consumers (Presidential Office, 2017). The government expects the price ceiling to keep beef prices sufficiently low (Budiyanti, 2017), while it expects restricted beef imports to ensure that domestic beef dominates the market, eventually benefitting cattle farmers (Rachman, 2013).

These import restrictions are stipulated in MOT 59/2016 on Export and Import Regulation on Animals and Animal Products. The first restriction is the process of obtaining an import license as stipulated in Article 10 (1) and Article 11 (1). It requires at least five formal documents that each importer must obtain in this specific order: (1) Trade Operation Permit (SIUP); (2) Certificate of Customs Registration; (3) Importer Identification Number (API); (4) Recommendation from the Minister of Agriculture; and (5) Import Approval from the Minister of Trade (WTO, 2016, pp.2-3).

The second restriction in MOT 59/2016 Article 9 (1 and 2) stipulates that beef from countries that are not entirely free from animal diseases can only be imported by state-owned enterprises, and even then only after obtaining official permission from the Minister of State-Owned Enterprises. Although the content of this regulation may imply that its purpose is to avoid the introduction of animal diseases and zoonosis into the country, the government argues that this restriction is necessary to avoid a sudden influx of cheaper imported beef into the market, thus keeping domestic beef prices stable. (KabarBisnis.com, 2016).

The third restriction applies to market access for imported beef. MOT 59/2016 Article 19 states that imported beef can only be used by industry, hotel chains, restaurants, catering service, and for other

[3] For chucks and cow forequarters.

special purposes. The Ministry of Trade further prohibits imported beef from sale in traditional markets (Ministry of Trade, 2016b, p.25), in order to protect domestic beef producers from direct competition with imported beef (Simanjuntak, 2011). While the government claims that they are considering removing the restriction (Widyastuti, 2016), this regulation remains in force to date.

Analysis

A. Potential cost of beef distribution by government

If the government wants to handle the distribution process by itself, then it must be ready to cover the associated transportation costs. While most feeder cattle originate from outside Java island, beef production is still mainly concentrated in Java because most of the slaughterhouses are located there (Ministry of Agriculture, 2015, p.38). Furthermore, the Indonesian archipelago requires distributors to transport cattle both by road and in sea vessels, further adding to transportation costs. These circumstances mean that handling beef distribution would be a costly operation for the government.

> "The government must be prepared to pay nearly IDR 713 billion (USD 52.8 million) to cover transportation costs if it wants to control the whole beef distribution process."

The distribution chains of beef in West Java and East Java illustrate this problem. The province of West Java has some of the highest beef consumption levels, while East Java is the top beef-producing province in the country (Statistics Indonesia, 2017c). The transportation cost of a beef distribution chain in West Java reached IDR 1,284.29 per kilogram in 2016 (Table 1), while in East Java the same costs reached only IDR 445.83 per kilogram, due to East Java's close proximity to the beef production phase of the distribution process. Using these two provinces as benchmarks yields an estimated average transportation cost in the beef distribution chain of IDR 1,004.81 per kilogram. National demand reached 709,540 tons in 2017, meaning that the government must be prepared to pay nearly IDR 713 billion (USD 52.8 million) to cover transportation costs if it wants to control the whole beef distribution process.

Table 1
Transportation Cost of Beef Distribution Line in West Java and East Java Provinces

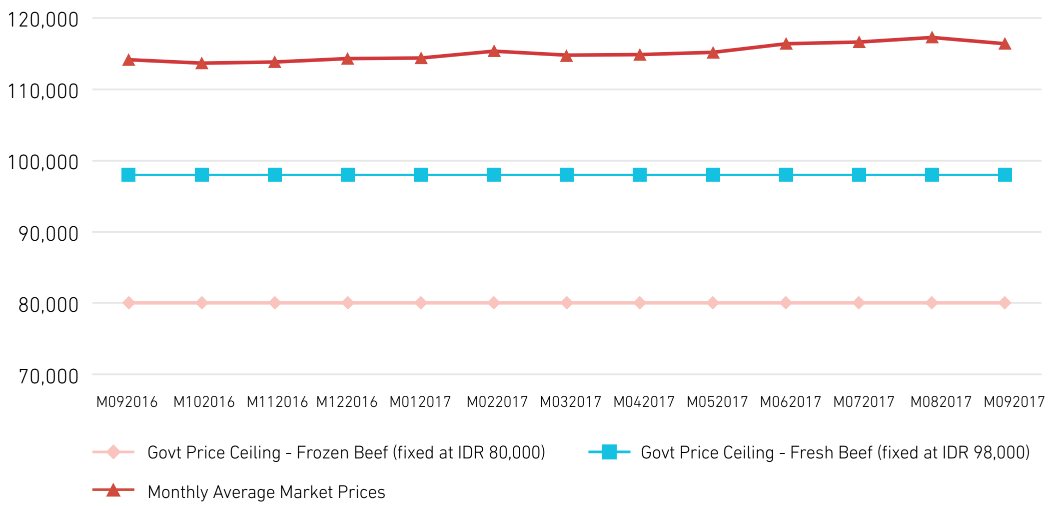
Place	Distribution Line	Transportation Cost (IDR/kg)*
Bogor, West Java	Slaughterhouses → Wholesalers I → Wholesalers II → Retailers	IDR 1,642.90
Garut, West Java	Slaughterhouses → Wholesalers → Retailers	IDR 925.69
Average transportation cost in West Java		**IDR 1,284.29/kg**
Jember, East Java	Cattle farmers → local traders → Slaughterhouses → Retailers	IDR 445.83
Average transportation cost in all sample areas		**IDR 1,004.81/kg**

'* Assuming each cattle weighs 240 kilogram and one truck carries 12 cattle per trip.
Sources are collated from Amirah (2015, p.10), Emhar et al. (2014, pp.56-57), and Rachman (2016, p.32).

B. Price ceiling policy

The price ceiling is unable to lower beef prices. The national average beef price per kilogram from September 2016 to September 2017 reached up to IDR 115,708.53 (Ministry of Trade, 2017), 17.53% more expensive than the price ceiling for fresh beef, and 43.97% above the price ceiling for frozen beef.

Figure 2
Monthly Average Beef Prices in the Consumers Market and Government Price Ceiling (IDR/kg)



Sources are collated from:
1. Ministry of Trade, (2017)
2. MOT 63/2016 on Reference for Government Procurement and Maximum Retail Prices
3. MOT 27/2017 on Reference for Government Procurement and Maximum Retail Prices

According to representative from one of the meat companies operating in Indonesia (Personal Interview, 5 Septermber 2017),[4] the government price ceiling of IDR 80,000 is unrealistic and unsustainable, especially for domestic beef. Although Bulog and the Ministry of Agriculture have managed to sell beef to consumers at the set price, they did so with beef imported from India.[5] Because they are government institutions, both Bulog and the Ministry managed to obtain privileges and preferential treatment in order to bypass several import licensing requirements, enabling them to save at the level of procurement and sell beef at or below the price ceiling. In addition, the quantity supplied by Bulog and the Ministry is severely limited and insufficient to meet consumers' demand. This practice is unfair for small-scale, private importers and retailers that do not have the special rights that Bulog and the Ministry use to sell at the price ceiling, and so this policy ends up distorting market prices.

[4] Interviewee is kept anonymous for privacy reasons.

[5] Bulog sells beef at "cheap markets", while Ministry of Agriculture sells at Indonesian Farmers Shops. These shops and markets are organised by either private or state-owned companies that have connections with the government and enjoy special rights in their procurement processes. As the result, these shops and markets manages to sell beef and other food items at lower prices compared to the regular traditional markets. Examples: http://ekonomi.metrotvnews.com/mikro/VNnxOeak-daftar-lokasi-penjualan-daging-sapi-murah

The failures of price ceilings have been documented in several countries. From January to May 2011 (Assefa et al., 2016, p.93), the Ethiopian government put price ceilings on 18 products, including sugar, palm oil, and wheat. Instead of lowering the prices, this policy triggered shortages due to rationing issues, creating long queues in many parts of the country's capital, Addis Ababa (pp.99-100). Due to their ineffectiveness, most of price ceilings were removed in late May 2011. In Serbia, the government imposed a maximum 10% limit on retailers' trade margins for 11 basic food products, including sugar, wheat flour, pork meat, and freshwater fish (Radukić & Marković, 2015, pp.197, 200, 201) beginning in December 2011. This policy was intended to limit the rise of food prices resulting from a lack of competition in the Serbian food market. Once again, price ceilings failed to lower prices, and a large number of small shops were forced to suspend their business because they were unable to turn a profit. This situation eventually weakened market competition even further when only large retail chains were able to survive.

The implementation of price ceilings in Indonesia carry similar risks: If production and distribution costs become higher than the price ceiling, the producers could potentially decide to reduce their outputs, while the distributors may hoard their supply to avoid losses. For consumers, the lack of supply may force them to turn to the black market where prices rise above the government price ceiling (Budiyanti, 2017, p.15; Fontinelle, 2017).

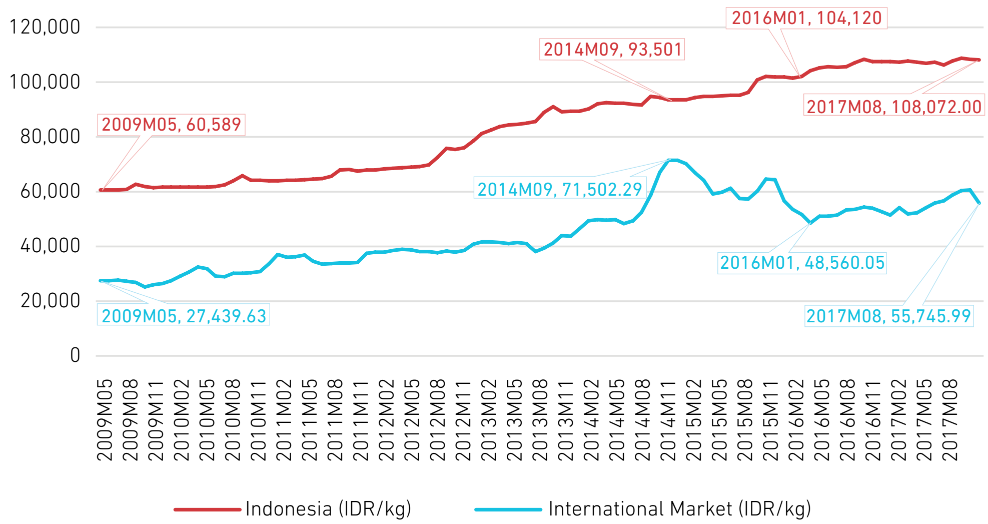
C. Beef prices in Indonesia and the international market

Although there were fluctuations in the price on the international market between May 2009 and July 2017, beef prices in Indonesia steadily increased every year (Figure 3). In May 2009, the per kilogram price of beef in Indonesia was IDR 60,589, more than twice (120.81%, more expensive) the price of beef in international markets, at IDR 27,439.63. By September 2014, this gap was reduced, to 30.76% more expensive, when increasing demand for beef in emerging economies (The World Bank, 2014, pp.3-4) such as China and India drove the international price to its peak at IDR 71,502.29 (a 160% increase from its price in May 2009). In the same period, the per kilogram price of beef in Indonesia experienced a more modest increase to IDR 93,501 (54% increase from its price in May 2009).

Although the gap between Indonesian and international beef prices shrunk in this time, a different trend emerged after 2014. By January 2016, favorable global supply conditions (The World Bank, 2016, p.23) lowered the per kilogram price of beef in the international market to IDR 48,560.05, a 32.09% decrease from its peak in September 2014. Beef consumers in Indonesia did not enjoy the fall in price. Instead, per kilogram beef prices rose even further (by 11.36%) to IDR 104,120. By August 2017, the per kilogram price of beef in Indonesia reached IDR 108,072, or nearly twice the price of IDR 55,745.99 on the international market.

"For consumers, the lack of supply may force them to turn to the black market where prices rise above the government price ceiling."

Figure 3
The Trend of Beef Prices in Indonesia and in International Market



Sources are collated from Statistics Indonesia (Statistics Indonesia, 2009), The World Bank (The World Bank, 2009), and X-rates.com (x-rates.com, 2017).

The relationship between beef prices in Indonesia and the international market in the short term is different than in the long term. In the short term, a 10% decrease in the international price corresponds with a 0.6% increase in Indonesia. In the long term, a 10% increase in the international price leads to a 3.3% increase in the domestic price and vice versa. International beef prices decreased by nearly 8% between July and August 2017, and the United Nations Food and Agriculture Organization (UN-FAO) predicts that it will continue to fall (UN-FAO, 2017a, 2017b).[6] Beef prices in Indonesia may experience another surge, at least in the short term, before they have a chance to follow the movement of the international price in the long term.[7]

D. Distribution system of imported beef

Imported beef has a much shorter distribution chain than domestic beef. While domestic beef goes through between seven to nine distribution stages before reaching the consumer (Figure 1), imported beef goes through at most two (Figure 4). This beef is sold by importers to wholesalers, and by wholesalers to the supermarkets and meat shops who sell to consumers.

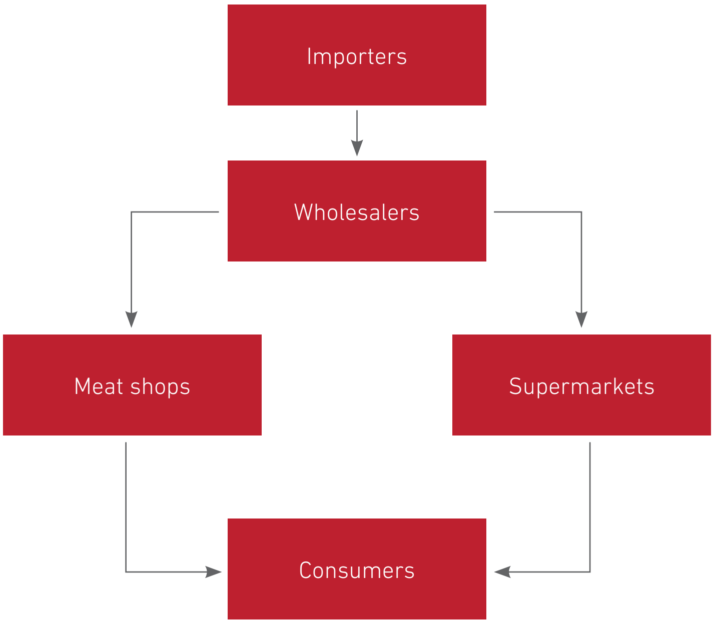
This short distribution chain is possible because imported beef is a ready-to-cook product that does not require feedlots, slaughterhouses, and traders in the holding grounds to prepare it for consumption. As a result, imported beef provides fewer opportunities for distribution actors who may attempt to take advantage of the system by charging high prices that would eventually be passed along to the consumers.[8] Providing better access to imported beef may allow the consumers to purchase the beef at more affordable prices.

[6] UN-FAO stated that this declining trend reflects the increasing export supplies from Australia and prospects for increasing domestic supplies in the United States.

[7] These calculations are explained in more detail in the Annex.

[8] In Indonesia, it is common to find this issue on strategic food items such as beef.

Figure 4
Distribution Chain of Imported Beef in Indonesia



Sources are collated from (Masbulan et al., 2000, p.172), (Purba, n.d., p.11), and (Rachman, 2016, p.24).)

E. Import restrictions hurt the private sector and consumers alike

With its shorter distribution chain and cheaper price, the international market should be able to provide the poor with more affordable beef, but it cannot do so due to government restrictive trade policies. The impacts of these policies on consumer prices are measured by using nominal rates of protection (NRP). NRP calculate the proportion by which beef producer prices exceed the prices of imported beef at the country's border due to trade policy (Marks, 2015, p.10). The NRP for meat and viscera, including beef, reached 37.4% in 2015. This means the price of domestic beef from cattle farmers in Indonesia is 37.4% more expensive than beef from Australia arriving for import at major Indonesian ports.[9] Indonesian non-tariff trade policies, including those mentioned in section III.B., are responsible for more than 87% of beef NRP value.[10]

> "The price of domestic beef from cattle farmers in Indonesia is 37.4% more expensive than beef from Australia arriving for import at major Indonesian ports"

In addition to negatively affecting consumers, Indonesian trade policy also puts the private sector at a disadvantage. Obtaining an import license as stipulated in MOT 59/2016 Article 10 (1) and 11 (1), requires undergoing a process that takes at least 30 working days as a result of the legal requirements for obtaining each supporting document (Table 2), and can often take much longer. Sometimes the process can even take months to complete (USAID, 2013, p.11). According to government officials from another beef producing country, this regulation harms importers, particularly the small-scale ones (who lack political connections), by making it difficult for them

[9] Including all expenses for Cost, Insurance, and Freight (CIF) required to bring the imported beef from the producing country to Indonesia.

[10] If the NRP on beef only calculates the import tariffs and export taxes, its value would only reach 4.8%, or barely 13% of the total NRP value.

to import beef based only on the market situation since they cannot do so without a license (Duckworth et al., Personal Interview, 2017).[11] Instead, this regulation burdens them with the additional time and cost required to complete the importation process (WTO, 2013a, 2013b).

Table 2
Required Documents and Time of Completion to Obtain Beef Import License in Indonesia

No.	Permit Document	Legal Bases	Estimated time of Completion (Working Days)
1.	Trade Operation Permit	MOT Regulation 36/2007 Article 12 [1]	3
2.	Certificate of Customs Registration	Regulation of the Minister of Finance 63/2011 Article 4 [3]	10
3.	Importer Identification Number	MOT Regulation 70/2015 Article 19 [1]	5
4.	Recommendation from the Minister of Agriculture	Regulation of the Minister of Agriculture 16/2016 Article 26	2
5.	Import Approval from the Minister of Trade	MOT Regulation 59/2016 Article 11, as reiterated in the official page of Indonesian Importers Registration Portal (InaTrade)	12 (10 days to process the registration, and 2 days to issue the import approval)
Total working days required for completion			**32 working days**

Sources are collated from:
1. MOT 36/2007 on Trade Operation Permit
2. Regulation of the Ministry of Finance 63/2011 on Customs Registration
3. MOT 70/2015 on Importer Identification Number
4. Regulation of the Ministry of Agriculture 16/2016 on Entry of Large Ruminants into Indonesia
5. MOT 59/2016 on Export and Import of Animals and Animal Products
6. Official Portal for Importers Registration (InaTrade)

"Since around 70.5% of the markets in Indonesia are traditional markets, keeping imported beef out of them prevents many consumers from accessing cheaper beef."

MOT 59/2016 Article 9 (1 and 2) restricts beef importation, allowing only state-owned enterprises to import beef from certain countries and, as a result, severely limiting business opportunities for private importers. This regulation makes it impossible for private businesses to import beef from countries such as Brazil, Argentina, and Colombia (Organization for Animal Health [OIE], as cited in Morgan & Tallard, 2016, p.7) that still have cases of animal diseases, even if they only occur in some parts of the country. In addition, the further requirement by this regulation that a state-owned enterprise importing from these countries obtain an additional permit from the Ministry of State-Owned Enterprises adds to the already long and complicated list of import procedures mentioned in the previous paragraph.

By not allowing imported beef into the traditional market, MOT 59/2016 Article 19 hampers consumers' access to more affordable beef still further. As mentioned earlier, the international price of beef, calculated from the price in Indonesia's neighboring countries, Australia and New Zealand, is nearly half the price of beef in Indonesia. Since around 70.5% of the markets in Indonesia are traditional markets (Muftiadi & Maulina, 2016, p.114),[12] keeping imported beef out of them prevents many

[11] The licensing requirements frequently make the importers lose momentum to import when the international prices are low

[12] Followed by supermarkets (22%), and minimarkets (7.6%).

consumers from accessing cheaper beef. This creates a major problem for urban consumers in particular, as their annual per capita beef consumption is 7 kilograms, much higher than the national average of 1.9 kilograms (Meat and Livestock Australia, 2016, p.2).

F. International commitments

The import restrictions stipulated in MOT 59/2016 (discussed in section IV.E.) contravene several international commitments made by the Indonesian government in the past (Table 3), and so they predictably resulted in negative responses from several countries. In September 2013, New Zealand and the USA filed litigation to request consultation with the WTO panel on Indonesia's burdensome import licensing process and restrictions limiting the legal sale of imported beef (WTO, 2013a, 2013b). In April 2016, Brazil filed their own complaint regarding Indonesia's non-transparent and restrictive import licensing requirements and Indonesian sanitary measures, which are not based on international standards or scientific justification (WTO, 2016).[13] In December 2016, the WTO ruled in favor of both New Zealand and the USA as it upheld all complaints launched by both countries against Indonesia's trade restrictions (Jones, 2016; Swenson, 2016).

Recent studies show that Indonesia benefited when it honored its commitment to international trade agreements. For example, the Indonesia-Australia Red Meat and Cattle Partnership (IARMCP), in effect since 2013, provides Indonesian cattle farmers, veterinarians, and government officers with training, capacity-building programs, and field trips to learn from Australia's experience. These activities help people in rural areas to develop their skills, raise their confidence, and eventually improve the quality of their products (Australia DoA and BKPM, 2016). Furthermore, IARMCP became one of the foundations for the Indonesia–Australia Comprehensive Economic Partnership Agreement (IA-CEPA), scheduled to be finalized by both countries by the end of 2017. This agreement is expected to enable greater sharing of knowledge and technology, to create mutual agricultural systems designed to achieve food security, and to foster inclusive economic growth for both countries (Indonesia Australia Business Partnership Group, 2016, p.8, 45, and 48).

> "The import restrictions stipulated in MOT 59/2016 contravene several international commitments made by the Indonesian government in the past, and so they predictably resulted in negative responses from several countries."

[13] The sanitary measures complaint by Brazil refers to Indonesia's MOT 05/2016, which stipulates that the Ministry of Agriculture reserves the right to forbid any import from any country that the Ministry deems to be at risk for animal diseases and zoonosis (Article 21). Since then, Indonesia has responded by replacing that regulation with MOT 59/2016 which stipulates that imports can still be made from such countries so long as the cases of disease and zoonosis only occur in some parts of the country (Article 9). However, Indonesia still maintains some restrictions, since only state-owned enterprises are allowed to import in these circumstances.

Table 3
The Contradiction Between Indonesia's Import Restrictions and Its International Commitments

No.	Barriers	Stipulated in...		Contradicts...	
		Regulation	Content	Regulation	Content
1.	Import licensing	Regulation of the Minister of Trade (MOT) 59/2016 article 10 (1) and 11	All importers must obtain import license prior to importing beef and livestock into the country. The license will only be granted after the importers fulfil several documents. In its entirety, those documents are including (1) Trade Operation Permit; (2) Certificate of Customs Registration; (3) Importer Identification Number; (4) Recommendation from the Minister of Agriculture; and (5) Import Approval from the Minister of Trade	General Agreement on Tariffs and Trade (GATT) 1994 article XI:1, ratified by the Indonesian government via WTO Agreement Law 7/1994	No trade restrictions other than duties, taxes, and other charges shall be made by any contracting party. This is including quotas and import licenses.
2.	Discriminatory treatment of beef originating from countries that are not entirely free of animal diseases	MOT regulation 59/2016 article 9 (1 and 2)	Import of beef that comes from the countries that are not entirely free from animal diseases can only be done by state-owned enterprises after obtaining the official permission from the Minister of State-Owned Enterprises.	WTO Agreement on Agriculture Article 2 (3) WTO Agreement on Sanitary and Phytosanitary Measures Article 5 (4, 5, and 6).	Sanitary and phytosanitary measures should keep negative trade effects at the minimum level, and shall not be applied in a manner which would constitute a disguised restriction on international trade.
3.	Market access restriction for imported beef	MOT regulation 59/2016 article 19	Imported beef is not allowed to enter traditional markets, and can only be used by industry, hotel chains, restaurants, catering services, and for other special purposes.	GATT 1994 article III:4, ratified by the Indonesian government via WTO Agreement Law 7/1994	Imported products shall be treated equally with the domestic products with respect to all laws and regulations affecting their sale, purchase, transportation, distribution, or use.

Sources are collated from:
1. MOT 59/2016 on Export and Import of Animals and Animal Products
2. Indonesian Law 7/1994 on WTO Agreement
3. General Agreement on Tariff and Trade (GATT) 1994
4. WTO Agreement on Agriculture
5. WTO Agreement on Sanitary and Phytosanitary Measures

Recommendation

The price ceiling stipulated in MOT 27/2017 has not lowered beef prices for consumers. Instead, beef prices in Indonesia are nearly twice as expensive as beef from Australia and New Zealand, which the World Bank uses as international market references. Meanwhile, import restrictions stipulated in MOT 59/2016 hurt private importers and consumers alike. In addition, these restrictions contradict international commitments by the Indonesian government, triggering litigation by several countries in the WTO forum.

Four recommendations may improve the situation:

1. Remove the MOT 27/2017 on price ceiling

The government should remove the price ceiling on beef and instead use international trade to lower consumer prices. The price ceiling has been ineffective, as was demonstrated when the average per kilogram market price for beef between September 2016 to September 2017 reached IDR 115,708.53, or 17.53% more expensive than the price ceiling for fresh beef and 43.97% above the price ceiling for frozen beef. In August 2017, the beef price in Indonesia was around twice as high as the beef price in the international market.

The price ceiling is also unrealistic and unsustainable, especially for small-scale, private importers, who must deal with lengthy licensing process, and also for retailers, who must cover the high cost of the long distribution process before they can sell their beef to the consumers. Instead of supporting small-scale, private business, this policy benefits importers and retailers with political connections to Bulog and the Ministry of Agriculture, enabling them to bypass the regulations and distribution process. These circumstances create unfair competition and distort beef prices.

> "The government should remove the price ceiling on beef and instead use international trade to lower consumer prices."

Furthermore, the experiences of Ethiopia and Serbia show that a price ceiling could potentially force the producers to reduce their outputs and the distributors to hoard their supply to avoid losses. When the supply is too low, consumers might have no choice but to turn to the black market to buy their beef at prices above the price ceiling.

2. Revise MOT 59/2016 Article 10 (1) and Article 11

Beef prices in the international market are nearly half the beef price in Indonesia. Imported beef has a much shorter distribution chain compared to domestic beef, which means there are fewer distribution actors that may take advantage of the distribution process. Providing poor Indonesians with better access to imported beef could serve as an alternative strategy to lower beef prices. In this regard, MOT 59/2016 Article 10 (1) and Article 11 must be revised to simplify and shorten the process of obtaining an import license, changing it to focus on speedy and reasonable identification and quality checks. These processes must adhere to the international standards and procedures to which Indonesia has committed itself in order to ensure that qualified beef importers do not need to concern themselves with burdensome bureaucratic procedures and can put more focus on ensuring the quality and distribution efficiency of their products.

3. Revise MOT 59/2016 Article 9 (1 and 2)

The WTO Agreement on Agriculture as well as on Sanitary Measures, to which Indonesia is a party, stipulates that sanitary measures imposed by the Indonesian government must not become disguised trade restrictions. Therefore, MOT regulation 59/2016 Article 9 (1 and 2) must be revised to ensure that all qualified beef importers, whether private or state-owned, have the same opportunity to import products into the country. To provide consumers with maximum protection against the risk from animal diseases, the government should focus on improving the performance of the health monitoring system by the Ministry of Health and Food and Drugs Agency (*Badan Pengawas Obat dan Makanan*/BPOM), rather than by restricting import opportunities to state-owned companies.

4. Remove MOT 59/2016 Article 19

It is imperative to ensure the public can access more affordable beef and not be hindered from doing so because of where it comes from. MOT 59/2016 Article 19 must be removed, since it restricts the entry of imported beef into traditional markets. This regulation hampers the people's access to more affordable beef, since 70.5% of markets in Indonesia are traditional markets. Allowing imported beef into traditional markets will ensure the beef supply is secure, since it will come from various sources. These measures will help keep beef prices competitive and eventually benefit the consumers.

"MOT 59/2016 Article 19 must be removed, since it restricts the entry of imported beef into traditional markets."

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Annex

Analysis on beef prices in Indonesia and in the international market

A. Data Source and Data Period

We analyze the relationship between the logarithm (log) of domestic retail price (which is the same as the consumer price, ***PD***) of food items in Indonesia expressed in IDR/kilogram and the log international (world) price for the same food items (***PW***) expressed in USD/kilogram, while controlling for movements in IDR/USD exchange rates (**ER**), also in logarithm form, and all logarithms are natural. The average monthly data on retail prices (***PD***) were obtained from Statistics Indonesia (2017a) (BPS) for the period May 2009 through July 2017 (97 observations). International prices (***PW***) were obtained from the World Bank (2017) Database (The Pink Sheet) for the same period. The nominal rupiah/dollar exchange rates (**ER**) were obtained from the Converter Exchange Rates (X-Rates, 2017) for the same period.

This paper combines the qualitative method and the quantitative method for analysis. For the quantitative method, we used error correction models (ECM). An ECM is a dynamic model in which the movement of the variables in any period is related to the previous period's gap from long-run equilibrium (cointegrated). If the series is cointegrated and the ECM validated then it will encompass any other dynamic specification, such as the partial adjustment mechanism.

The first step in estimating a long-run relationship between domestic prices (**PD**) and international prices (**PW**) while controlling for foreign exchange rates (**ER**) is to use a two-step method of Engle & Granger (1987), called symmetric ECM test. According to this approach, if the variables are cointegrated of the same order, then those variables integrated of order one (I(1)) with a cointegration relation of the form as in equation (1):

$$\boldsymbol{PD_t = \alpha_0 + \beta_1 PW_t + \beta_2 ER_t + \varepsilon_t} \quad \textbf{(1)}$$

Would produce a stationary term (error term/residuals) after estimating this equation with an ARIMA (autoregressive integrated moving average) procedure, where α and β are estimated parameters. If the residuals of equation (1) are stationary, then an error correction mechanism exists.

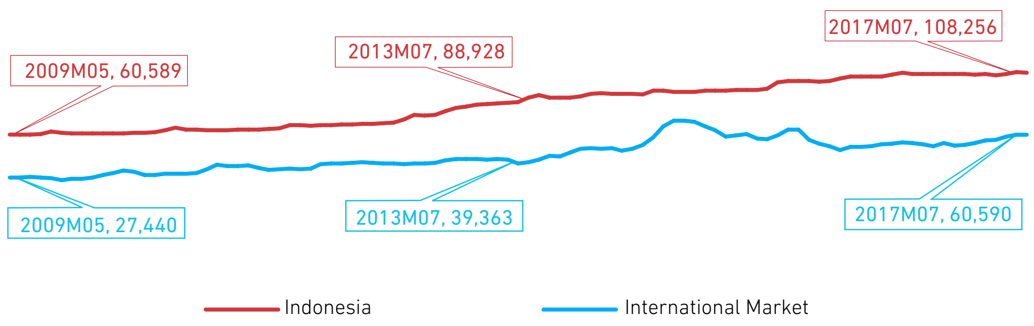
Second, the ECM is specified by using lagged residuals from the co-integrating regression in equation (1) as error correction terms (ECT) and using Δ as the difference indicator (differencing means subtracting from) as follows in equation (2):

$$\boldsymbol{\Delta PD_t = \alpha_0 + \beta_1 \Delta PD_{t-1} + \beta_2 \Delta PW_t + \beta_3 \Delta PW_{t-1} + \beta_4 \Delta ER_t + \beta_5 \Delta ER_{t-1} + \beta_6 ECT_{t-1} + v_t} \quad \textbf{(2)}$$

B. Preliminary Findings

As shown in Figure 1, the domestic food price had a positive tendency every month. The price of beef rose 78.67% from around IDR 60,589 per kilogram in May 2009 to more than Rp 108,256 per kilogram in July 2017. The world food price had a stronger positive tendency than domestic price cases. The price of beef increased about 120.81% from around Rp 27,440 per kilogram in May 2009 to Rp 60,590 per kilogram in July 2017. From Figure 5, we found that at the end of observation, which is July 2017, domestic rice price was almost 2 times higher than the international price.

Figure 5
The Trend of Beef Prices in Indonesia and in International Market



As shown in Equation 1 results below, in the long run, for beef, a 10% increase in the international price causes an instantaneous 3.3% increase in the domestic price.

$$\widehat{PDbeef}_t = 1.594^{***} + 0.334^{***}\ PWbeef_t + 0.997^{***}\ ER_t + 0.93^{***}\ \varepsilon_{t-1}$$

(***): denotes significance at 1% of confident level

And as shown in Equation 2 results below, in the short run, for beef a 10% increase in the world beef price in the current period causes an instantaneous 2.37% increase in the domestic price in the current period and a 10% increase in the world in the price previous period causes an instantaneous 0.57% decrease in the domestic price in the current period, ceteris paribus and *vice versa*.

$$\Delta\widehat{PDbeef}_t = 0.004^{***} + 0.237^{***}\ \Delta PDbeef_{t-1} + 0.057^{*}\ \Delta PWbeef_t - 0.062^{*}\ \Delta PWbeef_{t-1} - 0.033\ \Delta ER_t + 0.097\ \Delta ER_{t-1} - 0.006\ ECT_{t-1}$$

(***): denotes significance at 1% of confident level | (*): denotes significance at 10% of confident level

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