

The Determinant of Beef Prices in Bali

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Abstract--- The Indonesian government launched beef self-sufficiency in 2019. There is holding various programs, however, it has not currently been realized. The beef prices are increasingly rising. Rising beef prices are not able to provide incentives for farmer's welfare. Therefore, cattle farming, especially, in Bali still maintains traditional maintenance and the rearing average number (2-5). The beef increased price due to the people's purchasing power to decrease. The research is needed to be conducted on determining the beef price in Bali. The study aimed at determining the determinants of beef prices in Bali Province. The method used is the survey method to the modern market as well as the traditional market as well as interviews with beef traders and buyers in Bali. Data collection techniques conducted on secondary data. The study results showed the determinants of beef prices in Bali Province are beef demand, beef production, and imported beef prices. It is due to in Bali the increase beef production has not been able to meet the demand. Balinese beef prices will continue to increase. It can be stated Bali beef production and demand have no effect on Bali beef price. Due to the Bali beef price will continue to increase every year, until self-sufficiency in beef. It is reached and demand can be fulfilled. The beef price in the market is influenced by the place wherein beef is sold (traditional or modern markets), packaging, shape (commercial beef shredded) and self-commercial beef shredded and time, during Ramadan/before the Eid Fitri and imported meat.

Keywords--- Bali, beef, price, market, traditional, modern.

1 Introduction

The need for beef continues to increase in accordance with an increasing resident's number in Indonesia. It has resulted on high demand for having beef. The imbalance between demand and supply of beef due to beef prices on the market tends to increase. The Indonesian government launched beef self-sufficiency in 2019. There is holding various programs. However, it has not currently been realized. The beef prices are increasingly rising. Rising beef prices are not able to provide incentives for farmer's welfare. Therefore, cattle farming, especially, in Bali still maintains traditional maintenance and the rearing average number (2-5) (Astiti, 2018).

The increasing of beef price due to the people's purchasing power to decrease. Indonesia is a developing country, quality human resources are needed. The human resources quality level can be seen from a person's nutritional adequacy. Protein intake is important for human growth and physical health. Beef is a source of protein. It is categorized as one of the basic community needs. Bali is a dream island destination for tourists both local and international. The need for meat for tourists will increase along with the increasing tourists coming number to Bali. This is a reason the beef availability must always be on. Beef prices always increase from year to year. Most of the Balinese indigenous do not consume beef due to beef is considered mothers who give life through milk production as a substitute for mother's milk. Thus, most Balinese people cannot bear to consume beef.

The increase of meat needs must be in accordance with the livestock growth sector as a source of meeting protein needs. The government has conducted various programs to maintain beef price stabilization. Unlike program is the achievement of beef self-sufficiency targets. It was published in order to increase production. However, it was not effective yet (Korupsi, 2006). The imbalance between the demand and supply of beef will result beef price fluctuations in the market.

The number of demand is determined by the goods price and the price of substitute goods and consumer tastes. It is the same as *demand theory* stated the number of production and imports will affect the number of beef supply in the country. Another factor can affect the beef prices balance in Bali is the development of national and international beef markets. The beef price currently has an increasing trend every year. There is an average 6% over the 2016-2018 period. During certain moments unlike fasting and Eid, the average beef price in the retail level can increase 7.8% compared to before fasting. In May 2019, the national average retail beef price was IDR 110.600/kg. Whereas before fasting in April 2018, the average national retail beef price was IDR 102.500/kg. It shows beef prices in Indonesia are still not stable on high level. It is, therefore, important to understand further the beef prices actions through several factors thought to influence it (Karnata & Putra, 2017; Paramita *et al.*, 2019).

2 Method

The method used in the present study is a survey method for traditional and modern markets in Bali. It is also conducted interviews with beef of traders and buyers. The secondary data is used getting from the statistical data center.

3 Results and Discussion

Demand theory is the consumer's willingness to buy a product on the price level they must pay. The higher price offered is the number of products requested is lower. If the goods price offered is lower. The number of goods requested will increase. Demand theory is the willingness producers to sell goods on the price level offered. If the price increases, the number of goods producers are willing to sell will increase. If the price decreases, the number of goods producers are willing to sell will decrease (Pyndick, 2003). The market price of a commodity and the number traded is determined by the demand and supply commodity. It is regarded as market prices, the intended price is agreed upon by the seller and buyer (Astuti *et al.*, 2016).

Analysis of demand and supply is used to describe the market mechanism (Sugiarto, 2000). The demand for meat ahead on Eid holiday festivities in June 2019 to increase the beef prices up to 7.8% from the average beef price in the traditional market IDR 102.500.00 to IDR 110.600.00. The supply curve theoretically shows the number of goods producers are willing to sell price. They will receive on the market. The item price initially is above the level of market equilibrium (P1). Therefore, the producer will try to produce goods and sell more than consumers are willing to buy. As a result, there is a supply surplus exceeds the number of demands.

In order to sell the excess supply, the producer will start lowering prices. The traditional market does not have a cooling tools. Therefore, the remaining beef past 12 hours will be sold on lower price. The number of demand will rise and the number of supply will fall until the equilibrium price (P0) is reached. Conversely, if the initial price is below on consumer's level. The market balance will compete (P2), namely, the number of demand exceeds the supply amount. Wherein, the consumers cannot afford to buy goods in a certain price level. The results in upward pressure on prices due to one another to get existing offers, and producers respond by raising prices and increasing the number of goods. The eventually prices will reach the P0 point.

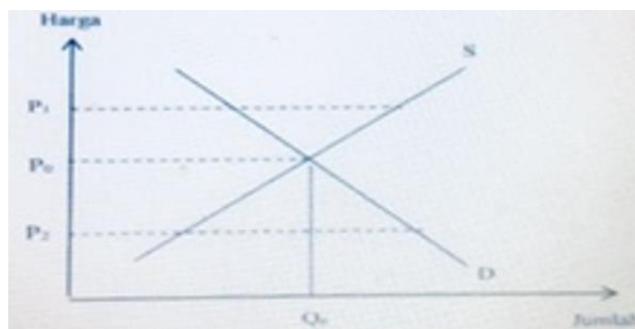


Figure 1. The determination of prices (*harga*) and number (*jumlah*) of demand/supply.

Figure 1 shows a strategic commodity due to price fluctuations. It will have an impact on increasing the final product for the processing industry on a large, small, and medium scale as well as the household's behavior as end consumers. In accordance with the demand theory, the goods price itself, the price of substitute goods and consumer tastes will affect the number of beef demand. There is the same as supply theory stated the number of production and imports will affect the number of beef supply in the country (Priyanti *et al.*, 2012; Sio *et al.*, 2016). Another factor can affect the balance of national meat prices is the development of the international beef market. The beef price currently has an increasing trend every year is 9.4% during the 2016-2018 period. The certain moments unlike fasting and Eid, the average beef price on retail level can increase 7.6% compared to before fasting. In May-June 2019, the national average retail beef price is IDR 110.685/kg.

The term is supported by a study entitled "Effect of beef imports on beef prices level of Indonesian domestic in 1993-2009" (Kurniawan, 2011). The study examined the effect of domestic beef production, consumption P2 S D, the number of P1 price, P0 Q0 6 domestic beef, world beef prices, exchange rate, and volume of beef imports on the level of world domestic beef prices in 1993-2009. T researcher was to test using *Ordinary Least Squared (OLS)* estimation techniques. The research result is domestic beef production, domestic beef consumption, world beef price, exchange rate, and beef import volume significantly influence the level of Indonesian domestic beef prices (Sukada *et al.*, 2016; 2019; Hadi *et al.*, 2002).

Determining beef price from the supply term is the beef price in the country. The number of local cattle production, cattle population, real salary level, capital interest rates, and cattle real price. The factors are the strongest influence on beef prices: (1) the cattle total population, (2) the number of local cattle production, (3) the beef price in the country. Nevertheless, there are still factors due to the increased beef prices that have not been caught in the equation model. For example, the effectiveness of slaughterhouses, inter-island trading system arrangements, as well as the time system of importation mechanisms (meat, feeder cattle, and ready-to-slaughtered cattle) on a regular basis. The factors are the strongest influence on demand terms beef prices (1) the number of local beef demand, (2) the number of local beef supply, (3) tastes, (4) dummy factor religious holidays, and (5) demand for imported beef. The religious holiday factor as the most influential dummy factor in increasing the beef price in the country. For example, on fasting month and approaching Eid, wherein both have a very strong influence compared to other religious holidays, namely Galungan, Nyepi, Eid al-Adha, and Christmas (Arnawa *et al.*, 2019; Suryani *et al.*, 2017; Kesuma & Setiawina, 2019).

Another determinant of the beef price is a commercial fracture on beef itself. The fracture commercial beef is usually sold in the modern market. The consumers are people who have middle to upper economic capacity. In the modern market, the commercially fracture beef prices vary according to texture and beef quality. The most expensive beef in sirloin IDR 238.500. if the traditional market is often called scrub meat. Ribeye reaches IDR 291.000/kg. Tenderloin is IDR 198.500. (Fig. 2).



Figure 2. The prices of commercially fracture beef in the modern market

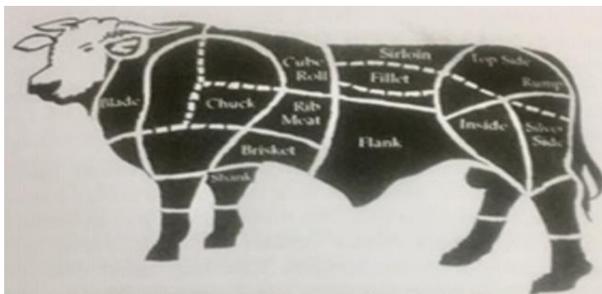


Figure 3. The most important part of the cow carcass

Beef prices in the traditional market in May 2019 is IDR 110.500. There is a slight difference in price between beef thighs with sirloin an average IDR 10.000. The thigh beef is cheaper ranges from IDR 8.000 to IDR 12.000. The price difference is high between traditional and modern markets is due to modern market facilities and packaging of products sold, the freshness of beef products in modern markets is maintained due to modern markets have cold storage or freezers to slow down product damage. Most of the items sold have a longer life with quality can not be doubted. The buyer comfort is guaranteed with good facilities unlike air conditioning, clean floors, and neatly arranged products according to its type. In addition, security is very guaranteed. There are security officers who guard.

4 Conclusion

Based on the above descriptive analysis results, the determinant of the beef price in the market is increasing every year solely due to:

- 1) The *place* wherein beef is sold. The sale price in traditional markets is (5-10)%. It is lower than the prices in modern markets. The sale price in modern markets is much more expensive compared to traditional markets.
- 2) *Packaging* affects the beef price. Beef packaged with mica boxes is on average 2% more expensive than standard prices.
- 3) The *form of beef* sold. Chopped forms are relatively more expensive on average 3-7%.
- 4) *Commercial fractures* on beef itself (Sirloin portions or scrubs are more expensive than other commercial fractures).
- 5) The *time* during Ramadan is a lot of demand. Therefore, it affects increasing a beef prices.

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