

Analysis of Distribution and Consumption Patterns in Pangkalpinang City

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Abstract: *The food industry not only fulfils basic human needs for survival, but is also one of the vital economic sectors for a region. It creates jobs, from farmers to distributors, and drives various related industries such as packaging and transportation. Furthermore, the export of food products can be a significant source of foreign exchange. Thus, the healthy and sustainable development of the food industry not only ensures the food security of the community, but also contributes to economic growth and overall regional welfare. The purpose of this study is to analyze distribution and consumption patterns in Pangkalpinang City, using analysis of market structure detection, and analysis of trade and transport margins. The data from this study uses primary data, the results show that the distribution pattern of cooking oil and chicken eggs has the longest path and the pattern of consumption of food commodities contributing to the highest deflation is rice.*

Keywords: Pattern, Food, Distribution, Consumption

JEL : D3, D4, E2, R4

1. INTRODUCTION

Pangkalpinang City is the capital of the Bangka Belitung Islands Province, where the Pangkalpinang City Statistics Agency states that the total population recorded in 2022 was 225,162 people, with a population density of 9,514 people per km². Then the population density will increase along with the growth rate, which is 5.80% in the period 2021 to 2022.

The food industry is one of the basic human needs as well as a factor that can create regional economic stability, especially in the Pangkalpinang area (Hariyadi & Dewanti-Hariyadi, 2009; Max-Neef, 2017; Sadiku et al., 2019). Humans cannot survive without food, in Food Law No. 18/2012, it is stated that the central government and local governments are responsible for food availability, food distribution, and are obliged to improve the fulfillment of the quantity and quality of people's food consumption (Ardani, 2020; Suryana et al., 2017; Zahra & Ramadani, 2023).

Based on data from the Central Bureau of Statistics of Pangkalpinang City, 2022, the basic needs of the community, especially food, include volatile goods so that they have the highest inflation rate compared to other sectors. Inflation or volatility in the price of basic needs of the community will result in weak economic stability. Table 1. shows monthly inflation in Pangkalpinang City based on expenditure groups, in 2022 the inflation rate of goods from the food sector amounted to 2.66%, the position of this sector is far above other sectors, except for the housing, water, electricity, and household fuel, and personal care and other services sectors, which amounted to 3.84% and 3.96% respectively. Therefore, it is necessary to conduct a study on the price mapping of community goods in a region. This is in line with national data related to inflation.

Table 1. Monthly Inflation in Pangkalpinang City by Expenditure Group
Year 2022 (in percent)

No.	Details	Jan	Feb	Mar	April	May	June	2022*
1	Food, Drink, and Tobacco	2.72	-2.22	2.21	1.36	3.07	-0.98	2.66
2	Clothing and Footwear	0.11	0.09	0.48	0.45	0.03	-0.04	0.68
3	Housing, Water, Electricity and Household Fuel	1.41	0.27	2.12	0.74	0.15	0.34	3.84
4	Supplies, Equipment, and Routine Maintenance Household	0.27	0.48	0.53	0.46	0.31	0.30	1.28
5	Health	0.06	-0.13	0.15	0.06	0.01	0.09	0.08
6	Transportation	-0.07	0.05	-1.06	6.74	-1.83	-0.29	-1.08
7	Information, Communication, and Financial Services	0.34	0.19	0.27	0.00	-0.15	0.21	0.80
8	Recreation, Sports, and Culture	-0.01	0.78	0.00	0.07	0.00	0.00	0.77
9	Education	0.16	0.00	0.00	0.00	0.00	0.00	0.16
10	Food Provision and Beverages/Restaurants	0.74	0.21	0.00	2.3	0.95	0.00	0.95
11	Personal Care and Other Services	0.15	1.69	2.08	1.56	-0.04	1.22	3.96
General Inflation		1,22	-0,53	1,10	1,82	0,85	-0,22	4,28

Source: BPS Kota Pangkalpinang, 2022

*Data for 2022 from January-June data

Prices at the consumer level are closely linked to prices set by producers and traders (Bhinadi, 2012; Irawan, 2007; Smale et al., 2012). Price determination by producers, wholesalers and small traders is influenced by economic behavior that is closely related to the market structure. Economic actors in an invisible force, namely the market structure (Indrawati, 2020; Rumallang et al., 2019; Sari et al., 2012). The study of market structure is important to determine the nature of the basic needs of the community in the market whether homogeneous or differentiated, knowing the number of traders and buyers and how price formation occurs (Indrawati, 2020). If inflation in a region is caused more by an uncompetitive market structure, then prices in the market are more controllable.

In Pangkalpinang City, it turns out that the price of basic necessities for the community is not only caused by market behavior, but also a dynamic market structure, especially during the Covid-19 pandemic. Analysis of the volatility of inflation rates in foodstuffs (especially basic goods for the community) is urgent to achieve price stabilization (Rangasamy, 2011). Because it will trigger the quality of economic growth to degrade. The contribution of household consumption is declining every year (2021-2022). Since inflation is a response to market behavior, i.e. a change in the behavior of supply and demand as a gap, it is necessary to look at both in encouraging a new market equilibrium. (Horwitz, 2003). Therefore, as part of the effort to control regional commodity prices, it is necessary to map commodity prices, production and consumption behavior, market structure, and distribution patterns, as well as marketing margins (Arsanti et al., 2017; Hermanto, 2017; Oktavianti, 2013; Rahim et al., 2012; Sari et al., 2012).

Strategic commodity distribution patterns can be seen in the release of trade distribution patterns and strategic commodity Trade Margins. Trade distribution patterns are related to trade institutions and channels that explain the trade institutions involved in distribution. Margin of Trade and Transport (TTM) is related to price changes at the producer, intermediary, and consumer levels (Darwis et al.,

2020).

According to Hanum (2018) stated that household consumption patterns are usually influenced by population diets, food availability and income levels. The availability of food in an area affects the food consumption patterns of the local community. According to Miranti et al. (2016) states that there are differences in food consumption patterns between households in urban and rural areas, thus causing differences in the level of household food diversification.

This study aims to determine the distribution pattern of trade in food commodities, namely rice, cooking oil, granulated sugar, broiler chicken, chicken eggs, fish, wet shrimp, shallots, chilies, and vegetables in Pangkalpinang City from producers to final consumers, to determine household food consumption patterns, and to determine the value and percentage of trade and transport margins (TTM).

2. LITERATURE REVIEW

2.1 Distribution Pattern

Distribution patterns are people or institutions whose activities distribute goods from producers to consumers with the aim of making a profit by forming a chain of marketing channels (Agustin, 2018; Siagian, 2005). Distribution patterns are basically intermediaries that bridge between producers and consumers. The number of intermediary traders involved in trade distribution can affect the length of the distribution pattern chain and the amount of marketing costs.

The amount of marketing costs will lead to greater price differences between farmers and consumers. The distribution pattern of trade is an economic activity carried out to bridge the production and consumption process, so that goods from producers can be distributed to consumers. Trade distribution is closely related to the role of each mediator which will affect the economic development of the community.

Distribution patterns from producers to consumers can be done directly or involve a series of marketing institutions. Some of these marketing institutions include intermediary traders or retailers until finally sold to consumers. The distribution pattern takes place through cooperation between producers and intermediary traders and retailers.

2.2 Consumption Pattern

The higher prices of products sold will also have an impact on consumption patterns in households. This is because each household has a different level of income. The higher the household income earned, the higher the household consumption pattern. Conversely, households with low income will limit consumption patterns to meet the main needs of the household.

According to Samuelson & Nordhaus, (2004) explains the regularity of general consumption patterns by households or families. Poor families spend their income mainly on food and housing. As income rises, food expenditure rises and food becomes more varied. However, there is a limit to the extra money used for food expenditure as their income rises. Therefore, as income increases, the proportion of food expenditure decreases and will shift to non-food needs such as clothing, recreation, luxury goods, and savings.

Consumption patterns can be used as an indicator of household welfare (Adiana & Karmini, 2012). Consumption patterns that are dominated by food expenditure are a portrait of a community with low welfare. Conversely, consumption patterns that are dominated by non-food expenditures are a picture of more prosperous households. This is because households with low incomes can only focus on meeting basic needs for the survival of the household so that consumption patterns appear dominant in food consumption. Meanwhile, households with higher incomes can fulfill both food and non-food needs.

2.3 Industry and Trade

Law No. 3/2014 on Industry has placed industry as one of the pillars of the economy and given a considerable role to the government to encourage the progress of the national industry in a planned manner. This role is needed in directing the national economy to grow faster and catch up with other countries that are more advanced (Situmorang & Kurniawan, 2018).

To strengthen and clarify the role of the government in national industrial development, it is necessary to prepare a systematic, comprehensive, and futuristic national industrial development

plan in the form of the National Industrial Development Master Plan 2015-2035, hereinafter referred to as RIPIN 2015-2035.

The food commodities most consumed by the community in Pangkalpinang City are rice, red chili, shallots, and broiler chicken meat. The consumption pattern will be influenced by the value of product prices, the population's diet, food availability and income levels. The higher household income can change the consumption pattern of the household, which was previously dominated by simple starchy crops to be more varied such as consumption of fruit, vegetables, milk and meat.

3. METHOD

This research was conducted in Pangkalpinang City, Bangka Belitung Islands Province. The location selection was carried out purposively (purposive sampling) is one of the cities that has a price stabilization program for basic community needs. The research was conducted from January to June 2022. The primary data collection method was carried out by survey method, namely through interviews and observations.

3.1 Data Analysis Technique

a) Descriptive Analysis

This research was conducted in Pangkalpinang City, Bangka Belitung Islands Province. The location selection was carried out purposively (purposive sampling) is one of the cities that has a price stabilization program for basic community needs. The research was conducted from January to June 2022. The primary data collection method was carried out by survey method, namely through interviews and observations.

b) Market Structure Detection

Market structure is the state of the market that presents aspects that significantly affect business behavior and market performance.

c) Trade and Transport Margin Analysis

Trade and Transport Margin (TTM) is the compensation of the trader as a distributor of goods, which is the difference between the value of sales and the value of purchases. This margin is a measure of the amount of output from trading activities. Meanwhile, according to Puspita, (2022), the Trading and Transport Margin (TTM) is the difference between the value of sales and the value of commodity purchases that include transportation costs as compensation for traders who become commodity distributors. The TTM value is a calculation of the distribution cost of the distribution pattern that is included in the selling value of the commodity. The higher the TTM value indicates that the distribution pattern is longer and less efficient, of course this will be detrimental from the producer side, namely farmers and breeders and consumers. How to calculate the Total TTM value is as follows:

$$\text{Total TTM} = ((1 + \text{TTM}_P) \times (1 + \text{TTM}_G) \times (1 + \text{TTM}_E) - 1) \times 100\% \dots\dots\dots 1$$

Where:

TTM Total	= Total Margin of Trade and Transport
TTM _P	= Producer Trade and Transport Margin
TTM _G	= Wholesale Trade and Transport Margin
TTM _E	= Retailer's Trade and Transport Margin

4. RESULTS AND DISCUSSION

4.1 Market Structure Analysis

In the market structure analysis section, the author will present the distribution channels for each commodity within the scope of this study.

4.1.1 Rice Commodity Distribution Lines

Trade distribution patterns describe the distribution chain of a commodity from producers to final consumers in an area involving trade actors. This publication analyzes the distribution of rice commodity trade nationally and regionally as a result of distribution pattern surveys with respondents from producers, wholesalers, distributors and wholesalers, and retailers in the

Pangkalpinang City area. The following are the distribution channels of rice commodities:

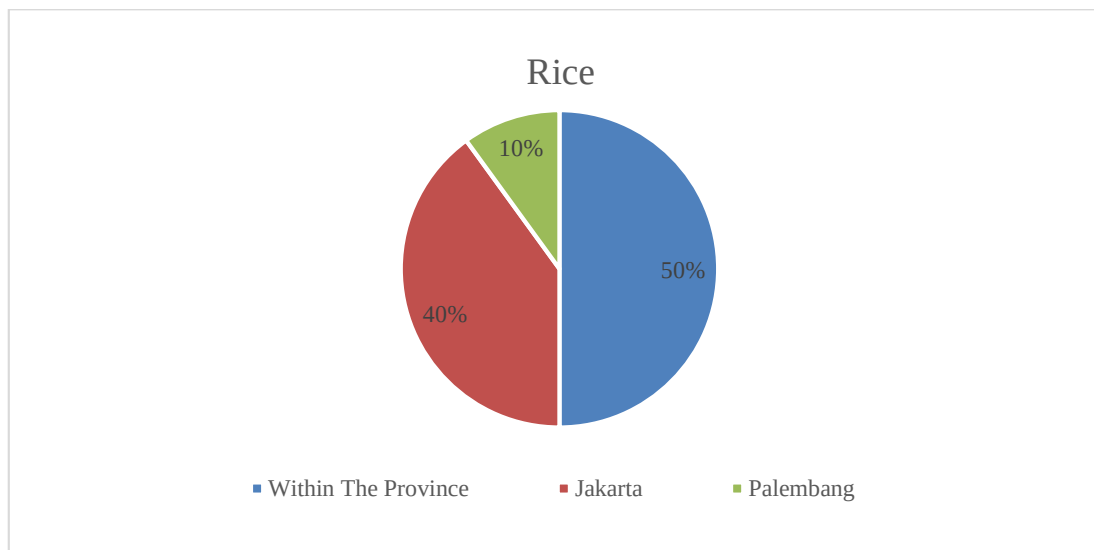


Figure 1. Rice Commodity Distribution Channels and Proportion of Rice Distribution in the Bangka Belitung Islands Province
Source: Processed Data (2022)

Based on Figure 1., the survey results show that the distribution of rice from producers to final consumers in Pangkalpinang City can involve 5 trading actors. The main pattern of rice trade distribution is from outside the province-distributors-traderbig-retailers-consumers with a total TTM of 9.10%, which indicates that nationally, the price increase from producers to final consumers based on the main pattern is 9.10%, meaning that from the first path from outside the province to the final consumer in Pangkalpinang City, the TTM is 9.10%, the price increase from producers outside the province to consumers in Pangkalpinang City is 9.10%.

Rice suppliers in Bangka Belitung Islands Province are not only from within the province but also from outside the province. Based on Figure 1, the proportion of rice distribution in Bangka Belitung Islands Province based on the supply area shows that, from within the province, the distribution of rice is 50%, while from outside the province comes from two cities, namely from Jakarta by 40%, and Palembang by 10%. Although 50% of the rice is sourced from within the province, the majority is also sourced from outside the province.

4.1.2 Distribution Channel of Cooking Oil Commodity

The distribution pattern of cooking oil trade describes the distribution chain of cooking oil from producers to final consumers involving trade distribution business actors. Each trade actor earns a trade and transport margin (TTM) in the trade activities involved, potentially lengthening the distribution chain which is suspected to result in price increases at the consumer level. This publication analyzes the domestic trade distribution of cooking oil commodities in Pangkalpinang City. By using a survey method on a sample of producer traders, information is obtained on the distribution pattern of cooking oil commodities nationally and regionally. The following are the distribution channels of cooking oil commodities, namely:

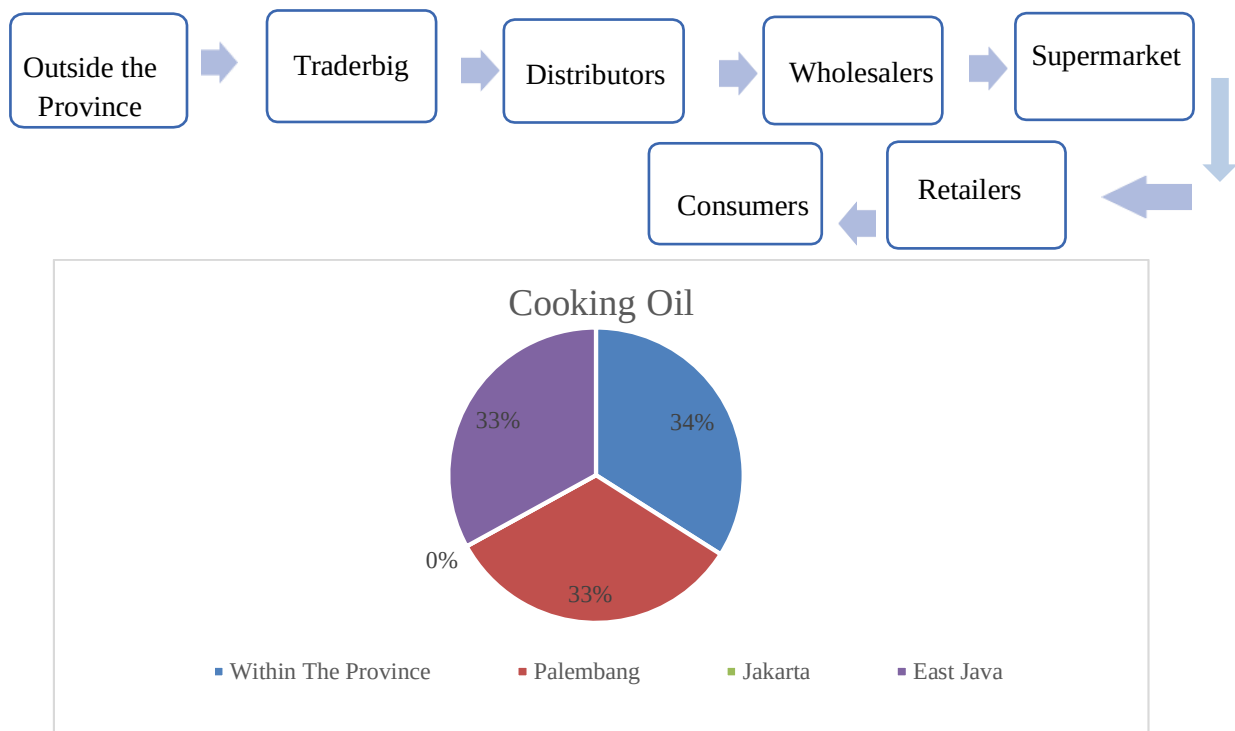


Figure 2. Distribution Line of Cooking Oil Commodity and Proportion of Cooking Oil Distribution in Bangka Belitung Islands Province
Source: Data Processed (2022)

Based on Figure 2., the survey results show that the distribution of cooking oil from producers to final consumers in each province involves 2 to 4 trade actors. The main distribution pattern of the national cooking oil trade is Outside Province-Traderbig-Distributors-Wholesalers-Supermarket-Retailers-Household with a trade and transport margin of 17.15%. This main distribution chain is also the longest chain of cooking oil distribution in Pangkalpinang City. Based on Figure 2, the proportion of cooking oil distribution in Bangka Belitung Islands Province shows that from within the province the distribution of cooking oil is 34%, while from outside the province there are three, namely from Jakarta 0.33%, Palembang by 33%, and from East Java by 34%.

4.1.3 Distribution Channel of Sugar Commodity

Trade distribution patterns describe the distribution chain of a commodity from producers to final consumers in an area involving trade actors. This publication analyzes the trade distribution of granulated sugar commodities nationally and regionally, the results of the Distribution Pattern Survey with respondents from producers, wholesalers, distributors, wholesalers, retailers and final consumers in Pangkalpinang City. The survey results show that the distribution of sugar from producers to final consumers in Pangkalpinang City can involve 3 to 7 actors of trade activities. The following are the distribution channels of granulated sugar commodities, namely:

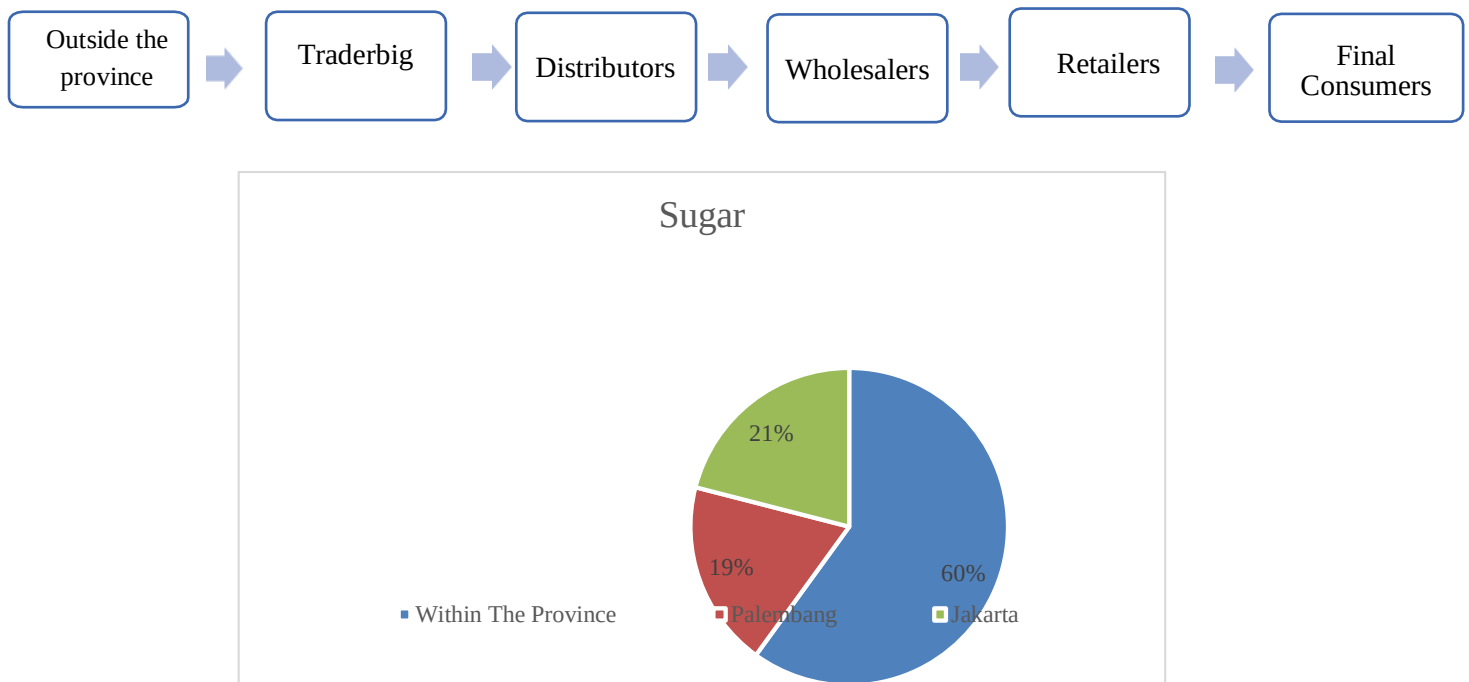


Figure 3. Distribution Channels for Sugar Commodities and Proportion of Sugar Distribution in Bangka Belitung Islands Province
Source: Data Processed (2022)

The main pattern of national sugar trade distribution is outside the province - traderbig - distributors - wholesalers - retailers - final consumers, with a total TTM of 5.09% which indicates that nationally the price increase from producers to final consumers based on the main pattern is 5.09%. Based on Figure 3, the proportion of sugar distribution in Bangka Belitung Islands Province shows that from within the province the distribution of granulated sugar is 60%, while from outside the province there are two, namely from Jakarta 21%, and Palembang by 19%.

4.1.4 Distribution Channel of Broiler Chicken Meat Commodity

The distribution pattern of purebred chicken meat trade in Pangkalpinang City starts with agents who obtain supplies from producers and distributors. Furthermore, agents sell their goods to retail traders, while the rest are sold to final consumers, which include households and other business activities. On the other hand, wholesalers who receive supplies from distributors also sell their goods to retailers and households. Furthermore, the supply of broiler chicken meat owned by retail traders is sold to fellow retail traders, while the rest is sold to final consumers in the form of households and processing industries. The following are the distribution channels for broiler chicken meat commodities, namely:



Figure 4. Distribution Channels for Broiler Chicken Meat Commodities

The trade distribution pattern describes the distribution chain of a commodity from the producer to the final consumer in Pangkalpinang City that involves trade actors. This publication analyzes the trade distribution of broiler chicken meat commodities in Pangkalpinang City. Information on the distribution pattern of broiler meat commodities nationally and regionally was

obtained by conducting a survey of producers and traders. The survey results show that the distribution of rice from producers to final consumers in Pangkalpinang City can involve 1 to 6 trade actors. The main pattern of rice trade distribution is producer-large trader-distributor-wholesaler-retail trader-final consumer with a total TTM of 12.48%, indicating that nationally the price increase from producer to final consumer based on the main pattern is 12.48%.

4.1.5 Distribution Channel of Broiler Egg Commodity

Trade distribution patterns describe the distribution chain of a commodity from producers to final consumers in an area involving trade actors. This publication analyzes the trade distribution of broiler egg commodities from the national and regional Distribution Pattern Surveys with respondents from producers, wholesalers, and retailers in Pangkalpinang City. The survey results show that the distribution of broiler eggs from producers to final consumers in the Pangkalpinang City area can involve 4 to 7 trade actors. The following are the distribution channels of egg commodities, namely:

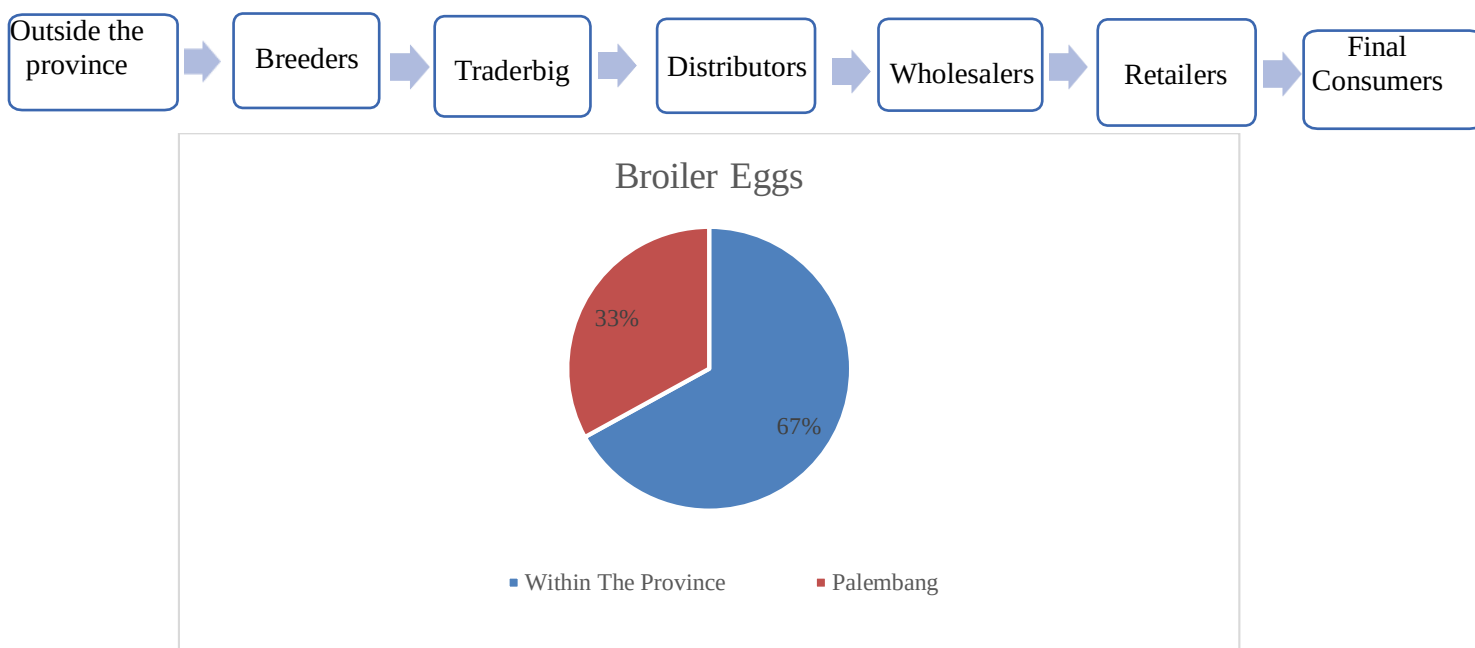


Figure 5. Distribution Channels for Broiler Eggs Commodities and Proportion of Broiler Egg Distribution in Bangka Belitung Islands Province
Source: Data Processed (2022)

Based on Figure 5., the trade distribution of broiler egg commodities from producers to final consumers in the Pangkalpinang City Region involves a number of trade actors, namely outside the province, breeder traders, distributors, wholesalers, retail traders, supermarkets and to final consumers. The results of the Distribution Pattern Survey show that the TTM of the broiler egg commodity is 24.76%. This means that the increase in the price of broiler eggs from the producer level to the final consumer is 24.76%. Based on Figure 4, the proportion of distribution of broiler eggs in the Bangka Belitung Islands Province shows that from within the province the distribution of broiler eggs is 67%, while from outside the province, namely Palembang, it is 33%.

4.1.6 Fish Commodity Distribution Lines

Trade distribution patterns describe the distribution chain of a commodity from fishermen to final consumers in an area involving trade actors. This publication analyzes the trade distribution of fish commodities consisting of breams fish, catfish, yellowstripe scad, frozen fish. The results of the Survey of Distribution Patterns nationally and regionally with respondents of Fishermen, Collecting Traders (TPI), Large Traders, and retail traders in the Pangkalpinang City area.

The survey results show that the distribution of various types of fish from producers to final consumers in the Pangkalpinang City area can involve 4 to 7 trade actors. The following are the distribution channels of fish commodities, namely:



Figure 6. Distribution Path of Fish Commodities

Based on Figure 6., trade distribution of various fish commodities such as breams fish, catfish, yellowstripe scad, frozen fish from producers to final consumers in Pangkalpinang City involves a number of trade actors, namely fishermen, collective traders (TPI), large traders, retail traders and final consumers. The result of Distribution Pattern Survey shows that TTM of broiler egg commodity is 5.75%. This means that the price increase of broiler eggs from producer level to final consumer is 5.75%.

4.1.7 Distribution Channel of Wet Shrimp Commodity

Trade distribution pattern describes the distribution chain of a commodity from producer to final consumer in a region involving trade actors. This publication analyzes the trade distribution of wet shrimp commodities nationally and regionally as a result of distribution pattern survey with respondents from fishermen, intermediary traders, wholesalers, and retailers in Pangkalpinang City. The following are the distribution channels of wet shrimp commodities, namely:

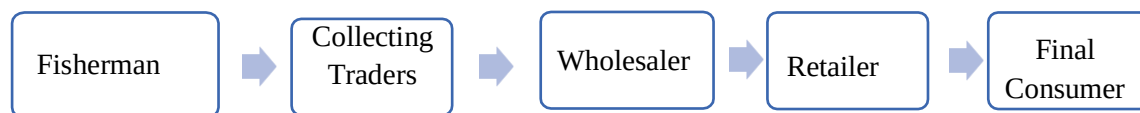
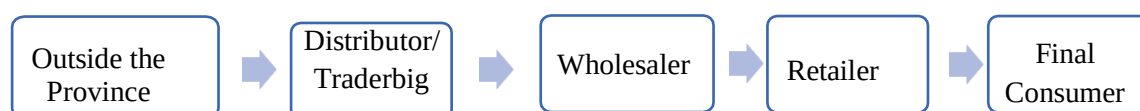


Figure 7. Distribution Path of Wet Shrimp Commodities

Based on Figure 7., the survey results show that the distribution of wet shrimp from producers to final consumers in Pangkalpinang City may involve 3 to 8 trading actors. The main pattern of rice trade distribution is fishermen-collecting traders-retailers-final consumers with a total of 3.98% which indicates that nationally the price increase from producers to final consumers based on the main pattern is 3.98%.

4.1.8 Shallot Commodity Distribution Channel

The red onion trade distribution pattern describes the red onion distribution chain from producers to final consumers in an area involving trade actors. Each trade actor earns a trade and transport margin (TTM). The more trade actors involved, the more potential the length of the distribution chain. The length of the distribution chain is thought to result in price increases. This publication analyzes the trade distribution of shallot commodities in the Pangkalpinang City area. From the trade side, the distribution of shallot in Pangkalpinang City involves business functions such as wholesalers, distributors, wholesale traders, and retail traders. Meanwhile, the final consumers consist of other business activities and households. The trade channel starts from wholesalers (PG) who get red onion supplies from various business functions above them, including producers. The following are the distribution channels for onion commodities, namely:



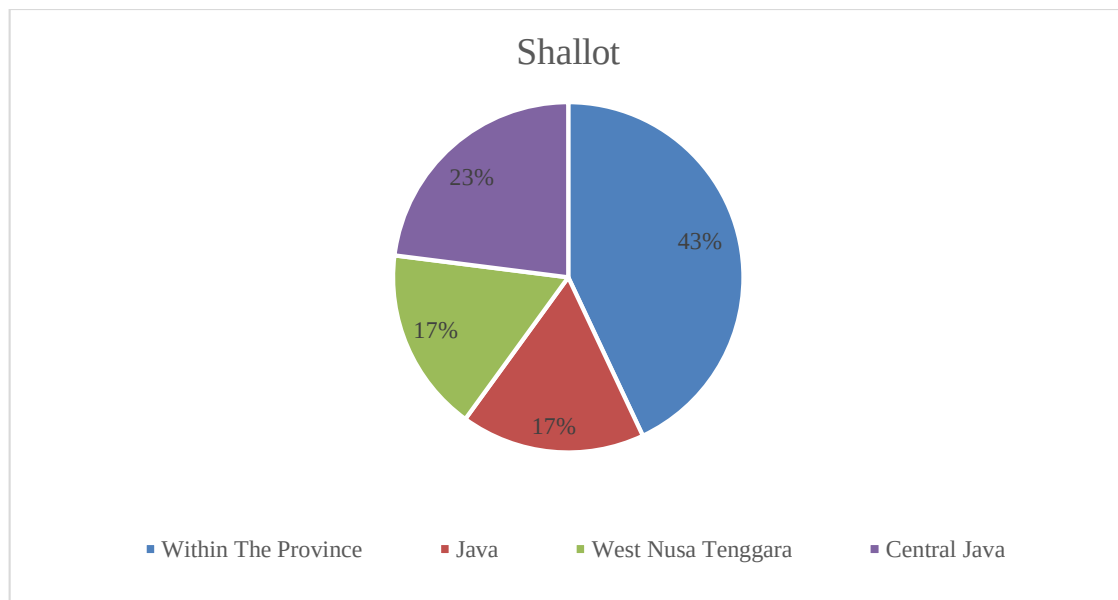


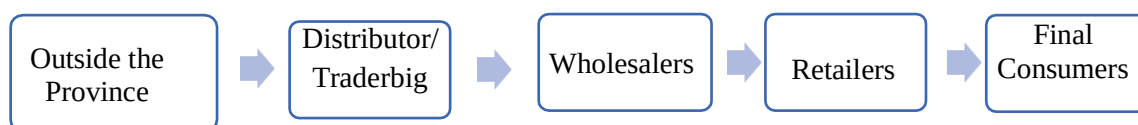
Figure 8. Shallot Commodity Distribution Channel Proportion of Red Onion Distribution in Bangka Belitung Islands Province
Source: Data Processed (2022)

Based on Figure 8, using the survey method on a sample of producers and traders, information is obtained on the description of the distribution pattern of red onion commodities nationally and regionally. The survey results show that the distribution of red onions from producers to final consumers involves 2 to 7 actors of trading activities. The main pattern of shallot trade distribution in Indonesia is farmers - collecting traders - large traders – distributors – wholesalers - retail traders -final consumers with a total trade and transport margin of 71.3%.

Based on Figure 5, the proportion of shallot distribution in Bangka Belitung Islands Province shows that from within the province, the shallot distribution is 43%, while from outside the province, namely Central Java is 23%, Java 17%, and West Nusa Tenggara 17%.

4.1.9 Distribution Channel of Chili Commodities

The distribution pattern is basically an intermediary that bridges between producers and consumers. The number of intermediary traders involved in chili marketing will affect the length of the distribution pattern chain and the amount of marketing costs. The amount of marketing costs will lead to greater price differences between farmers and consumers. The relationship between the price received by farmers and the price paid by consumers is highly dependent on the market structure that connects them. If the greater this price difference will cause the price received by producer farmers to become smaller and more indicative of an inefficient marketing system. The following are the distribution channels for chili commodities, namely:



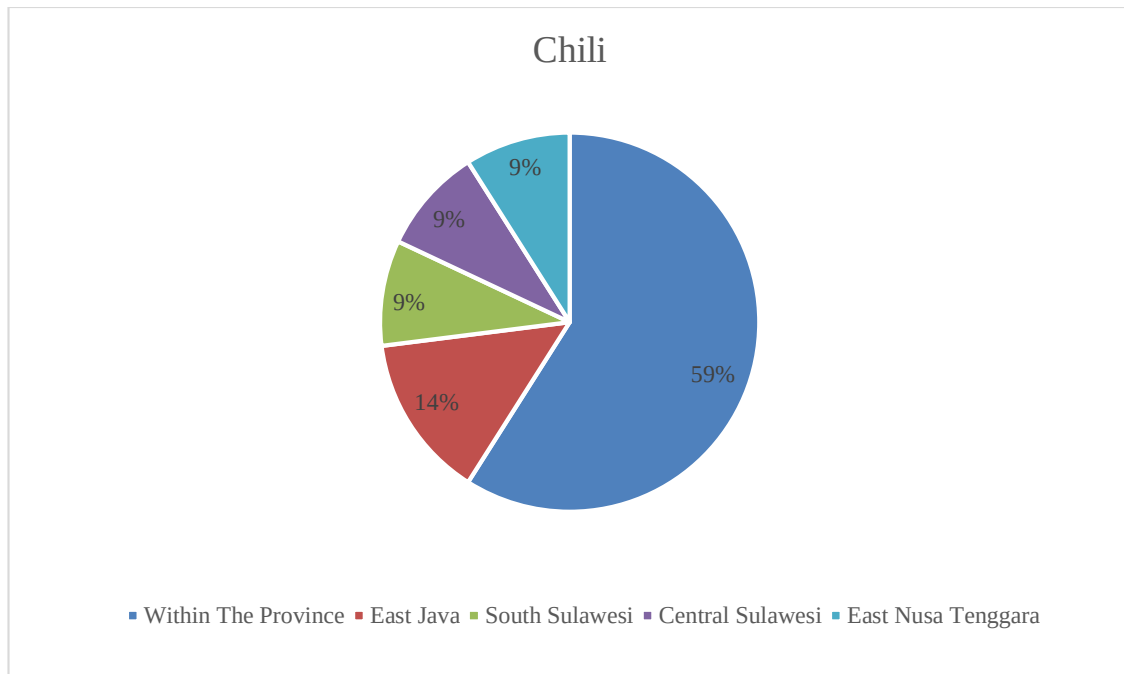


Figure 9. Distribution Lines of Chili Commodities and Proportion of Chili Distribution in Bangka Belitung Islands Province

Source: Data Processed (2022)

Based on Figure 9., the survey results show that the distribution of chili from farmers to final consumers in the Pangkalpinang City area involves 2 to 4 trading actors. The main distribution pattern of the national chili trade is farmers-collectors-large trader-distributors-wholesalers-household with a trade and transport margin of 0.89%.

Based on Figure 6., the proportion of chili distribution in Bangka Belitung Islands Province shows that from within the province the distribution of chili is 59%, while from outside the province, namely East Java 14%, South Sulawesi 9%, Central Sulawesi 9%, and East Nusa Tenggara 9%.

4.1.10 Distribution Channel of Vegetable Commodities

Trade distribution patterns describe the distribution chain of a commodity from producers to final consumers in an area involving trade actors. This publication analyzes the distribution of vegetable commodity trade nationally and regionally as a result of the Distribution Pattern Survey with respondents from producers, wholesalers, distributors, wholesalers and retailers in Pangkalpinang City. The following are the distribution channels of vegetable commodities, namely:

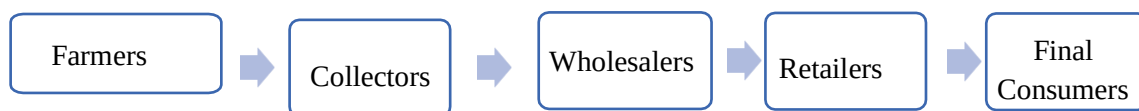


Figure 10. Distribution Lines of Vegetable Commodities

Based on Figure 10., the survey results show that the distribution of vegetables from producers to final consumers in the Pangkalpinang city area can involve one to six trade actors. The main pattern of vegetable trade distribution is producers - wholesalers - distributors - wholesalers - retailers - final consumers with a total TTM of 67.29% which indicates that nationally the price increase from producer to final consumer based on the main pattern is 67.29%.

4.2 Trade and Transport Margin Analysis

From Figure 7. below, we can see the results of the trade and transport margin in Pangkalpinang City. There are ten commodities studied in this study, namely, rice, cooking oil, granulated sugar, broiler

chicken, chicken eggs, fish, wet shrimp, red onion, chili, and vegetables.

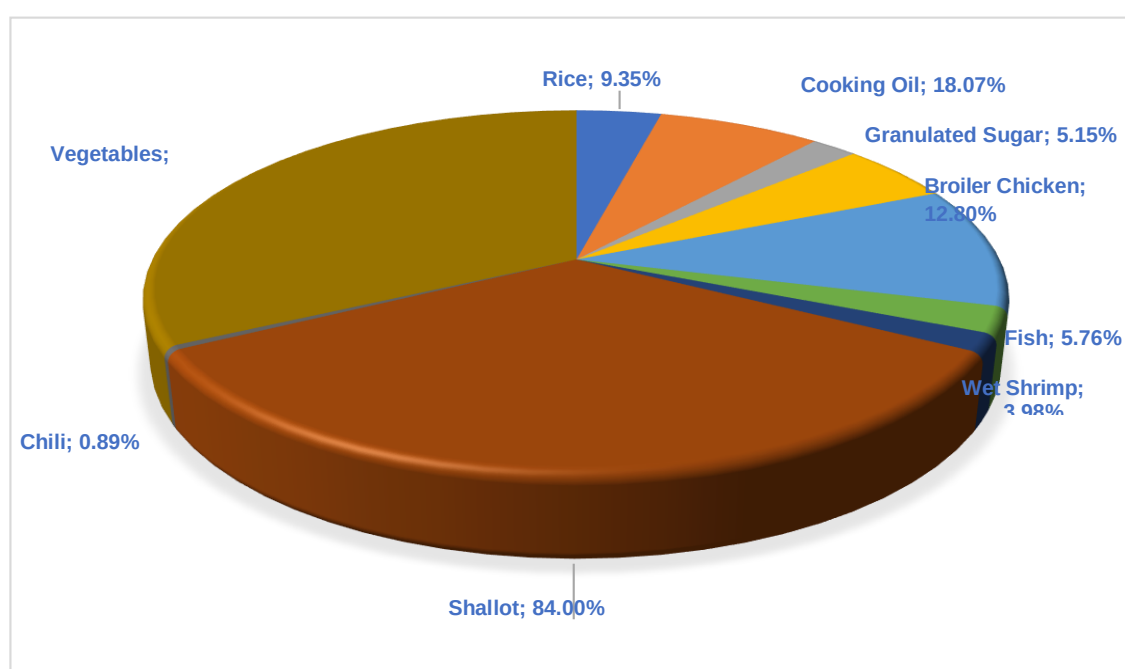


Figure 11. Trade and Transport Margin
Source: Data Processed (2022)

The shallot commodity has the highest TTM value, which is 84.00%, meaning that the higher the TTM value indicates that the distribution pattern is getting longer and less efficient, of course this will be detrimental from the producer side, namely shallot farmers. The chili commodity has the lowest TTM value, which is 0.89%, meaning that the efficiency level of the distribution pattern is getting better and more profitable from the producer or chili farmer side.

4.3 Food Consumption Patterns in Pangkalpinang City

Table 2. Total Food Consumption, Total Supply, and Share of Commodities Driving Inflation in Pangkalpinang City in 2021

No.	Commodities	gr/capita/ day	Kg/capita /year	Supply Quantity/ Kg/Day	Supply Quantity/Ton/ Year	Inflation/Defla tion/ 2021/%
1	Rice	177,4	64,7	32.642,31	11.905,06	-0,25
2	Cooking Oil	25,1	9,2	4.618,50	1.692,84	0,23
3	Granulated Sugar	21,1	7,7	3.882,48	1.416,83	-
4	Breed Chicken Meat	0,3	0,1	55,20	18,40	-0,08
5	Broiler Eggs	22,6	8,2	4.158,49	1.508,83	0,039
6	Yellowstripe scad	13,9	5,1	2.557,66	938,42	0,86
	Long Jawed Mackerel	7,3	2,67	1.343,23	491,29	0,42
	Breams					
	Fish/Other	21,7	7,9	3.992,89	1.453,63	0,21
7	Fresh Fish					
	Catfish	3	1,1	552,01	202,40	-
8	Wet Sea Shrimp	4,6	1,7	846,42	312,81	0,03
8	Red Onion	10	3,65	1.840,04	671,61	-0,12

9	Red Chili	5,8	2,1	1.067,22	386,41	0,01
	Spinach					
	Vegetable	10	3,97	1.840,04	730,50	0,29
10	Water Spinach	11,3	4,12	2.079,25	758,10	0,45
	Vegetable					
	Collard Greens	9	3,3	1.656,04	607,21	0,36
	Vegetable					
Pangkalpinang City						2,45

Source: BPS, Food and Agriculture Office of Pangkalpinang City, Data Processed (2021)

Table 2. above shows the amount of food consumption, the amount of supply, and the share of commodities driving inflation in Pangkalpinang City in 2021. Of the ten commodities, rice is the most consumed commodity, namely 177 gr / capita / day, 64.7 Kg / capita / year, then the need for rice supply is 3,2642.31 Kg / day and 11,905.06 Tons / year, but with the amount of rice consumption of 64.7 Kg per capita every year, it turns out that rice is the highest contributor to deflation in Pangkalpinang City, seen from the ten food commodities the deflation value of rice is -0.25%. A continuous decline in the price of goods and services within a certain time is called deflation. Deflation occurs when the supply or supply of goods in the market exceeds the demand for the goods themselves, deflation also occurs when input prices fall and technological advances such as machines that are able to increase production output, while demand for these goods is fixed, so producers must reduce their selling prices.

In the short term, deflation is good for the economy, because with a decrease in prices, people will increase their consumption, which will then increase the demand for goods and services, but deflation is not good if it lasts for a long time, because it will reduce domestic production, if deflation continues to be allowed to increase unemployment, due to a decrease in purchasing power from reduced public income (Nur et al., 2012; Oktavia & Amri, 2017; Ryngaert, 2022). From the rice commodity as the highest contributor to deflation of the ten food consumption is due to the amount of rice supply in Pangkalpinang City exceeds the amount of demand in Pangkalpinang City itself, meaning there is an *excess supply* of rice commodities, so it is necessary to control the price of rice itself.

Inflation is a continuous increase in the prices of goods and services over a certain period of time (Eti et al., 2023; Malikova & Ziyadullayeva, 2023; Sawitri et al., 2023). Inflation is the opposite of deflation. Good inflation is in the range of 1% to 3%, in this range the economy will grow in accordance with what is expected and at this limit also shows a healthy economy, prices can be controlled, so that demand for consumption of goods and services will continue to increase. Of the commodities above, the highest contributor to inflation is the fish and vegetable family, but yellowstripe scad is the highest contributor to inflation in Pangkalpinang City in 2021 at 0.86% with the amount consumed of 13.9 gr per capita per day and 5.1 kg per capita per year, while the amount of yellowstripe scad supply is 2,557.66 kg per day and 938.42 tons per year. The increase in inflation from this commodity is caused by the demand for yellowstripe scad fish continues to increase, but is not accompanied by the amount of mackerel supply available in the market, eventually causing prices to jump up. This increase was also triggered by the increasing level of consumption of mackerel, because the people of Pangkalpinang City like to consume fish, both processed directly and processed fish such as pempek/fishcake, bakwan and so on, the culture of eating fish in Pangkalpinang City is very strong. The shortage of mackerel supply is also caused by fishermen who are not maximizing their catch, due to weather factors, fuel prices and so on, as a trigger for the shortage of mackerel supply in the market.

5. CONCLUSION

Based on the research results obtained from the analysis of distribution and consumption patterns in Pangkalpinang City, the following conclusions are obtained: 1. The distribution pattern of cooking oil and chicken eggs commodities has the longest path, which is as many as six paths from producers to consumers, then rice, sugar, wet shrimp, red onion, chilies and vegetables have five paths, while broiler chicken and fish commodities have the shortest path, which is as many as four paths only; 2. The value of the largest trade and transport margin is found in red onion commodities by 84% and the smallest is found in chilies by 0.89%. The consumption pattern of food commodities contributing to the highest deflation is rice by -0.25% and the highest inflation contributor is from yellowstripe scad by

0.86%. The final conclusions obtained and suggestions for improvements deemed necessary or relevant follow-up research.

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