



UNDERSTANDING MARKET BEHAVIOR ON CORN COMMODITY: PHENOMENON IN THE YEAR END

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ABSTRACT

The cause of market failure is ~~that there is no~~ lack of synchronization between ~~demand and supply~~ and demand, or vice versa ~~in supply and demand~~. Initially, corn was considered as a substitute and a complementary commodity for food, but now it has turned into a basic need for people in Indonesia, especially when they celebrate the new year. ~~An obsession~~ The main aim of this study is to examine the interaction between the demand side and the supply side. The ~~objectivity of the~~ study was ~~designed~~ carried out by inviting 9,850 respondents in Samarinda City to be ~~reviewed~~ surveyed regarding interest, tradition, taste, price, opportunity, profit, production cost, and distribution. Empirical testing ~~practices the right and measure in interpreting~~ was used to interpret the data, including correlation, reliability, and validity. ~~We found that there is a constructive~~ Constructive validity was found in the market behavior function, where the indicators of consumer demand ($p < 0.01$) and produce supply ($p < 0.01$) have a significant effect. ~~Another thing that stands out is~~ Also highlighted were production cost and distribution, both of which have a positive channel and ~~are~~ closely related to the other six indicators. The consistent performance of production cost and distribution supported further evidence providing stability of measurement results. ~~Not only that~~ Additionally, tradition and opportunity also ~~have produced~~ high coefficients in the reliability ~~testing test~~. We can ~~consider concrete expectations to further~~ examine empirical results by including other dimensions, such as social ~~factors~~, psychological ~~factors~~, and individual factors. In addition, diagnostic transformations need to be highlighted, where market trends can change along with the growth of other commodities.

Contribution/Originality: The orientation of this study emphasizes and focuses on the increase in the demand ~~side~~ and supply ~~sides~~ of corn commodity. Although livestock commodities (~~example, g.,~~ chicken ~~meat~~) and plantation commodities (~~e.g.,~~ coffee and tobacco) have also increased ~~at~~ by the end of the year, the most popular commodity in Indonesia is ~~corn, such as~~ food crops. ~~In addition, another such as corn.~~ Another feature is that ~~we concentrate it in the case~~ this study ~~for the~~ offers is its focus on Samarinda City, where the market depends not only on consumer demand but also on attractive ~~producer~~ offers from producers.

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1. INTRODUCTION

The ambition of this study is to look at market anomalies in the demand for corn commodities during the year-end celebrations in Samarinda City. Generally, the end of the new year is a time where people spend a lot of time gathering with family, friends, and partners. No exception for those who are busy with their work also feel happiness at the end of each period through various activities for fun. Celebrations at the end of the year or before the turn of the new year are moments that New Year celebrations are often in the spotlight for some economists and policy makers (such as Resnik & Elliott (2016); Aya (1979)). Anticipation of an increase in a commodity, services and goods must be or what they know as 'inflation' must be suppressed so that prices do not soar, thus causing 'hyperinflation' (Farandy, 2020). Sometimes farmers also benefit from 'inflation' from the demand aspect (Paul, Jahan, Nandi, & Rahman, 2021). It's just a matter of how producers package by offering their goods or services at relevant prices in the market (Darma, Wijaya, & Darma, 2020).

Besides Christmas, New Year's celebrations have been enthusiastically celebrated since the 18th century until now (Schmidt, 1991). It is not surprising that the increase in a product, service demand for products, services and goods has exploded (Yijo et al., 2021). Even though this benefits the welfare of farmers, it can cause harm for consumers can be harmed if they are not taken seriously (Darma, Maria, Lestari, & Darma, 2020). Indonesia has different cultural characteristics from other countries to celebrate in the celebration of the new year (Rianti, Novenia, Christopher, Lestari, and Parassih (2018)). The most striking difference is the consumption of food and drinks, which are less favored by most people, where Indonesian people often process corn to be used as a main dish (Wijaya, 2019). They serve these preparations grilled, fried, or boiled. The expansion, and the use of corn commodity at the turn of the year has become a special tradition for them.

According to Rosas-Castor, Guzmán-Mar, Hernández-Ramírez, Garza-González, & Hinojosa-Reyes (2014), corn, which in Latin is 'Zea mays L' (or maize) is a food crop. Corn contains a lot of carbohydrates, so it is one of the staple food sources in Indonesia after rice (Nuss & Tanumihardjo, 2010). Because corn is a favorite commodity in Indonesia, therefore it exists from various community groups (Arifin, 2013). Another important thing aspect is the nature of that corn is easy to grow (Sandhu et al., 2020). In a global context, the average temperature to produce maize productivity ranges from 18°C–33°C with a minimum rainfall of 800 mm per year and a maximum of 2,300 mm per year (Ferrero, Mauricio, & Gonzalez-Andujar, 2014; Wang et al., 2020). With relatively cheap capital, corn production is not a big constraint. As is known, Samarinda City is the center of the East Kalimantan Province in Indonesia, which has a high level of consumptive tendencies (Wijaya, Darma, & Darma, 2020). The high level of per capita income is the major cause of main reason for the population's prosperity. They channeled most of their spending for non-food needs, such as ceremonies and parties, insurance and tax collections, health and education costs (BPS of Samarinda City, 2021b; Wijaya, Zainurrossalamia, & Darma, 2020). However, the factor of special habits to welcome special days celebrations, such as the end of the year makes, increases the need for food such as and horticultural crops also increase. Customs, traditions, and culture as a device that cannot be separated because all three have become part of history (Indriastuti, Kasuma, Zainurrossalamia, Darma, & Sawangchai, 2020). The complexity of the paper is demonstrated based on five plots, including the introduction, theoretical lens, methods, results and discussion, and conclusions.

2. THEORETICAL LENS

Moss (1974) illustrates that supply and demand are the most vital parts of market economics. 'Law of demand' and 'law of supply' are basic theories that explain the interaction between sellers and buyers for a resource (Inoua & Smith, 2020). The two laws represent the relationship between the price of a service or good product, the number of people who buy it, and its availability (Parro, 2019). Both demand and supply are inversely related, which will affect the price of the goods or services sold. These conditions are interpreted as a 'demand curve' and a 'supply curve' (Safiullin, Oduntsova, & Safiullin, 2015).

Demand is a term for the amount of goods and services that are desired to be purchased at a certain time and price level according to the market (Mazurek, García, & Rico, 2019). The 'law of demand' applies when the price of a good product or service falls, and the quantity demanded increases. On the other hand, when the price of goods demanded increases, demand will decrease (Wirtz, So, Mody, Liu, & Chun, 2019). The crucial factor influencing demand is consumer tastes (Harahap, Amanah, Harahap, & Jubaidah, 2019). Increased consumer tastes trigger an increase in demand (Purcell & Lusk, 2003) as, for example, with certain fruits whose stock is scarce, of course they will therefore be priced more expensive (Hovhannisyan, Kondaridze, Bastian, & Shanoyan, 2020). Another factor is the price of substitute or substitute goods (Milgrom & Strulovici, 2006). For example, when the price of coffee is high, people will start shifting their shopping for tea because the price is cheaper it costs less. Several factors that influence demand include the proportion of needs, prices, income levels, and population (Sorrell, 2015). Figure 1 illustrates a 'simple demand curve' that relates demonstrates the general relationship between the number of consumer purchases of goods and services in a given period.

In contrast to demand, the 'law of supply' occurs when the price of goods rises, encouraging an increase in the supply of a service or good. If the price increases, production will supply more goods also increase, but when the price decreases, the producers are reluctant to reduce supply (Ai-Hua, 2012). The crucial factor that determines supply is the cost of production. The lower the cost of production, the cheaper the goods that can be produced, so that it and

Comment [i-1]: Please check the English grammatical mistakes that highlighted in red/blue color.

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therefore supply can increase ~~supply (such as per the example of given by Aday & Aday (2020)).~~ Future speculation is the second factor, where predictions of future price increases ~~allow allowing~~ people to withhold goods or services. The last element is technology. Advances in technology will ~~bring a product produced~~ result in more ~~efficiently efficient~~ production processes.

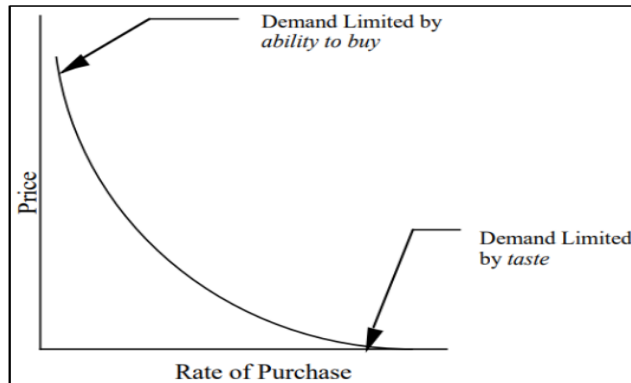


Figure 1. The point of consumer desire.

Source: Whelan & Msefer (1996).

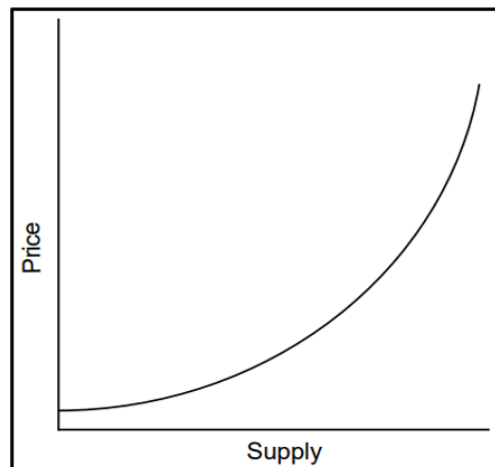


Figure 2. The point of desire.

Source: Whelan & Msefer (1996).

Figure 2 shows the 'supply curve'. If the slope is curving upward, it causes the price of goods and services to be expensive increase or become more difficult to get to obtain because each additional unit is scarce. Then, that is often encountered is the cost of production is becomes much more expensive, therefore and the price offered is very high much higher than normal times usual. Unexpectedly, when prices soar, there will be is more incentives incentive to increase production (MacDonald, 2000). The 'classical economic theory', it represents a short-run approach (Davidson, 1999).

Interestingly, supply and demand are opposites. Both will reach a point of market equilibrium when they meet each other, which is what then referred to as the 'law of demand' and the 'law of supply' (Jehle & Reny, 2011). In fact, these two laws explain the harmony between the quantity and the price offered. They then connected this to a 'demand curve' and a 'supply curve'. At a certain point in time, the supply of goods brought to the market is fixed. In other words, the 'supply curve' is a vertical line, while the 'demand curve' is always downward sloping because of the diminishing law of marginal utility. When it reaches this point of equilibrium point, the price of a commodity and its demand will be stable, even constant or not change at all (Humphrey, 1992). Sellers also can no longer raise the prices borne by consumers (Alam & Uddin, 2009). However, in the long term, they can increase or decrease the stock to change the market price to the expected level (Haugen, Talmor, & Torous, 1991).

As an extra illustration, the interaction between supply and demand in controlling the market is largely determined by sellers and buyers (Cannon & Perreault, 1999). Both react in opposite ways to changes in the price of a commodity. When the ability, price and supply of sellers also increase, while and the attention of buyers decreases, the market is clearly working (see Figure 3).

Moving on to 'microeconomic theory', an obvious example of the application of the 'law of demand' and the 'law of supply' is the level of consumption (Lee & Keen, 2004). Within the household, they are interrelated consumption with the encouragement of consumptions influenced by income ability, savings, or individual willingness. Each The needs of each household to meet are very diverse. Household consumption capacity also depends on educational background, age group, occupation, and social status. Those who are classified as 'rich' certainly have a source of living eligibility, while those who are 'poor' will rethink having contemporary goods or substitutes. In essence, they classify the needs into three categories, namely primary needs, secondary needs, and tertiary needs. If the economy is in a stable trend, it will affect welfare, and if not, what we will happen is see a decline in welfare. Social problems, such as poverty and unemployment—as are the 'old face' of the transformation of and development. Socio-economic Socioeconomic status will determine the individual's success in achieving a decent standard of living.

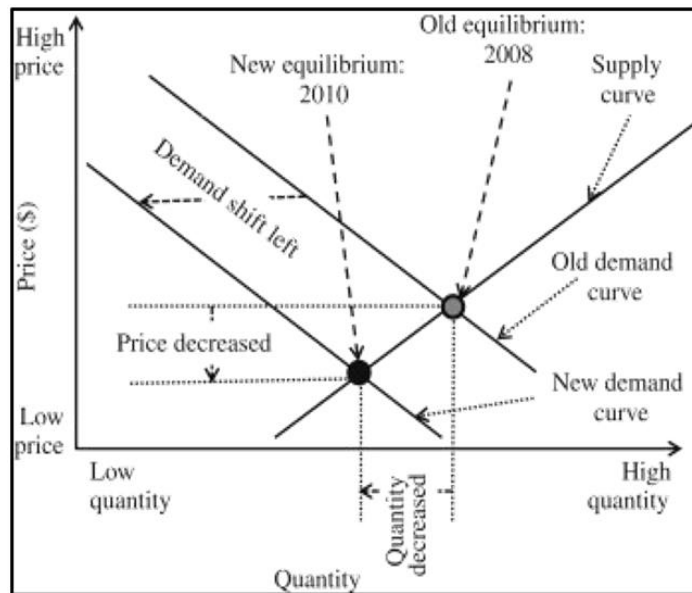


Figure 3. The pointpoints of balance of supply and demand.

Source: Hoekstra, Savenije, & Chapagain (2001).

As an actual illustration, the 2008 financial crisis in the US created new interests that caused consumption behavior, income distribution, and household debt to increase. This explains the dynamics of the crisis (Albayrak, 2020). The paradigm continueshas continued to flow since the 1980s, and economists assume that household consumption has decreased. Debt-based consumption and a decline in actual income followed this compensatory decline. With the help of deregulation of the financial system, at least the pattern that leads to 'increased debtdebt and 'reduced savings'savings can be reduced. However, aggregate demand and theirthe level of consumption in the private sector remain high, so that it suffices to maintainmaintains macroeconomic stability (e.g., relatively smalllow unemployment).

Alp & Seven (2019) and Nelson (1988) highlight the stagnant wages of lower-middle distributedincome households. In today's era, the exploding financial crisis has become the focus of reducing credit bubbles. In the 'consumption theory' and the 'Keynesian theory', seethere are significant correlations between consumer behavior, household debt, and inequality (Perugini, Hölscher, & Collie, 2016).

In principle, 'agricultural economic theory' focuses on cause-and-effect relationships between spatial patterns and economic decisions derived from agricultural land use. The assumption refers to farmers pursuing utility maximization in production systems (Diogo, Koomen, & Kuhlman, 2015). Then, the framework considers land use decisions (land) and alternatives in production (Kellerman, 1989).

Semerçi et al. (2012) defineddefine the production function as a physical relationship between several inputs and outputs. Then, Anderson et al. (1996) enterentered the production function into only a few input variables, while other inputs are constant (ceteris paribus) as follows:

$$Q = f(C + L + T + Rm + \dots n)$$

(1)

Equation 1 presents connectivity in the Cobb-Douglas function type described, where Q = quantity (output), f = function, C = capital, L = labor, T = technology, Rm = raw materials, and n = other supporting variables.

Through the above formulation, farmers from various countries transactional outputs on factors that support agricultural productivity implement transactionally it. The level of demand and supply significantly influenced

Comment [i-[3]: Please explain equation 1 and others in the text followed by a suitable verb: Equation 1 presents; Equation 2 argues.

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market orientation for agricultural commodities. ~~Consensus~~The relationship between consumers and producers is dominated by financial factors (Okerenta, 2005). In fact, Dwi & Nyoman (2020) argue that the government, as a regulator, seeks to encourage and promote more local agricultural products to be absorbed by the market. They expect this enthusiasm to provide social, environmental and economic benefits for the local population (Gutman, 1959). In the theory of planned behavior (Sok, Borges, Schmidt, & Ajzen, 2020), the buying behavior of agricultural commodities can be tested. ~~Environmental~~The environment, local economic concerns, ethnocentrism of food safety, health, quality, and consumer perceptions influence consumer intentions (Petrea, 2001).

3. METHODS

We applied this study with a social experiment approach ~~was taken in agribusiness~~this study (such as Maat (2011); Syarifudin & Ishak (2020); Maman, Inawati, Aminudin, & Wastra (2017)). ~~We focus the approach in question on) and~~ a three-step-based interview technique: ~~was employed~~. The first step is data collection. ~~We~~Data were collected ~~data~~through the first (primary) party. Then, the second step ~~selects~~comprised the selection of the number of samples based on the population summarized in the formula below. Third, ~~prepare~~a questionnaire ~~referring to~~was prepared with four ~~scales including very~~answer options: high priority (4), priority (3), moderate (2), and not priority (1). The sample size is planned ~~into~~using the following simple mathematical calculations (~~e.g.g.~~ (Abdullah, Gindi, Darham, & Radam, 2015; Susanto, Siswandari, & Rujito, 2019)):

$$n = \frac{N}{[1+(N \times e^2)]} \quad (2)$$

$$n = \frac{658,525}{[1+(658,525 \times 0.01^2)]} \quad (3)$$

$$n = \frac{658,525}{[1+65.85]} \quad (4)$$

$$n = \frac{658,525}{66.85} \quad (5)$$

$$n = 9,850 \quad (6)$$

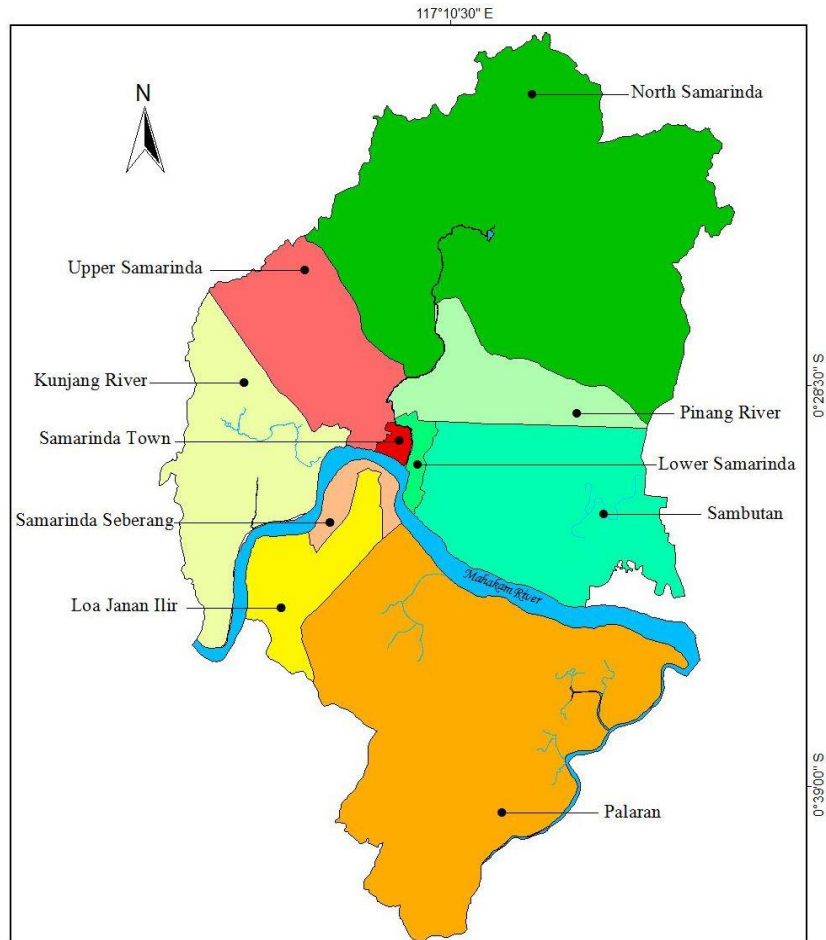


Figure 4. Road map of sample distribution.

Source: Susanto et al. (2019).

Comment [I-5]: Explain figure 4 in the text followed by a suitable verb in the present tense: e.g. Figure 4 illustrates, etc.

Equations 2 to 6 ~~The as attributes to~~ formulate the identity of the sample. ~~Where, where~~ n = sample, N = population, and 0.01 = margin of error. ~~Regarding the-~~ The total population, it is the ~~accumulationsum~~ of the total population of various age groups ~~(+15± years)~~. ~~Launching from~~ From BPS of Samarinda City (2021a), the population in Samarinda City is 827,994 ~~people~~, of which 658,525 ~~people are those with the status of the head of the family~~. Figure 4 displays the sample distribution model. The distribution of the sample comprises ten sub-districts in Samarinda City (64.72), including Pinang River (64.72.08), Kunjang River (64.72.06), Sambutan (64.72.07), North Samarinda (64.72.05), Samarinda Ulu (64.72). .03), Samarinda Seberang (64.72.02), Samarinda Kota (64.72.09), Samarinda Ilir (64.72.04), Palaran (64.72.01), and Loa Janan Ilir (64.72.10). ~~Therefore, each~~ Each sub-district ~~will be~~ is divided and represented by 985 respondents. Figure 4 also illustrates the coordinates of the market and the ~~location~~ locations for buying and selling corn commodities in Samarinda City.

~~It carried the identification of the interview time out during the full December 2021-~~ This. It is important to remember that the respondents ~~reaction to the demand for corn is relevant to the celebration of the new year~~. The ~~right instrument to~~ To make it easier for researchers ~~to collect~~, samples ~~were collected~~ through 'Google ~~Form~~ Forms, which is promoted ~~withon~~ social media such as WhatsApp and Facebook.

Comment [SP6]: The meaning of this sentence is not clear, and "It" doesn't tell the reader what you are referring to. Please review and amend the wording to ensure clarity.

~~We limited the~~ The research model ~~was limited~~ to the variables of consumer demand and produce supply. ~~These as these~~ two components are factors that influence market behavior. Each variable comprises four items. The demand side includes interests, traditions, tastes, and prices, while ~~items such as~~ opportunity, profit, distribution, and production costs ~~supported~~ support the supply side (see Figure 5).

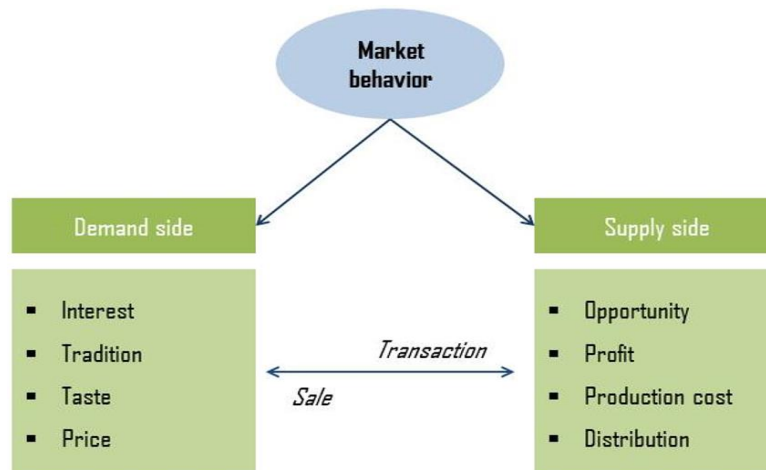


Figure 5. Conceptual framework.

Source: adapted from Naumova, Bilan, & Naumova (2019); Roufagalas (1994); Li, Wang, Yin, Kull, & Choi (2012); Xie, Gao, & Xie (2020); Sanchez (2003).

We developed the data processing structure was developed with the feasibility of testing correlation, reliability, and validity (e.g., De Barros Ahrens, Da Silva Lirani, & De Francisco (2020); Dewi et al. (2021)). SPSS software calculates was used to analyze the research findings.

4. RESULTS AND DISCUSSION

Exploration referring to the respondent's profile is The respondents' profiles are presented in Table 1. The sample sourced from household groups is divided into five units. Following up on this, of the 9,850 household heads, 55.3 percent of them are male and 44.7 percent are female. From this number Additionally, 26 percent of those who respondents are single, 52.7 percent are married, 18.4 percent are divorced (divorced and dead), and the remaining 2.8 percent are widows/widowers.

Intensely Interestingly, 40 percent of respondents belonging belong to the 16–26 age group of 16–26 years are those who and consume the most corn on New Year's Eve. For extra information, The 49–59 age group has the fewest people, making up only 9.8 percent of respondents (49–59 years) is the lowest score when compared to other groups. When viewed based on their occupational background, the number of those classified as in the labor force (already working and openly unemployed) are is far above higher than those classified in the non-labor force (attending school, taking care of the household, and other activities). After an in-depth analysis, the figure is 55) with figures of 65.3 percent compared to and 34.7 percent, respectively. The logical reason is that from the frequency of buying corn, as much as 3–6 kg or 41.5 percent, 41 percent is used and processed to become regular corn to accompany the turn of the new year celebrations.

Comment [i-[7]: Reinforce the all tables value upto 3 digits.

Table 1. Demographic of samples (n = 9,850).

Units	N	%
Sex		
• Female	4.403	44.7
• Male	5.447	55.3
Status		
• Single	2.565	26
• Married	5.192	52.7
• Divoree Divorced	1.816	18.4
• Widow/widower	277	2.8
Age group		
• 16—26 years	3.940	40
• 27—37 years	1.189	12.1

Comment [i-[8]: Please check again the table numbers and equations order.

• 38—48 years	2.258	22.9
• 49—59 years	961	9.8
• +60± years	1.502	15.2
Main activity		
• Economically active	6.431	65.3
• Economically inactive	3.419	34.7
Purchase frequency		
• 2 kg	1.001	10.2
• 3—6 kg	4.086	41.5
• 7—10 kg	3.846	39
• +11± kg	917	9.3
Diversification of corn		
• Fried corn	2.594	26.3
• Roasted corn	3.217	32.7
• Boiled corn	4.039	41

Source: Survey recapitulation.

The first model describes the value of descriptive statistics and correlations. Table 2 summarizes the output mean, standard deviation (SD), and Pearson correlation. As a result, the largest mean score is for the interest factor ($M = 3.738$) and the lowest is for the production cost factor ($M = 2.667$). In For SD calculation, the highest is the price factor ($SD = 0.735$), while the production cost is the lowest ($SD = 0.046$). Considering that causality between factors is very important, the calculation based on SPSS estimates all of them in the positive path, although not all factors have a significant effect ($p < 0.01$).

Table 2. Descriptive statistics and correlation matrix.

Items	Mean	SD	1	2	3	4	5	6	7	8
Interest	3.738	0.114	1	0.011 (0.473)*	0.071 (0.321)*	0.305 (0.021)*	0.167 (0.136)*	0.056 (0.358)*	0.064 (0.337)*	0.429 (0.000)*
Tradition	3.597	0.545	0.011 (0.473)*	1	0.574 (0.000)*	0.099 (0.258)*	0.136 (0.186)*	0.543 (0.000)*	0.325 (0.015)*	0.201 (0.391)*
Taste	3.602	0.396	0.071 (0.321)*	0.574 (0.000)*	1	0.174 (0.126)*	0.092 (0.275)*	0.991 (0.000)*	0.122 (0.212)*	0.656 (0.157)*
Price	3.713	0.735	0.305 (0.021)*	0.099 (0.258)*	0.174 (0.126)*	1	0.281 (0.031)*	0.166 (0.137)*	0.300 (0.023)*	0.478 (0.000)*
Opportunity	3.498	0.112	0.167 (0.136)*	0.136 (0.186)*	0.092 (0.275)*	0.281 (0.031)*	1	0.103 (0.251)*	0.437 (0.001)*	0.513 (0.417)*
Profit	3.606	0.287	0.056 (0.358)*	0.543 (0.000)*	0.981 (0.000)*	0.166 (0.137)*	0.103 (0.251)*	1	0.098 (0.261)*	0.772 (0.106)*
Production cost	2.667	0.046	0.064 (0.337)*	0.325 (0.015)*	0.122 (0.212)*	0.300 (0.023)*	0.437 (0.001)*	0.098 (0.261)*	1	0.180 (0.097)*
Distribution	3.574	0.204	0.272 (0.013)*	0.166 (0.032)*	0.293 (0.145)*	0.317 (0.289)*	0.345 (0.167)*	0.470 (0.047)*	0.155 (0.000)*	1

Source: SPSS output. Note: *p-value < 0.01.

The results of further investigations also confirmed the two-way relationship between interest and distribution ($C = 0.429$ and $p = 0.000$), tradition and taste ($C = 0.574$ and $p = 0.000$), taste and profit ($C = 0.991$ and $p = 0.000$), price and distribution ($C = 0.478$ and $p = 0.000$), opportunity and production cost ($C = 0.437$ and $p = 0.001$), profit and taste ($C = 0.981$ and $p = 0.000$), production cost and opportunity ($C = 0.437$ and $p = 0.001$), and distribution and production cost ($C = 0.155$ and $p = 0.000$). Production costs and distribution as factors that are considered the most dominant than other of all the factors.

The second parameter is validity testing, as measured by Confirmatory Factor Analysis (CFA). The Kaiser-Meyer-Olkin Measure of Sampling (KMO-MSA) is interpreted as an index of the distance comparison between the correlation coefficient and its partial correlation coefficient. If the sum of the squares of the partial correlation coefficients from all pairs of variables is small compared to the sum of the squares of the correlation coefficients, it will produce a KMO-MSA value close to 1. The KMO-MSA gain is sufficient if ≤ 0.5 (Hair, Black, Babin, Anderson, & Tatham, 2006). Another projection from Bartlett's test shows that there is a sufficient correlation between the variables to apply, provided that the p-value must be ≤ 0.01 (such as e.g., Melati (2018)).

Assumptions in construct validity are based on Bartlett's test of sphericity, and content validity is determined by the KMO achievement test. Table 3 explains that the achievement of the correlation between indicators for the

consumer demand variable is high ($KMO = 0.632$ and $Bartlett's\ test = 0.000$), so the factor analysis process is workable allowing the analysis to continue.

Table 3. Construct validity and content validity in the first element.

Measurements	Measurement	Values	Score
KMO-MSA			0.632
Approx. Chi-square			315.11
d#Df.			90849
Prob.			0.000

Source: SPSS output.

Table 4. Construct validity and content validity in the second element.

Measurements	Measurement	Score
KMO-MSA		0.580
Approx. Chi-square		207.69
d#Df.		90849
Prob.		0.000

Source: SPSS output.

Overall, the achievement on the significance of Bartlett's test resulted in a p-value of 0.000 and a KMO-MSA of 0.580. This shows that both requirements meet the requirements because the KMO-MSA has a value of > 0.5 and a significance of < 0.01 , so it is prioritized for the next process (see Table 4).

In the third session, identification of the assumptions that must be met is reliability. We packed reliability testing with Cronbach's Alpha (CA) coefficients. Classification in the CA acceptably of Cronbach's alpha is possible if the coefficient value is > 0.7 , which means that the reliability is met. It also makes sense if the coefficient is > 0.8 , which suggests that all items are reliable, and all tests are internally consistent because they have strong reliability (Hoekstra, Vugteveen, Warrens, & Kruijen, 2018; Peterson, 1994). Table 5 summarizes the CA coefficient gains of Cronbach's alpha.

It can be interpreted that if the alpha coefficient is low, it is possible that one or more indicators are not reliable, so it makes sense to investigate with a per item analysis procedure. This test is a continuation of the previous series to determine if certain indicators that do not meet the requirements. With Through this process, unreliable indicators can be discarded; so that other alphas can further support their value (Tavakol & Dennick, 2011).

Table 5. Cronbach's Alpha for all indicators.

Items	CA	Remark
Interest	0.587	Moderate reliability
Tradition	0.749	High reliability
Taste	0.687	Moderate reliability
Price	0.682	Moderate reliability
Opportunity	0.705	High reliability
Profit	0.934	Almost perfect reliability
Production cost	0.820	High reliability
Distribution	0.717	High reliability

Source: SPSS output.

The advancement of people's perspectives and ways of thinking to determine what food is worth consuming at an affordable price². They are selective drawn towards selecting products with relatively cheap prices, but without neglecting the practical side practicality and nutritional composition. The other side is the level of need that is increasing along with accessibility. The importance of corn commodity, gives a signal to farmers that this type of plant is also easy to grow from narrow land, open space, in all seasons with sufficient light intensity, soil fertility level, and rainfall level, as shown in Figure 6.

Comment [SP9]: Figure 6 is just a photo and doesn't demonstrate anything that you have just listed. Consider removing.

With the harvest period in intervals of 2–3 months, it is ~~very~~ possible for corn farmers to achieve maximum productivity. They will certainly see ~~the ratio of a significant~~ market demand ~~that is so enthusiastic~~, especially towards the end of the year. Each period, the consumption of corn soars sharply, so preparation for farming ~~is carried out at least~~ starts in September or October.

In the context of economic development and food security, the agricultural industry has played a key role for decades (Zyl, 1989). Directly, the best options are in rural areas, where a large part of the world's population also depends on this sector for their ~~livelihood~~ livelihoods (Udemezue & Osegbue, 2018). As the migration of people to cities and the world's population explodes, it has a systematic impact on the proportion of growth in food production.

Martin, Groenewegen, & Pidgeon (1980) ~~detect~~ found that the uniqueness of market characteristics highly depends on the specifics of corn ~~commodity~~ in Southwestern Ontario (Canada). ~~Corn~~ where corn farmers ~~seesaw~~ a tremendous opportunity to create welfare value. Global corn prices influenced the retail of corn-based products in the manufacturing sector (Rattray, 2012) ~~reports that retail corn-based products in the manufacturing sector~~. This is a determinant of price policy by major food companies. High global corn prices have affected final retail and consumer products. Even though the market conditions for agriculture and food companies were fluctuating, they corn farmers could still benefit. Sibanda, Mushunje, & Mutengwa (2016) highlight valuable steps adopted by small-scale maize farmers in ~~Q-R-OR~~ Tambo and Amatole (Eastern Cape, South Africa). Samples from households were ~~ensure to~~ reviewed for their response to maize. ~~The, and the~~ findings confirm that planning and decision-making in the maize market highly depend on seed availability, farmer perceptions, land area, income, access to credit, and access to extension services. The application of superior seeds and the absorption of corn commodities has played an important role in the productivity of corn farmers.

During the period from 1948–1970, the supply of maize acreage in the US underwent a significant change ~~from due to~~ the government's ~~program of~~ price intervention and acreage control. ~~Government policies allow for the future program~~. Empirical analysis examines area restrictions, transfers, support, and lending rates for maize farmers. Houck & Ryan (1972) ~~suggests~~ suggested that policy variables ~~to~~ should be selected and applied to maize as part of government priorities.

Production and land management decisions strongly influenced land conservation and crop. Farmers in the Liandaowan area (Northeast China) ~~decide~~ make decisions based on motivation as a key factor in implementing government policies. Most of the farmers there insist on growing maize despite facing various obstacles, such as striking comparative advantage, farmer preferences, age and education, low ~~temperature~~ temperatures, drought, technical help, low income, and availability of machinery. The experimental results obtained by Liu, Zhang, Liu, & He (2019) emphasized ~~that they~~ the need ~~to carry out~~ for promotions to adjust for corn diversity because the level of demand was stable.

The theoretical justification for ~~this finding~~ these findings is in line with the investigations of Mišečka, Ciaian, Rajčániová, & Pokrivčák (2019). ~~They, who~~ emphasized that agricultural commodity prices are driving consumer ~~attention~~ awareness. On an international scale, behavior towards agricultural products, such as corn, is permanently and causally connected to the demand factor. ~~Corn, and the corn~~ prices confirm both relationships.

Other aspects, such as campaigns against 'green consumption', brands, channels, prices and marketing strategies, can stimulate agricultural products in Wuhan (China). Yi (2017) revealed that the safety of people's lives there for agricultural products depends not only on stability but also toward son sustainable agricultural development. Farm household investigated their ~~perception~~ perceptions and ~~level~~ levels of knowledge based on purchasing behavior, work background, income level, region, age, and gender.

The causality highlighted by Gao, Huang, Zhong, Chen, & Lu (2013) and Horská, Petrůlák, Šedík, & Nagyová (2020) regarding the sale of local agricultural products is not only influenced by the behavior of farmers, but also by the driving forces of the market. In China, in 16 villages in Anhui, Jiangsu, and Shanghai, households earn higher profits. They see economic developments in the agricultural market, thus shifting from food crops to cash crops. Aspects of capital and production costs are the more dominant input factors, where they know that if they want to get achieve a large output, then the production input becomes a big ~~defense~~ investment. In this way, agricultural

Comment [i-[10]: In these references, Please add missing volume number, issue number and page no. list of References.

Comment [SP11]: It's not clear who "they" a Please clarify.

Comment [SP12]: Who investigated whose perceptions? Please clarify who "They" and their refer to.

products gain market enthusiasm because the selling price is more significant than government subsidies. Market sales orientation supported the independence of agricultural households based on product quality improvement strategies (Hunt, 2007). Unlike the case with local farmers in Slovakia—Sales, the sales of agricultural products depend on the supply chain. ~~A~~This was driven by a short distribution route; so that the product can go directly to consumers, ~~stimulated this~~. Customer loyalty is ~~very concerned about~~ motivated by locality, freshness, and quality factors. That way, the marketing approach is a surefire technique to save time, cost, and effort.

5. CONCLUSION

This study ~~aims to analyze~~ analyzed the influence of the demand ~~side~~ and supply ~~sides~~ on the behavior of the corn ~~commodity~~ market in Samarinda City. ~~In fact, Indonesia, and it was found that~~ the two are closely related; ~~where as~~ both consumers and producers respond to each other ~~to based on~~ the quantity of corn ~~commodity~~. Towards the end of the year, demand from consumers increased in line with the supply of producers, ~~in this case corn farmers with residents of Samarinda City~~. However, the supply side variable determines the market the most because the two indicators (production cost and distribution) ~~get have~~ the highest ~~coefficient~~ coefficients with a positive path.

~~The~~This study ~~invention~~ contributes to the theoretical aspect. Extension services to seasonal corn farmers in Samarinda City, ~~at least are~~ not only based on certain moments (such as New Year's celebrations and ~~certain~~ festivals), but also follow market patterns that follow demand trends. For the future ~~agenda, they needed~~, there is a ~~need for~~ policies ~~in distributing on distribution~~, training, extension, knowledge, and promotion services ~~to for~~ corn farmers. We expect the implications for industry practitioners and academics to ~~invite attract~~ attention to highlight and expand knowledge regarding the factors that influence market behavior for corn ~~commodities~~, besides ~~the~~ supply and demand factors.

The ~~weakness~~ limitation of this study is ~~that it may expand in~~ the design of variables, ~~used~~. The sample range, and observation period ~~in order can be expanded~~ to produce more extensive findings. In order to support ~~socio-economic~~ socioeconomic sustainability in agriculture, these findings require scientific references and foundations based on a more constructive scale.

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Comment [i-13]: If the research article is funded by university/institute, please provide us details.

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Comment [i-14]: Please check the following references-(Wlay et al., 2018), (Canon and Perrea 1989), Nelson (1998), BPS of Samarinda City (2021), (Hoekstra, 2018). That have been cited in the text but not provided in the reference list. Provide these reference or remove them from text. References highlighted are incomplete. Please provide complete details.

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