

# Analysis of the Effects of Income Level, Education Level, Employment, House Price and Housing Location on the Demand for Subsidized Housing in Sei Mencirim Village

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## ABSTRACT

This research aims to analyze the effects of income level, education level, employment, house price and location on the demand for subsidized housing in Sei Mencirim Village. This research employs primary data obtained from interviews (filling out questionnaires) with 90 people from a total of 878 consumers of subsidized housing mortgages in Sei Mencirim Village, Deli Serdang Regency. This research employs Structural Equation Model (SEM) approach based on Partial Least Square (PLS) Method. PLS is a Structural Equation Model (SEM) which is based on components or varians. The result indicates that income level, education level and employment have a positive and significant effect on the demand for subsidized housing respectively. Meanwhile the house price and location also have a positive but insignificant effect on the demand for subsidized housing respectively. In spite of an insignificant effect of house price and location, it shows a pattern of directly proportional data. This means that the higher the house price or the more strategic the location, the demand for subsidized houses will also increase.

**Keywords:** *Income, Education, Employment, Price, Location, Demand*

## INTRODUCTION

Along with the development of the times, the flow of urbanization urban population growth in Indonesia tends to increase from year to year making the demands of human needs for residential housing continue to grow and increase. The rapid rate of population growth and urbanization flows in developing countries cause problems to have residential dwellings that need to be addressed immediately in order to get out of these problems (Catalonia, 2016).

Population density is the ratio between the number of inhabitants and the area occupied. Population density or population density using the unit of population/km<sup>2</sup>. The way to calculate it is by calculating the number of people in an area divided by the area. The greater the total number of outgrowths, the denser the territory. On the other hand, the smaller the number of results, the more tenuous the population (Kompas, 2020). While the population growth rate per year is a number that shows the average population growth rate per year in a certain period of time (BPS, 2023)

Basic human needs must be met, namely clothing, food, and space, these three

aspects are inevitable to be met for the sustainability of human life. The need for clothing can be met by the textile industry, the need for food can be met by the agricultural industry, and the need for boards can be met by buildings. The increasing population of the population explosion, it also increased the need for clothing, food, shelter. But what happens if it turns out that the inability to meet the growing needs of the population.

The board needs that the House certainly requires land to build. More and more residents, of course, the need for houses is increasing automatically, the land needed is increasing. While the available land area remains. The occurrence of population density or settlement, the remaining shrinkage of vacant land, making land prices soar, low-income people can not meet the need for housing, with soaring land and building prices.

The house is the main human need and has now grown in value into a form of investment. Currently there are many home ownership schemes that can provide a variety of options for people to buy the House (Hashim, et. Al, 2012), one of the

scenarios is that the government provides subsidies to the lower middle class. Subsidies are provided for cheap housing. Low-cost housing has been recognized as a very useful idea for people with lower to middle incomes thus allowing them to access decent homes. A study states that 60% of people living in low-cost housing come from low-income families with many children (Currie & Yelowitz, 2000).

Thus, the purchase of housing on credit among the public becomes a very attractive option. For this reason, the government and banks work together to provide subsidized housing facilities to help people get the desired homes. This subsidized house, in addition to the relatively cheaper price, the payment can also be done by credit or what is often called a mortgage ( home ownership loan ).

The population growth of Medan City and Deli Serdang regency is increasing every year. Of course, with the increasing number of residents, the need for housing will increase as well. For population data, population growth rate and population density of Medan City and Deli Serdang regency can be seen in the table below.

**Table 1 Total Population And Population Growth Rate By Regency / City Of North Sumatra Province**

Regency / City	Total Population						Population growth rate per year (%)				
	2017	2018	2019	2020	2021	2022	2017-2018	2018-2019	2019-2020	2020-2021	2021-2022
Nias	142.110	142.840	143.319	143.983	147.794	149.249	0,51	0,34	0,5	2,65	0,98
Mandailing Natal	439.505	443.490	447.287	451.028	478.062	484.874	0,91	0,86	0,8	5,99	1,42
Tapanuli Selatan	278.587	280.283	281.931	283.389	303.685	307.312	0,61	0,59	0,5	7,16	1,19
Tapanuli Utara	297.806	299.881	301.789	303.688	315.222	318.424	0,70	0,64	0,6	3,80	1,02
Asahan	718.718	724.379	729.795	735.026	777.626	787.681	0,79	0,75	0,7	5,80	1,29
Simalungun	859.228	863.693	867.922	871.678	1.003.727	1.021.615	0,52	0,49	0,4	15,15	1,78
Dairi	281.876	283.203	284.304	285.481	311.665	315.460	0,47	0,39	0,4	9,17	1,22
Karo	403.207	409.675	415.878	421.997	409.077	414.429	1,60	1,51	1,5	3,06	1,31
Deli Serdang	2.114.627	2.155.625	2.195.709	2.234.320	1.941.374	1.953.986	1,94	1,86	1,8	13,11	0,65
Langkat	1.028.309	1.035.411	1.041.775	1.048.100	1.034.519	1.039.926	0,69	0,61	0,6	1,30	0,52
Pematangsiantar	251.513	253.500	255.317	257.110	270.768	274.056	0,79	0,72	0,7	5,31	1,21
Tebing Tinggi	160.686	162.581	164.402	166.100	174.969	177.785	1,18	1,12	1,0	5,34	1,61
Medan	2.247.425	2.264.145	2.279.894	2.295.003	2.460.858	2.494.512	0,74	0,70	0,7	7,23	1,37
Binjai	270.926	273.892	276.597	279.302	295.361	300.009	1,09	0,99	1,0	5,75	1,57
Padangsidempuan	216.013	218.892	221.827	224.483	227.674	231.062	1,33	1,34	1,2	1,42	1,49
Gunungsitoli	139.281	140.927	142.426	143.776	136.707	137.583	1,18	1,06	0,9	4,92	0,64
Source: BPS 2023											

**Table 2 Population and Population Density By District / City Of North Sumatra Province**

Regency / City	Total Population						Population density per km2				
	2017	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Nias	142.110	142.840	143.319	143.983	147.794	149.249	78.00	77.80	79.60	80.21	193,46
Mandailing Natal	439.505	443.490	447.287	451.028	478.062	484.874	72.00	72.90	77.09	77.94	74,06
Tapanuli Selatan	278.587	280.283	281.931	283.389	303.685	307.312	46.00	46.80	49.90	50.36	72,24
Tapanuli Tengah	363.705	370.171	376.667	382.917	369.300	374.734	169.00	172.20	166.90	168.78	160,63
Dairi	281.876	283.203	284.304	285.481	311.665	315.460	147.00	147.50	160.16	161.67	150,82
Karo	403.207	409.675	415.878	421.997	409.077	414.429	193.00	195.50	190.41	192.33	187,88
<b>Deli Serdang</b>	<b>2.114.627</b>	<b>2.155.625</b>	<b>2.195.709</b>	<b>2.234.320</b>	<b>1.941.374</b>	<b>1.953.986</b>	<b>165.00</b>	<b>979.50</b>	<b>861.60</b>	<b>866.04</b>	<b>757,95</b>
Langkat	1.028.309	1.035.411	1.041.775	1.048.100	1.034.519	1.039.926	165.00	166.40	164.52	165.21	169,32
Serdang Bedagai	612.924	614.618	616.396	617.772	662.076	667.998	323.00	324.40	346.01	348.42	342,75
Batu Bara	409.091	412.992	416.493	420.103	413.171	416.367	448.00	451.60	445.32	448.03	468,82
Padang Lawas Utara	262.895	267.771	272.713	277.423	263.551	267.275	68.00	69.60	66.54	67.27	68,83
Padang Lawas	269.799	275.515	281.239	286.627	263.719	267.275	71.00	72.20	67.05	67.75	68,28
Sibolga	87.090	87.317	87.626	87.791	89.932	90.366	2114.00	2121.20	2168.58	2177.00	4 438,41
<b>Medan</b>	<b>2.247.425</b>	<b>2.264.145</b>	<b>2.279.894</b>	<b>2.295.003</b>	<b>2.460.858</b>	<b>2.494.512</b>	<b>8544.00</b>	<b>8603.40</b>	<b>9189.63</b>	<b>9286.26</b>	<b>8 865,91</b>
Binjai	270.926	273.892	276.597	279.302	295.361	300.009	4627.00	4673.00	4930.60	4990.05	3 199,41
Padangsidempuan	216.013	218.892	221.827	224.483	227.674	231.062	1909.00	1934.70	1963.24	1985.64	1 450,48
Gunungsitoli	139.281	140.927	142.426	143.776	136.707	137.583	502.00	507.30	484.43	486.88	1 018,08
Source: BPS 2023											

The results of the 2020 population census (SP2020) released by the Central Statistics Agency (BPS) show that the distribution of the population in North Sumatra is concentrated in the city of Medan with a population of 2.43 million people or 16.46 percent of the entire population of North Sumatra. Meanwhile, the area of Medan City is only 0.35 percent of the area of North Sumatra or about 263 square kilometers. The population density in Medan city is 9,239 inhabitants per square kilometer. This figure also shows that Medan is the most populous city in North Sumatra. Judging from these figures, there is inequality in population distribution between the city of Medan and other regions in North Sumatra. Head of BPS Sumut Syech Suhaimi explained that this could happen because the city of Medan is the economic center of North Sumatra. The second largest population distribution is in Deli Serdang regency with a population of 1.93 million people or 13.05 percent of the population of North Sumatra. Still, according to the head of BPS Sumut Syech Suhaimi, if viewed from a macroeconomic point of view, people will migrate to areas with more developed economies.

Based on SP2020, the population of North Sumatra is 14.80 million people. Meanwhile, the land area of North Sumatra was recorded at 72,980 square kilometers. Thus, the population density of North Sumatra is 203 inhabitants per square kilometer. This figure increased from the results of SP2000 which recorded the population density of North Sumatra by 160 people per square kilometer and the results of SP2010 reached 178 people per square kilometer. When viewed from the rate of population growth, North Sumatra has indeed accelerated the rate of population since SP2000. The results of SP2020 noted that of the 14.80 million residents of North Sumatra, 93.37 percent or about 13.83 million residents were domiciled according to the Family Card (KK). Meanwhile, 6.63 percent or about 0.98 million other residents are domiciled not according to KK. This number indicates the large number of inhabitants who migrated from the territory of their previous residence. According to law No. 4 of 1992 on housing and settlements states that in national development which is essentially the development of Indonesian people as a whole and the development of all Indonesian people, decent, healthy, safe,

harmonious, and orderly housing and settlements is one of the basic human needs and is an important factor in increasing the dignity, quality of life and welfare of the people in a just and prosperous society based on Pancasila and the 1945 Constitution. The demand and need for housing by the population is also influenced by the increase in the number of inhabitants. The population of Medan city continues to increase every year. The growth of the population provides an indication of the need for people to acquire houses as a place

to live which further increases the demand for houses. The desire to own a house is limited by the level of income as well as the cost of housing construction. Low-income levels and high construction costs result in people not being able to build eligible homes, even though settlement needs are a primary need.

The following table contains the number of subsidized housing units available (offer) and the number of units purchased (demand) in Sei Mencirim.

**Table 3 Supply And Demand For Subsidized Housing in Sei Mencirim**

No	Housing Name	Units Available	Units purchased
1	Reveno Residence 1	90	82
2	Graha Sekip Mencirim	100	95
3	Mencirim Asri	120	104
4	Perum Romeby Lestari 1	120	109
5	Asri Indah Mencirim 1	101	95
6	Asri Indah Mencirim 2	80	45
7	Ateneo Residence	99	75
8	Grand Permata Residence	85	70
9	Griya Sirsak Mencirim 1	120	105
10	Griya Sirsak Mencirim 2	135	122
	Total	<b>1050</b>	<b>902</b>

Source: Survey Of Researchers In Sei Mencirim Village, 2023

Of the 1050 housing units available, 902 units or 86% were purchased. This means that there is a gap between supply and

demand for subsidized housing. The following is a survey of residential property prices in quarter II 2023 by Bank Indonesia.

**Figure 1 Residential Property Prices In The Second Quarter Of 2023**

TRIWULAN II 2023	Harga Properti Residensial Meningkat
Indeks Harga	Hasil Survei Harga Properti Residensial (SHPR) Bank Indonesia mengindikasikan bahwa harga properti residensial di pasar primer secara tahunan masih melanjutkan tren peningkatan pada triwulan II 2023. Indeks Harga Properti Residensial (IHPR) triwulan II 2023 tercatat naik sebesar 1,92% (yoy), lebih tinggi dibandingkan dengan kenaikan pada triwulan sebelumnya yang sebesar 1,79% (yoy).
Penjualan	Dari sisi penjualan, hasil survei mengindikasikan penjualan properti residensial di pasar primer pada triwulan II 2023 masih belum kuat. Penjualan properti residensial berkontraksi 12,30% (yoy) pada triwulan II 2023, lebih dalam dari kontraksi triwulan sebelumnya sebesar 8,26% (yoy).
Pembiayaan	Hasil survei juga menunjukkan bahwa sumber pembiayaan nonperbankan masih menjadi modal utama untuk pembangunan properti residensial. Pada triwulan II 2023, sebesar 72,80% dari total kebutuhan pembiayaan proyek pembangunan perumahan berasal dari dana internal. Sementara dari sisi konsumen, jenis pembiayaan utama pembelian properti residensial berasal dari fasilitas KPR dengan pangsa sebesar 76,02%.

Source: Bank Indonesia

The results of Bank Indonesia's Residential Property Price Survey (SHPR) indicate that the development of residential property prices in the primary market on an annual basis continues the upward trend in the second quarter of 2023. This is reflected in the increase in the Residential Property

Price Index (PPI) in quarter II 2023 of 1.92% 1 (yoy), higher than the previous quarter's growth of 1.79% (yoy) (Graph 1). The increase in PPI was mainly supported by an increase in small-type house prices of 2.22% (yoy), higher than the increase in the first quarter of 2023 which was 1.77% (yoy)

(graph 2). Meanwhile, the price of medium-type houses increased by 2.72% (yoy), slightly lower than 2.76% (yoy) in the first quarter of 2023 (graph 3). Furthermore, the increase was also observed in large-type house prices with an increase of 1.49% (yoy) (Chart 4). Spatially, the development of the house price index that increased in the second quarter of 2023 mainly occurred in Batam City, Jabodebek-Banten, and

Denpasar (Chart 5). In terms of sales, the survey results also indicate that sales of property products for the residential category in the primary market in the second quarter of 2023 are still not too strong, but there is already a trend that shows an increase.

The following table rental price type 36 (2 rooms) in the city of Medan and Deli Serdang:

**Table 4 Rental Price Of Type 36 House (2 Rooms) In Medan City And Deli Serdang Regency**

No	Location	House rental price / tahun type 36 (2 rooms)
1	Medan Amplas	10.000.000
2	Medan Area	15.000.000
3	Medan Barat	15.000.000
4	Medan Baru	19.000.000
5	Medan Belawan	5.000.000 – 9.000.000
6	Medan Deli	5.000.000
7	Medan Denai	11.000.000
8	Medan Helvetia	7.000.000 - 11.000.000
9	Medan Johor	7.500.000 -10.000.000
10	Medan Kota	18.000.000 - 20.000.000
11	Medan Labuhan	14.000.000
12	Medan Maimun	15.000.000
13	Medan Marelan	6.000.000 – 8.000.000
14	Medan Perjuangan	8.000.000 – 11.000.000
15	Medan Petisah	15.000.000
16	Medan Polonia	8.000.000
17	Medan Sunggal	7.000.000 – 10.000.000
18	Medan Selayang	15.000.000
19	Medan Tembung	7.000.000 – 9.000.000
20	Medan Tuntungan	7.000.000 – 8.000.000
21	Medan Timur	8.000.000 -12.000.000
22	Deli Serdang	5.000.000 – 9.000.000

Source: olx.co.id and lamudi.co.id

As for the price of houses type 36 (non-subsidized) in Medan and Deli Serdang range from Rp 160 million-Rp 432 million (www.rumah123.com, www.rumah.com).

Many factors influence a person in choosing the type of house that will be used as a residence. Awang Firdaus (1997) explained that the demand for houses can be influenced by factors such as price, income, expenditure, location, ease of funding, facilities, and public facilities, consumer tastes and legislation.

Income level also affects demand, in theory which states that income has a positive influence on the demand for a good (Sadono Sukirno, 2005). According to the nature of changes in demand due to changes in income, different types of goods can be distinguished into inferior goods, essential goods, normal goods, and luxury goods.

Inferior goods are those that are generally demanded by low-income people. If these people increase their income, they will reduce their demand for inferior goods and replace them with other goods of higher quality. For example, cassava. When the income was low, people consumed manioc. If their income increases then they will reduce the consumption of manioc and replace it with rice. Essential goods are goods that are very important benefits for people's daily lives. For example, food (rice, sugar, coffee, tea) and clothing. Refer to the book Introduction to Microeconomics by Dr. Busra, S.E., M.Si, Yuli Anisah, S.E., M.M., Zulkarnaini, S.E., M.Si., Ak., CA, a normal good is one in which, if income rises, the demand for that good will also rise. Most things in society are normal. Because, the increase in demand occurs due

to the increase in income. When incomes rise, people's purchasing power increases. In general, the goods that fall into this category are a variety of goods including necessities. In this case, subsidized housing includes normal goods. Luxury goods are goods purchased by people with high incomes. As for examples of luxury goods such as cars, gold, diamonds, expensive paintings, and so on.

Previous research analysis of the effect of price, income, location, and facilities on the demand for simple houses (Case Study housing Puri Dinar Mas) in Semarang (Ismi M and Nenik W, 2012) proved the price,

income, location, and facilities have a positive effect on housing demand Puri Dinas Mas. In addition, the study of the influence of price and consumer income on the demand for Type 36 houses (MK Situmorang, 2018) also proved the existence of a positive and significant influence between income variables on the demand for type 36 housing (subsidized housing).

Based on an initial survey conducted on 40 respondents in terms of Education respondents who are low-income people (MBR) do subsidize home buyers, known from the data listed in the following figure.

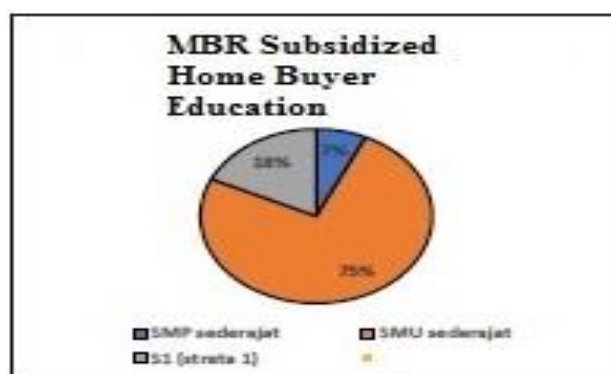


Figure 2 Respondents Based On Education  
Source: Processed Data (2023)

Andrew E. Sikula in Mangkunegara (2003: 50) states that: "the level of education is a long-term process that uses systematic and organized procedures, in which the managerial workforce learns conceptual and theoretical knowledge for general purposes. Education is a form of consumption of society. In the long term this is responded by the population by investing in education by attending school or continuing higher education in the hope of getting a higher income (Diah Widyawati, 1994). Higher education will indirectly have consequences on individual choices in getting a job. Thus, jobs that generate high income tend to be taken by educated workers. So it can be concluded that if the education is higher than the income is greater.

Related to the demand for subsidized housing where subsidized housing is normal because the purchase of subsidized housing

in this study is the first purchase. Normal goods are all those goods for which demand will grow as people's incomes increase. (Sugiarto et al, 2007). Income affects the amount of expenditure of each person and in the household. If the consumer's education level is higher than the consumer's income is also higher, the demand for subsidized housing will rise as well.

Previous research on the effect of age, education, work on the income of poor households in the village of Bebandem (Arya Dwiandana Putri, Nyoman Djinar Setiawina, 2013) stated that the results showed that simultaneous factors of age, education, and work, a significant effect on the income of poor households in the village of Bebandem Karangasem. Another study analyzes lifestyle factors and their influence on the purchase of A Simple House (Study on residential customers Puri Dinar Mas PT.

Ajisaka in Semarang) by (Sari Listyorini, 2012) also states that lifestyle has a significant influence on the decision to purchase a simple house is accepted. This means that lifestyle variables consisting of social factors, household factors (work), pleasure factors, reference factors (education), and identity factors together

have a positive and significant effect on simple home purchase decisions.

Based on an initial survey conducted on 40 respondents in terms of work respondents who are low-income people (MBR) doing subsidized home buyers, it is known from the data listed in the following figure:

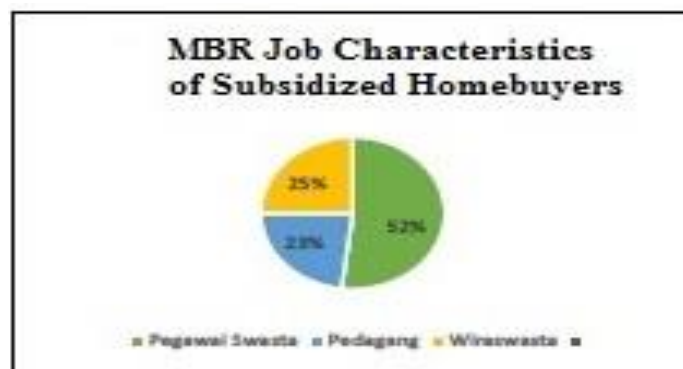


Figure 3 Respondents by Occupation  
Source: processed Data (2023)

Work is one of the most important aspects of a healthy adult's life, no matter where and when they are. How people will feel very difficult and restless if they do not have a clear job, especially if they become unemployed. According Notoatmodjo (2010), work is an activity or activities carried out by a person so as to obtain income. Siswanto Sastrohadiwiryo (2003: 127) said work is "a set or group of tasks and responsibilities that will, are, and have been done by the workforce in a certain period of time". Based on that responsibility someone will get a reward. The reward to be received depends on the large or small value of the responsibility assumed in a job.

Income affects the amount of expenditure of each person and in the household. The greater one's income will make one prefer something more quality and branded. Thus a person's income is inseparable from the type of work he does. Work has a significant influence on a person's income level that cannot be separated from the level of Education taken. According to Sijrat (2007) in Agustini and Marhaeni (2017), explained that heads of households with low education or only completed education in elementary

education will be faster to work in the informal sector with limited or low income. While the head of the family with higher education will enter and work in the formal sector.

Previous research on the effect of age, education, work on the income of poor households in the village of Bebandem (Arya Dwiandana Putri, Nyoman Djinar Setiawina, 2013) stated that the results showed that simultaneous factors of age, education, and work, a significant effect on the income of poor households in the village of Bebandem Karangasem. Another study analyzes lifestyle factors and their influence on the purchase of A Simple House (Study on residential customers Puri Dinar Mas PT. Ajisaka in Semarang) by (Sari Listyorini, 2012) also states that lifestyle has a significant influence on the decision to purchase a simple house is accepted. This means that lifestyle variables consisting of social factors, household factors (work), pleasure factors, reference factors (education) , and identity factors together have a positive and significant effect on simple home purchase decisions. Price according to Kotler and Armstrong (2001:

439) is the amount of money charged for a product or service, or the amount of value exchanged by consumers for the benefits of owning or using the product or service. According to Tjiptono and Candra in Priansa (2017: 209) said that the price is an inherent part of the product that reflects how much the quality of the product.

According to Sukirno (1996) provides an explanation in the law of demand where there is a relationship between the demand for a good and the price of goods.

1. A price increase causes a consumer to look for the same substitute goods so that the substitute goods increase in demand while the main goods decrease in demand.
2. With rising prices, it can affect the real income of consumers of goods decreases so that because of declining income, consumers will decrease or reduce demand.

According to Sukirno (2003) one of the factors that affect the elasticity of demand for a good is the level of ability of other goods to replace the goods concerned. If a good has many substitutes, the demand for that good tends to be elastic. A small change in price will switch to another item as a replacement. For goods that do not have substitutes, the demand for these goods is inelastic. Because consumers find it difficult to obtain replacement goods if the price of these goods rises.

It does not make direct demand go down with ease for people with low income ( Rp.

2.500.000, - up to Rp. 4.000.000, - per month) can already have a Healthy Simple House (RSS) or subsidized House, then this raises the number of requests for subsidized houses in Indonesia, especially North Sumatra province and other provinces. For the city of Medan, there are many thousand house programs.

Previous research analysis of the effect of price, income, location, and facilities on the demand for simple houses (Case Study housing Puri Dinar Mas) in Semarang (Ismi M and Nenek W, 2012) proved the price, income, location, and facilities have a positive effect on housing demand Puri Dinas Mas. In addition, the study of factors that influence the decision to purchase a house for low-income people (Andika Mendrofa, Heri Wibowo, Ivan Sofyan, Taufiq Hendrawan, Wita Witria, 2017) also showed that the factors that are considered to purchase a house for low-income people are price, location, promotion, facilities and financing where the most dominant is the price and location

In addition to price factors, location factors are also things that need to be considered by the company, especially the location of a housing estate. A strategic location is a location desired by most consumers, the more strategic the location of a housing will affect the level of housing demand. The following is the location of subsidized housing in Sei Mencirim Village



Figure 4 location of subsidized housing in Kelurahan Sei



Sei Mencirim village is located in Sunggal District. Sunggal sub-district is a sub-district located in Deli Serdang regency, North Sumatra province, Indonesia. Sunggal district is exactly in the middle, between Medan City and Binjai City. Its strategic location makes many developers / developers build subsidized housing there. The difficulty of finding areas in the city of Medan for the development of property projects encourages developers to look at the area around the capital of North Sumatra province. Deli Serdang and Binjai are two of the most attractive cities especially for large-scale project development and commercial properties. But Deli Serdang the most desirable because the stock is still a lot of land and the price is more sloping. Kotler and Armstrong (2018: 51) stated that location is a variety of company activities to make products produced or sold affordable and available to target markets, in this case related to how to deliver products or services to consumers and where strategic locations. The availability of housing, both in the center and on the outskirts, strategically greatly affects consumer interest in buying a home. The more strategic the location of housing, the better and higher the level of demand. Previous research analysis of the effect of price, income, location, and facilities on the demand for simple houses (Case Study housing Puri Dinar Mas) in Semarang (Ismi M and Nenek W, 2012) proved the price, income, location, and facilities have a positive effect on housing demand Puri Dinas Mas. In addition, the study of factors that influence the decision to purchase a house for low-income people (Andika Mendrofa, Heri Wibowo, Ivan Sofyan, Taufiq Hendrawan, Wita Witria, 2017) also showed that the factors that are considered to purchase a house for low-income people are price, location, promotion, facilities and financing where the most dominant is the price and location

## **LITERATURE REVIEW**

### **Income**

Income is all receipts, both cash and non-cash which are the results and sales of goods or services within a certain period of time (Ahmad Ifham Sholihin, 2013:621). Income is compensation for providing services to others, everyone earns income for helping others (Iskandar Putong, 2013: 33)

### **Education Level**

According to Hasbullah (2009: 1) states that "education is often interpreted as a human effort to develop his personality according to the values of culture and society". According to Tirtarahardja et al., (2005) defines that: "the level of Education is something that is universal and lasts continuously unbroken from generation to generation anywhere in the world. Efforts to humanize humans through education is organized in accordance with the outlook on life and social background of each particular society".

### **Definition Of Work**

Work is one of the most important aspects of a healthy adult's life, no matter where and when they are. How people will feel very difficult and restless if they do not have a clear job, especially if they become unemployed. According Notoatmodjo (2010), work is an activity or activities carried out by a person so as to obtain income.

### **Price**

Price is the value of an item expressed in money. (Alma, 2004: 169). According Tandjung (2004: 78), the price is the amount of money that has been agreed by prospective buyers and sellers to be exchanged for goods or services in normal business transactions.

### **Location**

Luhst (1997) states that the quality of life in the form of comfort, security of a dwelling house is determined by its location, in the sense of the attractiveness of a location

determined by two things: the environment and accessibility. A neighborhood is defined by Luhst as an area that is geographically bounded by real boundaries, and usually inhabited by groups of residents. The environment contains physical and social elements that give rise to activities and busyness in everyday life. These elements are in the form of school buildings, shopping buildings, markets, open areas for recreation, car roads and so on. Accessibility is the attraction of a location because it will obtain ease in achieving various centers of activity such as trade centers, education centers, industrial areas, banking services, recreation areas, government services, professional services and even a combination of all these

activities. The assessment of accessibility can be in the form of distance from the Central Business District or CBD, the ease of getting services from public transportation to the location concerned or can also be seen from the width of the road, namely the narrower the width of a land road, it means that accessibility from the place concerned is not good.

### Request

According to Sadono Sukirno (2005) demand is the various types and quantities of goods and services that buyers demand at various possible prices in a given period in the market. In economic analysis it is considered that the demand for a good is mainly influenced by its price level.

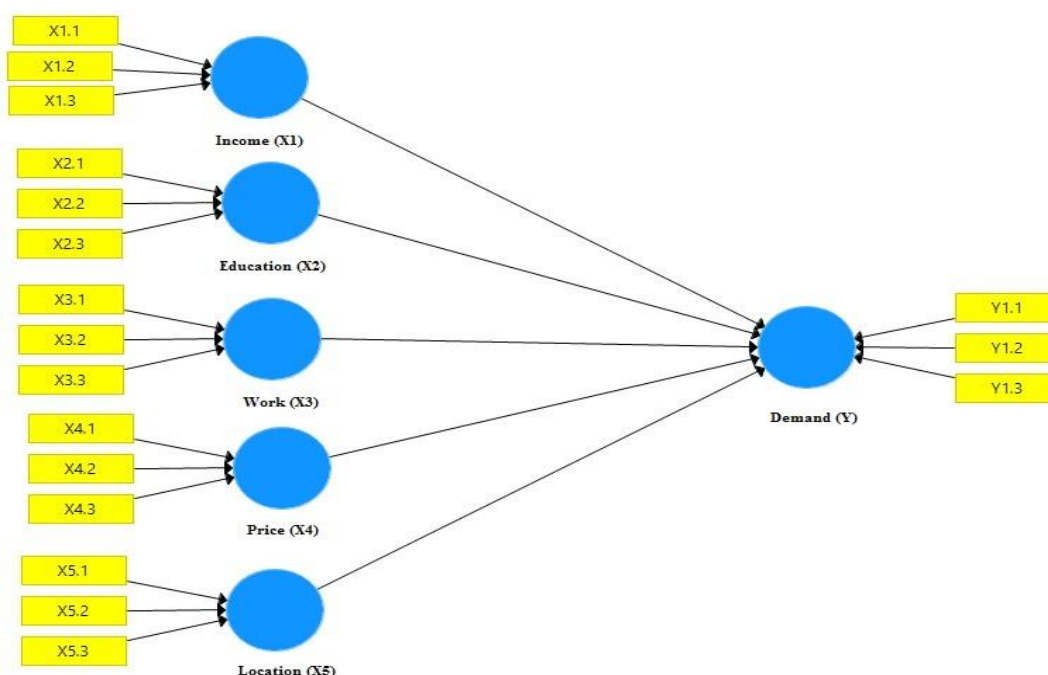


Figure 5. Conceptual Framework

### Hypothesis

Based on background research and the relationship between variables, the research hypothesis:

1. Income level has a positive effect on the demand for subsidized housing
2. The level of Education has a positive effect on the demand for subsidized housing.
3. Employment has a positive effect on the demand for subsidized housing.
4. Prices negatively affect the demand for subsidized housing.
5. Location has a positive effect on the demand for subsidized housing.

## **MATERIAL AND METHODS**

This study uses quantitative methods to test and prove hypotheses that have been made through various tests and data processing. This is mentioned Schiffman and Kanuk (2000: 19), quantitative research methods related to methods for collecting data, sample design, and construction of data collection instruments. In addition, Malhotra (2006: 161) revealed that the quantitative approach is a research methodology that seeks to quantify data and usually apply certain statistical analysis. Based on the dominant type of data processed in the form of numbers, this study is a category of quantitative research (Sekaran, 2007). The tool used in this study is a questionnaire that is distributed to a sample of a predetermined population.

Types and sources of data used in this study, namely: 1. Primary Data, which is the source of data obtained in this study directly from the respondents and in the form of opinions of subjects individually or in groups, the results of observations of an object, activity, or event. 2.Secondary Data, which is the source of data obtained in this study from several literatures, such as books, journals, magazines, social media, websites and other sources of information that are still relevant to this study.

The population in this study is the buyer of subsidized housing in the village of Sei Mencirim Sub-District Sunggal Deli Serdang as many as 878 people.

A sample is a portion of the total population that will be taken in certain ways to measure or observe its characteristics (Silaen,2018). According to Sugiyono (2016) the sample is part of the number and characteristics possessed by the population. Barclay, Higgins, & Thompson (1995), stated that to use SEM PLS, the minimum sample based on one of the rules is find the endogenous variable that receives the most incoming arrows, then the number of incoming arrows multiplied by 10 then we will obtain the minimum sample number. In this study, there is one endogenous variable demand (Y) and receive arrows as much as 5. Then

the minimum number of samples of this study is 5 times 10 equals 50 samples. However, in calculating the number of samples, this study uses the Slovin formula and obtained the number 90 means that this has met the rules of Barclay, Higgins, & Thompson, namely the minimum sample50. data collection in this study will be done in the following ways: 1.Library Studies; Literature study is done by collecting information from books, journals and other literature relevant to the research problem which is then used as a theoretical basis. This literature study was conducted at the stage of preparation of literature review (Chapter II) and preparation of research stimuli. 2. Observation: observation is a research technique that is done by observing / observing directly. 3.Interview; the interview is the most important part to obtain information or data that will be used as research 4. Questionnaire; Questionnaire / questionnaire is a form of questions asked to respondents, namely consumers (buyers) subsidized housing in the village of Sei Mencirim Sunggal District of Deli Serdang regency which became the object of research. The study was conducted with the approach of Structural Equation Model (SEM) based on Partial Least Square (PLS). PLS is a component or variant based structural equation modeling (SEM). Structural Equation Model (SEM) is a field of statistical study that can test a series of relationships that are relatively difficult to measure simultaneously. According to Santoso (2014) SEM is a multivariate analysis technique which is a combination of factor analysis and regression analysis (correlation), which aims to examine the relationship between variables that exist in a model, be it between indicators and constructs, or relationships between constructs. According to Latan and Ghazali (2012), PLS is an alternative approach that shifts from a covariance-based SEM approach to a variant-based one. SEM based on covariance generally tests causality or theory while PLS is more predictive model. However, there is a difference between

SEM based on covariance based with component based PLS is in the use of structural equation models to test theories or theory development for predictive purposes.

**RESULTS**

**Evaluation Of The Measurement Model (Outer Model)**

Testing of measurement models will be carried out to show the results of validity and reliability tests. In this study, validity test was conducted to determine whether the construct is qualified to continue as research or not. Based on the results of the validity

and reliability test of the previous questionnaire, the indicators to be discarded (replaced) are X4.2 (price conformity with product quality) and Y1 (demand for subsidized housing due to facilities). X4.2 (suitability of price with product quality) was changed to an indicator of price competitiveness and Y1 (demand for subsidized housing due to family size) was changed to an indicator of demand for subsidized housing due to facilities. As for these changes can be seen in the following table of research variables.

**Table 5 Research Variables**

No	Variabl3		Indicator Variable (Manifest Variables)
1	Income (X1) (Laten Eksogen)	X1.1	Income received per month
		X1.2	Jobs
		X1.3	Family burden borne
2	Education (X2) (Laten Eksogen)	X2.1	Education level
		X2.2	Educational suitability
		X2.3	Competence
3	Jobs (X3) (Laten Eksogen)	X3.1	Sufficient income
		X3.2	Decent working hours
		X3.3	Social Security
4	House Prices (X4) (Laten Eksogen)	X4.1	Price affordability
		X4.2	Price competitiveness
		X4.3	Compatibility of price with benefits
5	Location (X5) (Laten Eksogen)	X5.1	Environment
		X5.2	Access
		X5.3	Visibility
6	Demand (Y) (Laten Endogen)	Y1.1	Demand for subsidized housing because it suits the size of the family
		Y1.2	Demand for subsidized housing because it is in accordance with the ability of consumers.
		Y1.3	Demand for subsidized housing due to price.

The results of the validity and reliability test in the main test are as follows:

**Convergent Validity**

Convergent Validity is a measurement model of an item that has a value based on the correlation between the item score and

the value of the construct. The Convergent Validity index is measured by the factors AVE, composite reliability, and Cronbach's Alpha. The following are the results of the Ave, composite reliability and Cronbach's alpha indices, which can be seen in Table 6 below:

**Table 6 Convergent Validity**

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability(rho_c)	Average variance extracted (AVE)
X1	0.703	0.753	0.832	0.626
X2	0.734	0.755	0.848	0.651
X3	0.809	0.811	0.887	0.724
X4	0.772	0.776	0.868	0.687
X5	0.829	0.834	0.897	0.745
X6	0.833	0.833	0.900	0.749

Source: primary data processed, 2023

Validity and reliability criteria can also be seen from the value of the reliability of a

variable and the value of the average Variance Extracted (AVE) of each variable.

The variable is said to have high reliability if the composite reliability value is above 0.7 and AVE is above 0.5. Based on Table 4.9 above, it can be stated that all variables meet the composite reliability because the value obtained is above the recommended number, which is above 0.7 which meets the criteria.

**Discriminant Validity**

Discriminant Validity of the measurement model with indicator reflection can be seen from the cross-loading value of the measurement with the construct. If the correlation of measurement constructs is greater than that of other constructs, it can be concluded that latent constructs have sizes in their blocks better than sizes in other blocks (Ghozali, 2014). The following is the output Discriminant Validity test results using SmartPLS 4.0:

**Table 7 Discriminant Validity (Cross Loading)**

	X.1	X.2	X.3	X.4	X.5	Y
X1.1	0.871	0.736	0.757	0.789	0.788	0.362
X1.2	0.579	0.573	0.179	0.954	0.974	0.558
X1.3	0.977	0.894	0.760	0.461	0.442	0.943
X2.1	0.645	0.860	0.368	0.809	0.830	0.649
X2.2	0.871	0.850	0.643	0.374	0.354	0.867
X2.3	0.397	0.875	0.126	0.715	0.733	0.467
X3.1	0.266	0.208	0.769	0.852	0.032	0.219
X3.2	0.506	0.635	0.632	0.239	0.149	0.017
X3.3	0.488	0.425	0.773	0.161	0.107	0.437
X4.1	0.451	0.511	0.141	0.903	0.892	0.512
X4.2	0.591	0.511	0.722	0.770	0.683	0.568
X4.3	0.579	0.573	0.857	0.908	0.848	0.383
X5.1	0.451	0.767	0.793	0.814	0.842	0.512
X5.2	0.579	0.614	0.722	0.727	0.758	0.558
X5.3	0.321	0.805	0.857	0.853	0.816	0.383
Y1.1	0.956	0.888	0.672	0.500	0.482	0.808
Y1.2	0.397	0.505	0.158	0.635	0.652	0.797
Y1.3	0.380	0.442	0.121	0.647	0.667	0.724

Source: primary data processed, 2023

Based on Table 7 above, it can be seen that the loading factor for each indicator of each latent variable has a relatively larger value when compared with the value of other latent variable indicators.

**Reliability Indicators**

Indicator Reliability indicates the amount of variance of each indicator described through latent variables obtained from the value of the loading factor as follows:

**Table 8 External Loading**

	X1	X2	X3	X4	X5	Y
X1.1	0.756					
X1.2	0.762					
X1.3	0.760					
X2.1		0.860				
X2.2		0.850				
X2.3		0.875				
X3.1			0.769			
X3.2			0.632			
X3.3			0.773			
X4.1				0.903		
X4.2				0.770		
X4.3				0.908		
X5.1					0.842	
X5.2					0.758	
X5.3					0.816	
Y1.1						0.808
Y1.2						0.797
Y1.3						0.724

Source: primary data processed, 2023

Based on Table 8 above it can be seen that the loading value of each latent variable is greater than 0.4 which means that no indicator variable should be eliminated from the model.

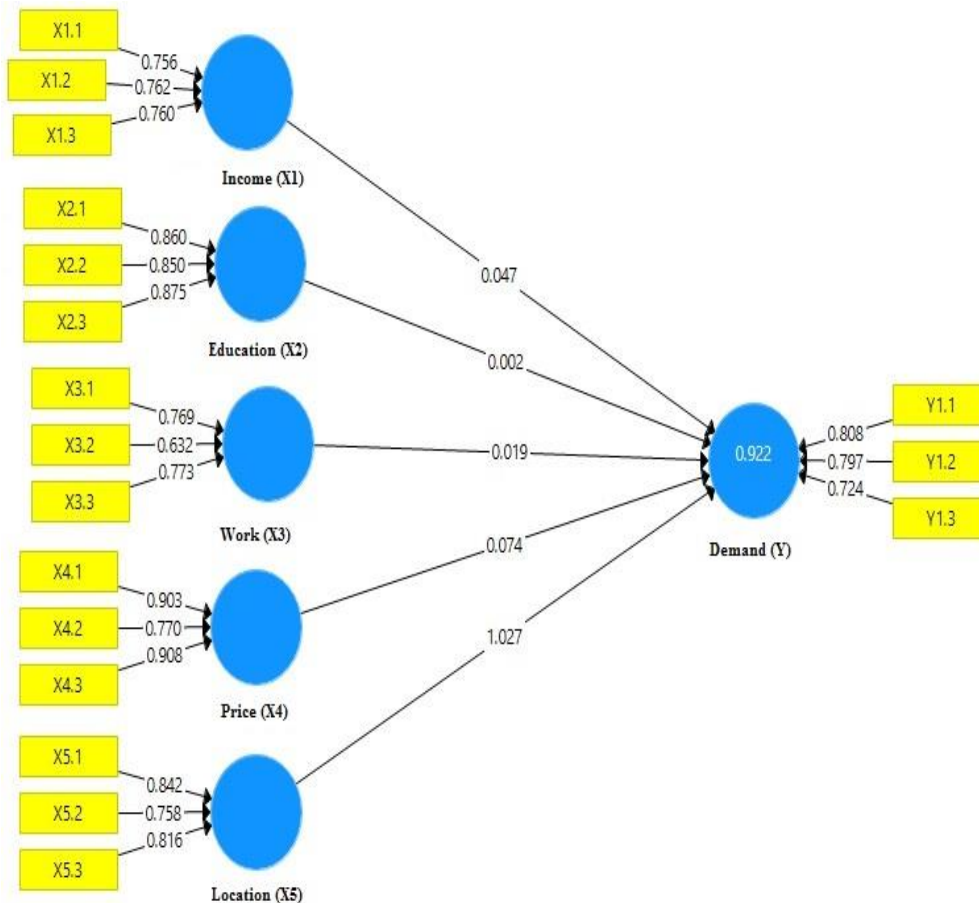


Figure 6 Outer Model Test Results

Based on the results of the analysis shown by Figure 6 shows that of the 18 variables as a whole, there are 17 variables have a value greater than 0.7 and as many as 1 variable

has a value below 0.7. It can also be seen from the loading factor value of each data construct in this study which is shown in Table 8 below:

Table 9 Loading Factor Values Of Construct Data

	X1	X2	X3	X4	X5	Y
X1.1	0.756					
X1.2	0.762					
X1.3	0.760					
X2.1		0.860				
X2.2		0.850				
X2.3		0.875				
X3.1			0.769			
X3.2			0.632			
X3.3			0.773			
X4.1				0.903		
X4.2				0.770		
X4.3				0.908		
X5.1					0.842	
X5.2					0.758	
X5.3					0.816	
Y1.1						0.808
Y1.2						0.797
Y1.3						0.724

Source: Primary Data Processed, 2023

From the results of the analysis as shown in Table 9 above shows that the loading factor value of each construct has been above 0.7 except for the construction work (X3) indicator 2.

**Evaluation Of The Measurement Model (Inner Model)**

Evaluation of structural models in this study using 3 tests, namely: (1) R-Square, (2) F-Square and (3) Mediation Effect: (a) Direct effect and (b) Indirect Effect.

**R-Square**

R Square is a measurement of the proportion of variation in the value of the influenced variable (endogenous) that can be explained by the influencing variable (exogenous). This test is useful to predict whether the model in this study is good or bad (Juliandi,2018). Here are the results of the R-Square test shown in Table 9 below:

**Table 10 R-Square**

	R-square	R-square adjusted
Y1	0.938	0.935

Source: Primary Data Processed, 2023

Based on Table 10 above, it can be concluded that the R-Square test results obtained a value of 0.935 on Y. This indicates that the ability of variables X1(income), X2(Education), X3(employment), X4(price) and X5(location) in explaining Y (demand) is 93.5%.

**F-Square**

F-Square measurement or f2 effect size is a measure used to assess the relative impact of a variable that affects (exogenous) to the variable that is affected (endogenous). The measurement of f2 (f-square) is also called the effect of change. R2. That is, the change in the value of R2 when a particular exogenous variable is removed from the model, will be able to be used to evaluate whether the removed variable has a substantive impact on the endogenous construct (Juliandi, 2018).

F-Square criteria according to (Cohen, 1988) are as follows:

- (1) if the value of the F square of the exogenous variable  $f^2 = 0.02 \leq f^2 < 0.15$  then there is a small effect of the exogenous variable to the endogenous;
- (2) if the value of the F square of the exogenous variable  $f^2 = 0.15 \leq f^2 < 0.35$  then there is a medium effect of the exogenous variable on the endogenous; and
- (3) If the value of the F square of the exogenous variable is  $f^2 \geq 0.35$ , there is a large (high) effect of the exogenous variable on the endogenous;

**Table 11 F-Square**

	X.1	X.2	X.3	X.4	X.5	Y
X1						0.450
X2						0.262
X3						1.027
X4						0.151
X5						0.174
Y						

Source: Primary Data Processed, 2023

Based on the data in Table 11 above, it can be seen that the variables X1(income) and X3(employment) have a value of f2 (2) 0.35, then there is a large effect (high) of exogenous variables to endogenous (demand). While the variables X2 (Education), X4(price) and X5(location) have a value of F2 between  $0.15 \leq f^2 < 0.35$  then there is a moderate effect (medium) of exogenous variables to endogenous (demand).

**Mediation Effect**

**a. Direct Effect**

Direct effect analysis is carried out in order to test the hypothesis of the direct influence of a variable that affects (exogenous) to a variable that is influenced (endogenous) (Julianato,2018). The criteria in testing the hypothesis of direct influence (direct effect) are as follows:

First, the path coefficient : (a) if the value of the path coefficient is positive, then the influence of a variable on other variables is unidirectional, meaning that if the value of a variable that affects increases, the value of the variable that is affected will also increase; and (b) if the value of the path

coefficient is negative, then the influence of a variable on other variables in the opposite direction, which means that if the value of a variable increases, the value of other

variables will decrease. Conclusion or hypothesis is accepted when P-Values <0.05 and rejected when p-Values>0.05.

**Table 12 Direct Effect**

	<i>Originalsample(O)</i>	<i>Samplemean(M)</i>	<i>Standarddeviation (STDEV)</i>	<i>Tstatistics (O/STDEV)</i>	<i>P values</i>
X1->Y	0,057	0,026	0,233	0,246	0,047
X2->Y	0,284	0,160	0,272	0,058	0,002
X3->Y	0,332	0,321	0,308	0,076	0,019
X4->Y	0,180	0,117	0,275	0,654	0,074
X5->Y	0,294	0,274	0,256	1,149	1,027

Source: Primary Data, 2023

The path coefficient in Table 12 shows that all path coefficients are positive and less than 0.05. This indicates that the variables X1(income), X2(education) and X3(employment) have a direct influence on Y(demand) with P values smaller than 0.05, namely X1(0.047), X2(0.002) and X3 (0.019) based on these results, Hypothesis 1, hypothesis 2 and Hypothesis 3 in this study are accepted.

## DISCUSSION

### Influence Of Income On Demand For Subsidized Housing

The results of the first hypothesis test showed that there is an effect of income on demand for subsidized housing with a p value of 0.047 (< 0.05). Based on these results, it can be concluded that the results of the first hypothesis test showed a pattern of directly proportional data means that the higher the income, the demand for subsidized housing will also be higher according to Rahardja & Manurung (2010: 20-21). This is supported because subsidized housing includes normal goods (first purchase). Subsidized housing has a positive correlation between its income and demand. Subsidized housing has a positive elasticity of income to demand, where changes in demand and changes in income move in the same direction. This study supports research conducted by Situmorang, M. K. (2018) which revealed that consumer income has a significant effect on the demand for Healthy Simple houses (RSS) or

subsidized houses. Thus, it can be stated that consumer income is one of the factors that affect the demand for type 36 houses in PT. Aresco Dharma Medan. This result is also in line with research conducted by Vivi Devianti, I Ketut Surabagiarta, Suharyanto (2022) which reveals that price, location, and income have a positive and significant effect on the demand for subsidized housing.

Income is a very important factor in determining the pattern of demand for various goods. Changes in income always lead to changes in demand for various types of goods. Based on the nature of changes in demand that occurs when income changes, various types of goods can be divided into four groups, namely inferior goods, essential goods, normal goods, and luxury goods (Sukirno, 2002). In this case the subsidized house includes normal goods (first purchase). Subsidized housing has a positive correlation between its income and demand. Subsidized housing has a positive elasticity of income to demand, where changes in demand and income move in the same direction. The first hypothesis was accepted.

### The Effect Of Education On The Demand For Subsidized Housing

The results of the second hypothesis test showed that there is an effect of education on the demand for subsidized housing with a p value of 0.002 (< 0.05). Based on these results, it can be concluded that the results



of the second hypothesis test show a pattern of directly proportional data means that the higher the education, the demand for subsidized housing will also be higher (Widyawati, 1994).

Education (ability, expertise and knowledge) is one of the qualities of human capital according to Romer, D. (1996). In the long run this is responded by the population by investing in education by attending school or continuing higher education in the hope of getting a higher income (Diah Widyawati, 1994).

Education is closely related to job market analysis. In theory, it can be concluded that based on various views, the occurrence of wage segmentation related to the educational characteristics of workers has been concluded. Higher education will also provide a higher income. Higher education will indirectly have consequences on individual choices in getting a job. Thus, jobs that generate high income tend to be taken by educated workers. So it can be concluded that if the education is higher then the income is greater.

These results are in line with research conducted by Putri, A. D., & Setiawina, D. (2013) which revealed that age, education, type of work, simultaneously significant effect on household income. The results of this study were also supported by Mateus Benjamin Kapisa, Siti Aisah Bauw, Rumas Alma Yap (2021) who revealed that there is a positive and significant influence between the variables of Education Level and type of work on household income. The second hypothesis is accepted.

### **Effect Of Employment On Demand For Subsidized Housing**

The results of the third hypothesis test showed that there is an effect of employment on the demand for subsidized housing with a p value of 0.019 ( $< 0.05$ ). Based on these results, it can be concluded that the results of the third hypothesis test show a pattern of data that is directly proportional, meaning that the better/higher

the work, the demand for subsidized housing will also be higher.

According to the ILO (2011) simply decent work can be defined as work done on their own will or choice, salaried or provide sufficient income to pay for a decent and decent life, and is assured of physical and psychological security and safety. Work is an activity that produces goods and services for yourself and others within a certain period of time to earn income in the form of money to meet daily needs. In this case, the indicators of employment are stability and job security (safe work, not easily dismissed for no apparent reason), decent working hours (Law No. 13 of 2003 on employment (UUK 13/2003) and Social Security (Health Insurance, work accident insurance). This means that the better the work, the more guaranteed the income.

These results are in line with research conducted by Putri, A. D., & Setiawina, D. (2013) which revealed that age, education, type of work, simultaneously significant effect on household income. The results of this study were also supported by Mateus Benjamin Kapisa, Siti Aisah Bauw, Rumas Alma Yap (2021) who revealed that there is a positive and significant influence between the variables of Education Level and type of work on household income. This is also related to the first hypothesis where there is a positive correlation between income and demand for subsidized housing. Subsidized housing has a positive elasticity of income to demand, where changes in demand and changes in income move in the same direction. The third hypothesis is accepted.

### **Influence Of House Prices On The Demand For Subsidized Housing**

The results of the fourth hypothesis test showed that the hypothesis was rejected because the results showed that prices have a positive effect on the demand for subsidized housing but not significant with a p value of 0.074 ( $> 0.05$ ). For the price variable in this study shows a pattern of data that is directly proportional to the higher house prices the higher the demand. The

price variable on the demand for subsidized housing is closely related. Price is the amount of money charged on a product or service or the sum of all the value provided by a customer to benefit from owning or using a product or service. Price plays a strategic role in marketing. If the price is too expensive, the product in question will not be affordable by the target market. Conversely, if the price is too cheap, the company is difficult to make a profit or some consumers perceive the quality as poor according to Kotler and Armstrong (2011:345). In this study the price increase does not reduce the demand for subsidized housing tends to increase.

Price increases do not reduce demand for subsidized housing instead tend to increase, this is due to:

✓ There is a guarantee from the developer (REI) that will maintain/improve the quality of the house if there is an increase in house prices. The same was also asked by President Jokowi so that REI could maintain the quality of buildings provided in the one million houses (PSR) program. Real Estate Indonesia (REI) is one of the 3 developer associations with the largest contribution to providing housing for low-income people (MBR) in the country. REI controls 60 percent of the market share of subsidized homes. With this role, President Joko Widodo (Jokowi) has high hopes and asked REI to continue to make a major contribution in smoothing the government program. Since July 2023, the government has officially increased subsidized house prices in various regions in Indonesia, with the highest limit ranging from Rp 162 million to Rp 234 million in 2023. Real estate Indonesia (REI) stated that the realization of subsidized house sales has increased relatively despite the price limit set by the government since July 2023 ✓ in addition, the government will provide incentive assistance as support for MBR houses by providing administrative fee assistance (BBA) of Rp 4 million which will be valid from November 2023 to December

2024. This will make consumers still choose subsidized houses even though there is an increase in prices because the increase in prices is considered reasonable.

✓ This situation is also reflected in the Residential Property Price Survey (SHPR) released by Bank Indonesia (BI). For the second quarter of 2023, BI'S SHPR recorded an increasing trend of 1.92 percent on an annual basis (yoy). This figure is higher than the previous quarter period of 1.79 percent. In terms of sales, the survey results also indicate that sales of property products for the residential category in the primary market in the second quarter of 2023 are still not very strong, but there is already a trend that shows an increase.

This result is in line with research conducted by Muchtar (2021) which shows that price variables have a positive but not significant effect on subsidized home sales. The fourth hypothesis was rejected.

### **The Influence Of Location On The Demand For Subsidized Housing**

The results of the fifth hypothesis test showed that location has a positive effect on the demand for subsidized housing but not significantly with a p value of 1.027 (> 0.05). For the location variable, although it is not significant but shows a directly proportional data pattern. This means that the better / strategic location (environment, access, visibility), the higher the demand for subsidized housing. In this study, the location indicator is the environment (surrounding areas that support the products offered. For example, adjacent to restaurants, markets, schools, offices, and so on) access (often traversed or easily accessible means of transportation), and visibility (location or place that can be seen clearly from normal visibility).

Luhst (1997) states that the quality of life in the form of comfort, security of a dwelling house is determined by its location, in the sense that the attractiveness of a location is determined by two things, namely the environment and accessibility. A

neighborhood is defined by Luhst as an area that is geographically bounded by real boundaries, and is usually inhabited by groups of residents. The environment contains physical and social elements that give rise to activities and busyness in everyday life. These elements are in the form of school buildings, shopping buildings, markets, open areas for recreation, car roads and so on. Accessibility is the attraction of a location because it will obtain ease in achieving various centers of activity such as trade centers, education centers, industrial areas, banking services, recreation areas, government services, professional services and even a combination of all these activities. The assessment of accessibility can be in the form of distance from the Central Business District or CBD, the ease of getting services from public transportation to the location concerned or can also be seen from the width of the road, namely the narrower the width of a land road, it means that accessibility from the place concerned is not good.

In addition to considering the strategic location of housing, it must also take into account aspects of environmental comfort for the owner of the House (Mardiani et, 2020). Tabroni and Komarudin (2021) suggest that the geographical position determined by the developer company to build housing is referred to as location. Location is one of the important factors in competing to attract consumers because the presence of residential locations greatly affects consumer interest in buying a home. The more strategic the location of the housing, the higher the level of demand for housing.

The results of this study are supported by research by Aan Rahman (2022) which states that there is a significant influence on house prices while the location variable has a positive but insignificant effect on the decision to purchase subsidized housing. The fifth hypothesis was rejected.

## **CONCLUSIONS AND RECOMMENDATIONS**

### **CONCLUSIONS**

Based on the results of the study, it can be concluded as follows:

1. The results of the first hypothesis test showed that income levels have a positive and significant effect on the demand for subsidized housing.
2. The results of the second hypothesis test showed that the level of Education has a positive and significant effect on the demand for subsidized housing.
3. The results of the third hypothesis test showed that employment has a positive and significant effect on the demand for subsidized housing.
4. The results of the fourth hypothesis test showed that prices have a positive but not significant effect on the demand for subsidized housing.
5. The results of the fifth hypothesis test showed that the location of a positive but not significant effect on the demand for subsidized housing.

### **RECOMMENDATIONS**

Suggestions researchers from research that has been done are as follows:

1. The author suggests that the mortgage managers (banks) and developers provide convenience to meet the requirements related to the income of prospective subsidized home buyers (MBR).
2. The author suggested that the mortgage managers (banks) and developers provide convenience to meet the requirements related to the level of education of prospective subsidized home buyers (MBR).
3. The author suggests that the mortgage managers (banks) and developers provide convenience to meet the requirements related to the work of prospective subsidized home buyers (MBR).
4. The authors of the study can further update the indicators of house prices to improve the quality of research.

5. For further research could consider other locations (besides Sei Mencirim) but still in Deli Serdang as a comparison.

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