The Philippines Housing Market Demand in the 21st Century: Income and Expenditures

ANGELO C. PEÑAREDONDA, (Ph.D Cand)

Professor
Department of Marketing and Management, College of Entrepreneurship
Saint Benilde International School (Calamba) Inc., Calamba City, Laguna, Philippines
Email - acpenaredonda@gmail.com

Abstract: *This paper examines on how housing consumption is associated with income and expenditure changes in the Philippines. The data were analyzed through regression analysis. The results show that income has no significant relationship with the housing demand. On the other hand, there is a significant relationship in expenditures to bring about change in housing conditions. In the long run, economic development may bring about the needed boost in income, however, in the short-run, government has look into alternative forms of low-cost housing.*

Key Words: *Housing Demand, Income, Expenditures.*

1. INTRODUCTION:

Philippines is considered as one of the fast-growing economies in Asia. One of the important aspects which has significant effect on the booming economy is the foreign investors investing through businesses in the region that provides jobs for many. Its impact is the increase of employees' income and likewise the purchasing power. Counterpart of this is the housing demand which considered of how households adjust their housing consumption given factors that them out of equilibrium. The Philippine housing market reveals a tremendous gap between the demand and supply of housing. At the root of this housing shortage is the fact that the majority of households are unable to pay for the cost of housing and land.

According to the data from The Subdivision and Housing Developers' Association (SHDA) which is the largest organization of housing developers in the Philippines, the housing backlog is 3.9 million households. Assuming that production of housing units would average 200,000 units every year from 2012 to 2030, the backlog would still persist and hit 6.5 million households by 2030. The highest demand would come from the economic housing segment, followed by socialized housing, and lastly by low-cost housing. According to Smith et al. 1988 the attributes of housing are inherent, thus, differences in demand among households or across cities and countries are primarily due to household characteristics and the way the housing market operates within a city or country.

In spite of the continuous developing and building houses for the poor by the government, it will not sustain the increasing population and demand. However, not all people and households in the Philippines cannot afford to acquire own house.

This study aimed to determine the housing demand in the Philippines which focused on the effects household characteristics and treats conditions on the housing market and will examine on how housing consumption is associated with income and expenditure changes in the Philippines. Further, it determines if the existing housing units are enough to support the growing population of the Philippines in the 21st century.

Based on the study conducted by the World Bank on Housing Finance of the Philippines on 1982, residential construction in the urban Philippines is dominated by a few big developers who acquire land and prepare serviced lots. Some have their own building contractors associated with them, but nearly all will sell serviced lots to households for them to contract (eventually) on their own for a home or sell to contractors for home building. Consequently this industry has emerged into the most popular means of providing affordable housing to Filipinos through real estate businesses. Year before that, the government adopted a total system approach in housing finance production and regulation. An interacting network of Housing agencies with specific functions, namely funds generation, mortgage purchase, mortgage guarantee, regulation and socialized

housing production was established and maintained. A housing finance system, with the long term, objective of integrating savings mobilization, secondary trading and credit insurance, was put into place. Unfortunately, the system failed to take off beyond the primary mortgage market, and even the mortgage origination set up with a single mortgage lending institution was suboptimal.

Based on the gathered data, the housing demand in the Philippines is increased by 12%.

Table 1. Philippines Housing Demand

Region	Housing Demand(Occupancy)	Average Household Income (In Thousands)	Average Househol Expenditure (In Thousands)
CAR	22,968,651	425	349
NCR	390,923	382	209
Region 1	1,110,987	238	182
Region 2	789,269	237	162
Region 3	2,511,783	299	239
Region 4	3,297,110	312	269
Region 5	677,301	222	161
Region 6	1,207,809	187	160
Region 7	1,694,705	226	176
Region 8	1,675,808	239	193
Region 9	975,625	197	156
Region 10	781,692	190	144
Region 11	1,014,814	221	161
Region 12	1,159,719	247	190
Region 13	1,037,676	188	162
Region 14	565,495	198	159
ARMM	561,826	139	111

2. METHOD:

The regression analysis was used in this study in order to determine the relationships between housing demand as dependent variable and income and expenditure as independent variables. The ANOVA results showed that income is not significant to the demand. When income increases, may concern not only increased space and improved quality in the dwelling already occupied, but may sometimes involve the acquisition of one or perhaps several additional residences. It have been concerned with the increase in housing expenditure when families of a certain character achieve increased income, but not the increased housing demand, and thus the total housing costs, which occur when certain of the grown children of a family acquire their own apartments. In order to be able to measure the total housing expenditure of entire families which is incurred after an increase in the total family income, clearly one should include the income of all the members of the family, even if living in different places, as well as the annual expenditure on housing of each different member of the family (Akirman 2011).

However, it contradicts to the study of Ballesteros 2000, housing demand is shown to be largely associated with income. For this reason, housing affordability has often been measured in terms of the proportion of income that a household must or is willing to spend on housing. However, the demand estimates also show that there are underlying factors such as lifecycle, price of housing and financing availability that impact on housing affordability. Income is predicted to be positively related to housing demand. An increase in income leads to an increase in demand for housing. In studies of durable consumer purchases, permanent income has been shown to be the relevant variable in consumers' housing decision (Friedman 1957). Total household expenditures has been used as proxy of permanent income.

This research tried to capture the interaction of these factors by looking into the distribution of households by average incomes in specific locations. These income levels are matched with housing expenditure patterns and financing availability to come up with some indication of housing affordability. Muth, in his analysis emphasizes that transactions (moving) costs may be relatively more substantial for housing than for other goods, leading to response lags in adjusting consumption to changes in desired demand. In a model that expresses changes in demand as a function of changes in income In another analysis (Weinberg, Friedman, and Mayo) they estimate empirically a model that relates the probability of moving to the "income equivalent" of the net change in utility that would be occasioned by moving, and to a number of explicit transactions costs that vary among individuals- expected search costs, expected out of pocket moving costs, and the cost associated with surrendering any "good deal" that may exist as a result of market imperfections or tenant-landlord relations. In that analysis, one implication of the relatively low observed price and income elasticities of demand is that utility surfaces are rather "flat" with respect to changes in income and price, with the result that income equivalents of net changes in utility are small.

However, the Keynesian theory contradicts the results and stated Consumption is how much people will buy. In the Keynesian theory, consumption is largely determined by income. The more money people make, the more money they will use to purchase goods and services. The amount of additional disposable income that goes to additional consumption is called "the marginal propensity to consume." This theory doesn't deal thoroughly with the fact that

people respond differently to short term increases in income from the way they do to long term increases or a variety of other factors.

Further, according to Investopedia the income effect represents the change in an individual's or economy's income and shows how that change impacts the quantity demanded of a good or service. The relationship between income and quantity demanded is a positive one; as income increases, so does the quantity of goods and services demanded. For example, when an individual's income increases, that person demands more goods and services, thus increasing consumption, all things equal. Further, the income effect can also increase average prices. If a consumer is willing to spend any amount at his current income level, any increase in discretionary income can increase that consumer's willingness to spend more money on the same product. The income and expenditure were considered in the regression model in this paper.

HDemand= Bo + B1 (Income) + B2 (Expenditures)
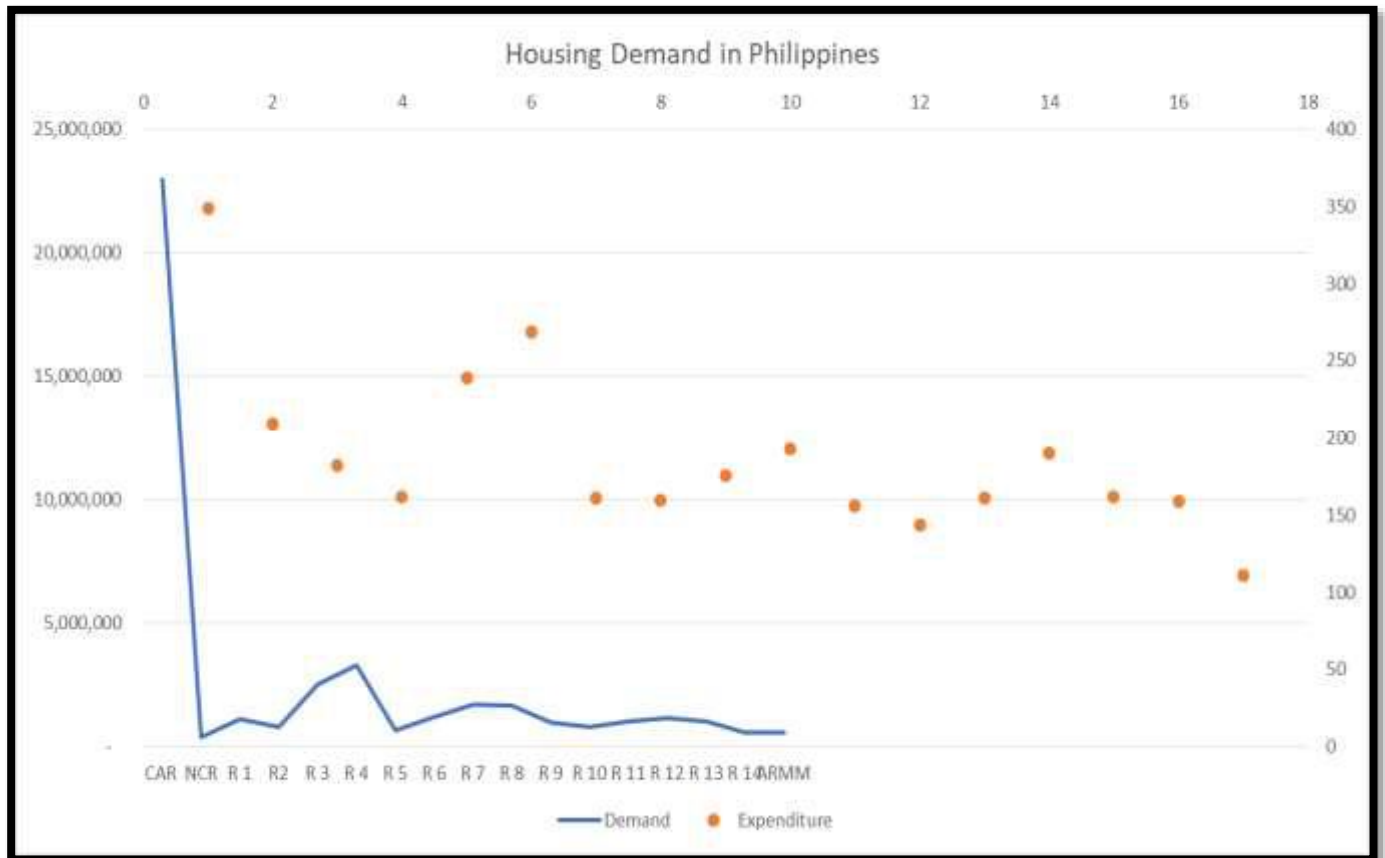Where:
HDemand= Housing Demand
B1= Income
B2= Expenditures

The coefficients of income is negative and not significant. It signifies inverse relationships with the housing demand. However, it will not affect the housing demand since the p value is greater than .05.

Table 2. Graph Determining the Housing Demand in the Philippines

3. RESULTS:

In computing the results, it revealed that housing demand was considered as dependent variable. The income and expenditures were used as independent variables. Using the Regression Analysis only the expenditures is the significant variable. The computed R squared for the model regression using the identified significant variables is .693 which is considered highly reliable and the other insignificant factors were excluded from the regression derived.

Further, the results imply that income have no big impact in the decision making of the consumer to buy a house and they tend to rent. Households are longing for a decent home but it becomes too expensive. Low incomes lead households to spend most of their income on necessities focusing on foods and education. On the other hand, there is a significant relation in expenditures to bring about a significant change in housing conditions. In the long run, economic

development may bring about the needed boost in income, however, in the short-run, government has look into alternative forms of low-cost housing.

4. CONCLUSION:

Government regulation, in part designed to improve quality, can increase the cost of housing so that it is unaffordable. The costs imposed by land-use regulation can be particularly pronounced for the lowest-cost units. Even if costs fell significantly by an amount roughly equal to estimates of the increase in cost due to regulation the vast majority of the poor living in the country would still live in rental units though considered unaffordable.

The government should provide low-income households with additional cash or government support through accessing other basic necessities such as food and medicine. After all, concern about a high housing cost-to-income ratio for low-income households only makes sense if housing costs prevent those households from buying other basic necessities.

REFERENCES:

1. Associations with Parenting and Child Development- PMC (2010). *Income Is Not Enough: Incorporating Material Hardship Into Models of Income*. Retrieved from ww.ncbi.nlm.nih.gov/pmc/articles/PMC2835994/
2. Ballesteros (2002). *The Dynamics of Housing Demand in the Philippines: Income and Lifecycle Effects*. Retrieved from https://pdfs.semanticscholar.org/c6d9/f7582f77bef0a7b225d8af37c3fd4b6d3fd1.pdf
3. Chron (n.d) *What is income expenditure model?* Retrieved from http://smallbusiness.chron.com/income-expenditure-model-26104.html
4. Dong et al (1998). *Impacts of Income Distribution on Market Demand-*https://ideas.repec.org/p/ags/aaea98/20996.html
5. Investopedia (n.d) *Income Effect*. Retrieved from https://www.investopedia.com/terms/i/incomeeffect.asp
6. Malpezzi, S. and S. Mayo. (1987). *The Demand for Housing in Developing Countries: Empirical Estimates from Household Data. Economic Development and Cultural Change 35(4): 688-721*. Retrieved from https://pdfs.semanticscholar.org/c6d9/f7582f77bef0a7b225d8af37c3fd4b6d3fd1.pdf
7. Mayo (1981). *Theory and Estimation in the Economics of Housing Demand'*. Retrieved from http://www.socsci.uci.edu/~jkbrueck/course%20readings/mayo.pdf
8. Muth, R. (1971). *The Derived Demand for Urban Residential Land. Urban Studies 8: 243-54*. Retrieved from https://journals.sagepub.com/doi/abs/10.1080/00420987120080431
9. Nik Hashim et. Al (2011*). Household Income and Expenditure Relationships: A Simultaneous Equation Approach-*.   Retrieved   from https://www.researchgate.net/publication/269098014_Household_Income_and_Expenditure_Relationships_A _Simultaneous_Equation_Approach
10. Pineda et. Al (2013). *In Depth Study of Housing Finance Sector (Philippines)*. Retrieved from https://www.slideshare.net/nels09/research-report-on-phil-housing-finance-sector-of-philippines
11. Philippine Statistics Authority (2012-2015). *Philippines Poverty Rate*. Retrieved from http://www.psa.gov.ph/poverty-press-releases/data/2015%20Full%20Year%20Poverty%20Statistics