CHAPTER THREE

THE PLACE OF HOUSING IN THE ECONOMY

3.1 Theoretical Framework

Economics in general is concerned with the allocation of resources. Material resources, land, labour and capital - which can be used to satisfy human desires for consumption, are limited. Desires to consume things which can be created from these resources, on the other hand, is virtually unlimited. Thus, problem arises in allocating resources among potential uses, and also among potential users in some acceptable fashion. Therefore, the housing economy is facing exactly the similar problem - how to minimise input and maximise output or how to minimise construction cost and maximise profit.

As a result, the study of economics can be used to explain the above problems. First of all, the housing development is defined here as comprising a number of different parties utilizing the main productive elements (land, materials, capital and labour) in the production and distribution of dwelling units; the consumers, the entrepreneurs, the institutional framework and the public administrative...
apparatus of the state - interacting within the context of the nation's development process.

In order to analyse the behaviour of the housing market in regards to its demand and supply, one should first realise the relationship between the housing sector and economic framework. The housing market can be classified into two, namely the demand and the supply. In terms of overall economic concept, this can be divided into microeconomics and macroeconomics perspective. Theoretically, the place of the housing market can be explained through these two main groups.

Generally speaking, a nation's housing needs (in contrast to the housing demand) is determined on the basis of information about population growth trends, regional variations in these trends, the volume and age of the existing stock of housing, and the degree to which tenants are crowded. Also, housing units vary in the amount of space and the number of rooms they have, and these variations are relevant to the size of families that need housing. Apart from that, the size and number of rooms, again, affect the cost of housing and how the houses can be built with a given amount of resources. To ascertain the quantitative need for new housing over a given
period of time, a target-setting exercise must thus be achieved. Then, the cost and resources required to provide this amount can be ascertained.

Here, target-setting involves many decisions in addition to a simple determination of how many housing units are needed at different locations. On the basis of expected housing needs and demands, it always contains two objectives. First, to close or reduce the housing gap and secondly, to provide housing for new households. The projection should also determine how many housing units should be provided for the benefit of specific social classes and income groups as well as to indicate where the beneficiaries are expected to be living. The criteria of individual needs, however, are, in theory, modified to take into consideration community-wide objectives relating to maintaining equity among different social groups.

Apart from that, the patterns of household income and expenditure are needed to determine the amount of money people can afford to pay for their housing. In turn, differences in the ability of families to devote their limited resources to housing is a basis on which governments can determine for whom housing should be built, the size of the subsidies
that must be provided, and the length of time required before government investment on housing can be recovered, if this is a policy concern. On the supply side, it is necessary, to ascertain recent rates of housing construction and the age composition of the housing inventory to determine the need for replacement as well as new housing to meet population growth rates.

Basically, the free market was allowed to determine the amount and cost of housing that would be built. New housing was constructed only for those able to afford it at prices that were profitable to private home-builders. But today, most governments realize that there is a difference between the effective demand for housing, and the need for housing. Especially when the supply side of the demand - supply equation for housing tends to be fairly inelastic in many countries because of imperfections in the market and in the construction industry per se.

Furthermore, nations, even the wealthiest, have limited financial and material resources (including land) that can be devoted to housing. Apart from that, decisions must be made on how well these resources could be put to use in order to optimize the amount of housing that can be provided.
In addition, a national housing policy should be able to state how far the government is prepared to go into public housing, and what contribution will be expected of private enterprise. It also means stipulating how much funding will be put aside in relation to Gross National Product (GNP) or other factors. It may also mean defining "adequate" and "inadequate" housing and laying down standards for housing provision.

Therefore, based on the concept mentioned above, one can conclude that many dimensions of housing must be seen from a general system's perspective. So, inter-sectoral planning is essential. This dissertation thus conducts a comprehensive and comparative analysis through the setting up of diagrams shown as Figures 3.0 and 3.1. Figure 3.0, suggests that the consumer, the entrepreneur and the government are the three main actors that make up a nation's housing development system. They respectively input housing demand, housing supply and guidance, and output basic needs, market mechanism and policy action. A nation's or region's housing development can be viewed from this brief perspective of relationships among these factors.
Figure 3.0 shows that, the consumers form the demand side while the entrepreneurs and government form the supply side of the housing market. The housing transactions occur in a free market mechanism, which imply that effective demand backed by purchasing power will determine who can buy the
housing units in a certain location at a given time period. Therefore, the housing sector is always closely integrated with the consumer, government and entrepreneurs. The similar concept applies in the Klang Valley. Apart from that, the local authorities and state governments with the cooperation of the Federal Government should make sure that the social needs of the housing sector are satisfied. The authorities must make sure that the lower income groups share the benefits of economic growth. This is done through low-cost housing. Subsidising the production cost of the houses for the lower income groups and premiums for the developers will enable the developers to build the houses at a given price range. With these policies, the government would influence the allocation of land and other resources so that, it can reduce the gap between the rich and the poor and enable the poor to own a house and finally improve their living standards.

A more detailed information is provided by the model shown in Figure 3.1. First of all, the national economy (particularly Klang Valley), establish the volume of housing construction that a nation can support, influenced by world conditions and local resources endowment. World condition here refers to world economic performance
FIGURE 3.1
DETAILED DIAGRAM OF THEORETICAL FRAMEWORK

LOCAL RESOURCE ENDOWMENT → WORLD CONDITIONS → SOCIO ECONOMY CONTEXT & POLITICAL IDEOLOGY

NATIONAL ECONOMY

POPULATION DYNAMICS

Per capita income & income distribution

CAPITAL FORMATION

HOUSING POLICY

FINANCE POLICY

REGULATORY POLICY

HOUSEHOLDS ASPIRATION & NEEDS

Target Setting

PUBLIC & PRIVATE INVESTMENT

Social/Cultural Context

TIME LAG REGIONAL EFFECTS

BUILDING TECHNOLOGY & CONSTRUCTION PROCESS

HOUSING DEMAND

HOUSING SUPPLY

DIFFERENCE (HOUSING SATISFACTION)

EVALUATION & FEEDBACK

such as past, present and future growth trends. A healthy economy will encourage more housebuilding due to a rapid rise in per capita income and an increase in society’s affluence. A downward trend in the economy will obviously reduce the demand for houses and this will reduce the growth of the construction sector. Local resource endowment reflects the availability of land, labour, capital and entrepreneurs. Usually in urban areas, residential land is always limited due to stiff competitions from other sectors of the economy such as commercial, industry, infrastructure, and recreation.

The national economy mutually interacts with the government’s housing policies, and affect the nation’s "population dynamics" such as population change, family structure and "per capita income". From here, one can see how many families are able to afford their own houses, or who are entirely excluded from the housing market. The distribution of income within a nation plays a key role. Population dynamics and per capita income plus the "social/cultural context" such as the percentage of low-income people and the rate of unemployment, affect the households aspiration and needs. These needs will then be further adopted into a "target-setting"
exercise when incorporating the factors of "public and private investments" which are derived from the housing policies.

Finance policies are usually constructed by the public sector and followed by both the public and the private sectors. In our context, the public sector refers to the Federal Government, state government and local authorities. While the private sector finance refers to the commercial banks, building societies and finance companies.

The "capital formation" then, influences the progress of the "building technology and construction process". Combined with the households aspiration and needs and operated through the practical consideration of "time lag and regional effects", the cells of "housing demand", "housing policy" and "demand" that finally "translates into housing satisfaction" will then be obtained. And through the process of evaluation and feedback, the previous process will be comprehensively revised. Here, evaluation, refers to four dimensions which are political effectiveness, economic/efficiency, cultural/equity and physical/quality.
EVALUATION INDICATORS

A. Political/Effectiveness
   a) dwelling units/households
   b) home ownership
   c) public housing investments
   d) squatter settlements/substandard housing

B. Economic/Efficiency
   a) housing production
   b) housing utility
   c) housing finance
   d) housing costs

C. Social/Equity
   a) housing affordability
   b) low-income housing
   c) locational choice
   d) cultural characteristics

D. Physical/Quality
   a) living space
   b) living facilities
   c) neighbourhood
   d) physical appearance

3.1.1 The Housing Sector: A Macroeconomic View

The housing economy plays a significant role in a country's economic development and welfare of the society. Housing has highly significant social implications because it provides shelter for our basic unit that is the family. Apart from that, housing is considered one of the necessities of man. Housing has major potential in expanding the construction industry, generating jobs, inducing savings and
contributing to capital formation.\textsuperscript{2} The macroeconomic view can explain how the housing sector operates through its demand and supply forces under the market mechanism.

Figure 3.2 shows a clear picture of the housing sector under a macroeconomic view. First, the total current output consists of aggregate volume of valuable goods and services which the national or local economy produces in a period of time such as one year. A small portion of this current output consists of goods and services which are produced for the housing sector, for example, the new houses which are constructed during the period; the land which is prepared for housing; renovation or maintenance of older housing units; personal services in managing existing dwellings, and in facilitating transfers of dwellings both new and old (such as brokerage, appraising, and the processing of loan applications).\textsuperscript{3} Apart from that, several parts of the community’s current economic output become elements of supply in the current housing market.

The production of total current output creates a circular flow of income. An increase in output increases income in the form of rent, wage, interest and profit for land, labour, capital and
entrepreneurs respectively. As a result of these changes, there will be an increase in consumption, savings, investment and taxes. All these at the end will increase the demand for houses which in turn would increase the supply of new houses in the housing market. This in turn would create another increase in income and this would lead to a multiplier effect.

The inflow of income to the government sector (public sector) is spent on housing. This includes government housing for civil servants, government subsidized-housing such as low cost housing and other government expenditures which are related to the housing sector such as the construction and maintenance of utility systems, streets and even schools and firehouses. Apart from these, either directly or indirectly the government may provide housing for some needy persons in the community, or through tax exemptions, may allow many people in the community to enjoy more housing than their own current income would permit.

The public's savings in the financial sector, are in turn channeled into the housing sector. The financial sector can be divided into the government and the private sector. The government
FIGURE 3.2
THE HOUSING SECTOR - A MACROECONOMIC VIEW

TOTAL CURRENT OUTPUT

TOTAL CURRENT INCOME

Housing Consumption
Government Outlays
Financial Sector Outlays
Other Consumption

Total Housing Demand

Total Housing Supply

New Housing

Housing Market Services

Services of existing Housing Stock

usually provides financial facilities for its staff in order to purchase a house. In addition, the private sector is directly involved in the housing market. They provide financial back-up either to the house developers or house buyers. The financial sector is led by commercial banks, finance companies, building societies and others. Higher savings will enable the banks to allocate more capital to the housing market and speed up the construction sector's growth overall. Thus, the financial sector, which is a pool of the community's current savings, plays a very important role in determining the rate of growth or improvement in the housing stock.

The housing demand and supply blocks signify that, the market process in the housing sector is not limited to current output or current income. Apart from that, used houses or previously constructed houses also occur within any housing sector. The transactions of these houses are also important to secure the maximum economic advantage from what is, in effect, "Sunk Capital". This process is used by either the house developer or the government to determine the actual need for housing in the future. Furthermore, from the demand pattern one can decide which income group earners need houses with a given
type of price range. The housing sector thus deals with the administration of previously accumulated capital as well as with decisions about the creation and use of new capital. It also deals with a variety of current services.

Overall, a macroeconomic view of a housing sector deals with the national level or national housing demand and supply. The housing sector also deals with durable and non-durable goods which measure the aggregate value. We may say that macroeconomics is also concerned with the origin of total housing demand, so that it recognizes the divisions among housing consumption expenditures, government outlays for housing and financial sector outlays for housing which is shown in Figure 3.2.

3.1.2 The Housing Sector: A Microeconomic View

Aggregate housing demand and supply usually occur in a bigger volume which involve the national context. Conversely, individual demand and a single developer's supply is usually connected with the microeconomic view. In microeconomics, two conditions must be fulfilled in order to observe the significance of the housing market.
First, the individual transactions must be stable so that parameters representing private transactions can be employed in forecasts and plans. This behaviour must also be optimal in the sense of making efficient use of housing sector resources. Unfortunately, in the real world these two rules do not hold due to various reasons. First, the conduct and outcome of individual transactions in the housing sector tend to change over time as the economic growth trends especially technology and urbanisation become more complex, economic preferences change and business practitioners become more sophisticated. Secondly, and important source of instability in microeconomic behaviour is the economic planner himself, for his tax and subsidy programmes and various regulatory innovations are likely to affect the way in which individual decisions are made.

In addition, the planner (government) usually plans housing policies based on anticipated changes in the business sector. But, sometimes, anticipation can go wrong due to speculation and various economic shocks. The planner can only come up with accurate policies if he himself can understand the process of the housing market mechanism. Therefore it is important to analyse how the housing sector operates in a microeconomic point of view.
The system in which the microeconomic principles work can be analysed using the figure 3.3. So, Figure 3.3 denotes a clear view of the main elements in the microeconomic principles. Its main focus is the individual housing-market transaction. The transaction here can be either the purchase of a house, or the renting of an apartment, flat, condominium or other types of houses. The above mentioned transactions may be, for granting of a mortgage loan, or the acquisition of a residential property for investment.

Figure 3.3, explains the integration of principles, market and institutions. The transaction can involve any interest in residential property. The right to occupy a dwelling unit is perhaps the most important object in housing sector transactions, but there are many other steps in the process of turning economic resources into housing services. Apart from that the lenders secure certain rights to property used as collateral in addition to their expectation of repayment at interest. Equity investors are involved in the construction of new dwellings with the cooperation of construction firms. This forms the supply of housing from the private sector.
Usually the private sector is more towards profit targets and to some extent ignore social responsibilities. Therefore, to correct these problems, the institutions play greater roles. This includes public housing which are financed by the government for civil servants. Apart from that, the government uses subsidy or cross subsidy and through this policy, the house shortages for low income earners are reduced. In addition, the government imposed certain rules for the private developers so that they will be socially responsible to a certain extent.

These include the provision of low-cost houses which is compulsory for developers under certain situations. The government also sets the quality criteria which must be fulfilled by every dwelling before it is allowed for occupation. This is done through the issuance of the certificate of fitness (CF).

Governments exercise varying kinds of control over financial institutions which facilitate housing transactions. Apart from that, the government controls the legal fees, brokerage fees and to some extent the price of input such as cement and steel. The government also makes sure that the developers
comply with the environmental rules and also provide basic facilities such as water, road, electricity etc. In certain countries, governments often supervise or take direct responsibility for the provision of water, power, sewerage, and transportation facilities as well as education, police and fire services, which influence the usefulness of the particular dwellings.

Apart from providing houses for the public sector, the government also makes sure that the private sector performs well in the housebuilding industry. This is done through various legal, financial and social reformation from time to time according to economic changes. Therefore the ownership, occupancy, finance and development combined with purchasing power complete the transaction process. Therefore, the microeconomic view of the housing sector looks into every small sector which contributes to the development of the housebuilding industry.
FIGURE 3.3
THE HOUSING SECTOR - MICROECONOMIC VIEW

PRINCIPLES

Land owner

Lender

Equity Investor

Construction Firms

Housing User

Transaction

Legal

- Free market
- Socialist
- Mixed economy

Market

- Real property
- Contract
- Agency

- Professional
- Broker
- Appraiser
- Lawyer
- Architect
- Manager
- Engineer

INSTITUTIONS

- Government

- Land and building regulation
- Financial regulation
- Public utility regulation
- Environmental regulation
- Socio-economic and political regulation

Outcome

Price

Service income

Change in use

Change in stock

Change in value

External effects

Speculation

3.2 Literature Review

The previous explanations basically deals with the system in which the housing market works. But, it only explains the housing market based on the theoretical view such as microeconomic and macroeconomic aspect of the housebuilding industry. Therefore, it is extremely very important to analyse the practical side of the housing market. Here, the explanation will be on the contribution of the housebuilding industry to the whole economy. This is necessary because, the housing industry is very closely integrated with the other sectors of the economy. Therefore, we cannot explain or study the housing market without taking into consideration the various sectors of the domestic economy. Even though the housebuilding industry is limited to domestic usage, yet it can influence the type of imports as an input for the houses. Even though, houses are not tradeable goods like cars, tin, petroleum, rubber, electronic products, yet it still creates foreign exchange when foreigners purchase or rent properties in this country.

Apart from that, housing can be used as one of the indicators of improvement in the levels of living. It could be used for monitoring and evaluating progress towards the achievement of certain
goals such as provision of equal opportunities for all, eradication of poverty, restructuring of society and so on. In addition, housing is considered as one of the basic necessities of man. Housing has a major potential for expanding the construction industry, generating jobs, inducing savings and contributing to capital formation. The housebuilding industry does not only encourage savings and investment but also improves the skills of the labours and encourage more research and development (R & D) to reduce construction costs.

According to Ronald L. Molen in his book titled *House Plus Environment*, "housing is a basic element in a structure of our society. The home has a great impact on the growing child unquestionably more important than that of either the school or church. The physical home can provide privacy and intimacy, can encourage exploration, self determination and creativity, and can help to develop emotional harmony and love of beauty. A well designed house will never be a substitute for virtually concerned parents, but it can provide the right kind of space for the right things to happen". The importance of housing is very clear from the above opinion. This analysis will be divided into few sub-topics to make explanation easier and clearer.
First of all, the study will start with the importance of investment in the housing sector and how it relates to or influences the economic growth. Secondly, the analysis will be on the importance of backward linkages of the housing industry to the overall economic growth. These linkages are usually related to the income and employment creation due to the growth of housing inputs. Thirdly, we will explore the impact of housing investment to the domestic price level. Here the focus will be on the trend of inflation (price level) and its influence on the property market boom or slump. Later, we will analyse the impact of the housing investment on skill development in the construction and other industries. The target here is mainly on the, on-the-job training and its effect on the construction costs of new houses.

3.2.1 The impact of housing investment on economic growth

Housing investment can be divided into two groups. First, investment in the construction industry (to build new houses) and second investment in buying a house either new or used house. By comparing both the types of investments, the former has a greater effect on the economy compared to the
latter which is more towards long term savings. However, housing investment has been thought to contribute relatively less to the development of economic growth. In other words, compared with investment in other sectors, output per dollar investment in housing was thought to be relatively low, implying that in allocating scarce resources the housing sector should receive a relatively low priority. Even though, the direct contribution of the housebuilding industry to the GDP and employment is very small, this should not lead one to the conclusion that housebuilding is not productive because the figures, which were obtained only refer to the direct output and employment generated within the industry.

Therefore, through multiplier effect it creates output, income and employment. The indirect impact of an investment in housebuilding is very large partly because of the many types of inputs required in housebuilding. Therefore, through the multiplier effect, the impact of housebuilding on related industries is spread to other industries and sectors in the economy.

In order to measure the impact of the various sectors in the economy, economists usually use sectoral capital-output ratio as investment criteria.
This concept normally plays a greater role in generations income under the macroeconomic "Harrod - Domar" type of growth model. Under this situation, the famous and most relevant concept for resource allocation is the sectoral incremental capital-output ratio (ICOR) usually measured on an annual basis (due to statistical inconvenience). ICOR is obtained by dividing an increase in sectoral output (value added) during the same period with nett or gross sectoral investment per period.⁷

\[
\text{ICOR} = \frac{\text{Net or gross sectoral investment per period}}{\text{Increase in sectoral output during the period}}
\]

Output in this context, refers to either as sales value or as sectoral value added. For housing investment, the ICOR consists of the price of houses and the value added such as labour, input and capital contents in order to construct a house. Therefore, the main point here is whether the invariably high ICOR's found for the housing sector compared with other sectors are sufficient reason for a low allocation of funds for housing. This is an interesting question, because in any government the return from investment is very important. They allocate the scarce resources in such a way, that it will create maximum employment and income.

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Therefore, under the housing sector, it is very important to determine how much fund should be allocated for housing in order to create the expected or estimated amount of employment, income and finally overall economic growth. Therefore, for housing investment, the future allocation is determined by past and present contribution of housing investment to the economy. This contribution is measured by ICOR. The ICOR refers to the number of periods it takes before an investment in the particular sector in any one period is doubled in terms of output (or value added).  

The ICOR, to some extent discriminates in favour of investments yielding a relatively large output (or value added) in the early phases of the economic life of the investment concerned and against investments where output (or value added) is less readily forthcoming and/or is spread out over longer periods of time (such as rubber and oil-palm). It is noteworthy, that the sectoral ICOR pays more emphasis on output of value added, not in terms of returns to capital. For housing, it is quiet difficult to measure the returns to the value added because it's very complicated.
In other sectors, like in the manufacturing sector, the value added can be obtained and therefore the returns to capital can be measured. Apart from that, it is difficult to measure the gain from welfare by house owners and therefore it thus appears that returns to capital from the housing sector are very small compared to other sectors. This, reduces the fund allocation for this sector.

In addition, under the ICOR sectoral measurement, the necessary labour complementary to the investment is not taken into account. If the share of labour in the output/value added is subtracted, we may find that an investment yielding a relatively low annual output or value added (resulting in a relatively high ICOR) with a relatively low level of complementary labour and a long economic life may well have a substantially higher rate of return than an investment having a low ICOR, a high level of complementary labour, and a short economic life.\(^{10}\)

Therefore, low ICOR indicates high labour complementary, higher output or value added and higher returns to investment and this in turn encourages higher resource allocation. On the other hand, high ICOR indicates low labour complementary, lower output or value added and lower returns to investment and
this in turn discourages higher resource allocation. Since wage only consists of 20 to 30 per cent of the construction costs, it reflects lower labour complementary, high ICOR and finally lower returns to investment and resource allocation for the housing sector. Overall, the resource allocation for the housing sector is determined by ICOR.

Various empirical studies show that, ICOR is separately estimated for "construction" and for "housing services". The ICOR for construction is low as a consequence of the relatively low capital input in this sector. Whereas for housing services, capital is almost the sole measurement of input, resulting in a high ICOR.\textsuperscript{11} However, this sectoral split is based on statistical convention. If the two activities were to be looked combined as "investment in housing", the ICOR for this new sector would clearly be somewhere between the low ICOR for construction and the high ICOR for housing services.\textsuperscript{12}

In order to obtain a low ICOR, it is recommended that, services rendered by housewives should be included in the national accounts as the labour complementary to the housing services. Overall, the evaluation of housing investment using
ICOR is not very suitable as an investment criteria. Furthermore, the indirect impact on output is neglected under the ICOR method, which includes education, health, housing and downstream activities.

Apart from the above mentioned opinions, several other factors make the housing industry an ideal choice for "a local engine of growth". The housing sector also has strong and extensive linkages to other sectors of the economy, supporting 108 industries, and providing manufacturing jobs to thousands and service related activities to the rest. In addition to this, housing investment will also boost the growth of other sectors such as cement, steel, metal-works, brick, glass, timber, paints, chemical, ceramics and electrical products.

On the other hand, investments in housing also tend to stimulate growth among smaller manufacturers and suppliers. This includes the production of roofing sheets, wall-boards, carpets, wiremesh, building tools, burglar alarms, bricks, tap fittings, water tanks, adhesives and scaffolding. The building material industry is also domestic-based, and the majority of firms in the industry are small local companies. Small industry have a strategic role in revitalising the economy as they
breed business acumen, are well dispersed compared with larger firms, especially foreign ones, use more local materials, create more jobs per unit of capital and do not repatriate profits.\textsuperscript{14}

In the long-run, it is not just the building industry which will gain from influx of new houses. New homes and the formation of new households can be expected to generate increased demand for a whole gamut of consumer items, ranging from refrigerators and gas cookers, to television sets and potted plants.\textsuperscript{15}

In general, the effect of investment in the housing sector can be seen either in short term or long term. In the short term, housing investment is determined by a residual activity of the general economy and, besides a trend, is believed to be counter cyclical. While in the long-run the determinants are, the rate of population growth and the trends toward urbanization or suburbanization. Age composition as well as the general attitude of the society toward marriage may also affect the investment decision in the long-run. The long-run and short-run effects are closely interrelated: but since they may exert different effects on housing investment, their nett effects may not be clearly identifiable. For
example, during a recession, investment in housing may be encouraged due to the sector's counter cyclical tendency. However, the depression may be associated with a decline in the population growth and the creation of new households. The nett effects on the investment in housing thus depends on which is dominant.

Therefore, this brief explanation here is expected to give a clearer view regarding the importance of investment in the housing industry. Inevitably, the nett effect of the housing investment depends on various factors. This will be looked into detail in the coming discussions.

3.2.2 The housing investment and backward linkages

Investment in the housebuilding industry will not only increase the supply of houses but also stimulate the domestic economy by raising income and employment among the labour force. This can usually be explained through the multiplier effect which was introduced by John Maynard Keynes. The effect of the multiplier can be analysed through backward linkages. Backward linkages can be defined as an additional income and employment generated as a consequence of increased demand for inputs.¹⁶
These linkages can be discussed both in terms of income and employment created in the sectors of the economy that generate housing inputs. Normally, these inputs are produced in the construction industry, transport and manufacturing sectors and are not necessarily imported either directly or indirectly. The income impact of housing investment is normally measured using an input-output model. In this way, the ultimate expansion of aggregate demand caused by an initial expenditure on housing investment is estimated by calculating its primary factor cost proportion, that is, the shares of import, labour, profits and indirect taxes, and applying those proportions to the well-known Keynesian multiplier to the formula (with some added assumption regarding the marginal savings, taxation, import propensities of factor incomes). 17

Eventhough, the Keynesian multiplier method remains the best method to measure the effect of investment in residential construction, it still carries some problems. Moreover, the multiplier approach assumes complete absence of supply bottlenecks in the economy. 18 This assumption is not true in reality. There are always supply shortages in the inputs and outputs under the housing industry. In
addition, the input-output data if available in most countries are usually insufficiently disaggregated to enable a separate analysis of the expenditure effects of investment in housing. 19

Under the input-output model, only the construction sector is included and there is no specific allocation for the residential sector. If one takes only the construction sector’s figures, this could be misleading in terms of the findings. Apart from that, the construction sector covers a broader scope which includes residential, commercial, industrial, infrastructure and public facility projects. Therefore, the findings using the above concept can be misleading. Generally in a construction sector housing typically comprises of only 30-40 per cent. 20 Therefore, one must be very careful in drawing a conclusion out of an input-output model regarding the backward linkages due to an increase in investment in the housebuilding industry.

Based on these limitations, various studies conducted in several countries such as Korea, India, Mexico, Pakistan and Colombia revealed that the estimated expenditure multiplier of investment in
housing as to be around two and it is generally contended that this is a high figure as compared to multipliers of other sectors. Studies carried out in Netherlands reveal that, the multiplier for investment in construction is at 2, as compared to 1.5 for investment in machinery and transportation. While the estimated multiplier for construction in the urban infrastructure in Calcutta is around 1.6. This difference can be attributed to various reasons and difference such as low import content of housing investment, high labour content, combined with assumption of relatively low savings, import and taxation propensities of labour used in housing investment.

Therefore, the lower import content of the housing sector will certainly create a bigger multiplier effect to the other sectors of the economy. Furthermore, the direct and indirect import content of housing varies from country to country. This is usually determined by the size and per capita income level of the country. Apart from that, the availability of input from domestic suppliers will obviously reduce the volume imports of housing inputs. Therefore, if one nation has a well developed building material industry which can offer housing
inputs within reasonable prices compared to imported inputs, this will definitely reduce the import content of the house building sector.

In Malaysia generally and the Klang Valley specifically, most of the housing inputs can be obtained locally. This include cement, steel bars, aluminium roof, timber, brick ceramics, glass, electrical products, chemical, paint, water tanks, carpets, wall-boards, roofing sheets, refuse bins, locks, tap fittings and wiremesh to scaffolding. Furthermore, the building material industry is also domestic-based, and a majority of firms in the industry are small local companies. Usually the small companies tend to use more local materials, create more jobs per unit of capital and foremost they do not repatriate profits. The low import content provides more job opportunities and generate higher income for domestic investors and workers. Apart from that, domestic based industries create greater linkages with other sectors of the economy. Thus, this circle at the end helps to create a broader and stronger economic base for the country.

The United Nations Industrial Development Organisation (UNIDO) considers an accumulated (direct and indirect) import content of construction of
approximately 32 per cent typical for developing countries having a per capita GNP of US$100 per annum, but available studies suggest much lower levels.25 For example, Burns (1969) found percentages of seven and ten for Mexico and South Korea respectively.26 Apart from that, data from the annual survey of construction industries, Department of Statistics, Malaysia; indicate that, for residential construction industries in Peninsular Malaysia, costs of hiring plant, machinery, building and transport equipment plus depreciation on owned machinery, building and transport equipment averaged only 1.9 per cent of total output during 1969 - 1972 as compared to 56.5 per cent for building materials.

In terms of value added, the housing sector contributes more than the other sectors in the economy. For example, during 1969 - 1972, value added in residential construction amounted to 39 per cent of output during this period, consisting of 25 per cent wages and salaries, 13 per cent entrepreneurial income and 1 per cent indirect taxes.27 Therefore, the share of labour income in value added on site was nearly twice the share of entrepreneurial income. Furthermore, these study revealed that, production on site is probably, more labour intensive than
production in the sectors providing inputs. So, overall one can conclude that, the housing construction sector is slightly more labour-intensive than manufacturing, but certainly less than the agriculture sector in Peninsular Malaysia.

It is vital to analyse the effects of investment on housing to job creation. Since the construction sector uses less imported inputs, the multiplier most of the time tend to be higher. As a result, there are higher possibilities for greater job creation as a result of new investments in the housing sector. Employment creation is normally measured using the Relative Incremental Employment to output Ratio (RIEOR).

**TABLE 3.0**

RIEOR ESTIMATES FOR MALAYSIA, 1971 - 1975

<table>
<thead>
<tr>
<th>Sector</th>
<th>RIEOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary sector</td>
<td>0.30</td>
</tr>
<tr>
<td>Construction</td>
<td>0.57</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>0.61</td>
</tr>
<tr>
<td>Tertiary Sector</td>
<td>0.62</td>
</tr>
<tr>
<td>Aggregate</td>
<td>0.45</td>
</tr>
</tbody>
</table>

The above figures, indicate that employment elasticities are at similar levels for all non-agricultural sectors. The above figures could be obviously misleading due to under-employment in the agriculture sector which leads to a low RIEOR for the primary and construction sectors. Since the construction sector is labour-intensive, the RIEOR for that sector should be higher than the manufacturing sector. This is due to various data constraints, assumptions and simplification problems which lead to misleading figures.

Overall, investments in housing create greater backward linkages to other sectors in the economy. This, tends to boost the investment in other sectors.

3.2.3 Housing Investment And The Domestic Price Level

Housing investment can influence the domestic price level either directly or indirectly. An increase in housing output may exert a depressing influence on the overall price or rent level of the existing housing stock. An excess supply of houses tend to reduce rentals due to wider choices for consumers. In terms of price, excess supply of houses
which exceed the demand for houses would obviously put a downward pressure on housing prices. In addition, a reduction in housing supply indicates a reduction in housing investment. A decline in housing investment leads to a reduction in demand for building inputs and construction workers. This would finally lead to a decline in building input prices and construction workers' wages.

In contrast, higher investment in housing may create temporary supply bottlenecks in the fields of building materials, labour or enterprenuerial capacity hence raising prices of these inputs, which in turn may lead to increased prices of housing and other construction inputs. In addition, land prices, too, may be influenced by increased housing investment. However, since this impact will generally be restricted to specific locations, the magnitude of the price change depends on the type and character of the particular site, its ownership and land market restrictions.

Given that the supply of land available for residential construction in urban areas is not perfectly elastic, it is inevitable that a rising demand for new homes will drive up the price of land
and consequently the price of housing.\textsuperscript{28} Since the Klang Valley area is a hot spot growth triangle, the demand for land for various reasons always exceeds the supply. Furthermore, speculation, foreign investors' interest and various public and private projects absorb most of the land available here. This competition is further aggravated by the selection of strategic locations which are nearer to the city. Overall, these factors contribute to higher land prices in this region and to some extent influence the price level of new houses.

Higher housing output which exceeds demand to some extent put a downward pressure on the price and rent of the houses. The magnitude of changes in rent hinges on the price elasticity of demand (relative inelasticity of demand is required for any decrease in rent levels) and the size of the housing investment vis-a-vis the existing housing stock.\textsuperscript{29} The rental will only decline if the demand for rental houses is lower than the supply. But, this is not the situation in the Klang Valley especially in Kuala Lumpur, Petaling Jaya, Ampang, Cheras, Bangi and Damansara. At these locations, the demand always exceeds supply for rental units. Therefore, it is quite clear that, around Klang Valley, the rental
returns will always be very encouraging for house owners. In addition, its actual impact is likely to be limited, because in most developing countries a severe housing shortage exists, which means that any new housing having rents below the existing market rate will cater to this "excess demand" and will have a minimal influence on the general rent level. 30

Apart from that, excess supply of houses may not necessarily lead to lower rentals. This can be attributed to the phenomenon called "downward stickiness" of rents. This trend occurs due to long leases (often combined with the expectation of capital gains on the part of landlords) and segmentation of housing market. The durability of housing to certain extent leads to a lower level of annual housing investment compared to the total housing stock. Therefore, this limits the impact on rental yet further. All this means that only in exceptional cases, such as the large scale public housing programmes in Singapore and additional housing investment exert a downward pressure on house prices and rents.

In Singapore, The Housing Development Board (HDB) has provided 120,000 units of public low-income
houses during 1960-1970, accommodating nearly 30 per cent of Singapore's population in 1970. With another 125,000 units planned during the third five year plan 1971-1975, it was expected to raise this percentage to 50 by 1975 and ultimately to provide public housing to 75 per cent of the population. The programme has not resulted in lower nominal rents, but has stabilized rents and house prices for low-income groups in the face of a rising overall domestic price level. 31

However, in the Klang Valley the price of houses tend to increase due to higher land prices. Apart from that, developers are more interested in providing houses for medium and higher income groups compared to the lower income group. In addition, the economic boom attracts more foreign buyers, investors and speculators towards high-priced houses such as condominiums, bungalows, detached and semi-detached units. This trend for the past few years especially since the mid 1980's, has led to a huge reduction in the construction of houses for the low income group and to some extent the middle income groups too. Therefore, it has created huge demand for houses among them, have not been fulfilled by either the private or the public sectors.

127
As a result, these people are forced to stay in rented houses, flats, apartments and rooms. For those who can not afford to pay higher rentals, they are forced to stay in squatter areas such as in Kuala Lumpur, Pudu, Kepong, Jinjang, Segambut, Sentul, Setapak, Ampang Jaya, Kampung Datuk Keramat, Kampung Kerinchi, Pantai Dalam, Bangsar and Salak South areas. Therefore, it is not surprising that the market for rental houses is always there and that the rental rates tend to go up instead of going down. In addition, migrants from other parts of the country to the Klang Valley area can also be sighted as a reason for higher rentals in this area. Therefore, higher rental leads to higher prices of dwellings in the Klang Valley area.

The previous explanations basically deals with the impact of the housing supply on rentals and prices for houses. However, here, the author will explain how an increase in housing investment could lead to input shortages such as in labour, building materials and so on, which in turn would push up the construction cost of houses and thus the general price level. Housing investment creates supply bottlenecks and to what extent it matters depends on certain
factors such as, the elasticity of supply of inputs and the size of the additional demand generated for these inputs compared to the total demand.

The input shortages can be solved in two ways. One, by increasing the imports of inputs and secondly by increasing the production of inputs which are produced locally. In our context, most of the inputs used in residential construction such as cement, steel bars and others are from local producers. Therefore, during supply shortages, the production of various housing inputs could be increased with certain tax concessions from the government. If this method cannot solve the above problem, the government can reduce the import tax for the various inputs in order to encourage more imports. Thus, an increase in housing investment would not necessarily lead to supply bottlenecks of inputs which could push up the general price level and the price of houses particularly.

Construction costs will increase if domestic inputs are more expensive compared to imported inputs. In Malaysia generally and the Klang Valley specifically, this situation is true for certain inputs such as steel, which is a controlled item.
When the Ministry of Trade announced a 21 per cent price increase in April last year, without any specific reasons, steel bar prices went up to between RM1,085 to RM1,229 per tonne. Steel bars cost only RM874 to RM 909 per tonne in the Philippines, which is much lower than Malaysia. In such a situation, higher housing investment will obviously stimulate higher housing prices due to a supply bottlenecks.

In Malaysia, cement costs RM 186 to 217 per tonne, while in the Philippines it only costs RM 113 per tonne. The fact is, house buyers are paying a high price for such protectionism. In addition, local producers are not efficient, charging up to 25 per cent higher than international prices. Furthermore, the import of cement is banned and the same goes to steel bars since 1982. For cement, there is a high import duty, 50 per cent or RM60 per tonne imposed on imported cement, again consumers pay higher prices because Japanese, Korean and Taiwanese manufacturers are able to produce cheaper cement.

Therefore, the higher cost of locally produced housing inputs tend to increase the production cost of houses and lead to higher prices overall. If these inputs are cheaper, the
construction cost would be lower. Thus an increase in housing investment would not necessarily lead to higher domestic prices for houses and other inputs. Burns et al. (1970) have estimated the impact of increased construction output on the domestic price level in South Korea and Mexico. This study indicated that, at least during the period studied (1955-1965), a 1 per cent increase in construction output had an increase of prices for building materials at 0.45 per cent and 0.31 per cent respectively. Since building materials have a lower weight in the overall wholesale price index in both countries, the author concluded that the impact of increased construction output on the overall domestic price level was slight. 35

It should be noted, that the above findings may not be necessarily true in our context. From 1972 to 1973 prices of major building materials rose by an average of 24 per cent (some, such as timber prices, by more than 50 per cent), while the Consumer Price Index rose by 10.5 per cent. As a result of this, the construction industry experienced a boom during that period and the value added rose by 11 per cent in real terms. 36 In addition, the international commodity boom during that period, raised the export volume of sawn logs and sawn timber up to 11 per cent.
and 27 per cent respectively. These two products are very important building materials apart from steel and cement.  

Apart from that, the international commodity boom contributed to supply problems in the construction industry (especially concerning sawn timber, iron and steel products, together comprising 43 per cent of the building materials input in residential construction), and now that both property and commodity booms are over (1975), prices of materials have dropped considerably. Therefore it is not always the case that, housing investment leads to supply bottlenecks of building materials. One must look into a broader scope of the economy to determine what actually leads to supply bottlenecks, because economic activities are always interrelated with the various sectors of the economy.  

Other than the above mentioned factors, the cartel marketing system also contributes to the higher domestic prices which has nothing to do with changes in the housing investments. The cartel marketing system is practiced for products like roofing tiles, bricks and others. Brickmakers are said to have ganged up to raise the price from 14 sen in 1988 to 20 sen a piece last year. Timber prices have doubled
from RM 200 to RM 400 per tonne in the last two years. The high demand from buyers in surrounding countries like Thailand and Singapore have sent prices shooting up. Local contractors have to match the high prices offered by overseas buyers. Otherwise, foreigners will take the timber.40

Housing investments also influence the supply of labour force. Higher investments in residential construction leads to higher demand for skilled and unskilled workers. Supply bottlenecks in the fields of labour and entrepreneurial capabilities are likely to arise for skilled labour, technicians, professionals and semi-professionals such as management staff, surveyors, engineers and draughtsmen.41

The findings from the survey on material and labour cost, which was conducted by the Building Cost Information Centre in 1989 reveal that the shortage for construction workers led to a 20 to 25 per cent increase in labour costs. Since labour costs consist of 20 to 30 per cent of building costs, the upward trend in wages to some extent increases the domestic price level in the Klang Valley.42 While shortages for professional and semi-professional labour may persist for a considerable period of time, and thereby hamper
expansion of construction output, the impact of this on the domestic price level will probably be slight, since labour costs of this kind typically account for only a small percentage of construction costs (1.5 percent for residential construction, Peninsular Malaysia).\footnote{43}

Furthermore, unlike prices of building materials, wage rates generally respond only very slowly to increased supply. Furthermore, to solve the labour shortage problem, the government allows more foreigners to be employed in the construction sector especially from Indonesia, Bangladesh, India and Thailand. Thus, lower wage rates lead to lower construction costs and a lower price increase for dwellings. This stabilize or control the domestic price level.

In reality, the effect of supply constraint for housing inputs on domestic price levels determine the developers' profit margins. Higher profit margins lead to higher price levels and vice-versa. Therefore, even though input shortages lead to higher construction cost, the rate of increase is very small. Various studies show that there are other reasons which actually increase the domestic price levels. Quantity Surveyors say that construction materials
only contribute a small percentage to the overall price of a house. A 10 to 20 per cent increase in building costs do not cause the same quantum of increase in house prices. For example, the 21 per cent increase in the steel price in 1989 only contributes to 1.13 per cent of the total cost of construction. This is because, the reinforcement steel constitutes only about 5-4 per cent of the total cost of a typical double-storey medium cost terrace house.

One developer acknowledges that in theory, material costs only account for 30 to 40 per cent of the total selling price of a house. Infrastructure can come up to 10 to 15 per cent, wages 20 to 30 per cent and the balance, financial, administration and profit margins. Apart from that, land, infrastructure and design also affect the pricing of a house. In addition, profiteering is another factor that has been linked to high house prices. This is of course difficult to pinpoint. It is generally held that profit margins are at least 20 per cent since developers have to allow for rising costs and contingencies. In practice, margins can leap to as much as 100 to 200 per cent when market prices escalate but cost price remains unchanged.
finally, various studies reveal that housing investment alone does not contribute to higher domestic prices. There are other factors such as export trends economic cycles government policies and administration efficiencies that influence the domestic price levels. In practise, input shortage due to higher housing investments, eventhough leads to higher construction costs, the magnitude is very small. Therefore, housing investment need not necessarily increase the domestic price level. But the combination of various factors lead to the price hike.
3.2.4 The Housing Investment and Skills Development In The Construction Industry

It is widely believed that, additional housing investments create more job opportunities and thus contribute to an increase in labour skills. This is usually done through on-the-job training and not learned through formal education or training centres. This is particularly important in the construction industry because in almost any developing country, educational facilities to develop construction skills through formal schooling and training programmes are grossly inadequate, and skills in the construction industry are still generally passed on through apprenticeship. 48

Therefore, an increase in housing investment generates more residential unit construction which in turn absorbs more labour force. This process provides an opportunity for fresh workers to learn new skills and for the rest of the workers to improve their skills. This will transform the labour force from unskilled to semi skilled and finally to skilled workers. Experience has shown that unskilled labour can easily be trained into an efficient work force by teaching some basic skills such as: familiarity with basic tools: how to make concrete; how to assemble
simple components like bolts; though it is both frustrating and uneconomical to attempt to transform them into tradesmen without a long period of training. The impact of the housing investment on skill development is of course determined by various factors such as technical constraints, financial limitations, ethnic barriers, the import content of housing inputs and the ratio of capital compared to labour as an input in housing construction.

It should also be noted that in the case of housing investments, informal training is almost completely limited to the construction phase; during the operating phase only management, repair and maintenance of housing schemes may offer some learning-by-doing possibilities. In addition, in Malaysia generally, and in the Klang Valley specifically, most of the housebuilding activities are carried out by the Chinese community. This can be attributed to their long time participation in the housebuilding industry. Apart from that, their financial stability enables them to undertake various projects and they open up more job opportunities for their race especially which require high skill such as plumbing, wiring, welding and others.
This strategy obviously help to improve their skill in the housebuilding industry in the long run. Generally, only unskilled or general jobs are awarded to the other races including the migrants. These types of jobs do not require high skills and the chances for the general worker to improve his skill is very limited. Thus, this strategy on the one hand contributes to the improvement of skills among workers especially the Chinese and on the other hand restricts other races from learning new skills or improving their skills. Therefore, skill development as a consequence of housing investment very much depends on the ethnic aspect in this country.

Another reason for limited skill development among certain races is the earning capacity. In addition, studies show that, at least a two year period is needed for an unskilled worker to reach semi-skilled level during the on-the-job training. This means that the worker concerned has acquired the basic skills of a particular trade, such as bricklaying, carpentry, bar-bending and others until he is able to apply these techniques to the job at hand under supervision. On top of this an additional period of 2 to 3 years is required to reach the fully skilled level, being fully proficient in the job, able to work independently, to take measurements and to read
plans. Apart from this, higher wage also contributes to lower skill development among new workers from other races. The lower supply of skilled workers can enable them (Chinese workers) to demand higher wages during economic booms or even in normal situations. In 1974, a semi-skilled worker earned approximately 45 per cent more than an unskilled labour.\(^{52}\) (See Table 3.1).

The table indicates the wage differences between the skilled and unskilled workers. Obviously the skilled workers are highly paid compared to unskilled workers. This can explain why certain people are reluctant to teach their 'know-how' to others. Therefore, this factor limits skill development in the construction sector.

The import content of building inputs also contribute to skill development among local workers due to an increase in housing investment. If the import contents of housing inputs are higher, obviously this will reduce skill development among workers and vice-versa. In our context, in Klang Valley, most of the housing inputs are from local suppliers and therefore this helps to
improve our workers' skills. Inputs such as cement, steel rods, sawn log and sawn timber, window, door and wire are from local suppliers. This obviously leads to skill development among the workers who produce the above mentioned inputs. The skills used in

<table>
<thead>
<tr>
<th>Skill</th>
<th>Minimum (RM)</th>
<th>Maximum (RM)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skilled Worker</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mason/Concretor</td>
<td>30</td>
<td>45</td>
</tr>
<tr>
<td>Bricklayer</td>
<td>30</td>
<td>45</td>
</tr>
<tr>
<td>Barbender</td>
<td>25</td>
<td>45</td>
</tr>
<tr>
<td>Carpenter</td>
<td>32</td>
<td>45</td>
</tr>
<tr>
<td>Plasterner</td>
<td>35</td>
<td>50</td>
</tr>
<tr>
<td>Tiler</td>
<td>35</td>
<td>50</td>
</tr>
<tr>
<td>Plumber</td>
<td>30</td>
<td>45</td>
</tr>
<tr>
<td>Electrician</td>
<td>30</td>
<td>45</td>
</tr>
<tr>
<td>Painter</td>
<td>30</td>
<td>45</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unskilled Worker</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>25</td>
<td>23</td>
</tr>
</tbody>
</table>

Note: * Figures refers to Kuala Lumpur and Petaling Jaya. Basic costs excludes allowance for EFF, Socso, food, transport.


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building a brick wall are inherently different from those required to build a steel or timber-frame wall. The brick wall consists of plastic materials with flexibility for innovation and repair. Steel or timber-frame construction requires accuracy of cutting and fitting, knowledge of power tools and conformity to strict patterns.53

Housing investments will induce skill development and skill development is expected to contribute to higher productivity in the residential construction industry. However, various studies show that the productivity level among construction workers is low compared to the other sectors in the economy. The decreases in absenteeism and improvement of on-the-job performance would lead to increases in output and earnings, which would ultimately benefit the employer, the employee or both. The construction sector has low levels of labour growth rates, which could lead to higher construction costs which in turn could push up the prices of new houses. The main reason for this phenomena is the large number of small construction firms which reflect that construction is essentially an on-site activity which must use traditional and specialised labour inputs and
materials and which allows few scale economies to emerge in the production process. This leads to low productivity growth among construction workers.

Another reason for low productivity growth in the construction sector is the large number of small scale inputs such as glass, ceramics, chemicals, paints, electrical products, water tanks and others. This large number of small-scale inputs suggests that efficiencies and indivisibilities in labour use are likely to be a characteristic problem in the industry. This complexity is worsened by the specific phasing required for on-site construction with, for example, structural workers being required predominantly in the middle phases of development. Clearly a large-scale site operator with a large number of houses at various stages of completion can use specific labour inputs more systematically than smaller firms. This finally will help to improve labour productivity in the construction sector. Since almost half of the construction firms in this country are very small, not surprisingly their productivity levels are low compared to larger firms.

The size of the construction firm is not the only determinant of labour productivity. There are also other factors which can explain the situation.
The low rate of output per labour cannot of course, be assumed to arise because of low skilled manpower. Land conditions, capital use and management skills would all affect the average output of per labour (or machine or acre)\(^{55}\).

Table 3.2, indicates the relationship between wage increase and labour productivity.

### TABLE 3.2
MALAYSIA: WAGE INCREASE AND LABOUR PRODUCTIVITY (AVERAGE % CHANGE)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>5.0</td>
<td>6.2</td>
</tr>
<tr>
<td>Construction</td>
<td>3.8</td>
<td>3.9</td>
</tr>
<tr>
<td>Mining</td>
<td>10.7</td>
<td>12.4</td>
</tr>
<tr>
<td>Banking</td>
<td>4.6</td>
<td>5.4(^a)</td>
</tr>
<tr>
<td>Rubber Estates</td>
<td>3.1</td>
<td>0.6</td>
</tr>
</tbody>
</table>

**Notes:** For period 1980-1989.

**Sources:** Department of Statistics  
*Malaysian Journal of Economic Studies*  
The above figures show that, on average, the nominal wages increased between 4 to 11 per cent from 1981 to 1989 for the manufacturing, construction, mining, banking and rubber estates. For the construction sector which includes the housebuilding sector, the wage increase is very small only next to rubber estates. This factor to some extent contributes to the lower labour productivity in this sector which is 3.9 per cent between 1981 and 1989. If we compare with other sectors except for rubber estates, the wage increase would obviously improve the labour productivity in the mining, banking and manufacturing sector. In fact, in these sectors, the labour productivity growth is more than the wage increase. For the mining, manufacturing and banking sectors, the wage increase was 10.7 per cent, 5.0 per cent and 4.8 per cent respectively and the increase in the labour productivity was 12.4 per cent, 8.2 per cent and 5.4 per cent respectively. Therefore, for the construction sector, the wage increase to a certain extent determines or influences labour productivity.
TABLE 3.3
MALAYSIA: SECTORAL LABOUR PRODUCTIVITY
(% CHANGE)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>12.7</td>
<td>16.0</td>
<td>3.4</td>
<td>11.3</td>
<td>7.0</td>
<td>6.2</td>
</tr>
<tr>
<td>Construction</td>
<td>16.8</td>
<td>3.4</td>
<td>3.3</td>
<td>-5.7</td>
<td>6.8</td>
<td>3.9</td>
</tr>
<tr>
<td>Mining</td>
<td>15.2</td>
<td>17.5</td>
<td>8.9</td>
<td>31.2</td>
<td>8.1</td>
<td>12.4</td>
</tr>
<tr>
<td>Rubber Estate</td>
<td>2.7</td>
<td>0.0</td>
<td>2.5</td>
<td>2.4</td>
<td>-7.0</td>
<td>0.6</td>
</tr>
<tr>
<td>Banking</td>
<td>7.1</td>
<td>3.0</td>
<td>6.1</td>
<td>5.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>


In addition, Table 3.3 shows the sectoral labour productivity in Malaysia. In this context labour productivity is defined as gross value of output per employee.

From Table 3.3, we can make a few conclusions regarding the sectoral labour productivity. From all the sectors listed, the mining sector shows a remarkable labour productivity followed by the manufacturing and construction sector. The construction sector’s labour productivity fluctuates according to the property cycle. During the property
market boom in 1981, it recorded a 16.3 per cent growth while during the property market downturn in 1987 it decline to -5.7 per cent. Later in 1989 it picked up again due to market recovery.

Another factor which will determine labour productivity in the housebuilding industry due to increase in housing investment is the labour cost as a percentage of gross value of output. The empirical figures show that, the higher the labour cost as a percentage of gross value of output the lower is the labour productivity growth. This is very clear in the construction sector where it consists of almost 22 per cent of the production cost. Furthermore, the labour force in the construction sector needs more time to learn the skills and achieve the lower costs per unit or achieve economics of scale. The manufacturing, mining and banking sectors' labour costs as a percentage of the gross value of output are 7.5 per cent, 4.5 per cent and 10.5 per cent respectively. It should be noted that for these sectors, it requires less time to train their labour force and therefore they can attain scale economics or minimise cost per unit of output at a faster time period. Therefore, the labour cost as a percentage of
gross value of output to a certain extent determines labour productivity in the housebuilding industry in this country and in the Klang Valley especially. So, Table 3.4 shows the labour cost content as percentage of gross value of output.

Table 3.4 indicates that the construction and rubber estates sector's labour cost content as a percentage of gross value of output is around 22 per cent and 51 per cent respectively. While for the manufacturing, mining and banking sectors, the labour cost is not more than 15 per cent. Therefore, a slight change in labour productivity would have greater effect on the construction and rubber sectors compared to the mining, manufacturing and banking sectors. Since the wage increase from 1981 - 1989 for the construction and rubber estates are lower than the other three sectors and in addition the labour content as a percentage of gross value of output is higher for the former sectors compared to the latter sectors during the same period, this can explain why the labour productivity is lower in the construction and rubber estate sectors compared to the other three sectors.
**TABLE 3.4**

**MALAYSIA: LABOUR COST AS PERCENTAGE OF GROSS VALUE OF OUTPUT BY SECTOR**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Manufacturing</td>
<td>7.0</td>
<td>7.7</td>
<td>7.9</td>
<td>7.6</td>
<td>6.6</td>
<td>-5.7</td>
</tr>
<tr>
<td>Construction</td>
<td>22.2</td>
<td>22.6</td>
<td>21.4</td>
<td>22.5</td>
<td>22.1</td>
<td>-0.5</td>
</tr>
<tr>
<td>Mining</td>
<td>4.7</td>
<td>4.5</td>
<td>4.6</td>
<td>4.9</td>
<td>4.2</td>
<td>-11.0</td>
</tr>
<tr>
<td>Rubber Estates</td>
<td>53.3</td>
<td>51.6</td>
<td>51.6</td>
<td>51.5</td>
<td>47.0</td>
<td>-12.2</td>
</tr>
<tr>
<td>Banking[^b]</td>
<td>9.6</td>
<td>9.6</td>
<td>9.4</td>
<td>11.1</td>
<td>12.6</td>
<td>+31.0</td>
</tr>
</tbody>
</table>

[^a]: For banking sector, the staff cost share in total expenditure for the sector is used. For rubber plantations, it is the labour cost share in total cost of production.

[^b]: Banking Sector includes commercial banks, merchant banks and finance companies.

**Sources:** Department of Statistics, Kuala Lumpur, 1991.

Therefore, housing investments would not necessarily stimulate higher productivity among workers in the housebuilding industry. There are other factors which determine to what extent housing investments contribute to the improvement of labour productivity. It should be noted that, the output per worker is determined by skill. A skilled worker is usually expected to contribute more towards
productivity compared to a semi-skilled or unskilled worker. Overall, we can conclude that, housing investment could lead to skill development and improvement among workers.
3.3 A Review of The Housing Market in The Klang Valley

There are four major forces determining the pace of urbanisation throughout the world; economic growth and development, technological change, a rapid growth in the world population and a large scale movement of people from rural areas to the cities.\(^\text{56}\) Obviously the Klang Valley is exposed to these forces either in the short term or long term. As a result, urbanisation in this area is growing at a faster rate compared to the other regions of the country ever since the 1980's.

An increasing proportion of the rapidly growing Klang Valley population is attempting to satisfy its economic and social needs and desires in an urban context creating huge demands for houses. Furthermore, the enormous migration of people into the Klang Valley has produced a very distinct possibility of an uncontrollable urban explosion such as an unprecedented increase in population, greater demands on urban infrastructure, higher rates of population and a decrease in the non-material (and in some cases) standards of living.

Under this section, the study will be divided into three groups. Firstly it will sought to
analyse the transaction trends of the housing market in the Klang Valley. Basically the target is on the price movements according to the different locations, the volume of transactions in respect of each district and the location impact on the price changes. Then secondly, the price movements of the houses in the Klang Valley will be analysed. The emphasis here will be on the location and income impact on the houses.

3.3.1 The Residential Properties Transaction Trends In The Klang Valley

The housing transaction in the Klang Valley varies according to the property market cycle, domestic and international economic performances. This can be attributed to the openness of the Malaysian and Klang Valley economy. It should be noted, that the driving force of the economic growth in the Klang Valley is the foreign investments especially in the manufacturing sector. Huge investments in the manufacturing sector create employment to local as well as foreign workers. This at the end creates higher per capita income which is the basic requirement to purchase a house. Therefore, in the Klang Valley, the house transaction pattern is determined by the local and foreign buyers' behaviour.
TABLE 3.5
Residential Property Transactions:
Federal Territory and Selangor, 1980 to 1992

<table>
<thead>
<tr>
<th>Year</th>
<th>Federal Territory</th>
<th>Selangor*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>9,389</td>
<td>26,896</td>
</tr>
<tr>
<td>1981</td>
<td>8,802</td>
<td>29,398</td>
</tr>
<tr>
<td>1982</td>
<td>9,539</td>
<td>32,197</td>
</tr>
<tr>
<td>1983</td>
<td>6,532</td>
<td>21,892</td>
</tr>
<tr>
<td>1984</td>
<td>7,482</td>
<td>16,428</td>
</tr>
<tr>
<td>1985</td>
<td>8,612</td>
<td>17,925</td>
</tr>
<tr>
<td>1986</td>
<td>6,918</td>
<td>17,428</td>
</tr>
<tr>
<td>1987</td>
<td>6,641</td>
<td>15,555</td>
</tr>
<tr>
<td>1988</td>
<td>8,086</td>
<td>17,775</td>
</tr>
<tr>
<td>1989</td>
<td>8,894</td>
<td>23,997</td>
</tr>
<tr>
<td>1990</td>
<td>12,197</td>
<td>32,672</td>
</tr>
<tr>
<td>1991</td>
<td>10,345</td>
<td>34,633</td>
</tr>
<tr>
<td>1992</td>
<td>13,979</td>
<td>32,280</td>
</tr>
<tr>
<td></td>
<td><strong>117,396</strong></td>
<td><strong>319,109</strong></td>
</tr>
</tbody>
</table>

Note: *Indicates, more than 80 to 90 per cent of these transactions happened in Klang, Petaling, Gombak and Hulu Langat District.

Figure 3.4
Residential Property Transactions, 1980-1992

Source: Property Market Report, various issues,
Table 3.5 shows the transaction changes in the Federal Territory and Selangor from 1980 to 1992. (See Figure 3.4).

Table 3.5 indicates, that in the early 1980's the total transactions in the Federal Territory (FT) and Selangor followed the upward market trend of the late 1970's. In FT, the transactions for all types of residential properties increased from 9,389 units in 1980 to 9,539 units in 1982. However in 1981, there was a slight drop in the residential property transaction where it dropped from 9,389 units in 1980 to 8,802 units in 1981. In the mid 1980's there was a property market downturn.

Simultaneously, the domestic and world economy also faced a slump in term of output, employment and income. Therefore, this dampened the residential property transactions in FT from 8,612 units in 1985 to 6,641 units in 1987. In Selangor the residential property transactions dropped from 32,197 units in 1982 to almost 100 per cent to around 15,585 units in 1987. Therefore, the property market slump severely affected the buyers, suppliers and the whole market. The prolonged economic slowdown, poor commodity prices and reduced
liquidity contributed to a lowering in effective demand. In addition, many potential buyers held back in anticipation of further price falls.57

After 1987, the property market in the Klang Valley started to perform well. The residential property transactions in FT increased from 8,066 units in 1988 to 13,979 units in 1992. This is almost 50 per cent growth from the 1988 transactions. For Selangor, the transactions went up from 17,778 units in 1988 to 34,633 units in 1991 before dropping to 32,280 units in 1992. This tremendous growth was due to various fiscal and monetary policy changes which were implemented by the authorities to boost the whole economy as well as the property market especially the residential sector. The improved economic situation, higher domestic income, growing confidence in the property sector and the concerted measures undertaken by Government since 1987 were the underlying factors contributing to the recovery of the property sector.58

In addition to this, the Government also removed sales tax on concrete bricks, blocks, slabs and ridge tiles and sawn timber. Furthermore, monetary policy changes such as higher lending for the housing sector by commercial banks and finance companies also helped this sector. The lower interest

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rate encouraged more house construction and encouraged more buyers to purchase houses. Cagamas, the secondary mortgage corporation, purchased 19,710 housing loans in 1989 to a total value of RM1.33 billion and Employees Provident Fund (EPF) released RM715.3 million during that year to contributors purchasing houses. In addition to the above mentioned factors, the launching of three property trusts marked the introduction of another investment vehicle into the property sector. These trust funds are expected to allow wider spectrum of ownership in income generating prime commercial and industrial buildings. The diversification of a few public listed companies into property development is a further indication of the optimism prevailing in the property sector.

Table 3.6, shows the share of FT and Selangor's residential property transactions compared to the whole of Malaysia's transaction. Based on various property market reports from 1988 to 1992, the number of transactions referred to the Valuation And Property Services Department increased to almost double from 1988 to 1992. In 1988, the total transactions for the whole of Malaysia was 111,113 or in total value of RM8.1 billion. This figure went up
to 165,272 transactions in 1990 with the total value of RM16.6 billion. Due to strong business confidence and property market boom, this figure reached 190,939 transactions in 1992 with the total value of RM21.4 billion. The share of the FT and Selangor residential property transactions also increased during this period. The total residential property transactions increased from 25,844 in 1988 to 32,891 in 1989. Due to rapid economic growth in this region, the total transactions reached 44,869 in 1990, 44,978 in 1991 and 46,259 in 1992.

These figures clearly indicate the strength of the residential property market in the Klang Valley. In terms of its share to the national level, in 1988 it constituted 23.26 per cent of the residential property transactions compared to the whole of the property transactions in Malaysia. Later, this figure increased to 24.24 per cent in 1989 and 27.15 per cent in 1990. However, in 1991 its share dropped slightly to 24.45 per cent compared to the national level. Later in 1992, during the level off period in the property cycle, its share further dropped to 24.22 per cent. Therefore, overall the residential sector in FT and Selangor alone contribute almost 20 to 25 per cent of the total transactions in Malaysia.
### TABLE 3.6

Comparisons of Total Property Transactions in Malaysia and Total Residential Property Transactions in Federal Territory and Selangor, 1988 to 1992

<table>
<thead>
<tr>
<th>Year</th>
<th>Total Transactions in Malaysia</th>
<th>Total Residential Transactions in FT &amp; Selangor</th>
<th>Share (in %)(^a)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1988</td>
<td>111,113</td>
<td>25,844</td>
<td>23.26</td>
</tr>
<tr>
<td>1989</td>
<td>135,704</td>
<td>32,891</td>
<td>24.24</td>
</tr>
<tr>
<td>1990</td>
<td>165,272</td>
<td>44,869</td>
<td>27.15</td>
</tr>
<tr>
<td>1991</td>
<td>183,996</td>
<td>44,978</td>
<td>24.45</td>
</tr>
<tr>
<td>1992</td>
<td>190,939</td>
<td>46,259</td>
<td>24.22</td>
</tr>
</tbody>
</table>

**Note:** \(^a\) refers to the share of the total Residential transactions in FT & Selangor compared to the total Property Transactions in Malaysia.


In addition to the transaction comparisons, now let us compare the value differences. This is indicated in Table 3.7. Table 3.7 denotes the value and share of the residential property transactions. The total value of transacted residential properties in Kuala Lumpur (KL) and Selangor increased from merely RM3 billion in 1989 to RM4.2 billion in 1990, RM4.4 billion in 1991 and then RM5.2 billion in 1992. The total value for the four years are RM16.8b
TABLE 3.7
Value Comparisons between Malaysia, Kuala Lumpur and Selangor during 1989 to 1992

<table>
<thead>
<tr>
<th>Year</th>
<th>KL^a</th>
<th>Selangor^b</th>
<th>Total</th>
<th>Malaysia^c</th>
<th>Share (in %)^d</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>1.1</td>
<td>1.9</td>
<td>3.0</td>
<td>11.3</td>
<td>26.5</td>
</tr>
<tr>
<td>1990</td>
<td>1.7</td>
<td>2.5</td>
<td>4.2</td>
<td>16.6</td>
<td>25.3</td>
</tr>
<tr>
<td>1991</td>
<td>1.5</td>
<td>2.9</td>
<td>4.4</td>
<td>18.7</td>
<td>23.5</td>
</tr>
<tr>
<td>1992</td>
<td>2.1</td>
<td>3.1</td>
<td>5.2</td>
<td>21.4</td>
<td>24.3</td>
</tr>
<tr>
<td>TOTAL</td>
<td>6.4</td>
<td>10.4</td>
<td>16.8</td>
<td>88.0</td>
<td>24.7</td>
</tr>
</tbody>
</table>

Note: a and b refers to the value of residential property transactions. c refers to the value of overall property transactions which includes residential, commercial, industrial and land transactions. d indicates the share of the residential properties transacted in the Kuala Lumpur and Selangor compared to the whole Malaysia's transaction.

precisely the Klang, Petaling, Gombak and Hulu Langat Districts contributed almost 80 to 90 per cent out of the RM10.4 billion during the same period.

In terms of its share, it showed a downward trend from 1989 up to 1991. However, in 1992 its share started to move up. K.L and Selangor's share in terms of value started to decline from 28.5 per cent in 1989 to 25.3 per cent in 1990 and further down to 23.5 per cent in 1991. Later in 1992 its share moved up to 24.3 per cent. Overall, during the four year period, its share was 24.7 per cent out of the national value. This evidence clearly shows the importance of the residential sector in the Klang Valley.

Now, the analysis will explore the transaction trends in the residential market. In Selangor, residential properties remained popular among property purchasers accounting for 79.3 per cent of the total transactions in 1992. In addition to this, out of 32,280 residential properties transacted in Selangor, 42 per cent were in Petaling District, followed by Hulu Langat District at 22 per cent and both Gombak and Klang Districts at 16 per cent and 14 per cent respectively. So, overall 94 per cent of the residential properties transacted were in the
The concentration of activities in the Klang Valley was due to the following factors:

a) 79 per cent of the total population of Selangor live in the Klang Valley,

b) being the hub of rapid industrial growth, the Klang Valley attracted many migrant workers. Its average population growth rate of 5.75 per cent per annum is relatively higher than that of the national 2.8 per cent and

c) well planned comprehensive residential developments with corresponding infrastructural facilities.

Table 3.8 gives a clear picture of this. It shows a breakdown of residential property transactions according to type and district in the Klang Valley (1992). A total of 43,937 residential properties were transacted. Out of this, 13,699 transactions were recorded in the Federal Territory (KL). This forms 31.18 per cent of the total transactions in the Klang Valley. This is followed by Petaling District with 13,870 or 31.11 per cent of the total residential transactions. It is thus
apparent that, these two areas represent up to 27,369 residential transactions or 62.29 per cent of the whole of the Klang Valley. These two areas is followed by Hulu Langat District with 7,071 residential transactions or 16.1 per cent out of the whole Klang Valley’s transaction. Next, followed by the Gombak and Klang Districts with 5,021 (11.4 per cent) and 4,476 (10.9 per cent) residential property transactions respectively.

In terms of types of residential properties transacted in the Klang Valley, almost half of them are two and three storey terrace houses. These houses represent 20,319 or 46.2 per cent of the residential property transacted. This indicates, that the Klang Valley residents still prefer to stay or buy terrace houses compared to high rise properties. This behaviour can be attributed to their purchasing power and reasonable prices from developers. This is followed by the one and a half story terrace houses which form 9,176 or 20.8 per cent of the residential property transacted.

Next on the list, is the detached and semi-detached houses which form 2,603 or 5.9 per cent of the residential property transacted. While
TABLE 3.8
Klang Valley: Breakdown of Residential Property Transactions
According to Type and District, 1992

<table>
<thead>
<tr>
<th>Type</th>
<th>Petaling District</th>
<th>Klang District</th>
<th>Gombak District</th>
<th>Hulu Langat District</th>
<th>Federal Territory</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vacant Plot</td>
<td>199</td>
<td>248</td>
<td>161</td>
<td>468</td>
<td>82</td>
<td>1,178</td>
</tr>
<tr>
<td>Land 1 1/2 Storey Terrace</td>
<td>2,173</td>
<td>2,141</td>
<td>1,054</td>
<td>1,856</td>
<td>1,950</td>
<td>9,176</td>
</tr>
<tr>
<td>2-3 Storey Terrace</td>
<td>8,371</td>
<td>946</td>
<td>2,677</td>
<td>3,323</td>
<td>5,000</td>
<td>10,319</td>
</tr>
<tr>
<td>1 &amp; 1 1/2 Storey semi-detached</td>
<td>90</td>
<td>36</td>
<td>39</td>
<td>63</td>
<td>63</td>
<td>291</td>
</tr>
<tr>
<td>Detached</td>
<td>399</td>
<td>113</td>
<td>151</td>
<td>238</td>
<td>779</td>
<td>1,680</td>
</tr>
<tr>
<td>Condominium/Apartment</td>
<td>288</td>
<td>3</td>
<td>69</td>
<td>131</td>
<td>1,432</td>
<td>1,923</td>
</tr>
<tr>
<td>Flats</td>
<td>244</td>
<td>6</td>
<td>30</td>
<td>337</td>
<td>762</td>
<td>1,379</td>
</tr>
<tr>
<td>Low-cost house</td>
<td>483</td>
<td>487</td>
<td>91</td>
<td>262</td>
<td>203</td>
<td>1,526</td>
</tr>
<tr>
<td>Low-cost Flat</td>
<td>63</td>
<td>11</td>
<td>11</td>
<td>133</td>
<td>688</td>
<td>906</td>
</tr>
<tr>
<td>2-3 Storey semi-detached</td>
<td>282</td>
<td>50</td>
<td>47</td>
<td>149</td>
<td>184</td>
<td>632</td>
</tr>
<tr>
<td>Others</td>
<td>1,176</td>
<td>453</td>
<td>671</td>
<td>109</td>
<td>2,556</td>
<td>4,947</td>
</tr>
<tr>
<td>Total</td>
<td>15,670</td>
<td>4,478</td>
<td>5,021</td>
<td>7,071</td>
<td>15,699</td>
<td>43,937</td>
</tr>
</tbody>
</table>

condominiums, apartments, flats and low-cost flats represent 4,208 or 9.57 per cent of the total residential properties transacted in the Klang Valley. Of the 14,466 units in the fifty new schemes launched, terrace houses accounted for only 11.3 per cent (1,706 units) while high rise developments comprising flats are (4,586 units), apartments (2,786 units) and condominiums (5,388 units) in the Federal Territory (KL). Therefore, high rise living is becoming popular in Kuala Lumpur and Petaling areas due to various reasons such as location, quality of construction, quality of management and availability of strata titles. In addition, for the urban low and middle income groups who cannot afford to buy terrace houses due to budget constraints always prefer low-cost high rise residential units.

In Federal Territory (K.L), terrace houses are still popular among buyers. In 1992, it accounted for 50.7 per cent or 6,950 residential units transacted in FT. This was followed by high rise residential units which formed 2,882 or 21.04 per cent of total houses transacted in 1992. Furthermore, in the whole of Klang Valley almost 1,432 or 74.5 per cent of the condominiums were transacted in the FT
(K.L). This was followed by Petaling, Hulu Langat, Gombak and Klang Districts with 288 units, 131 units, 69 units and 3 units respectively.

While in the Petaling District, out of 13,870 units of residential property transacted almost 10,546 or 77.1 per cent were terrace houses. This is followed by semi-detached and detached houses which form 691 units or 5.05 per cent of the residential property transacted. Condominium and apartment accounted for 288 units or 2.10 per cent.

Almost similar trends were recorded in Gombak, Klang and Hulu Langat Districts respectively. In the Klang Valley, residential property transacted by the lower income group only forms 8.6 per cent or 3,811 units. This is due to lower supply from public and private developers for such houses. Since the profit margin for low-cost houses is lower compared to other types of houses, developers are more interested in building houses which will cater medium and high income buyers. Medium cost houses represent 67.13 per cent or 29,435 units of residential property transacted in 1992. The upper income group houses accounted for 10.3 per cent or 4,528 units transacted in 1992.
Table 3.10 also indicates the volume of residential units transacted by the lower income groups. In Petaling District, out of 13,870 transactions only 790 units or 5.78 per cent accounted for low income group houses. While in Klang it is 504 units or 11.38 per cent, in Gombak District it is 132 units or 2.63 per cent. While in Hulu Langat and Federal Territory it is 732 units (10.35 per cent) and 1853 units (12.06 per cent) respectively. Therefore, overall in the Klang Valley, the transaction for low-cost houses are very small compared to medium and high cost houses. This is due to various reasons such as land price, speculation, foreigners interest and profit margin.

Therefore in the Klang Valley, the Federal Territory of Kuala Lumpur and Petaling District are the main growth areas. These two areas represent almost 60 per cent of the total houses transacted in 1992. In addition, high rise houses are very popular among the house buyers in these areas. Therefore most of the flat, apartment and condominium markets are very active here. The transactions of the low income group residential units are less than 10 per cent of the overall transactions. While the middle and upper market transactions accounted for 67 and 10 per cent respectively in 1992. Therefore, Klang Valley
residential transactions are more towards the upper and middle income buyers. This is mainly due to its population who relatively earn more compared to the other parts of the country.

3.3.2 The Price Movement Trends Of Residential Properties In The Klang Valley

The price movements of the residential properties in the Klang Valley are usually associated with the property market cycle. The property market worldwide is by nature a cyclical business going through periods of boom and burst. During boom periods, property values will appreciate and during slumps property values will depreciate. Therefore, the Klang Valley’s property market is of no exception to these situation. If we can recall, the property market plummeted in 1976 before picking up in 1978 and continued to enjoy a boom period of between six to eight years. Then the bearish years of 1985 to 1987 set in. Since then, the Malaysian property market has through the years experienced phenomenal growth and at present, still remains buoyant, amidst signs of a slowdown in certain sectors of the country’s economy. The next downturn is expected to be around 1995 and the period 1990 to 1992 had been a
peak period and the last quarter of 1992 and 1993 onwards till 1995 is expected to be a level off period. Therefore, the residential property's price trend in the Klang Valley is obviously closely associated with the overall property market cycle.

First, let us start with the residential property price behaviour in 1980. In 1980, the residential property prices followed the upward trend of property prices in 1978 and 1979. In the Klang Valley, single-storey terrace houses were the most popular, where the average price increase was 35 per cent during 1979-1980 and the Kepong area recorded the highest price increase with 62 per cent while the highest price paid was RM115,000 in Lucky Garden, Bangsar, Kuala Lumpur. Generally the overall increase in property price was about 20 per cent in 1980, the rise in prices was rapid during the first three quarters of 1980 owing to the following factors:

a) the demand for landed property due to the overall impressive economic performances and healthy business climate;

b) the national trend towards a house owning society;
c) the ready access to finance on which the market depended;

d) the extended period of repayment for loans; and

e) the increased cost of construction materials and labour.

In 1981, the price movements in the Klang Valley for residential properties were similar to the fourth quarter of 1980. During the fourth quarter of 1980, the property prices stabilized due to the central bank's new regulation which required the commercial banks to be more selective in extending credit to the construction industry and to dampen excessive demand and reduce speculation. Therefore, the difficulty in obtaining finance and the high interest rate charged on loans reduced effective demand for landed property especially for residential properties in 1981. The single-storey terrace houses were still the most popular and therefore the price of this property increased 26 per cent on average during 1981 as compared to 35 per cent during 1979-1980.69 The demand for 2-storey terrace houses was also popular with price increases in 1981 averaging about 29 per cent.70
"Generally, house prices showed an overall increase of 10 per cent over the 1981 level and prices were found to be higher where houses were close to good shopping areas as well as schools and public transport", this was the price situation in Selangor in 1982.71 (See Figure 3.5). In Kuala Lumpur the overall price increase of single-storey terrace houses was between 2 per cent to 7 per cent and this was mild compared to those of the previous years. The price of a single-storey terrace house in the prime location ranged between RM130,000 - RM145,000 per unit whilst those in secondary locations were between RM 80,000 - RM 100,000 per unit.72 The prices of double-storey terrace houses only show a small appreciation. In prime location it fetched RM 195,000 - RM 230,000 per unit and in the secondary location it was sold for around RM 130,000 - RM 170,000 per unit. (See Figure 3.6) The unit variations depend on the size of the land, the building area and the internal finishes.73

Overall, the acceleration in the upward trend of the property prices experienced in 1981 continued in 1982. Furthermore, Bank Negara’s guidelines issued in 1980 to the Commercial banks, which had the effect of curbing credit facilities to
the construction industry continued to dampen excessive demand and reduce speculation in the Klang Valley. Apart from that, high rates of interest, the problems of obtaining finance and Government's restraint on housing loans to civil servants dampened the effective demand for landed property in 1982.

In 1983, a similar scenario was seen in the Klang Valley. The high interest rates for housing loans, the problems of obtaining finance and Government's regulation on civil servants dampened the housing market. Generally, in the Klang Valley, it was a buyer's market because the supply was exceeding demand. Prices remained stable and interest rates remained high but houses in good locations were readily sold. In the Klang Valley, the demand for single-storey terrace houses was good with the price appreciation of 20 per cent. In Kuala Lumpur, despite the economic recession, low-cost houses were priced around RM 50,000 to RM 70,000 per unit and single-storey terrace houses which were priced around RM 100,000 per unit were still by far the most saleable while double-storey terrace houses above RM 160,000 per unit remained more or less static in price and in some areas even suffered a slight decrease in value.
Figure 3.5

SST - single-storey terrace
DST - double-storey terrace
Figure 3.6

price (RM) (’000).

year

SST—single-storey terrace
DST—double-storey terrace
The residential property market in the Klang Valley to some extent followed the trend of the past two years. However, during the second half period, there were indications of market deterioration in the face of sluggish demand.76 (See Figure 3.7) In the Klang Valley the demand for low-cost and medium cost houses was very strong. Certain residential units in the prime locations continued to change hands at higher prices, in spite of high interest rates because such properties were a good hedge against inflation. The residential property market in the Klang Valley overall performed badly in terms of price and volume of transactions. High interest rate was the main cause for the weak property market and in addition, many financial institutions were charging interest rates of 13 per cent to 16 per cent on property in anticipation of higher inflation.77 Therefore, this trend dampened the demand for residential properties in the Klang Valley. Further, in Kuala Lumpur the demand for condominium and luxury apartments also declined especially in the less popular areas.

Overall, the residential property market followed the slump in the property market cycle during 1985. The oversupply of houses reduced the house
Figure 3.7

Price (RM) ('000).

Year


SST—single-storey terrace.
DST—double-storey terrace.
prices significantly and this further dampened the market. In an effort to stimulate demand and improve sales, developers offered incentives and reduced prices. Apart from that, the market for smaller and cheaper houses fared well with most of the new developments being successfully marketed. Furthermore, the growing need for such houses encouraged housing developers during the year to concentrate their effort on low-cost and medium-cost terrace houses especially in Klang, Hulu Langat and Gombak Districts.

In Rawang the prices of single-storey terrace houses dropped around 2 per cent, while in Petaling Jaya it went up to 4 per cent to 10 per cent and for double-storey terrace houses in Rawang it went down around 6 per cent compared with 1984 levels and in Petaling Jaya it went up 1 per cent during the same period. (See Figure 3.8)78 The similar situation continued in 1986 with the market being weak. Overall, in 1986, the house prices generally went down compared to 1985. In Kuala Lumpur, the transactions for residential units dropped 19.8 per cent from the 1985 transactions. (See Figure 3.8)79

Let us examine the residential property sector in the Klang Valley during 1987. The total
transactions of residential units increased compared to the previous years. The demand for low-cost and medium-cost terrace houses remained high. Various Government policies in 1987 to some extent improved the residential market in the fourth quarter of 1987. This included lower interest rates for housing loans in the private sector. While in the public sector, the interest rate was reduced from 6 per cent to 5 per cent and 5 per cent to 4 per cent for category A and B and C respectively in 1987. Apart from that, the National Land Code was further amended to enable foreigners to purchase residential properties in Malaysia. As a result, condominium and luxury apartments fetched a relatively high price compared to the 1986 and 1985 figures. Overall, the residential property market had yet to recover from 1985's downturn. The market was still very dull and buyers still remained cautious to enter into any transactions.

In 1988, the residential sector in the Klang Valley improved faster than expected. This is due to various policies introduced by the Government in 1987. The total residential transaction increased compared to the mid 1980's figures. However, the prices for the various residential properties fell around 5 per
Figure 3.8

price (RM) (‘000)

year


SST—single-storey terrace
DST—double-storey terrace
Figure 3.9

price (RM)('000)


SST - single-storey terrace
DST - double-storey terrace

cent to 10 per cent in Klang, Gombak, Hulu Langat and certain parts of the Petaling Districts. Lower interest rates and less restricted financial facilities helped to improve the market during this period. In Kuala Lumpur, the total residential unit transactions increased by 32 per cent compared to the 1987 figures. While the prices went up by 1.9 per cent and 5.9 per cent for double-storey terrace houses in Kuala Lumpur.

Various government policies which were introduced in 1987, obviously improved the residential sector's performance in the Klang Valley in terms of price and transaction trends in 1989. Terrace houses dominated the market. The price for low-cost terrace, single-storey terrace and double storey terrace houses more or less remained unchanged. The houses in good locations experienced an increase in prices up to 10 per cent.

The authorities further improved the residential market with incentives for low-cost houses. Such as:

a) Exemption from stamp duty

b) Low-interest rates for mortgages offered by financial institutions
c) Relaxation of the government housing loan conditions for the purchase of low-cost houses, especially for the category 'D' staffs.

d) Permission to withdraw part of the buyers' Employees Provident Fund (EPF) to finance the purchase.

In Kuala Lumpur the number of transactions increased by 19 per cent over 1988. The availability of capital and relatively low interest rates were the more important ones. In addition, the comparatively low currency rates, low inflation, Malaysia's strong economic performance and political stability further boosted the market. Therefore, the demand for condominium, luxury apartments and high priced houses increased and this was mainly from foreigners. 1989 marked a turnaround in some areas with 1 per cent to 18.8 per cent increase in prices of apartments, condominiums, single and double storey terrace houses. Overall in the Klang Valley, the residential market continued to improve with the strong backup from the various government policies.

During 1990, 1991 and 1992 the residential sector experienced tremendous growth in the Klang
Valley especially in Kuala Lumpur, Petaling and Hulu Langat Districts. The total residential transactions improved from time to time since 1990. Apart from that, the prices of the various types of residential units appreciated more than 20 per cent. The condominium, apartments and high priced houses were in great demand either from the local high income earners, expatriates or foreign investors, for investment and speculation reasons. The price of single storey terrace houses ranged from RM 120,000 to RM 150,000 in better residential areas and RM 80,000 to RM 110,000 per unit elsewhere. While for double storey terrace houses in good locations were transacted at RM 160,000 to RM 210,000 per unit.

Overall, the price movements of the houses reflect the upward market trend in the late 1980's indicating property market peak or boom in 1990, 1991 and 1992. Furthermore, huge foreign direct investments (FDI) and steady economic growth were the main reasons behind this appreciation. The price movements of the various districts in the Klang Valley is listed below. Hulu Langat District shows the highest price movements of 5 per cent to 35 per cent in 1992, followed by Gombak District with 2 per cent to 28 per cent, Klang and Petaling Districts with 2.8 per cent to 22 per cent and 16 per cent respectively in 1992.
However, demand slackened during the last quarter of the year. The increase in Base Lending Rate (BLR) coupled with difficulties in obtaining loans for houses priced below RM 100,000 contributed to this and this situation appeared brighter towards year end when the 1993 Budget provided a 1 per cent interest subsidy for financial institutions to maintain the statutory rate of 9 per cent. 92

The residential market in the Klang Valley had been very active since 1989 till the third quarter of 1992. After that period, the amendments under the National Land Code and Foreign Investment Committee (FIC) to the ownership of properties by foreigners to some extent cooled down the market. As a result, the number of house transactions and price appreciation were quite slow. But, the demand for residential properties in the Klang Valley from local buyers was expected to increase due to higher per capita income, buoyant economic growth and strong business confidence. The price movements of the single-storey and double-storey terrace houses in the Klang Valley is shown in Figure 3.10.
Figure 3.10

RM('000).

Year:

SST - single-storey terrace.
DST - double-storey terrace.
3.4 Summary

Overall this chapter basically discusses the main issues pertaining the housing market in the Klang Valley. It begins with the theoretical framework which deals with housing concepts, the micro and macro views, regarding the housing sector and its links to other sectors of the economy. It continued further to the literature review. Here the author examined the impact of the housing investment on the economic impact, backward linkages, the domestic price levels, and finally on skill development in the construction industry. Finally in this chapter, the author analysed the whole housing market in the Klang Valley in terms of its relationship with the national construction sector's growth. Further, the price movements of residential units and residential property transactions were examined. Thus, this coverage is expected to provide a clear scenario pertaining the whole of the housing market's contribution, trends and growth patterns in the Klang Valley.
FOOTNOTES


4. Ibid., p.37.


7. Ibid., p.70.

8. Ibid., p.71.

9. Ibid.

10. Ibid., p.72


14. Ibid.

15. Ibid.


18. Ibid.

19. Ibid.

20. Ibid.


23. Ibid., p. 51.


25. Ibid., p. 86.

26. Ibid., p. 90.

27. Ibid.


30. Ibid., p. 92.


33. Ibid.

34. Ibid.


37. Ibid.


40. Ibid.


45. Ibid.

46. Ibid.

47. Ibid.


51. Ibid., p.81

52. Ibid.


55. Ibid., p.93.


59. Ibid.

60. Ibid.


63. Ibid., p.13-9

64. Ibid., p.13-62.


66. Ibid., p. 7.


68. Ibid., p.20.


70. Ibid.


72. Ibid., p. 120.

73. Ibid., p. 120.


75. Ibid., p. 123.


77. Ibid., p. 143.


82. Ibid., p. 13-37.

83. Ibid.


85. Ibid., p. 13-5.

86. Ibid., p.13-47.

87. Ibid.


90. Ibid.


92. Ibid., p. 13-8.