

CHAPTER 4

REAL ESTATE STRUCTURE ANALYSIS

The purpose of this chapter is to compare the structure of real estate business between economic increasing and economic decreasing, and to find what are the major factors that can affect this business. This study consists of 2 parts, as following:

Part 1: Study the trends of Rayong's GPP, the growth of industrial establishment, the employment status in Rayong, the amount of home loans, the interest rate, the number of new project launched in Rayong, and the trend of prices on housing.

Part 2: Analyze how these factors, namely (1) Overall economy in Rayong, (2) Employment, (3) Bank loans availability, (4) Interest Rate, and (5) Price of houses can affect on number of new projects launched. Number of new projects represents the status of real estate business. More new projects launched means stronger housing market, oppositely less new projects launched means the weaker of housing market.

4.1 TIMESCALE USED FOR ANALYSIS

Using Gross Provincial Product of Rayong as a base for analysis. It is found that 1992-1994 was a period of economic increasing, and from 1994 onward was a period of economic decreasing. There was an announcement of Thai bath on July 2nd, 1997, and since then the beginning of economic crisis in Thailand has begun.

4.2 PART ONE: Study the Trends of Factors Related to Real Estate

4.2.1 Overview of the Rayong Economy

In the last 10 years, Rayong had amazing economic growth. The economy strongly expanded into two digits in 1989-1992 and fell to 8-9 percents in 1991-1995 (see Table 4-1). The main factors that boosted the rapid growth were its location at the Eastern of Thailand; pipeline facilities for transporting the natural gas and oil from the Gulf of Thailand; and government policies to develop the country from agriculture to industrialization, Eastern Seaboard.

The economic growth was driven mainly by petrochemical industries, and supported agriculture industries. The major factors contributing to the economic growth were (Bank of Thailand, 1989-1999);

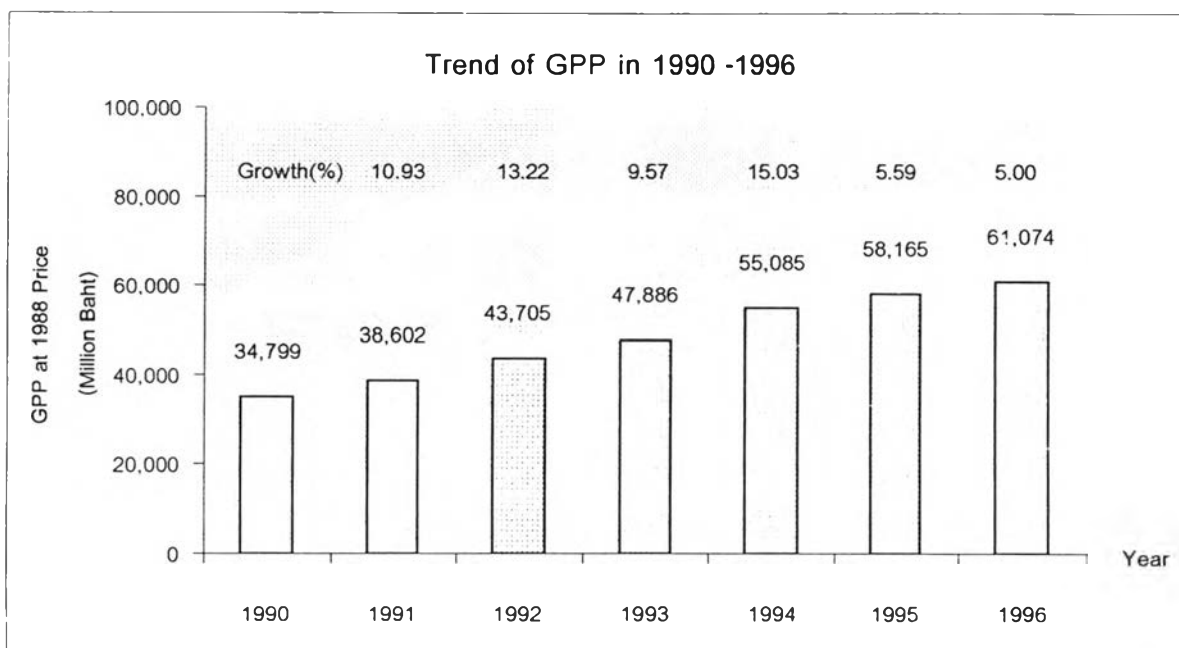
- (1) continued strength of the export sector,
- (2) the strong growth of private investment to expand production capacity,
- (3) the acceleration of public investment in infrastructure,
- (4) increase in income due to high commodity prices and wages adjustment in the private and public sectors, and
- (5) favorable weather which boosted agricultural output

Table 4-1: Selected key economic indicators**Source: (1) National Accounts Division, NESDB & Bank of Thailand****(2) Rayong Provincial Industrial Office**

	1990	1991	1992	1993	1994	1995	1996
GPP ⁽¹⁾ at 1988 Price (Million Baht)	34,799	38,602	43,705	47,886	55,085	58,165	61,074
GPP Growth (%)		10.93	13.22	9.57	15.03	5.59	5.00
Number of Industrial Establishers ⁽²⁾	481	537	629	699	766	848	988
Growth Rate (%)		11.64	17.13	11.13	9.59	10.70	16.51
Number of Employees ⁽²⁾	14,161	18,669	25,132	29,161	39,282	47,062	59,967
Growth Rate (%)		31.83	34.26	16.03	34.71	19.81	27.42

4.2.2 Gross Provincial Product of Rayong

From Figure 4-1, GPP was sharply increased with the growth rate of 13.22% in 1992. Both Thai and foreigners has invested their businesses in Rayong. This was due to the launches of many industrial establishers in Rayong, leading to high employment. When the people were employed, meaning that they had purchasing power. The demand for houses was increased. The demand types were for own-occupants, for speculative and some bought for second-homes. The property market was very boom then.

Figure 4-1: Trend of GPP in 1990-1996

Until 1995 and 1996, the GPP started to decline with the growth rate of 5.59% and 5.00% respectively. This economic decreasing caused many people to lose their jobs, and hence this reduced the housing purchasing power. The housing market was weakened.

4.2.3 Employment

From Figure 4-2 and 4-3, the growth rate of employees went as high as 34.71% in 1994, this was the result of more industrial establishments in Rayong with the growth rate of 9.59%. this was the time which the Board of Investment (BOI) announced new rules on provincial investments furthest from the capital. Rayong, which fell in the Zone Three categorized by being more than 200 kilometers away from Bangkok, had benefited from this. Rayong is one of the few provinces in Thailand that has infrastructure in place to handle huge inflow of investment. Therefore, due to the growth economy in Rayong, resulting people to be employed, and hence, this incomes increased.

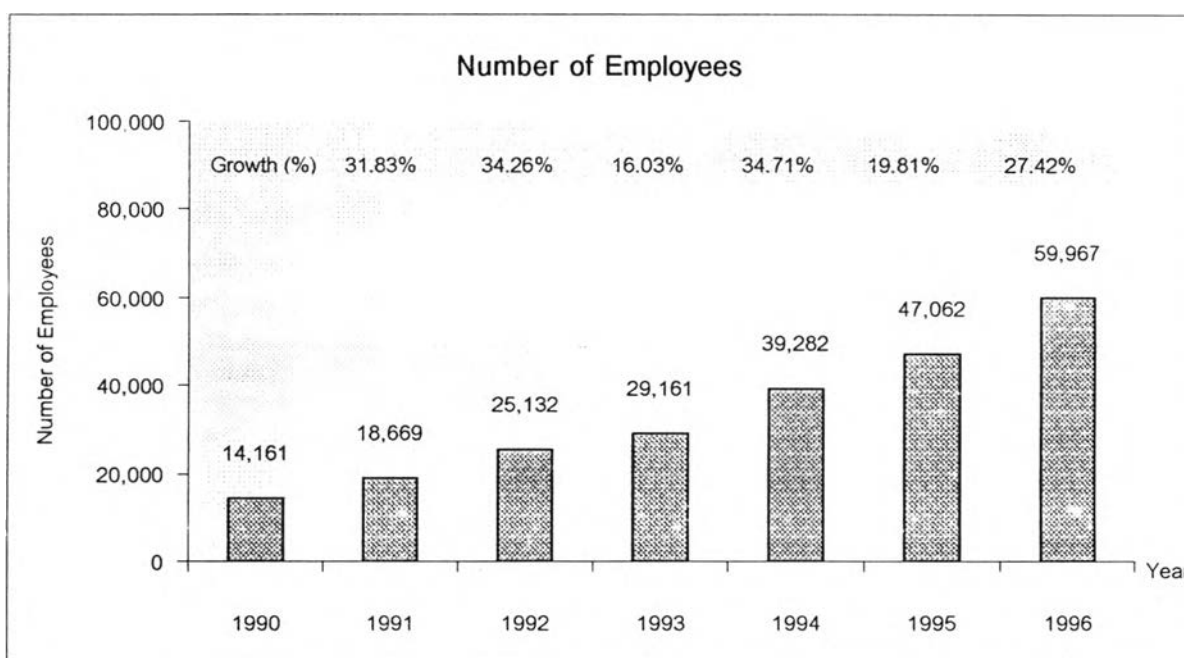
A significant factor in the decision to take on a mortgage is the actual and expected incomes. This factor is particularly important in the first – time buyers market. There has been considerable discussion about the ways in which expenditures on housing changes with income. Some say that as the income increases a greater proportion of it is devoted to housing, other say opposite. Certainly, it is difficult to judge who is right and who is wrong. What we can say with some confidence is that as real income increases, the followings will tend to happen :

- 1) Some people will tend to marry earlier than they would if income were lower.
- 2) Some single people will decide to set up their own households, either by themselves or sharing with other single people, and the number doing so will tend to be greater than if income were not as high.
- 3) Some married people will tend to have larger families.
- 4) Some elderly people who cannot easily manage themselves may be in a better position to employ help, and so to continue as separate households.
- 5) Some people who already have houses will seek second house.
- 6) Some people will decide to spend more on housing by moving to a bigger house, or in a different locality.
- 7) Owner-occupants may be more willing to keep their houses in good condition, because they can more easily afford repairs. Others will feel that since they can afford a new house there is no point in continuing to patch up the old one.

The above is not an exhaustive list of the consequences of a change in incomes, but it does illustrate that not all of the forces work in the same direction. On balance, however, it is likely that rising income will mean a rising total expenditure on housing. Putting it in another way, it is likely that as income rises the demand for housing also rises. Moreover, the demand for housing activity may also increase if families decide to increase the proportion of their incomes that they will spend on housing. Also, an increase in family size will obviously create a strong pressure to increase expenditure on housing in order to get a larger house. This period was said to be a boom period of housing industry.

Figure 4-2: Trends of Number of Industrial Establishers in Rayong

Source: Rayong Provincial Industrial Office

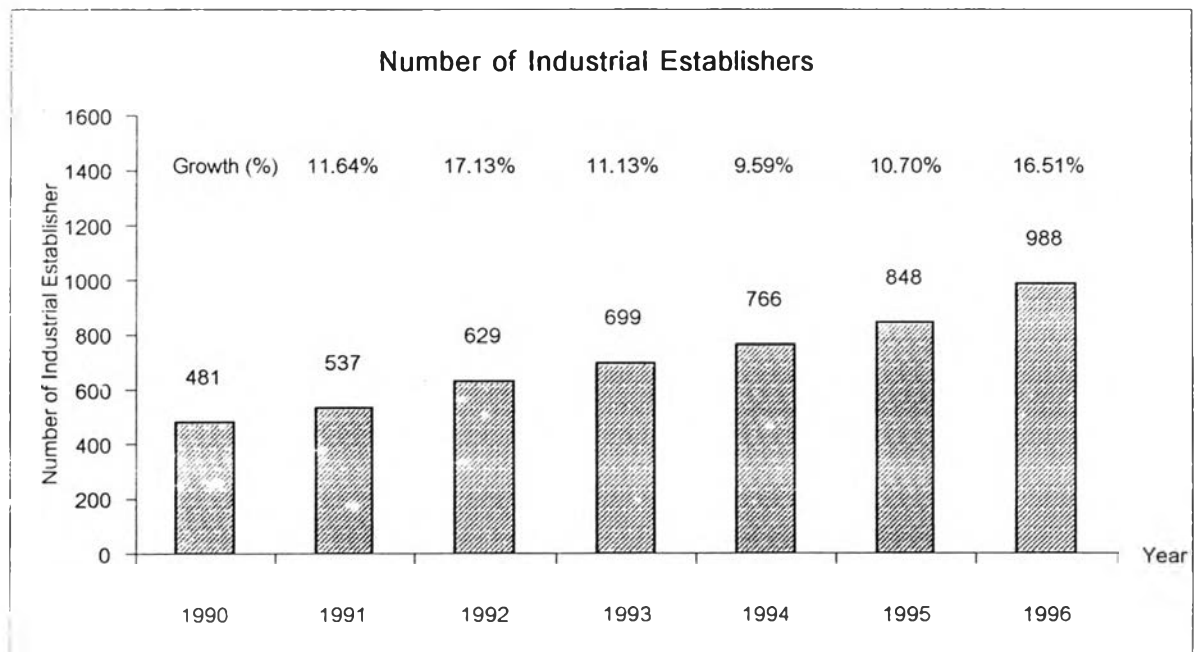


Obviously, when the GPP of Rayong declining to 5.59% in 1995, the number of employment was also decreased to 19.81% in the same year. The contraction of employment had led to no income earning. Hence, the purchasing power reduced and

the speculative demand disappeared. The housing market faced a problem with a weaken market.

Figure 4-3: Trends of Number of Employees in Rayong

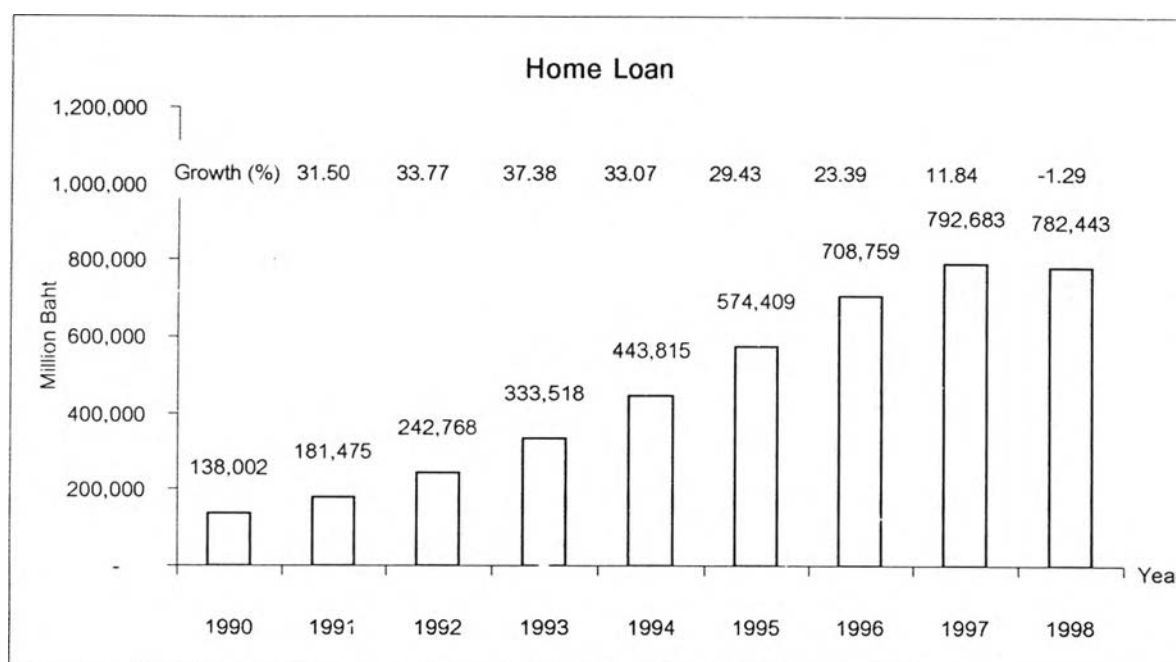
Source: Rayong Provincial Industrial Office



4.2.4 Home Loan

Home loan is a consumption loan as it is a loan for those people who want to have a house of their own. Therefore, the growth of home is related to the economic.

From Figure 4-4, since 1990 until 1994 the economy had sharply increased. This was because of the foreign capital was flying into the country through Bangkok Banking Facilities (BIBF), further propping up the property sector. The bank and financial institutes had a high liquidity. They were competing to lobbying the home loan markets.

Figure 4-4: Trend of Home Loan in 1990-1998**Source:** 1998 Annual Report of Housing Finance Association (Thailand)

The growth rate of home loan had an average of 33.93% per year since 1990 till 1994. The reduction of interest rate and the easing of bank policies had led to an increment of housing purchasing power.

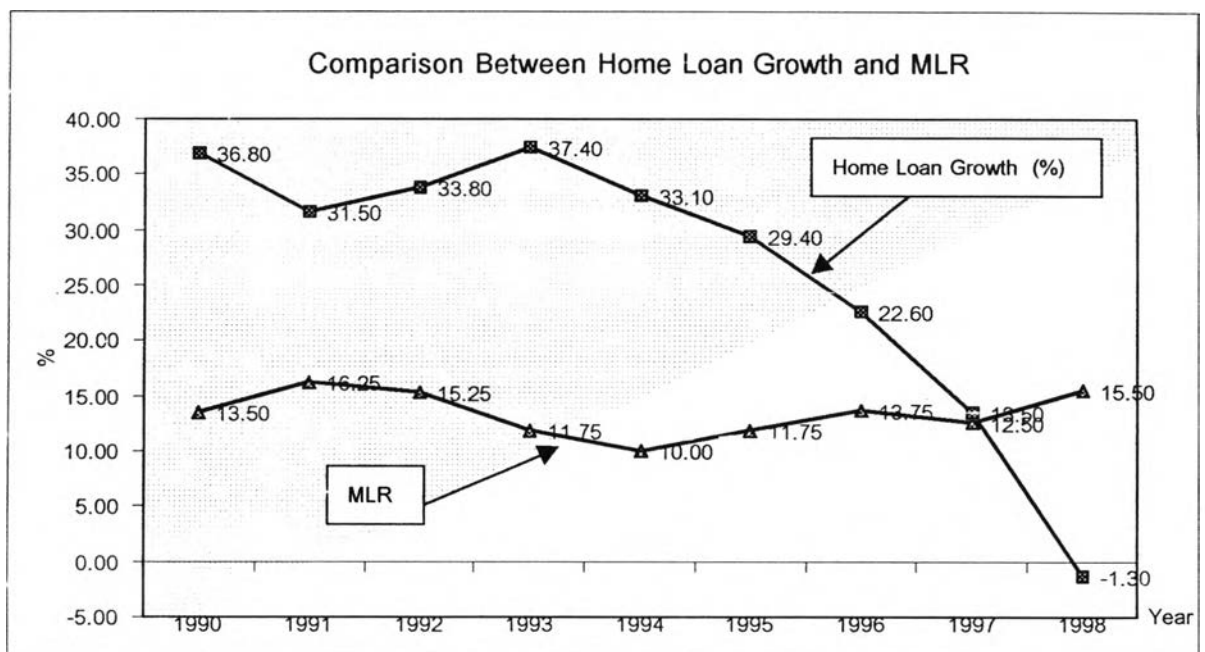
On the other hand, since 1995 the home loan began to decline with the growth rate of 29.43% and continuously declined to -1.29% in 1998. This was because the banks and financial institutes had a problem with liquidity tightening. Hence, the interest rate increased and the banks/financial institutes were stricter on providing loans. This effected the purchasing power to be lower as the consumers could not get loans from the banks or if they could they would have to pay more due to high interest rate.

Therefore, if the consumers could not get loans or can get but less than 70 percents of the selling price, the housing market would be weaken.

4.2.5 Interest Rate

Figure 4-5: Trends of Home Loan in 1990-1998

Source: 1998 Annual Report of Housing Finance Association (Thailand)



During 1992-1994, the interest rate had been reduced continuously from 15.50% in 1991 to 10% in 1994. This was because the banks and financial institutes were very well liquidated. Therefore, in order to gain more market share on home loan, one important tool was to reduce the interest rate. From Figure 4-5, it can also be seen that the growth of home loan was indirectly proportional to the interest rate.

However, in 1995 and 1996 the interest rate had been raised to 11.75% and 13.75% respectively. As the interest rate increased, the purchasing power then decreased.

4.2.6 New Project Launches

New projects refer to those which are newly launched into the market. In addition, each new phase of a project which opened for sale at a different time was classified as a newly launched project for the survey at that time.

Using data in Chapter3, the following figures can be summarized.

Table 4-2: New Project Launches in Rayong

Source: Agency For Real Estate Affairs, see Chapter 3

Year	1993	1994	1995	1996	1997	1998
Value of Development (Million Baht)	3,501	10,735	13,712	7,277	3,708	1,936
Total Units Offered for Sales	5,023	14,625	16,208	8,355	4,177	2,120
Price Changes on Housing	0.697	0.734	0.846	0.871	0.888	0.913
New Housing Projects Launched						
- Number of Projects	9	40	58	26	8	5
- Number of Units	765	5,711	5,948	2,620	683	309

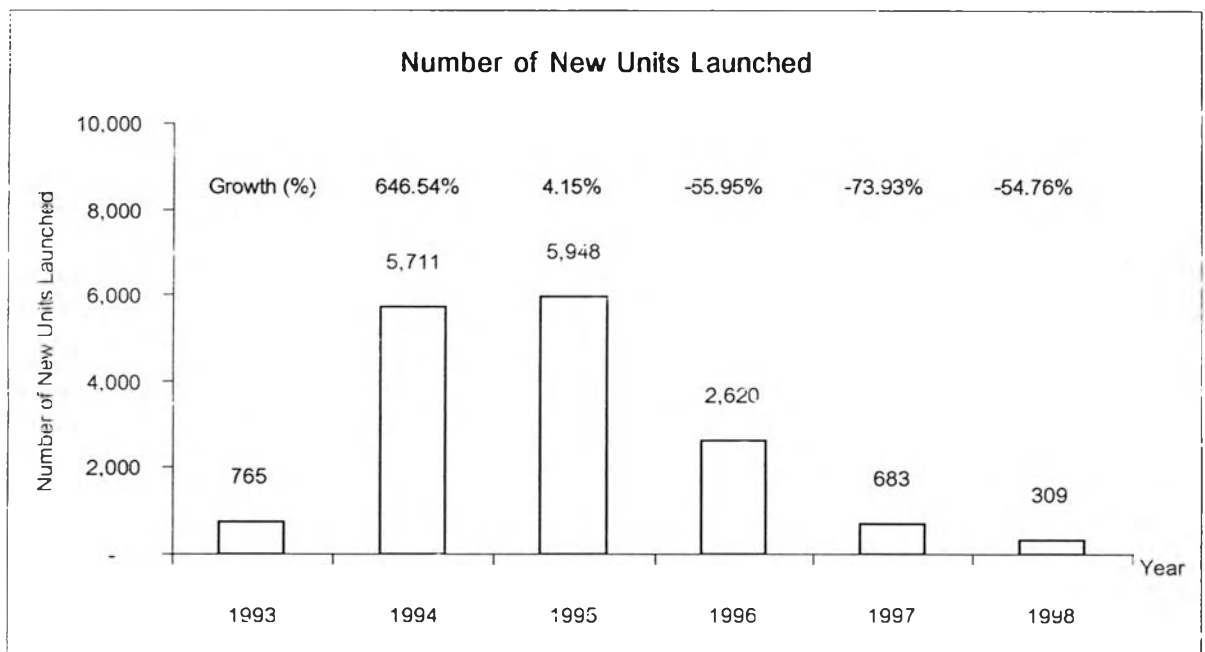
From Figure 4-6, it can be seen that the housing market was very strong as its growth was 646.54% in 1994 or three times more than previous year. With the economic increasing, the high capital investment, the high employment, had led to the higher purchasing power. Many people then jumped into this property business as they all agreed that this business would give a high return. Therefore, the more new project launches the better the status of real estate at that period.



However, due to economic decreasing in 1995 and 1996, many developers seemed to disappear from the housing market. Credit lines for property projects were cut, the developers could not get investment loans from the banks or financial institutes. The housing market in this period was said dampen.

Figure 4-6: Trends of New Units Launches

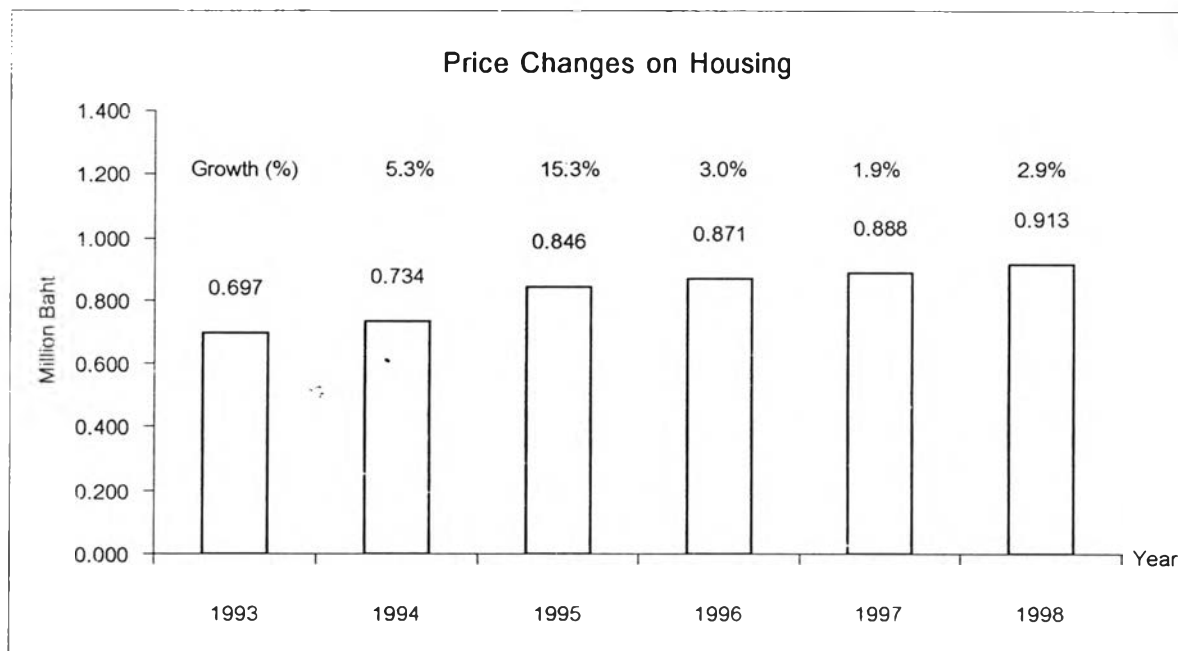
Source: Agency For Real Estate Affairs, see Chapter 3



4.2.7 Price Changes on Housing

From Table 4-2, the following prices on housing can be plotted as following:

Figure 4-7: Trends of Price Changes on Housing



From Figure 4-7, in 1995, the housing price was as high as 0.864 million baht (with the growth of 15.3% from previous year). This was due to many investments had flowed into Rayong. Therefore, the land price was increasing, and people tended to buy houses both for own-occupants and for speculative. As the demand increased, the price also increased.

However, the housing price was still continuously increased but in a small step growth (with an average of 2.6% per year since 1996-1998). This partly because of increasing of construction material cost. The developers could not increase the price to earn as much profit as they used to because there was a high competition in the housing market. The sale strategy which now used is price-cutting.

In conclusion, if the housing price increases while the income remains the same, then the housing affordability or purchasing power will reduce. Oppositely, if the price decreases and income stays constant, then this will stimulate the housing purchasing power.

4.3 PART TWO : Factors Affecting Real Estate Business

Number of new project launches is a measurement of housing industry status. The more investment, the more new project launches, and hence, the stronger the market situation. On the other hand, the less of new projects launches means the weaker the housing market. Therefore, by looking at the trends in earlier section, the major factors affecting the housing market can be summarized as following:

4.3.1 Gross Provincial Product

When the economic increases the banks and financial institutes give loans to the developers. Then there will be new project investment to meet the demand in the market. On the other hand, whenever the economy decreases, the banks will be stricter in providing loans to developers. Since, the developers do not have any source for investments, the number of new projects launches will be reduced.

4.3.2 Employment

When the economic increases, the employment rates will increase, and hence, they will earn more income and gain more purchasing power. Since that the developers will then expand the project or launch the new projects in order to meet the demand in the market. Oppositely, when the economic decreases, the employment rates will decrease, some will be laid-off or some will be paid less. The consumers will have to be cautious in their spending. The purchasing power for houses will be reduced as houses are categorized as postponeable consumption product. Hence, the chance of developers to open more new projects will be small.

4.3.3 Home Loans

When the economic increases, the banks and financial institutes have good liquidity, they will complete in loans lending and be more flexible with the bank loans policies, the housing affordability will then be increased, therefore they will start purchasing houses. Hence, the developers can launch more new projects. However, in an opposite direction, when the economic decreases. The banks do not have a good liquidity, they will be stricter on providing loans. Hence, the consumers cannot find any loans, the demand will be faded from the market. The developers will not launch the new projects unless these banking policies have been fixed.

4.3.4 Interest Rate

When economic increases the banks and financial institutes have good liquidity, resulting a decreasing of interest rate. With this decrement of interest rate will stimulate the purchasing power in the market. Also for those who already purchased houses, with reduction of interest rate will stimulates them to transfer the houses faster. However, when the economic decreases, the interest rate will be raised and, hence the demand in the market will also decrease. Developers will postpone their investments in new projects.

4.3.5 Housing Price

When economic increases, the demand for housing will increase. Hence, the developers will take this opportunity to increase the prices. If the construction costs remain the same, the higher prices mean the higher profits. The developers will again jump into this business as a high profit expected. On the other hand, when the prices are stabilized or tend to decrease, the developers will not be attracted to come into this business due to the lower profit margins. Hence, there will be no new project launches at this period of time.