

An Examination of the Housing Market in Crete, Greece.

A research from a perspective for the developer

By

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Abstract

This report examines the housing market in Crete. It identifies that house prices are determined by the *supply of housing*, the *supply of finance*, the *demand for housing*, and *confidence* rather than by the construction cost. The increasing wealth in Europe, and the increased accessibility with more frequent and cheaper flights attributed most to the increased demand for second homes in Crete. Demand for both first and second home markets in Crete is high and is expected to remain high. From 2000 to 2005, housing stock increased in Crete by 8.2% to meet the demand, while the output of new dwellings increased by 78.4% during the same period. The multi-European clientele of the property market in Crete is making it a multi-source market with potential benefits of high stability and strength. On the other hand, the frequent changes in the planning system create problems to the developers. In the wake of increased foreign involvement in the market, Greek developers would have to form alliances while investing in better marketing strategies. The retirement market, made particularly appealing by retirees' tremendous purchasing power, is quickly becoming the hot housebuilding category.

Word Count: 10,870

Keywords: Crete, housing market, second home market, speculative developer, housebuilder

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1. Introduction

1.1 Crete and the housing market

Crete is the largest island in Greece, the fifth largest in the Mediterranean Sea and it is the most southern part of Europe after Cyprus. Its population is around 600,000 which is 6% of Greece. The island is sparsely populated with more than 1/3 of the population concentrated in the three major cities Heraklion (or Iraklion, the capital of the island), Chania and Rethymnon. The main industries that provide income to the island are Agriculture and Tourism.



Figure 1.1: Greece and Crete (marked)

Currently an increase in demand for housing is observed in Crete and market professionals believe that there will be a further growth of demand in the future. Housing Developers have started building or currently planning a large number of developments with various sizes. On the other hand there is yet to be a proper research on the market in order to identify the opportunities and threats that they may exist while many developers by rushing to catch the competition have already fallen

into traps. The purpose of the report is to research the housing market in Crete from a perspective for the developer in order to define qualitatively the demand for housing.

1.2 Identification of Problem

During the last decade there is a significant and stable increase in Demand for Housing in certain areas of the island, especially the northern coast and increasingly for secondary homes (holiday homes) and retirement homes. This has been mainly driven by the touristic development of the northern coast of the island. Crete is considered an established holiday destination, attracting holiday makers from around the world, mostly from UK, Germany, the Netherlands and then from Ireland, Austria and France.

The demand for housing arises from national immigrants and tourists. It is directed in three distinctive areas; mostly to Urban areas and Rural areas of touristic interest and secondary to rural areas of agricultural interest. The combinations are shown in Figure 1.2.1.

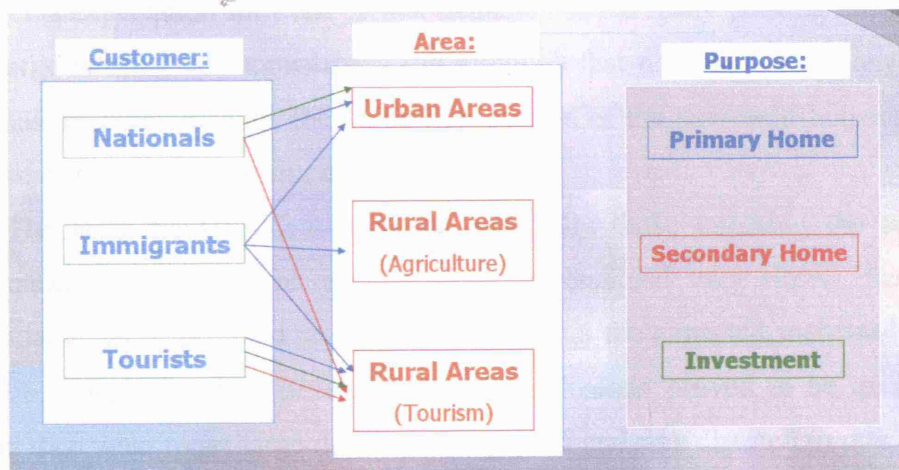


Figure 1.2.1: Customers of the housing market, areas and purpose of demand for housing

For the property developer, though two sub-markets are of interest (Figure 1.2.2): National customers in Urban Areas, and Foreigners (Tourists) in Rural Areas of touristic interest.

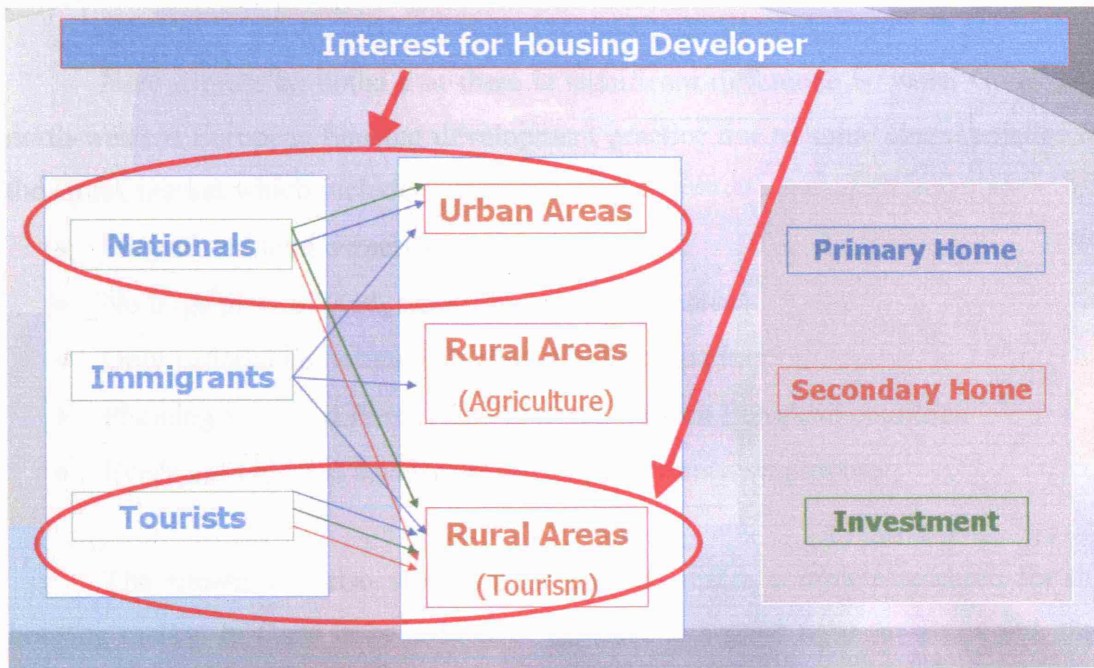


Figure 1.2.2: Areas and customers that interest the housing developer

Market analysts believe that the demand for housing will increase in the future, and especially the demand from foreigners purchasing properties as holiday and/or retirement homes.

This expectation for even greater demand has led many housing developers to create large housing developments. But although that now there are many large in scale housing developments, the biggest proportion of the new-built housing market still consists of smaller housing developments.

The large housing developments, especially those targeting the secondary home market, did not do as well as expected and sell very slow. Developers miscalculated, as it has been proven afterwards, that the expected increased demand would be enough for their developments. The demand proved to be qualitatively different than what those large developers expected and was directed to other smaller *new-built* housing development and also to '*old*' Houses.

This miscalculation could be explained partly by the inexperience of those housing developers. Most of them are large Construction Firms which after the end of large infrastructure projects of the last decade and the end of the Olympic Games and having identified the need to diversify have moved to housing development without having any prior experience or the necessary expertise in housing market issues.

Here it must be noted that there is significant difference between Greek and north-western European housing development practice due to some characteristics of the Greek market which include:

- Fragmented land ownerships
- No large plots of land, especially near urban areas
- Only national government & church own large plots
- Planning System different than in north-western European countries
- Every individual is usually the developer for his own property

The situation is also worsened by the fact that a complete research for the housing market in Crete does not exist. So there is a great need for a research that will enable the developer to respond correctly to the needs of the market.

1.3 Research Objectives

The objectives of this thesis will be firstly to establish the determinants of housing demand in Crete and identify any possible qualitative market trends.

Then the demand for new-build houses will be researched qualitatively, identifying what factors and features will affect the demand for new-build over old houses and eventually how to increase demand for new-build houses.

Next in this thesis, the role of internal (e.g. supply) and external (e.g. government, economic) factors to the market will be examined and what their effect might be on market prices and demand. Finally issues affecting the developer will be identified and discussed.

1.4 Structure of the report

Before investigating the housing market it is important to examine its fundamental elements in Chapter 2 by reviewing recent literature. Then the determinants of the second home market, the actors and roles in a private new housing project, and planning regulations and taxation relevant to housing are identified.

In Chapter 3, the methodology followed for the research of the housing market in Crete is analysed.

Chapter 4 includes the survey of the housing market in Crete giving information on demand, house prices and construction of new dwellings while the results from a questionnaire survey for potential buyers are presented later in the same chapter.

A critical discussion of the survey of the housing market and issues that arise for the developer follows in Chapter 5, while the thesis ends with the conclusions, recommendations, and fields of possible further research in Chapter 6.

2. Literature Review

The fundamental elements of any market, as the property market, are price, demand and supply and their analysis is important in order to understand the market environment. In this chapter the mechanisms of house prices, demand and supply are examined with an individual mention to the determinants of the second home market. Also, the actors and roles of house development, as well as, Greek legislation, taxation and planning regulations that affect the developer are identified.

2.1 House Prices, Supply and Demand

The price of a property is defined in Case & Wachter (2004) as *fundamentally equal to the present discounted value of all future services (ie housing) that will be provided by that property while it is owned by its current owner, plus the present discounted value of the price at which the owner will be able to sell the property in the future*. Generally, it is expected that there will not be rapid changes in the value of housing services, but contrary the future market price might change considerably. Case & Wachter (2004) again, define the market price of any property as *the highest price at which the owner would be able to find exactly one willing buyer for that property at that time*. Fluctuations of this market-clearing price are possible over time as availability of particular types of housing services, cost of finance, or expectations for prices among other market participants change.

Meilke (2001) identifies the key determinants of house prices and groups them in four sets of factors shown in Figure 2.1.1: the *supply of housing*, the *supply of finance*, the *demand for housing*, and *confidence*.

However Figure 2.1.1 is not exhaustive and the factors shown have different significance in different locations at different times.

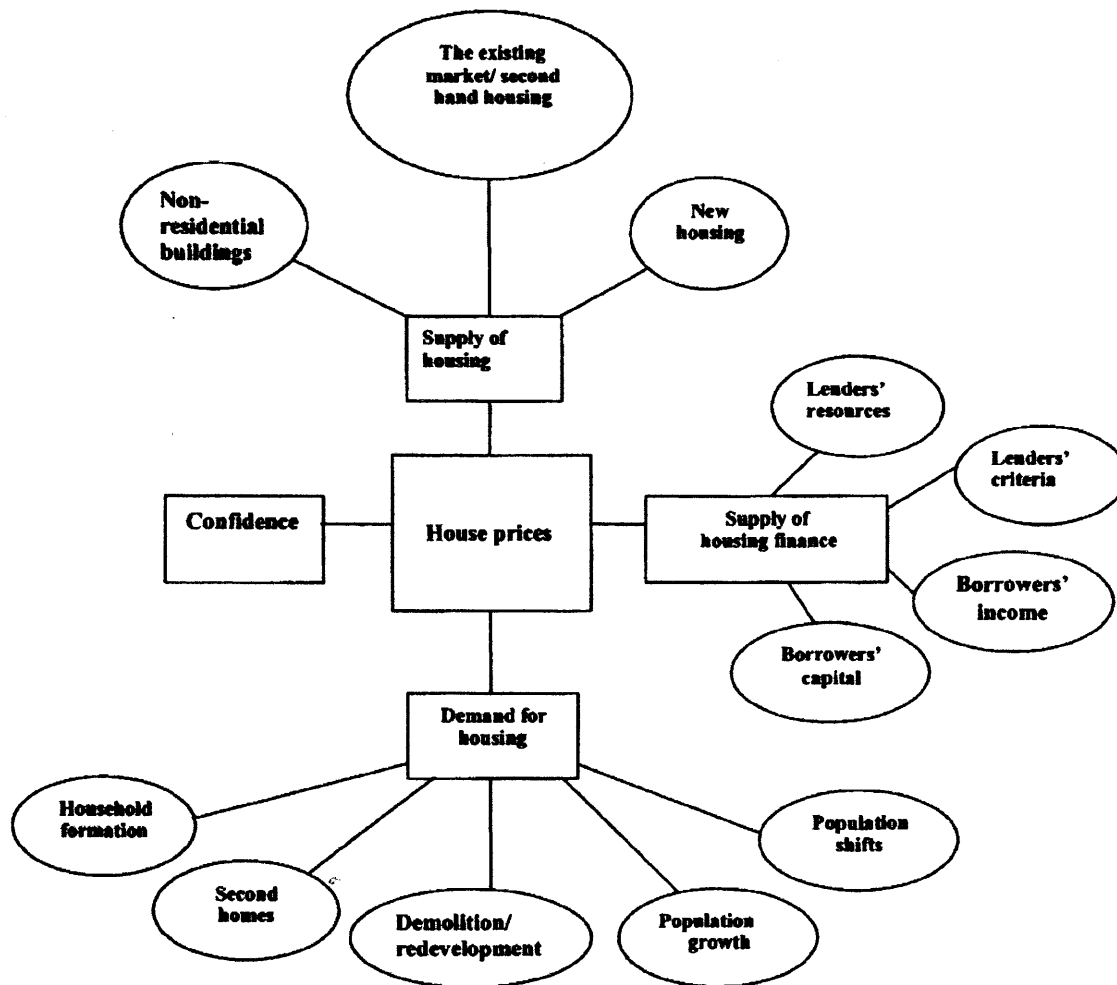


Figure 2.1.1 Key determinants of house prices (Source: Meikle 2001)

It is argued that existing stock of dwellings influences strongly the supply of housing while new additions have a rather smaller effect. However, as Wilkinson (1973) points out, the individual attributes of a dwelling play an important role in the selection process. When purchasing a dwelling, households are assumed to know their broad requirements and would select from dwellings which appear to offer these services in the appropriate proportions. Most of the stock in Crete was built decades ago while quality standards have increased since then resulting in many dwellings being undesirable. Available data for the island suggest that new housing completions represent 2% of the existing stock while 40% of housing transactions were for resale dwellings (RICS European Housing Review 2005). The demographic and social changes in Greece and Europe lead to increased demand for dwellings of higher quality than before and with 9% of unused housing stock in Crete it is obvious

that individual attributes of dwellings play indeed an important role in the housing market.

Regarding the supply of housing finance it is believed to be linked to the financial circumstances of the average borrowers and to the lending criteria established by the main lending institutions. The last decade through-out Europe interest rates have been falling and the strong competition between lenders lead to very attractive housing financing products. There is evidence that house prices, indeed, are affected by interest rate changes and that the strength and speed of this transmission differ considerably across countries (EOCD Economic Outlook 75, 2004). The impact of interest rates on house prices seems to be both stronger and more rapid in countries with more developed mortgage markets like Australia, Ireland, the Netherlands, the United Kingdom and the United States, as well as Nordic countries and Japan, as compared with most continental European countries. Greece has also benefited from lower interest rates, especially since the country entered the Euro-zone in January 2002 and has boosted the demand.

Housing demand is also affected by the changes in the number of households seeking housing, through natural increases in population, changes in the size of households, regional population shifts (variable) and losses to stock through demolition or redevelopment. Currently in Crete there is a slight rise in the population due to economic immigrants but the effect of demographics is rather low on the housing demand, the average size of households is decreasing but households require more and more spacious rooms, there is a negligible amount of demolitions but there is an increasing number of redevelopments of derelict old traditional houses in the villages. Demand for second homes also has an effect on total demand, especially in Crete where second homes constitute around one fifth of the housing stock and demand for holiday and retirement homes is high.

The fourth factor influencing house prices, confidence, can be affected by events outside the housing market or national economy and can be critical. When there is consumer confidence for future economic conditions, the willingness to borrow more is increased and so is the propensity for spending. Also confidence that future house prices will be higher can lead the buyer into paying higher price for the purchase. According to Garratt (2000), consumer confidence alone can explain up to two-thirds of the variation in annual growth of the house prices and consumer

confidence balances can be used to compile forecasts of house price inflation for up to three quarters ahead.

Generally it could be said that residential property markets tend to track the business cycle, with a tendency for real house price turning points to lag business cycle peaks and troughs (EOCD Economic Outlook 75, 2004). On many occasions in the past, house prices continued to decline in real terms for a few years after output had picked up. Conversely, prices often continued rising during the early part of a cyclical downturn. During the recent downturn, in several countries including the United States, the United Kingdom, Australia, Ireland and Spain, house prices not only continued to rise, but actually accelerated after the output turning point.

Finally, an important observation would be that construction costs are not considered to have an effect on house prices. Meikle (2001) argues that house prices are determined 'top down' by external factors: what people will or can pay (the supply of finance), how much housing is available (housing supply) and whether people want housing (housing demand); prices are not determined 'bottom up' by an aggregation of input costs, including what it costs to build. Although it is clear that housebuilders are concerned about construction costs because, keeping costs down will allow them to pay more for land, provide larger or better housing, or produce higher profits, or some combination of these.

2.2 Determinants of the second home market

The economic literature mostly deals with the first home market, but the second home market and especially the holiday home and retirement home markets are becoming increasingly important components of the housing market in general. This is especially true for the Cretan housing market as Greece for decades now has one of the largest percentages of second homes in Europe (RICS, 2005), and in 2002, holiday homes constituted 17% of Crete's total housing stock.

According to RICS European Housing Review 2005, in understanding the scale and location of second homes important part is played by differences in national and personal preferences, lifestyle fashions and climate and local physical geographies.

Gilbert (2001) observes that increasing wealth in recent years generated by rising incomes and buoyant equity and housing markets and falling unemployment

has resulted in very strong underlying consumer confidence in personal financial circumstances, and as second homes are considered income-sensitive leisure goods, their demand has significantly increased.

Another reason for the increase of second homes is the falling of transport prices, increasing choice and frequency of air and sea transport has provided people with the means of moving around the country and abroad relatively quickly and cheaply. RICS European Housing Review 2005 identifies the enormous impact of the routes of low-cost airlines on property values.

An important determinant of second homes abroad is the right to buy property and live in another EU country which was enabled after 1991 and has initiated the development of the holiday and retirement home market in Crete.

2.3 Housing Development – Actors and Roles

This report investigates the housing market in Crete from the position of a developer. To be able to do that it is important to define the developer. A developer is the actor who initiates and has total control over a project (Ive 2000). Such projects could be either speculative or non-speculative, depending on whether the production precedes the sale to the building owner or not.

In a private new housing project there are various actors and roles. Those are shown in Table 2.3.1. The Former landowner would sell the land to the Speculative Developer/housebuilder who in turn would develop the site. A speculative developer (1) who would undertake speculative projects could be a speculative housebuilder or a real estate firm. The speculative housebuilder would initiate, design and carry out the building work, while a real estate firm would initiate the project but the design and the building work would be carried out to contract from a professional service firm (4) and a specialist contractor (2) respectively. Then the finished product would be sold to the final user – the household.

Roles	Actors				
	(1) Speculative Housebuilder/ Developer	(2) Specialist contractor	(3) Former landowner	(4) Professional service firms	(5) Household
	Real Estate Developer or House-builders (could be part of a DCG ¹)	Single trade contractor	Agricultural or industrial landowner	Architect, structural and civil engineers	
Developer	Buys land ahead from (3). Obtains planning permission for a design scheme. Develops site.		Sells the plot of land		
Designer	Chooses mix of dwellings and sizes from own set of standard types			Designs site layout, carries out technical specification for (1)	
Builder	Project manages and pays the specialist ('trade') contractors. Buys some materials and components	Work to contract for (1), either on supply-and-fix or labour-only contract. Employ building workers. Buy some materials			
Owner					Purchases house on completion or from plan from (1) and maintains the property
User					Consumes the property by dwelling in it.

Table 2.3.1 Actors and roles in a private new housing project, Crete (adjusted from source: Table 7.3a, Ive 2000)

A significant difference of Greece with other EU countries is that there is only but an insignificant amount of social housing. All housing supply is produced by the private sector. Another important difference with many other countries is that in Greece not only speculative developers and housebuilder attribute to the production of new dwellings; any household can play role (1) in Table 2.3.1, by becoming the developer and having a house built in an owned plot by contracting the building work to specialists. According to RICS European Review 2005, around a third of Greek

¹ Diversified construction group

owner households acquired their home by doing this. There are signs though that speculative development, especially for second-homes, has been increasing fast.

2.4 Legal Background for a Property Developer

2.4.1 Property purchase

Greece is a member state of the EU and since 1992 EU citizens and firms can freely purchase properties anywhere in Greece without any restrictions. For non-EU citizens and firms there are certain restrictions that depend on the nationality and a 'per case' allowance for property purchase must be issued from the ministry of foreign affairs. 'Western world' nationals are usually granted the permission although the procedure is lengthy.

For any property to be sold there must be a topographical plan included in the contract, showing the plot with any existing buildings and the neighbouring property owners; this is obtained through registered civil engineers or surveyors. This is deemed necessary by the law because not all regions of the country have a Land registry yet, including Crete, as Greece is currently undergoing the process of establishing a Land Registry. In areas that do not yet have a Land Registry, ownership of property is based on and secured by the contracts which are filed in the local Registry of Mortgages.

2.4.2 Property taxation

Taxation is an important element of the housing market. Various different property taxes exist in Greece, but in 2006 there will be a major reform of the property taxation system.

Currently there is no Capital Gains Tax for property transactions in Greece. Real Estate tax is between 0.025% and 0.035% for estates with assessed value below 243.600 Euros, while for estates exceeding the price of 243.600 Euros the tax is 0.3% to 0.8%. Stamp duty is at 11%-13%. VAT for new-built homes is 0 while for repairs it is 19%. There is no wealth tax associated with the purchase of a property and inheritance tax is between 0%-65%

The Tax Assessed Value is the estimated monetary value of a property according to the Greek tax authorities. As a general rule, a property's Tax Assessed value is significantly lower than its purchase price and so it is common practice to use the assessed value in the property contracts in order to pay fewer taxes.

The new property taxation laws go into effect January 1st, 2006. These include a Capital Gains Tax for properties purchased after January 1st, 2006. The percentage of tax owed will vary depending on the length of time a property remains in one's ownership. More specifically according to the draft law:

- For properties purchased after January 1st, 2006, and remaining in one's ownership for 0-5 years: Capital Gains Tax 20%
- For properties purchased after January 1st, 2006, and remaining in one's ownership for 5-15 years: Capital Gains Tax 10%
- For properties purchased after January 1st, 2006, and remaining in one's ownership for 15-25 years: Capital Gains Tax 5%

There is also speculation, but not an official announcement yet, that a VAT of 19% will be applied to all new-built homes with planning permissions issued from January 2006 onwards, replacing the existing Stamp Duty. Additionally there is going to be an upwards re-evaluation of the Tax Assessed Values of properties. The minimum increase is expected to be 30% of the existing values.

2.4.3 Planning Permission System

The planning permission system in Greece is based on the 'General Planning Guidelines' applied on centrally-defined 'local planning zones'. It is a prescriptive planning system with strict rules and regulations applicable everywhere in Greece, but rather complicated and outdated.

What a developer can build depends on the shape, size and location of the plot of land. There are two broad categories of lands: (a) Land inside the 'town-plan' and (b) Land outside the 'town-plan'

(a) A plot of land is considered inside the town-plan if it is inside the limits of a city, town, village or settlement with an official planning zone, or if it is inside the limits defined by dwellings existing prior to 1923 in a village or settlement without an official plan. How much can be built on a plot is defined in the first case by the local town-plan and in the second case by the local Planning Authority. For the second case the building factor² is usually 0.6-0.8 and a maximum of two floors can be built. Additionally for cities, towns, villages and settlements existing before 1923 there is an additional zone of 500 metres radius from the town-plan limits where a plot with frontage on a municipal³ or national road and area from 2,000 sq.m. to 4,000 sq.m. can build a maximum of 200 sq.m. Before the permit is granted a formal approval from the Forestry Office is required that the plot is not part of a forest.

(b) A plot of land outside the town-plan is a plot outside any planning zones. The plot has to be at least 4,000sq.m. to be granted a planning permission. Here, there are two sub-categories: (i) Plots with an area between 4,000 and 100,000sq.m. and (ii) plots larger than 100,000sq.m.

(i) Plots with an area between 4,000 and 100,000sq.m:

- For a plot of 4,000 sq.m. the maximum allowable built area is 200sq.m.
- Plots with area between 4000-8000sq.m. can build:
Total built area = $[200 + (\text{Plot Area} - 4000) \times 0.02]$ sq.m
with the maximum allowed built area being 280sq.m.
- Plots with area from 8,000sq.m. and more can build:
Total built area = $[280 + (\text{Plot Area} - 8000) \times 0.01]$ sq.m
with the maximum allowed built area being 400sq.m.

Again, before the permit is granted a formal approval from the Forestry Office that the plot is not considered forestry is required.

ii) Plots larger than 100,000sq.m. can apply for a private planning zone to create a settlement. In this case fifty percent of the plot must be used for communal areas while the remaining will have a building factor of 0.4. The application of such a

² Total allowable built area = (building factor) x (plot area)

³ road connecting villages, towns or cities

permit is required to include an environmental consequences report and permissions from the Forestry office and the Archaeological office. The permit currently costs from 1 to 3 million euros and takes approximately four years to be accepted.

Building is not allowed in certain areas of Crete which are considered Archaeological Zones, Forests or 'protected areas of natural beauty'.

Also it is required by the law that if during the construction phase objects or ruins of archaeological interest are found on site, the works must stop until the archaeological office has conducted a check and gave approval for the continuation of works; a situation not uncommon for housing projects in and around the major cities.

Finally all planning permissions, except in case of a private planning zone, are valid for 4 years within which construction must start.

3. Research Methodology

For the qualitative research of the housing market in Crete a number of different methods were implemented and various sources were used in order to gather sufficient qualitative and quantitative information. Data was obtained by various publications, a series of interviews was made with estate agents and developers operating in Crete to acquire their insights into the market, and a questionnaire was distributed to potential buyers to determine qualitatively the demand.

3.1 Acquisition of information from Publications

Firstly a number of publications was used in order to obtain statistical data for the population fluctuations, the construction of new dwellings, information on demand, supply and house prices, as well as macroeconomic and microeconomic data and insights that might influence the housing market. The most important of these were:

- The newspapers 'To Symvolaio' (Property related magazine inside newspaper Kathimerini) and Naftemporiki (Greek financial newspaper). These provided insights into the Greek economy and generally the housing market in Greece. Some articles regarding planned large housing developments and the housing market in Crete were used but unfortunately they were only 'scratching' the surface rather than being analytical.
- Housing Market overviews from the European Central Bank and RICS. The ECB's *Structural Factors in the EU housing Market* and the RICS *European housing market review* for 2004 & 2005's provided insights of the condition and the factors that affect the individual European housing markets and consequently Greece. Unfortunately there is no specific mention for Crete, but some insights into the holiday home market of Spain and generally the second home market were useful.
- The National Statistical Service of Greece and Eurostat from which statistical data were obtained including population, new dwellings for the period 2000-2004 and consumer prices.

3.2 Interviews with estate agents and developers

Unfortunately most of the aforementioned publications ignore or ‘scratch’ only the surface of issues regarding the housing market in Crete, so it was required to acquire information from actors inside the market. Interviews were conducted, in person or through phone, with estate agents and developers from various parts of Crete:

- **Heraklion Prefecture:**
 - Estate Agent operating in and around Heraklion City
 - Managing director in an estate agency and small-medium property developer/housebuilder operating in and around the touristic resorts Malia, Sisi, Elounda and Agios Nikolaos (speculative projects)
 - Marketing Manager in medium-large speculative property developer firm which is a joint-venture of Cypriot and Cretan property developers.
 - Senior member of large national contractor responsible for a speculative property developer subsidiary.

- **Lasithi Prefecture:**
 - Estate Agent operating in Agios Nikolaos and Elounda

- **Rethymno Prefecture:**
 - Estate Agent operating in and around Rethymno City

- **Chania Prefecture:**
 - Estate Agent operating in most of the Prefecture of Chania.
 - Speculative Housebuilder (mostly speculative projects)

During the interviews a standard set of questions was asked, slightly changed to suit each interview accordingly, and was usually followed by a free conversation regarding issues affecting developers and the housing market in Crete. A typical set of questions can be found in Appendix I.

Due to the lack of previous relevant research specifically for Crete and lack of reliable official data for property transactions this research had to heavily rely on

personal views of the estate agents and the developers. Also many data regarding prices acquired from them are empirical and difficult to cross-reference scientifically.

3.3 Questionnaires to customers

In addition to interviews with actors on the 'supply side' of the market, it was important to acquire information directly from the 'demand side'; the customers. For this purpose a questionnaire for prospective buyers was prepared using knowledge acquired from the interviews and the publications. The questions were carefully selected in order to give a clear profile of the customer, determine the factors that affect the choice of a property and evaluate the current condition of the housing stock.

Currently the most vibrant section of the housing market in Crete and the one that is of most interest for the developers is the holiday-and-retirement home market. The section is currently driven by foreign customers and the questionnaires had to be distributed in touristically developed areas with a vibrant holiday and retirement home market, in order to receive responses mostly from foreign customers. Areas which fulfilled the above criteria were Agios Nikolaos and Malia and the questionnaires were handed out to customers from two estate agents in the aforementioned areas for the first two weeks of August.

Fifty two (52) questionnaires were returned, so the sample must be treated as informative only and cannot be considered as statistical data, although the results seem to be representative of the actual customer demand.

The results can be found in paragraph 4.6 and a sample of the questionnaire can be found in Appendix II.

The information extracted from the questionnaire survey will be valuable in determining what form the future housing projects should have in order to be attractive to more customers.

4. Survey of the housing market in Crete

4.1 An overview of the housing market in Crete

Most of the population and most of the touristic activity is located on the north coast of the island. This is also reflected in the infrastructure that exists on the north: better roads, four large hospitals in the major cities, two international and one national airports and 4 major harbours. As it is expected the activity of the housing market is also located mostly on the north coast. The housing market can be divided into two sub-sections: the *First home Market* and the *Holiday and Retirement home market*.



Figure 4.1.1: Map of Crete

First home market's activity is mostly in and around the urban centres of the island and more specifically in Heraklion (Iraklion), Chania, Rethymno, Agios Nikolaos, Sitia and Ierapetra. The market is driven primarily by Greek customers who live-and-work there and buy-to-occupy, and in smaller scale from Greek customers who buy-to-rent out.

Holiday home market and retirement home market in Crete appear to have mostly the same characteristics: (i) The areas of interest are mostly the same non-urban areas where people go for holidays, (ii) younger owners of holiday homes might be considering spending more time in their newly acquired property as they get older (iii) customers currently driving the market are mainly from abroad and (iv) there is no specific distinction between those two markets in term of the property types except in the case of small holiday apartments which don't sell in the retirement home market. All customers want to buy-to-occupy and there is only a small minority

who might occasionally rent-out the property with short-term contracts. As it is noted in the RICS European housing review 2005, ‘the fortunes of second home and retirement housing markets are closely entwined’.

Crete is one of the wealthiest parts of Greece and housing demand for first home has been high for many decades as people were moving from rural to urban areas and recently because of demand for dwellings of higher quality. The higher quality is delivered by new housing development. In Figure 4.1.2 Greece has the second highest average floor area of new dwellings in EU-15.

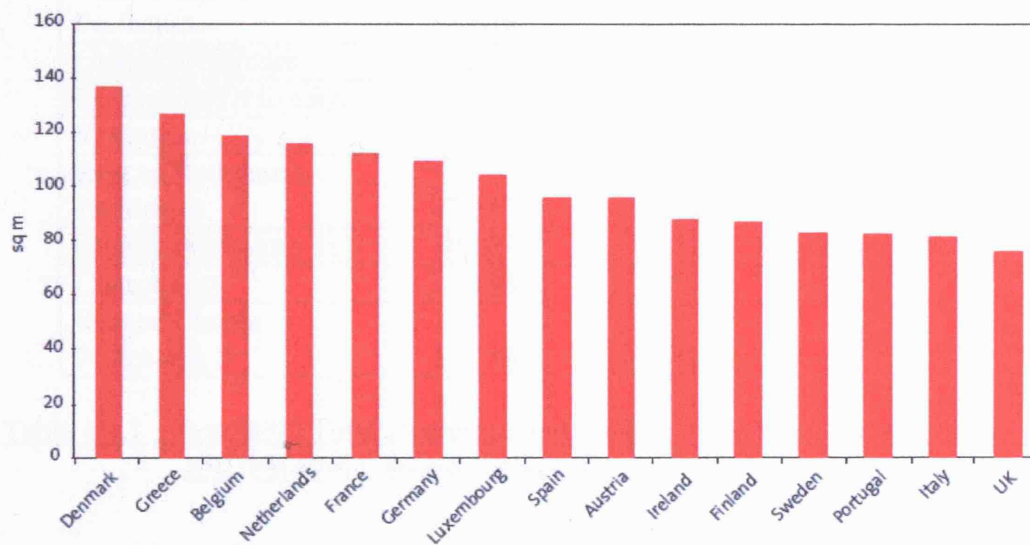


Figure 4.1.2 Average floor area of new dwellings (Source: RICS European Housing Review 2005)

Crete has a large number of holiday homes making up 17% of the total housing stock (Table 4.1.1). Demand for holiday homes in Crete has been increasing at a constantly high rate, even though surprisingly, compared to the holiday-home market in other countries, there is a lack of large housing developments and foreign investments. There is a significant demand in every part of Crete, other places more and other less. The fact that is clear now is that the prospective buyers are interested in holiday-homes with garden, preferably of small total build area from 75sq.m. to 100sq.m. rather than villas. The market has both Greek and foreign customers depending on the area. Many buyers from abroad are moving towards the lowest priced solution of purchasing a traditional stone-built house, probably in bad condition, with the intention of restoring it. Foreign buyers are mainly from the UK,

the Netherlands and Germany, and secondly from Austria, France, Italy and lately also from Russia.

	Total Dwellings	Distribution of dwellings	Holiday Homes	Holiday Homes/ Total Dwellings
Crete	335,440	100%	57368	17%
Heraklion Prefecture	154,779	46%	21000	14%
Heraklion City	68,103	20%	-	-
Rest of Heraklion Prefecture	86,676	26%	-	-
Lasithi Prefecture	54,379	16%	13856	25%
Rethymno Prefecture	46,055	14%	8873	19%
Rethymno City	18,742	6%	-	-
Rest of Rethymno Prefecture	27,313	8%	-	-
Chania Prefecture	80,227	24%	13639	17%
Chania City	27,188	8%	-	-
Rest of Chania Prefecture	53,038	16%	-	-

Table 4.1.1 : Year 2002 Total Dwellings and Holiday Homes per geographic region and prefecture (Source: National Statistical Service of Greece)

New housing in Greece is produced by builders or developers who buy the land, build (or sub-contract) dwellings, and offer the finished product for sale. A property development takes the form of one (or various) blocks of apartments or various houses with similar quality standards built together on the same site. They may share certain facilities such as a garage area or a garden in the case of apartment blocks, while in case of terraced or single household dwellings each unit has its own facilities but sometimes share a common swimming pool. The sale of dwellings starts from-plan –usually attributing for 30% of sales- often before construction work begins and continues until all dwellings are sold usually around the time of completion of the dwellings. A site is therefore on the market over an extended period of time, from 12-24 months on average. There are usually dwellings of different sizes at each site. Potential Greek buyers mostly visit sites and collect information directly rather than going through estate agents while potential buyers from abroad go mostly through estate agents.

The output of new dwellings in Crete has been increasing continuously from 2000 till 2005 as it can be seen in Tables 4.1.1, 4.1.2, 4.1.4, 4.1.5 and 4.1.6. In the five year period the output of new homes has been increased by 78.4% (Table 4.1.7) while the increase of the total housing stock during the same period 8.2%. The output seems to be slowing down and stabilizing at around over 2.2% of the total housing stock; a rather good figure for the developers. As a comparison, current output in UK is less than 1%.

1/2000-12/2000	Total New Dwellings	Change in New Dwellings from previous year	Total Dwellings	Distribution of Dwellings
Crete	4389	N/A	323,809	100%
Heraklion Prefecture	1650	N/A	150,371	46%
Heraklion City	698	N/A	66,107	20%
Rest of Heraklion Prefecture	952	N/A	84,264	26%
Lasithi Prefecture	703	N/A	52,627	16%
Rethymno Prefecture	743	N/A	44,382	14%
Rethymno City	537	N/A	17,590	5%
Rest of Rethymno Prefecture	206	N/A	26,792	8%
Chania Prefecture	1293	N/A	76,429	24%
Chania City	614	N/A	25,467	8%
Rest of Chania Prefecture	679	N/A	50,962	16%

Table 4.1.2 : Year 2000 New Dwellings and Total Dwellings per geographic region and prefecture (Source: National Statistical Service of Greece)

1/2001-12/2001	Total New Dwellings	Change in New Dwellings from previous year	Distribution of new Dwellings	Total Dwellings	Distribution of Dwellings
Crete	5209	19%	100%	329,018	100%
Heraklion Prefecture	2080	26%	40%	152,451	46%
Heraklion City	925	33%	-	67,032	20%
Rest of Heraklion Prefecture	1155	21%	-	85,419	26%
Lasithi Prefecture	745	6%	14%	53,372	16%
Rethymno Prefecture	783	5%	15%	45,165	14%
Rethymno City	529	-1%	-	18,119	6%
Rest of Rethymno Prefecture	254	23%	-	27,046	8%
Chania Prefecture	1601	24%	31%	78,030	24%
Chania City	763	24%	-	26,230	8%
Rest of Chania Prefecture	838	23%	-	51,800	16%

Table 4.1.3 : Year 2001 New Dwellings and Total Dwellings per geographic region and prefecture (Source: National Statistical Service of Greece)

1/2002-12/2002	Total New Dwellings	Change in New Dwellings from previous year	Distribution of new Dwellings	Total Dwellings	Distribution of Dwellings
Crete	6422	23%	100%	335,440	100%
Heraklion Prefecture	2328	12%	36%	154,779	46%
Heraklion City	1071	16%	-	68,103	20%
Rest of Heraklion Prefecture	1257	9%	-	86,676	26%
Lasithi Prefecture	1007	35%	16%	54,379	16%
Rethymno Prefecture	890	14%	14%	46,055	14%
Rethymno City	623	18%	-	18,742	6%
Rest of Rethymno Prefecture	267	5%	-	27,313	8%
Chania Prefecture	2197	37%	34%	80,227	24%
Chania City	958	26%	-	27,188	8%
Rest of Chania Prefecture	1238	48%	-	53,038	16%

Table 4.1.4 : Year 2002 New Dwellings and Total Dwellings per geographic region and prefecture (Source: National Statistical Service of Greece)

1/2003-12/2003	Total New Dwellings	Change in New Dwellings from previous year	Distribution of new Dwellings	Total Dwellings	Distribution of Dwellings
Crete	7195	12%	100%	342,635	100%
Heraklion Prefecture	2462	6%	34%	157,241	46%
Heraklion City	1133	6%	-	69,236	20%
Rest of Heraklion Prefecture	1329	6%	-	88,005	26%
Lasithi Prefecture	1115	11%	15%	55,494	16%
Rethymno Prefecture	1237	39%	17%	47,292	14%
Rethymno City	844	35%	-	19,586	6%
Rest of Rethymno Prefecture	393	47%	-	27,706	8%
Chania Prefecture	2381	8%	33%	82,608	24%
Chania City	906	-5%	-	28,094	8%
Rest of Chania Prefecture	1475	19%	-	54,513	16%

Table 4.1.5 : Year 2003 New Dwellings and Total Dwellings per geographic region and prefecture (Source: National Statistical Service of Greece)

1/2004-12/2004	Total New Dwellings	Change in New Dwellings from previous year	Distribution of new Dwellings	Total Dwellings	Distribution of Dwellings
Crete	7832	9%	100%	350,467	100%
Heraklion Prefecture	2658	8%	34%	159,899	46%
Heraklion City	1385	22%	-	70,621	20%
Rest of Heraklion Prefecture	1273	-4%	-	89,278	25%
Lasithi Prefecture	1107	-1%	14%	56,601	16%
Rethymno Prefecture	1237	0%	16%	48,529	14%
Rethymno City	721	-15%	-	20,307	6%
Rest of Rethymno Prefecture	575	46%	-	28,281	8%
Chania Prefecture	2771	16%	35%	85,379	24%
Chania City	1119	24%	-	29,213	8%
Rest of Chania Prefecture	1652	12%	-	56,165	16%

Table 4.1.6 : Year 2004 New Dwellings and Total Dwellings per geographic region and prefecture (Source: National Statistical Service of Greece)

1/2000-12/2004	Change in Housing Stock	Change in yearly production of New Dwellings
Crete	8.2%	78.4%
Heraklion Prefecture	6.3%	61.1%
Heraklion City	6.8%	98.4%
Rest of Heraklion Prefecture	6.0%	33.7%
Lasithi Prefecture	7.6%	57.5%
Rethymno Prefecture	9.3%	66.5%
Rethymno City	15.4%	34.3%
Rest of Rethymno Prefecture	5.6%	179.1%
Chania Prefecture	11.7%	114.3%
Chania City	14.7%	82.2%
Rest of Chania Prefecture	10.2%	143.3%

Table 4.1.7 : Period 1/2000-12/2004 Change in Housing Stock and Change in yearly production of new dwellings per geographic region and prefecture (Source: *National Statistical Service of Greece*)

4.2 Housing market in the Prefecture of HERAKLION

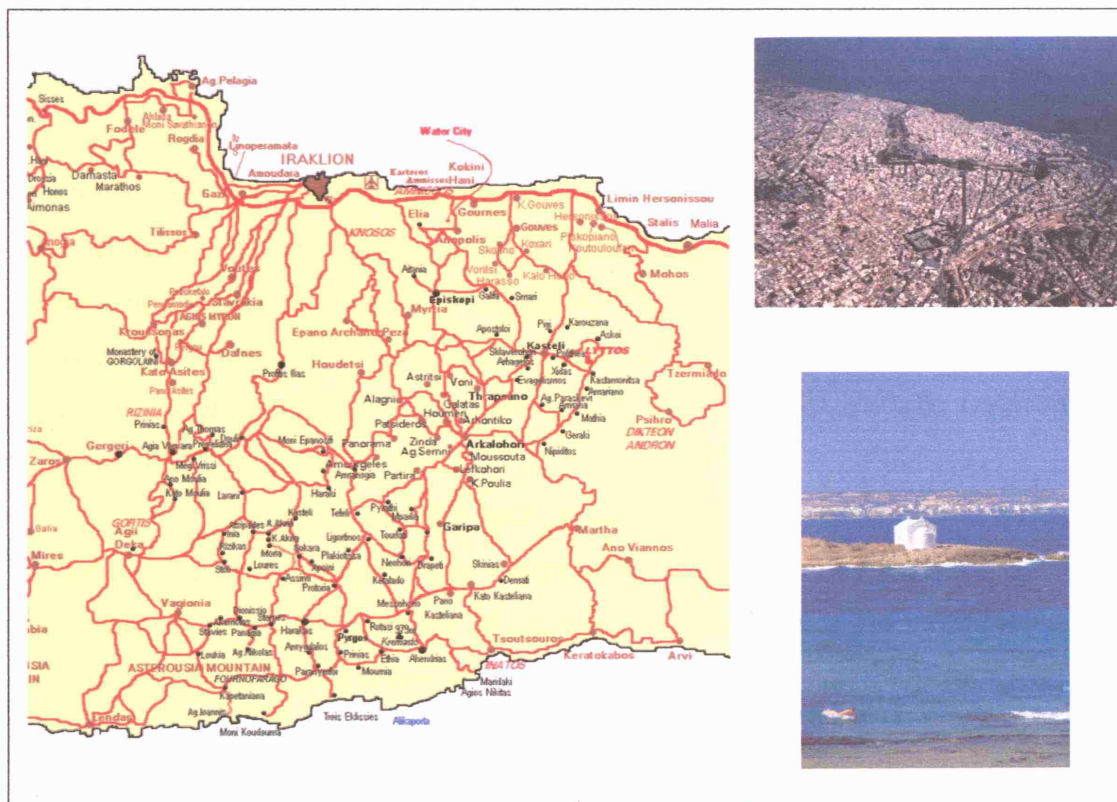


Figure 4.2.1 Map of Heraklion Prefecture. City of Heraklion (upper right) Hersonisos bay (lower right) (Source: www.gnto.gr)

The capital of Crete, Heraklion, is the third largest urban centre in Greece, but the coastal resorts of Heraklion are touristically-developed, attracting thousands of Greek as well as foreign visitors every year. Access to Heraklion is very easy either

by ship from Piraeus (Athens), Thessaloniki or Rodos, either from the airports of Athens, Thessaloniki or Rodos and with Charter flights from April until October from various European capitals. Demand for new homes including holiday homes is significant. This can be extracted by observing the ever increasing output of new housing, which from 2000 to 2005 has increased by 61.1%. In the same period housing stock has increased by 6.8% and 6.0% in the Heraklion City and the rural area respectively. As agents and developers argue, there is strong demand for new housing of higher quality in the city of Heraklion and the increased supply has not lowered the prices.

The prefecture has a significant number of holiday-homes. In 2002, there were 21,000 registered holiday homes which represented 14% of the total housing stock. The prefecture had 264.486 residents in 2001.

The demand for holiday-homes is mostly for areas close to the city of Heraklion. In a distance within an hour-drive or 50km from Heraklion there are many locations which are located on the sea/beach-front or have sea-view from higher ground. The close distance of many of those areas to the City lead many Greek owners of properties there in making the previously holiday-home to their primary home, in order to escape from the concreted urban area. On the east of Heraklion, there is an ever-increasing demand during the last 14 years for holiday and retirement homes in the holiday resorts of Kokkini Hani, Gouves, Anisaras, Hersonisos, Piskopiano, Koutouloufari, Stalis and Malia mostly from foreign customers. In Hersonisos there is the first and, currently, only 18-hole golf course in Crete which opened in 2003.

On the west of Heraklion there is interest in the areas of Ligaria and Agia Pelagia, which have potential for development since they are not as densely populated and build-up as the areas eastern of the city. Demand in this area is mostly from Greeks seeking either to move their first home to a more rural area or to have a weekend home close to the city. Lately the southern coast of the prefecture is starting being developed but due to lack of a good road network and infrastructure it is picking up in slow rates.

Most of the customers in the holiday and retirement market, both foreign and Greeks, are interested for detached maisonettes with garden or even swimming pool and seem to avoid large housing complexes. Buyers can be divided into two categories, those seeking small houses of 60-70sq.m. with 2 bedrooms and those

seeking houses of 80-120sq.m. with 2-3 bedrooms Only a small minority is interested in larger Villas. The foreign buyers are mainly from the UK and Germany, and secondly from Holland, Ireland, Austria, France, Italy and lately Russia.

Many of them are looking for properties at the lower price end of the market for a traditional house in one of the villages close to the city of Heraklion in order to have fast access to the airport and the hospitals; a characteristic example is the traditional village Archanes. In every occasion the construction activity around city of Heraklion is carried out in plots inside the town plan or planning zones, which is a solution that local holiday-home developers prefer in Agia Pelagia, Ligaria, Kokkini Hani and Gouves. For the areas from Anisaras and eastwards until Malia stock within town-plan is limited and expensive due to the high touristic development and developers prefer out-of-plan plots, in order to provide housing at prices affordable to the demand and at the same time yield a good profit.

Average prices for land and dwelling in the prefecture of Heraklion are shown in Table 4.2.1.

Average Price per square meter (Euros)		
Land inside town-plan	Land outside town-plan	Dwellings
250-350	30-45	1,500-2,400

Table 4.2.1 : 2005, Prices per square meter for land and dwelling in the prefecture of Heraklion (Source: *Estate Agents*)

4.3 Housing market in the Prefecture of Lasithi

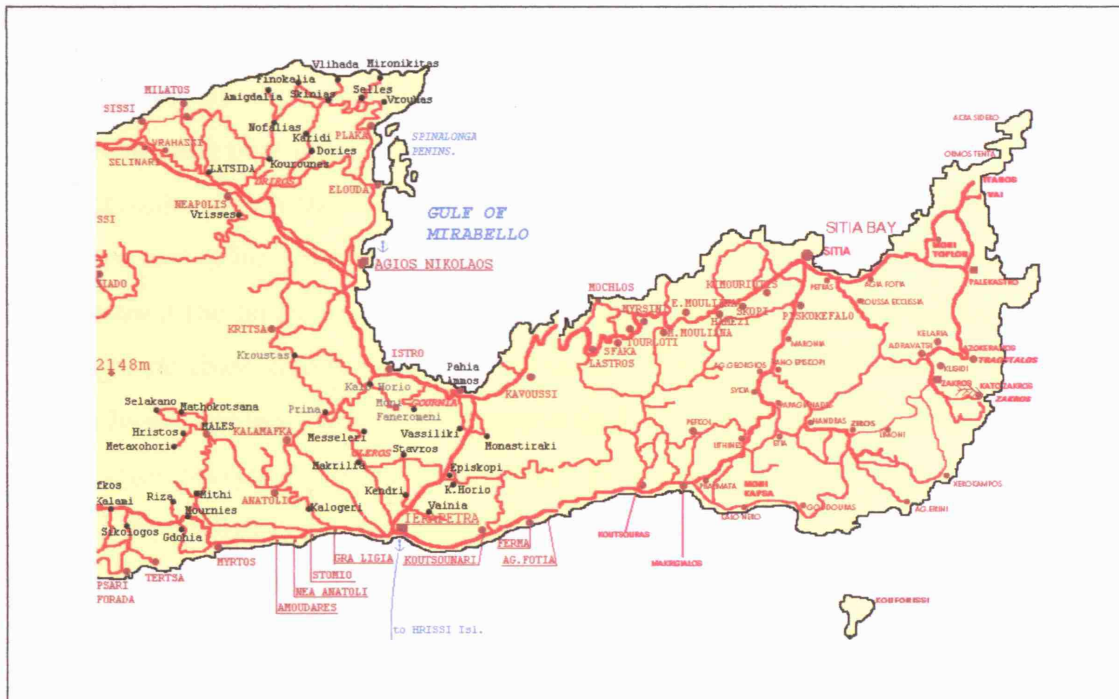


Figure 4.3.1 Map of Prefecture of Lasithi. (Source: www.gnto.gr)

The Prefecture of Lasithi covers the east part of Crete, and includes one of the most famous tourist destinations in Europe, Elounda. In Elounda a visitor can find some of the best and most luxurious hotels in the world⁴. There are thousand of visitors each year to the capital Agios Nikolaos of the prefecture, which attracts many families from Greece and abroad. Access to Lasithi is either by ship or from the Heraklion International Airport. In 2003 the Sitia Airport started operation having flights from Athens, Alexandroupoli and some charter flights during the tourist season but recently there is speculation for upgrading in order to accept more flights. Demand in the housing market is mostly for holiday and retirement homes and land and it is larger from supply because of the combined increased demand from Greeks and foreigners. It is interesting to observe that 25%, one fourth, of the total housing stock is holiday-homes. More specifically, out of 50,234 houses there are 13,856 registered as holiday-homes (Table 4.1.1). The output of new dwellings seems to be slowing by the end of 2004, but it had increased by 57.5% since 2000. The output of new homes is at 2% of the total housing stock.

⁴ Based on international evaluations conducted yearly

The natural beauty of many parts of the prefecture and the excellent beaches are some reasons why a lot of people are interested in buying a property in Lasithi. Again here most of the potential buyers come from England and then from Germany and the Netherlands. It must be noted here that the tourist industry of the island is based nearly totally on customers from those three countries. The demand for maisonettes with swimming pool initially troubled the developers but eventually they now seem to provide units to suit the demand. Still, many buyers prefer to go for the option of buying a plot of land, through estate agents, and then hiring a firm or local builders to construct the house of their own specification. Many of the buyers from abroad prefer to purchase traditional houses in small villages and many seek for properties which have a garden. Most of the demand for holiday-homes in Lasithi is for the area from Agios Nikolaos to Elounda and from Sisi to Milatos. Those areas are the closest part of the prefecture to the Heraklion Airport. The gradual upgrading of the road connection from Heraklion to these areas of Lasithi is a factor helping them become more attractive to buyers. Another area where demand is increasing is Plaka which is just eastern of Elounda, and prices are relatively lower than Elounda. It is evident though that during the last two years property prices have risen significantly.

On the eastern part of Lasithi and around Sitia, a number of large developments is expected. Large property developers from abroad and national contractors have purchased large plots of land and are either in the design phase or the planning permission phase for their developments. Most of the developments have been slowed down by the bureaucratic procedures involved in granting a planning permission. Many plots are subject to checks from the Archaeological bureau and there are certain planning or architectural limitations for new buildings in plots on the coastline. The largest such development is by the British developer Loyalward with a budget of 700million euros. The investment is located on land owned by Church of Crete and planning started in 1998 while the construction, which involves luxury holiday accommodation, golf course, spa, and 1,440 holiday homes, is expected to start in 2006.

The aforementioned activity of developers as well as the new Sitia airport has created value for properties in the eastern area of the prefecture which were previously underdeveloped. Average prices for land and dwelling in the prefecture of Lasithi are shown in Table 4.3.1.

Average Price per square meter (Euros)		
Land inside town-plan	Land outside town-plan	Dwellings
205-350	25-35	1,400-2,200

Table 4.3.1 : 2005, Prices per square meter for land and dwellings in the prefecture of Lasithi (Source: Estate Agents)

4.4 Housing market in the Prefecture of Rethymno



Figure 4.4.1 Map of Prefecture of Rethymno. City of Rethymno (upper right), Moni Prevelis (lower right) (Source: www.gnto.gr)

Rethymno is the least famous of the four prefectures of Crete. However, during the last couple of years there is increased building activity mostly inside the city of Rethymno, while on the sea-side areas near Rethymno there is a boom in output of new dwelling as it increased by 179.1% since 2000.

For the first home market, according to estate agents, there is increased demand in the areas Kalithea, Mastabas, Panepistimiou (University), Rodakino and Agia Galini around the capital. Prices for new-built dwellings in the city range from 1,300 to 1,700 Euros per square meter, while prices for holiday-homes outside the urban area are slightly lower and range from 1,000 to 1,400 Euros per square meter.

Population from 1981 to 2001 increased by 17% leading to increased house prices especially around the city of Rethymno. Still though, Rethymno is a city with

potential for further development, since prices are lower than Heraklion and Chania, while there are many available plots of land in and around the city. The demand for apartments and detached houses can be considered satisfactory, but with potential to increase further; every year more foreigners discover Rethymno and buy properties there. Here, most of the foreign purchasers are from Germany, Sweden and Holland and were looking mostly for traditional properties to renovate in the villages close to Rethymno, while lately demand for new-built holiday and retirement homes is increasing.

The last few years the population of the city seems to be moving towards the edge of the city where there are available plots of land and chooses to live in a more spacious environment. New-built apartments here cost from 1,300 to 1,700 Euros per sq.m. while resale apartments cost from 1,000 to 1,400 Euros per sq.m. It must be noted here that large, old traditional buildings in the city are being sold for prices above 2,500 Euros per square meter.

Plots of land outside of the urban planning zone cost from 30 Euros per square meter, and plots inside the urban planning zone have prices from 300 to 700 Euros per square meter. The most expensive areas are Panepistimio and Atsimopoulo. Except from the area around the city of Rethymno there is also high demand for housing in municipality of Arkadi and in the settlements of Sfakakio and Pigianos Kampos.

Rethymno has 8,873 registered holiday homes, fewer than the other prefectures but from the total of 46,055 houses in the prefecture this represent 19% of the housing stock.

Average prices for land and dwelling in the prefecture of Lasithi are shown in Table 4.4.1.

Average Price per square meter (Euros)		
Land inside town-plan	Land outside town-plan	Dwellings
150-180	20-32	1,600-2,200

Table 4.4.1 : 2005, Prices per square meter for land and dwelling in the prefecture of Rethymno (Source: Cretan Estate Agents)

4.5 Housing market in the Prefecture of Chania



Figure 4.5.1 Map of Prefecture of Chania (Hania). City of Chania (upper right) Balos Beach (lower right) (Source: www.gnto.gr)

The characteristics of the holiday-home market in the Prefecture of Chania is that the majority of the buyers are foreigners and that land prices are lower compared to other touristic areas in Greece. Greek buyers mostly focus on the city of Chania and new-built maisonettes or detached houses. Supply of plots of land inside the city borders is limited, as it for most urban centres. The prefecture has had a significant development over the last few years, based on high touristic activity. Although Chania is a large urban centre, the number of holiday-homes is significant and is 17% of the total housing stock (Table 4.1.1).

The construction of new dwellings in the prefecture is significant and constantly increasing in order to meet demand. Analytically, in 2001 the increase in construction output was 24%, in 2002 was 37%, while rate of increase seemed to slow down in the following two year. In the period 2000-2005 output of new dwellings more than doubled with an increase of 114.3% (Table 4.1.7) and housing output in the beginning of 2005 was 3.2% of the existing housing stock.

Eastern from the city, approximately by 10km, there is the Apokoronas area of the prefecture; here is the centre of the holiday-homes industry. The last six years, foreigners, mostly from Britain, Germany and Sweden are buying ready to move-in houses. Lately there is also interest for plots of land, since land prices remain

attractive despite the steep increase in demand. Typical prices for plots inside town-plan zone start from 140 Euros per square meter while for those outside a planning zone, where 4,000 sq.m. are needed for the plot to be able to get a planning permission, prices vary between 6 and 10 Euros per square meter. The most developed area of Apokoronas is north of Georgioupolis towards Gavalochori and Kokkino Xorio. In this area, prices have risen by more than it was expected as it is estimated that during the last five years around 10,000 foreigners have bought a residence there. Foreigners are mostly interested in detached houses and small housing developments of 10 to 12 units, which is supported by an increased supply of the aforementioned property types from the developers. Those residential developments consist of houses with areas between 70 and 100 square meters and with prices per square meter at the region of 1,400 to 1,800 Euros and being affected by the distance from the sea.

Due to the large demand and the unwillingness of locals to sell their properties, the coastal areas start showing signs of saturation and there is a trend of development of the inland-mountain areas. The mountain ridge between Souda and Kolimbari attracts most of the interest due to its proximity to the beach and the nice sea-view to the Aegean Sea. In this area there are more than 10 developers operating, having foreigners as their target group. It is evident that the expensive prices of sea-side plots can not allow the developers to sell houses in competitive prices so instead the developers have turned to inland Crete. Now, in Kolimbari new, luxury new-built houses are sold for 1,500 Euros per sq.m. Prospective buyers are also interested in the area of Akrotiri where there is a large supply of new-built houses for 1,350-1,500 Euros per sq.m. inside the town-planning zone. Available plots of land for development in this area are diminishing due to the high construction activity, while those that are available have prices from 100 to 180 Euros per sq.m. - depending on the distance from the sea.

West of the prefecture, the area where there is increased demand is Kissamos and most specifically Kasteli. In this area there is not much supply of new-built homes, while there are few available plots of land. Kasteli is the home of wealthy families that own large plots of land, and due to the profits from agriculture during previous decades they hadn't moved towards property development of their own plots. But declining income from agriculture and the potential many saw in the holiday-homes industry lead to a change in the situation and now plots are becoming

available for purchase and development. The construction activity is mostly within the urban planning zone on plots of land whose prices start from 200 Euros per sq.m. Outside the planning zone there is no significant supply of plots for development due to the large plots existing from the past and the current planning regulations that make it difficult to exploit them.

On the south of the prefecture of Chania, the most famous area is that of Sfakia, but the property market has not been developed because the locals refuse to sell houses or land. Contrary, in the villages around Palaiohora there are plenty of properties for sale and demand is significant.

Most of the villages are deserted and foreigners are buying mostly to restore old stone houses for 30,000-34,000 Euros. An example would be the small village of Anidri, where 47 out of the total 50 houses have been bought by Germans. Equally, there is increased demand for old stone-built properties in Gialiskari, in Libadas and in the settlements of the valley of Keramias.

It must be noted here that the cost for the restoration of an old stone-built house is around 1000 Euros per sq.m. and with the average built area of those properties being in the region of 70 to 110 square meters. Most of the old houses don't have a garden, if not a yard, but there are a few exceptions which have plots of land up to 1000 sq.m.

An evaluation of the reason to why foreigners choose to purchase properties in Crete is that it has been advertised abroad for its Climate, the Cretan diet and the hospitality. Additionally the low criminality and the sufficient infrastructure in terms of access through air and sea and the number of Hospitals and Health centres make the foreigners feel comfortable and secure, taking into consideration that most of the buyers are above 40 years of age.

An important indications that housing market is booming at the moment is that in 2001 there were 12 registered agents in the prefecture, today there are 102 registered plus 50 unregistered agents, while housing developers previously interested only in urban areas, currently build more homes for the second home market.

Average prices for land and dwelling in the prefecture of Chania are shown in Table 4.5.1.

Average Price per square meter (Euros)		
Land inside town-plan	Land outside town-plan	Dwellings
80-110	15-25	1,500-1,900

Table 4.5.1 : 2005, Prices per square meter for land and dwelling in the prefecture of Chania (Source: Estate Agents)

4.6 Customer Questionnaire survey results

The final part of the research involved the distribution of questionnaires to potential customers in the tourist areas of Malia and Agios Nikolaos in order to identify the customer profile, determine the factors that affect the choice of a property and evaluate the current condition of the housing stock. This survey was aimed at the holiday-and-retirement home market in Crete. In this chapter the results of survey are listed and analysed.

The first part of the questionnaire involved personal and demographic questions. Most of the potential customers – 68% - where found to be over the age of 40 years old (Figure 4.6.1) while most of them -75%- were married and had more than 2 children -53%. Gilbert (2001) points out that in UK the age group of 45-64 is the most important for the second-home market which is also confirmed in Crete. As expected the largest percentage of potential buyers were from the UK -37%- and the Netherlad -26%- while 16% was from Germany, 11% from Ireland, 5% from France and 5% from Greece (Figure 4.6.4). This seems to be a representative distribution of customers for the holiday-and-retirement home market, and possible only the UK percentage might be a little higher.

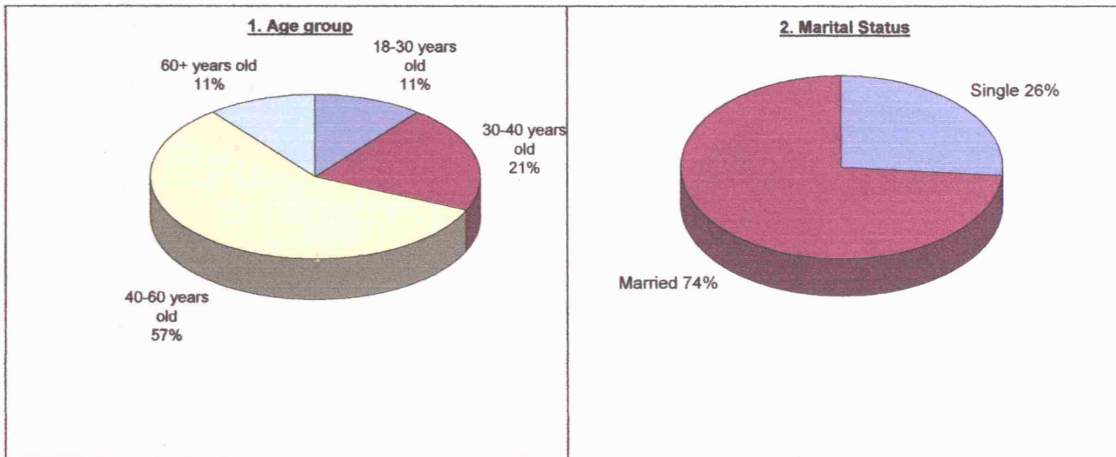


Figure 4.6.1. Age group

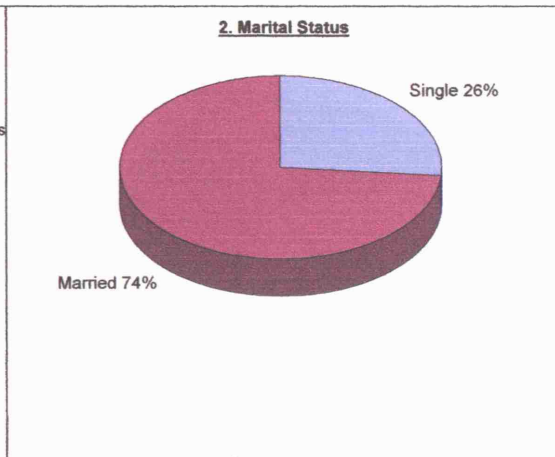


Figure 4.6.2. Marital Status:

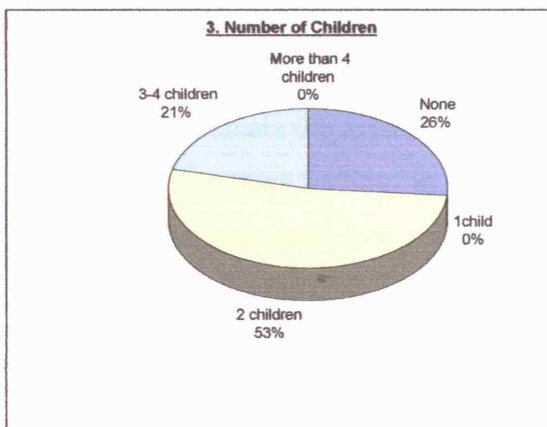


Figure 4.6.3. Number of Children:

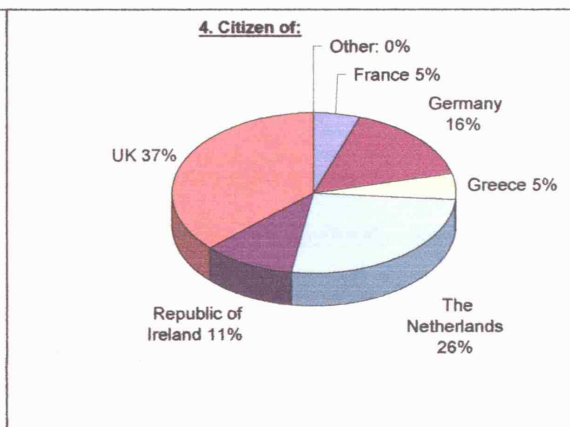


Figure 4.6.4. Citizen of:

An important finding of the survey is that most of the buyers are self-employed -46%- and only 11% are pensioners (Figure 4.6.5). An 11% showed as unemployed and it is assumed that refers to housewives who completed the questionnaire.

From Figure 4.6.6 most potential buyers appear to have a monthly income from 1,2000€ to 2,000€ while an 11% had an income of over 3,000€ per month.

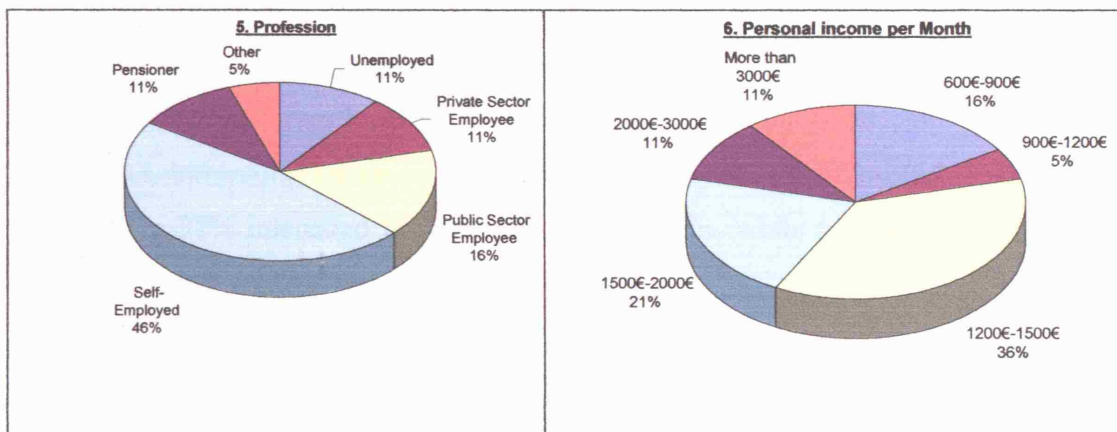


Figure 4.6.5. Profession:

Figure 4.6.6. Personal income per Month (in Euros):

Figure 4.6.7 shows that 73% of customers have visited Crete three or more times, and 42% have visited Crete more than 5 times.

The second part of the survey contained questions to determine the qualitative demand and evaluate the existing stock and services.

An important finding, in Figure 4.6.8 is that 26% of buyers are looking for houses in the medium- low price band -from 80,000€ to 120,000€- and 47% is looking for houses in the medium price band of 120-200,000€. A significant number of buyers -16%- is interested for properties in the medium-high price band of 200-350,000€. None of the participants in the survey was interested for a property over 350,000€, and as agents argue, there are rarely clients interested for large luxury villas.

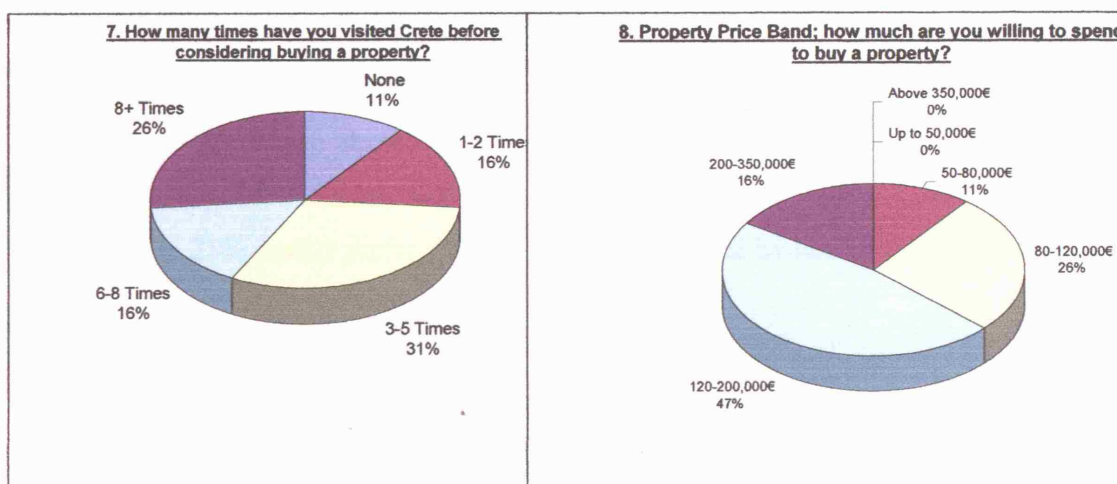


Figure 4.6.7. How many times have you visited Crete before considering buying a property?

Figure 4.6.8. Property Price Band; how much are you willing to spend for the purchase of a property:

Regarding the size of the property, 42% of the buyers are looking for 2-bedrooms while 53% are looking for 3-bedrooms.

An interesting figure is that 42% of the buyers are interested in new-built dwelling, a 37% interested in second hand properties, while a 21% is looking for a traditional property to restore.

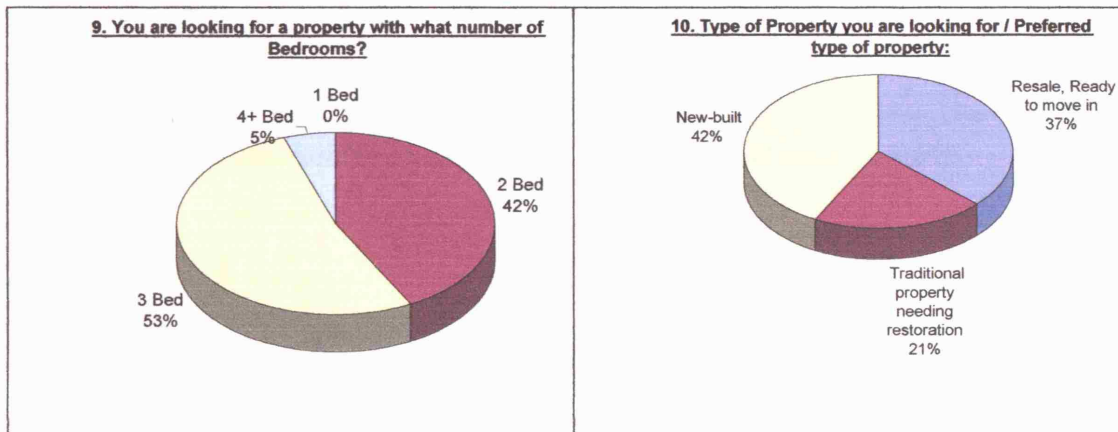


Figure 4.6.9. You are looking for a property with what number of Bedrooms?

Figure 4.6.10. Type of Property you are looking for / Preferred type of property:

The strong ties between the holiday-home and retirement-home markets is shown in figure 4.6.11 where 53% of buyers will use the property initially as a holiday home and then later as a retirement home. Only 21% of buyers will use the property just as a holiday home, while 26% will use the acquired dwelling as their first home.

The survey also showed that most of the buyers prefer a home near the sea (Figure 4.6.12), 47% in a sea-side village and 32% in a more vibrant sea-side holiday resort, while 21% would prefer a house in the, untouched by tourism, inland villages.

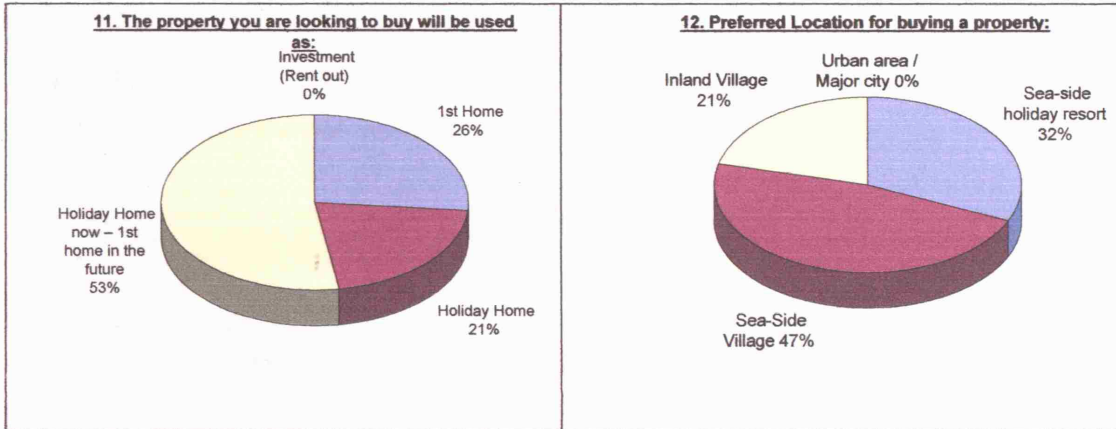


Figure 4.6.11. The property you are looking to buy will be used as:

Figure 4.6.12. Preferred Location for buying a property:

Regarding the preferred architectural style of the property there is no strong specific preference for most of the buyers (Figure 4.6.13), except for those willing to buy a traditional property to restore.

Figure 4.6.14 show what buyers consider as the most important characteristic of a property. As expected distance from facilities -37%- and garden -26%- are considered most important.

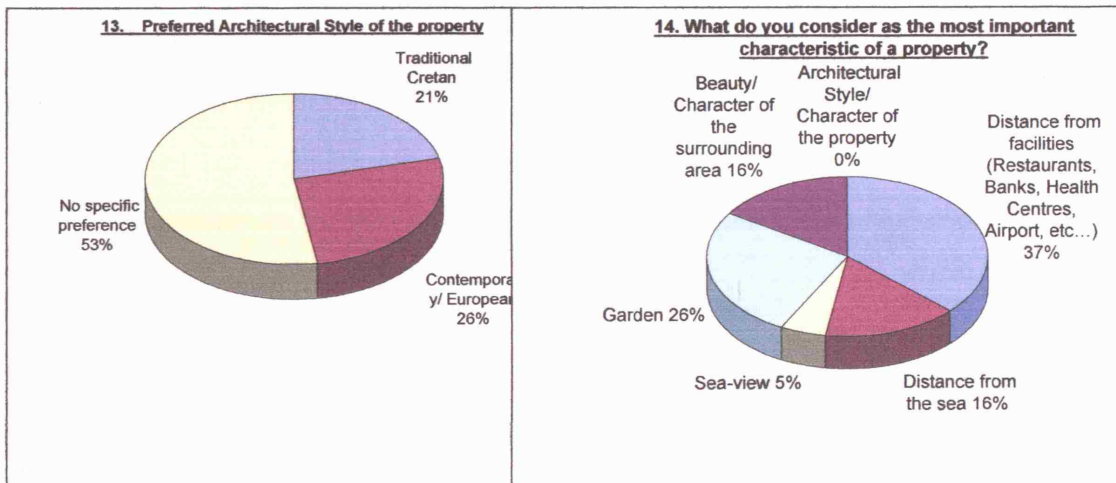


Figure 4.6.13. Preferred Architectural Style of the property

Figure 4.6.14. What do you consider as the most important characteristic of a property?

Half of the potential buyers have not considered buying a property in another country (Figure 4.6.15), especially those who have visited Crete many times, showing a strong preference for the island.

Figure 4.6.16 comes to support the argument that supply of financing plays an important role in housing market, as 63% of the potential buyers will be using a bank product to finance the purchase.

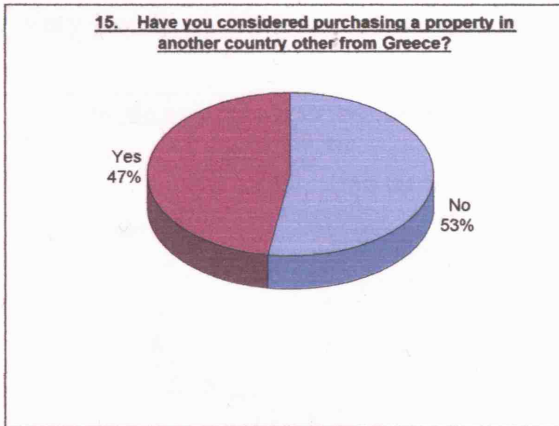


Figure 4.6.15. Have you considered purchasing a property in another country other from Greece?

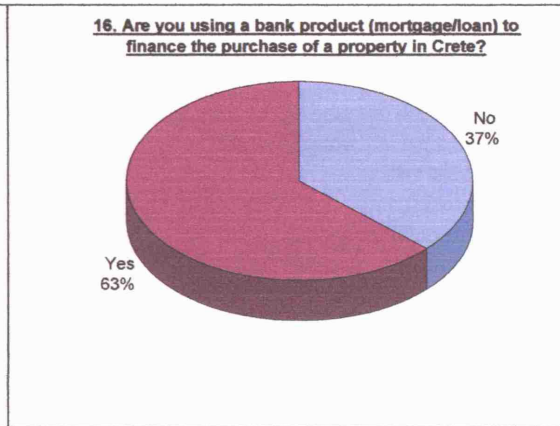


Figure 4.6.16. Are you using a bank product (mortgage/loan) to finance the purchase of a property in Crete?

An increasing number of potential buyers are using the internet to find information for properties and Figure 4.6.17 indicates that information for properties on the internet is adequate but not complete.

In Figure 4.6.18 most of the customers -48%- rated the service of the estate agents as Good and 26% Very Good, while 26% rated the service as average.

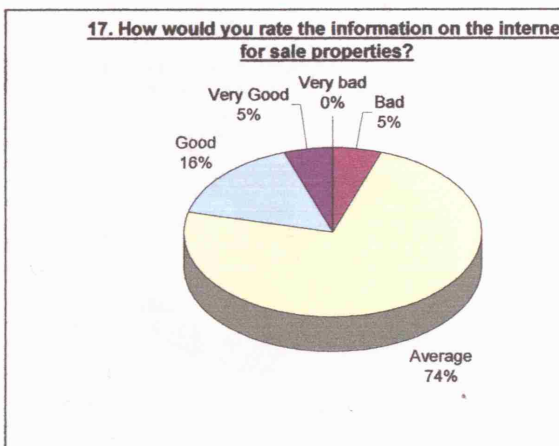


Figure 4.6.17. How would you rate the information on the internet for sale properties?

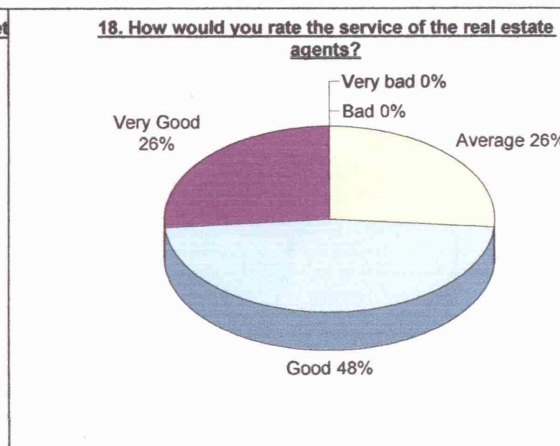


Figure 4.6.18. How would you rate the service of the real estate agents?

Regarding the second-hand properties the customers were shown 53% of the customer rated them as Average, 26% as Good, while 21% as Bad (Figure 4.6.19).

Customers were also asked to rate the access to housing development and 79% found that the access was average, while 16% had a positive opinion (Good or Very Good). A 5% found the access bad.

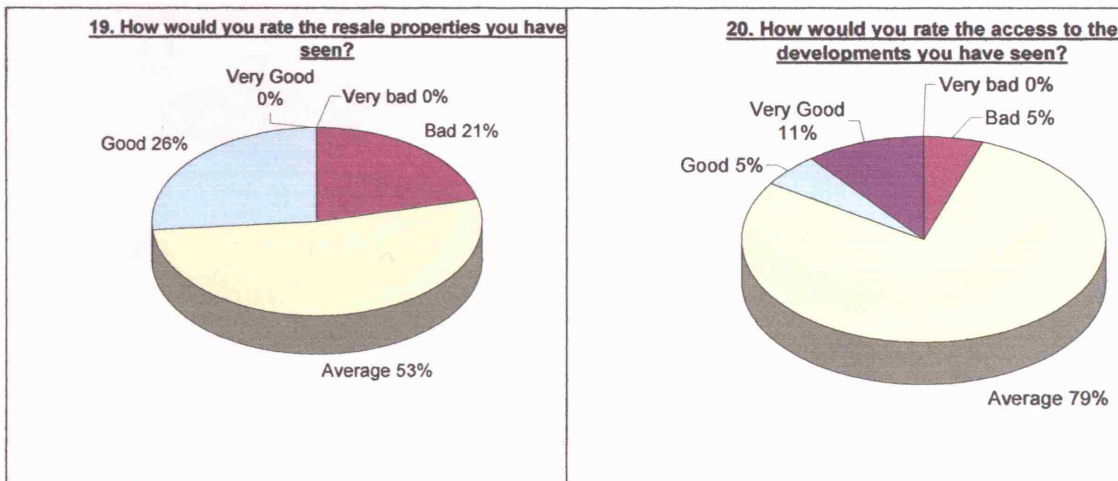


Figure 4.6.19. How would you rate the resale properties you have seen?

Figure 4.6.20. How would you rate the access to the developments you have seen?

Half of the potential buyers considered that the housing developments they had seen met to a satisfactory degree their requirements/expectation (Figure 4.6.21) while 36% said that their requirements/expectations were met or exceeded.

A surprising for the developers 11% found that value for money of the developments was bad, since the majority -48%- said it was Good or Very Good.

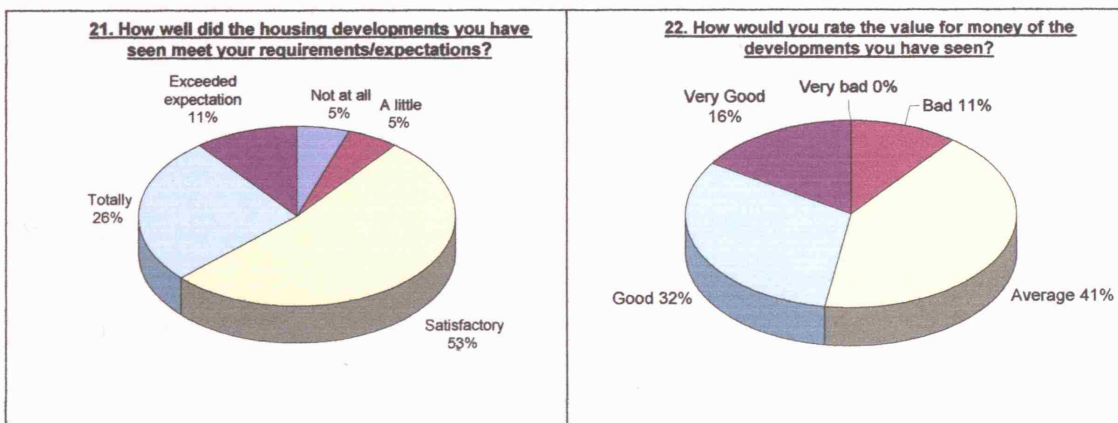


Figure 4.6.21. How well did the housing developments you have seen meet your requirements/expectations?

Figure 4.6.22. How would you rate the value for money of the developments you have seen?

Lastly two questions were asked in order to determine how potential customers feel about Crete. The majority of clients believe that the way of life in Crete is Good - 57%- or Very Good -16%-. Additionally 63% feel very safe in Crete and 21% feel totally safe.

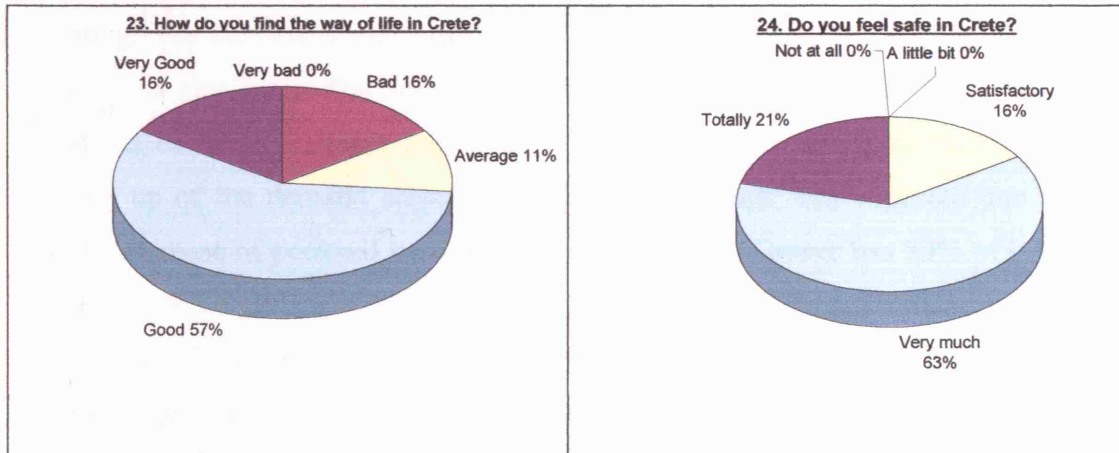


Figure 4.6.23. How do you find the way of life in Crete?

Figure 4.6.24. Do you feel safe in Crete

5. Discussion

5.1 Discussion on Demand and Supply for Housing.

By analysing the available data, it is apparent that demand for housing in Crete is strong. For the first-home market, demand is high in and around the urban centres. Demand is also increasing for spacious new-built houses of higher quality as the standards of living increase triggered by the increase in household income. The picking up of the demand seems to be higher than what was expected due to the official increase of personal wealth, but considering that Greece has 30% of informal economy (RICS E.H.R. 2005) this should not be surprising. Developers could provide new-built apartments and maisonettes in locations on the periphery of the urban centres but near main roads so that access is easy. A good sign from the Greek part of the demand is that there seems to be a turn in trends and lately increasingly more households are choosing to avoid the hassle of becoming the developer of their house and choose to buy from one of the many new-built developments.

The holiday and retirement home market is currently booming in the island, as described earlier. Customers are primarily from the UK, the Netherlands and Germany and secondary from Demand is increasing rapidly in the Chania prefecture, since prices there are still slightly lower than in other famous areas in Heraklion and Lasithi. As soon as prices in Chania equal the average of Heraklion and Lasithi it can be expected that demand will be balanced between the aforementioned touristic areas. Potential buyers at the lower end of the market are looking mostly for traditional derelict properties to restore. There are still opportunities in some villages for real estate developers to buy old properties for redevelopment but the increased cost might not allow for a large profit margin.

Regarding existing second-hand housing supply it can be commented that dwellings built earlier than 1990 are of inferior quality compared to new-built and much of the second-hand supply does not the features the holiday and retirement home market require.

In the most touristically developed areas there is demand from the low-medium part of the market for apartments of preferably 2 bedrooms. If land inside-town-plan at a reasonable price or a bargain tourist accommodation unit for

redevelopment can be found in the market, than the developer might be able produce 2-bedroom dwellings with prices not more than 100,000€ and expect to sell fast.

At the middle price section of the market, the research shows that the developers can provide approximately 100sq.m. semi-detached or detached homes with 2 or 3 bedrooms and importantly with garden. Important features of the property would be the easy access, the distance from the sea and a nice surrounding area. The accessibility of the housing development is very important and it is dictated not only from the answers to the questionnaires but also from lessons learnt by larger housing developments which have been difficult to sell because they were located in remote areas without easy access and facilities close by.

Generally, because of the age of potential buyers being over 40 and with most of them having the intention of using the purchased homes for their retirement, the developers should offer dwellings with characteristics to suit latter ages. Such would be easy accessibility, not more than 30 minutes drive from hospitals and at least one bedroom at the same floor as the living-room and kitchen area. It is important that housing developments would be attractive to as wide clientele as possible in order to increase their saleability.

A good sign for the retirement home market is the trend which currently exists in the United States where people choose to retire in California and Florida moving out of northern states in search of a warmer climate. Similarly, Crete has the benefit of a mild warm climate and as the trend will be catching up in northern Europe more households would choose to retire in the island.

Another important finding of the research was that 47% of customers said in the survey that they would prefer to have a property in a sea-side village rather than in a busy sea-side resort. This shows that Crete could be an alternative for potential buyers who do not like the overcrowding of the Spanish coast. Although Crete has many touristically developed areas, there are still areas not fully developed where buyers seeking a quite environment are attracted to. Land prices in such areas are still low and there appear to be good opportunities for development.

The multi-European clientele of the property market in Crete is making it a multi-source market with potential benefits of high stability and strength. If the economy of one country is not doing well, as the German was for the last few years, and generates low demand, another country's economy, like the UK, will be doing well and will generate high demand. When an economy is recovering, like the

German seems to be at the moment, the demand will increase. And indeed, for this particular case of Germany, there is evidence of an increase of German buyers in 2005. Additionally, even if the national economy is not performing well, there will still be demand for housing from other countries supporting the market.

The demand certainly is affected by tourist traffic. A person should visit a place before considering buying a property there. The results of the survey indicated that most of the customers have visited Crete at least three times before considering buying a property so the demand could be said to be affected by the long-term change in tourist traffic rather than by the short-term yearly changes. Of course the previous statement for the demand is not only confined to the volume but also to the quality of the holiday makers. So if, for instance, more high-profile holiday makers arrive in Crete over the long-run, then the demand for high-priced new housing developments should be expected to increase accordingly. Tourist traffic after a decline since 2001 appeared to be picking up again in 2005 with an estimated increase of 12% and future projections indicate that the increase will be sustained at levels above 10% for 2006.

Finally the current tax system with the insignificant real estate tax for most properties has helped house-owning and especially the second home market. Also the 0% VAT for new-built dwellings played an important role in the boom in housing production. The future of taxation from 2006 is still unclear. Possible application of 19% VAT to new dwellings will increase their prices and initially demand will turn to second-hand properties. But if the current economic conditions with low interest rates and increasing household incomes continue in the near future, the demand for new dwellings will most possibly return to current levels in short time. If capital gain tax is introduced it is unknown what effect it will have due to the large 'informal' economy that exists especially in property transaction and would 'allow' owners to show in contracts that they sold their property at the same price they had bought it.

5.2 Discussion of the effects of current planning legislation for Developers.

As all the developers and estate agents pointed out in the research, land prices inside the town plan are very high. The boom in land prices inside town plan could be mostly attributed to Law 1337/83 as the complicated and time consuming – up to 15

years- procedures it enforces for the inclusion of new areas into town planning zones, lead to increased lack of land supply inside the town planning zones. Until 1998 this lack of supply of land was not affecting the market due to the slow development rates of the property market and the increase in number of 'arbitrary'⁵ buildings outside the town plans. From 1998 and later the increased demand has rocketed land prices inside the town plan, and still in 2005 land is rather overvalued.

With a lack of inside-town-plan land, developers had to find a way to build more housing on out-of-plan housing where the minimum plot area required for planning permission is 4,000sq.m. For developers it is financially sensible to build as many dwellings as possible but the planning regulations allowed for a single, out-of-town-plan plot with area below 100,000 square meters a maximum built area of 400sq.m. So the logical step would be the segmentation of the plot in as many 4,000 sq.m. plots as possible. The legislation allowed the segmentation of a large plot into 4000sq.m. plots if each of the created plots had a frontage to a 'communal road'. Many land-owners and developers donated privately created roads inside their plots to the local council and by using the legislation proceeded to the segmentation of their land. The wording 'communal road' found in the legislation, though, was not well defined which caused a very odd situation. There are cases where different public officials, in different offices and in different or even the same areas interpreted the wording 'communal road' either as 'private roads'⁶ and public roads⁷ or as 'only public roads'. So there were areas where segmentation with private roads was possible, other areas where that was not possible, and areas where one official would initially approve the segmentation but it would not be approved at a later stage of the procedure by another official. The situation was cleared recently in 2003 with new legislation and segmentation is allowed if the created plots have frontage for at least 25 to a public road. The effect of the new explanatory legislation was that many developers who had invested and were planning developments on plots that could be segmented before, could not proceed afterwards and eventually were left with plots able to build only a small proportion of what would have been able to before.

Unfortunately for the developers, segmentation of larger plots has become extremely difficult and there is not enough supply of suitable land fulfilling the

⁵ Built without planning permission

⁶ Roads not created by the local council, or the national government

⁷ Roads created by the local council, or the national government

requirements of the new legislation. The problem is intensified around the urban centres and some touristically developed areas as the supply cannot satisfy the demand as housing developments are moving further away from the centre of facilities, wherever available land is found, even with difficult access.

The frequent changes of legislation affecting out-of-town-plan plots of land and what can be built on them have created a rather blurry situation of what is allowed and what is not, with many back-doors. This has given the opportunity or forced many to stand on the edge of the line between acting legal or illegal.

According to estate agents, lawyers and developers, the purchase of a plot of land outside town plan is a complicated act which can have many unpleasant surprises for the purchaser, as it is not always certain that the plot will be able to get planning permission in the short or long run. Generally out-of-plan land is cheaper compared to in-town-plan land. The difference in price is usually considerable but this most possibly reflects the problems that the prospective buyer might face. On the other hand there is the argument that according to economic theories higher risk yields higher profit. And many developers agree, indeed: if the development is carried out in short time, with the planning permission being acquired as soon as possible after the purchase of the land then the risk is considerably decreased and the profit remains high.

5.3 Discussion on partnerships of local with foreign developers and competition between developers.

The Cretan property market might not have been the most attractive market for foreign real estate firms but especially since around the beginning of 2005 there has been an increased interest. According to estate agents and developers, European firms that operate in the wider real estate sector have started doing market research and are looking for partners in order to obtain a presence in the Cretan market. Most of those foreign firms are estate agents and investment consultants from UK, Germany and France who want to extent their catalogues and give their customers more choices by including properties from Crete. But in the last few years at least two partnerships between local and international estate agents have proven unsuccessful, and especially one involving a large US firm with presence in other European countries (To Symvolaio 17/06/05).

Also some speculative developers/ housebuilders from UK, Germany and France have started showing interest for the holiday and retirement home market in Crete and few have already invested. The majority of the foreign property developers are looking for partnering with Greek developers for creating big sea-side developments incorporating luxury hotels, spas, golf courses and in addition to that offer high quality homes adjacent to all the other facilities.

The Cretan market has many particularities in its structure and operation. The most important characteristic is that it is based in personal relationships, since most of the volume of transactions until recently was primarily from Greeks. These elements render the Greek market inaccessible to foreigners and Greek developers and agents treat such partnerships with scepticism. The approach though to this matter has recently started to change.

For the Cretan market to reach its full potential in terms of demand from abroad there needs to be some sort of co-operation of Greek firms with foreign. Foreign firms have already ties and many developments in other 'rival' markets like in Spain, Bulgaria, Croatia and Turkey and they are actively promoting them to European and International buyers. It is evident that a firm, for instance, from UK or France would have better connections and opportunities for marketing and promotion abroad than a Greek firm would be able to acquire in the near future. Also developers who have already operated in various countries have acquired know-how for development and marketing that Greek firms at the moment lack, and a partnership would most certainly benefit not only the foreign but also the Greek side. An increased involvement of foreign developers would not only help in adding value to the homes created and the areas where the developments will take place but also add value to the market of Crete altogether.

Of course with the increased involvement in Crete of larger property developers from Greece and abroad, with greater financial strength and know-how, it might be inevitable that small and small-medium developers would have to form partnerships or joint-ventures in order to be able to compete in the market.

The increasing intensification of competition between developers and the lack of suitable land for development has lead many developers in adopting land-bank approaches in order to obtain competitive advantage (Smyth, 1982). In previous years a developer would acquire as much land as it was required to cover current demand. Recently a common practice for developers is to try and buy any suitable land that

enters the market, and possibly not developing it immediately. This is done in order for the developer to have the exclusive right to develop on that piece of land, ensuring supply for the future and limiting the competition in certain locations. Nowadays most developers have a land-bank for approximately 2 years and some for up to 3 years. It must be noted here that if a developer buys an out-of-plan land and uses it for land-bank, it is important to get planning permission immediately in order to reduce the risk from future planning legislation changes.

6. Conclusions

This thesis has investigated the determinants of house prices and the effect of macro- and micro- economic factors to house prices, demand and supply. House prices are mostly determined by the *supply of housing*, the *supply of finance*, the *demand for housing*, and *confidence* rather than by the construction cost. There is evidence that house prices are affected by interest rate changes and that the strength and speed of this transmission differ considerably across countries and that generally the residential property markets tend to track the business cycle, with a tendency for real house price turning points to lag business cycle peaks and troughs.

The factors responsible for the current boom in second home market have been identified as the increasing wealth, the increased accessibility with more frequent and cheaper flights.

The actors and their role in a private housing project have been defined and the procedure followed is: The Former landowner would sell the land to the Speculative Developer/housebuilder who in turn would develop the site. A speculative developer would initiate, design and carry out the building work, or would just initiate the project and the design and the building work would be carried out to contract from a professional service firm and a specialist contractor respectively. Then the finished product would be sold to the final user – the household.

Legislative background related to developer's activities including planning system and taxation has been explained. For land inside the town planning zone, the maximum allowable floor area is defined by the local plan, while a plot outside the town planning zone should have at least an area of 4,000 sq.m. to be granted a planning permission for a total allowable floor area of 200sq.m. Currently there is no capital gain tax for property transaction and the stamp duty is 11-13%.

Through a thorough research based on publications and statistical data, interviews with estate agents and developers from Crete and a questionnaire survey for potential buyers this thesis has come to a number of conclusions for the housing market in Crete and the developers.

From 2000 to 2005, housing stock increased in Crete by 8.2% to meet the demand, while the output of new dwellings increased by 78.4% during the same period.

Demand for both first and second home in Crete is high and is expected to remain high. First home demand is increased around the three major cities: Heraklion, Chania and Rethymno. Second home demand is mostly spread on the north coast of the islands, and is higher in touristically developed areas like Malia, Hersonisos, Agia Pelagia, Elounda, and Apokoronas. There is also increased demand at the low end of the market -under 50,000€- for traditional derelict homes in small villages which are being bought and then restored.

Typical prices of property in the four prefectures of the island are presented in Table 6.1.

Prefecture of:	Average Price per square meter (in Euros)		
	Land inside town-plan	Land outside town-plan	Dwellings
Heraklio	250-350	30-45	1,500-2,400
Lasithi	205-350	25-35	1,400-2,200
Rethymno	150-180	20-32	1,600-2,200
Chania	80-110	15-25	1,500-1,900

Table 6.1: 2005, Prices per square meter for land and dwellings in Crete per prefecture (Source: Cretan Estate Agents)

Demand for new dwellings especially for the holiday and retirement home market has potential of further increasing. A developer would be more interested in the holiday and retirement home market.

Most of the potential buyers are over 40 years old and have visited Crete several times before considering buying a property. Most of the buyers are looking for a property between 1,200€ and 2,000€ with 2-3 bedrooms to use it now as a holiday home and later maybe retire there. Most important characteristics according to the buyers are the distance from the facilities and a garden.

As the EU population ages, many developers in Crete are attracted to the retirement housing market. Made particularly appealing by retirees' tremendous purchasing power, the retirement market is quickly becoming the hot housebuilding category.

In touristically developed coastal areas where there is not much available land, developers could build apartment blocks close to the sea, preferably offering sea-view with prices not exceeding 100,000 Euros for a two-bedroom dwelling.

Developers should seek to increase their mid-priced housing stock with 2 or 3 bedroom, detached or semidetached dwellings with garden and accessibility features necessary for the retirement home market.

The multi-country clientele, consisting primarily by Greeks, British, Dutch, Germans, and Irish, of the housing market in Crete makes it a multi-source market. Although the market is driven by holiday-and-retirement home demand which is dependend on consumer confidence and extremely prone to an economic recession, its multi-source demand means that the market can withstand low demand due to bad economic conditions from one country as there will be sufficient demand from other countries. It is also suggested that a possible national demand decline could be compensated by demand from abroad.

The increased property-ownership has been supported by the insignificant real estate tax, not more than 0.035%, for most of the properties.

There is shortage of supply of suitable land for building in urban and developed rural areas, while the out-dated planning system with the slow bureaucratic procedures often creates problems to the developers. Developers try to overcome such problems and gain competitive advantage by having land-banks with planning permissions for approximately 2 years in good locations.

The involvement of foreign investors in the market through partnerships is a positive sign which will bring valuable know-how and expertise to their Greek partners, add value to the Cretan market and attract more high-profile buyers. It might be inevitable though, that other Greek developers would have to form alliances while investing in better marketing strategies, in order to be able to compete in the market.

Government initiatives play an important role in the housing market. Unfortunately during the last few decades, the frequent changes in the planning system have rather created problems to the developers. The government seems not to react right to a changing housing environment and changes should be pushed forward. Hence it seems of extreme importance that the government re-evaluates and reforms the planning system while it speeds up the procedures for the inclusion of new areas to the planning zones especially where there is currently high demand for new housing. Also the tourist industry, the property developers and the government should proceed to the active repositioning of Crete through branding, as it holds great

potential for the island (Gilmore 2001) in terms of attracting new tourists and buyers. This should be a field for further research.

A field for further research could also be what the effects of the increasing numbers of households retiring abroad could be to the home and to the retirement countries. As more and more households from northern Europe choose to retire in southern Europe a number of issues arise including demographic changes, changes in the social structure, flow of pension money from one country to the other, strain of southern European infrastructure and the economic growth of the retirement areas.

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Appendix I: Typical set of questions asked in interviews

1. A quick description of your company
2. In which areas of Crete do you operate?
3. What is the size of your developments?
4. Are the mostly speculative or non-speculative?
5. Do you target a certain market? First home or Holiday & Retirement Home?
6. What are the main differences of the aforementioned markets?
7. Why have you chosen the specific market? Is it the profit margin?
8. What nationality are most of your clients?
9. Which are the criteria for choosing the location and type of plot for your developments?
10. What percentage of your new units is sold from plan and what after completion?
11. Are sales direct or through an agent?
12. Are you using any agents in other countries?
13. What marketing methods do you use for the promotion of your properties?
14. What is your comment on demand compared to your supply, today and in the near future?
15. What do you consider are the most important characteristics of a dwelling?
16. Is there a specific type of housing with particularly high demand?
17. What is your opinion on the availability of plots suitable for development?
18. What is your opinion on current planning regulations? Has it been effective or has it created problems?
19. What is your evaluation of the house prices at the moment and over the past 5 years?
20. What is your general opinion about the future of the housing market in Crete?

Appendix II: Sample Questionnaire

Housing Market in Crete QUESTIONNAIRE

General Questions

1. Age group:

- 18-30
- 30-40
- 40-60
- 60+

2. Marital Status:

- Single
- Married

3. Number of Children:

- None
- 1
- 2
- 3-4
- More than 4

4. Citizen of:

- France
- Germany
- Greece
- The Netherlands
- Republic of Ireland
- UK
- Other:

5. Profession:

- Unemployed
- Private Sector Employee
- Public Sector Employee
- Self-Employed
- Pensioner
- Other

6. Personal Income per Month (In Euros):

- 600€-900€
- 900€-1200€
- 1200€-1500€
- 1500€-2000€
- 2000€-3000€
- More than 3000€

Questions related to buying a property in Crete

7. How many times have you visited Crete before considering buying a property?

- None
- 1-2 Times
- 3-5 Times
- 6-8 Times
- 8+ Times

8. Property Price Band; how much are you willing to spend for the purchase of a property:

- Up to 50,000€
- 50-80,000€
- 80-120,000€
- 120-200,000€
- 200-350,000€
- Above 350,000€

9. You are looking for a property with what number of Bedrooms?

- 1
- 2
- 3
- 4+

10. Type of Property you are looking for / Preferred type of property:

- Resale, Ready to move in
- Traditional property needing restoration
- New-built Development

11. The property you are looking to buy will be used as:

- 1st Home
- Holiday Home
- Holiday Home now – 1st home in the future
- Investment (Rent out)

12. Preferred Location for buying a property:

- Sea-side holiday resort
- Sea-Side Village
- Inland Village
- Urban area / Major city

13. Preferred Architectural Style of the property

- Traditional Cretan
- Contemporary/ European
- No specific preference

14. What do you consider as the most important characteristic of a property?

- Distance from facilities (Restaurants, Banks, Health Centres, Airport, etc...)
- Distance from the sea
- Sea-view
- Garden
- Beauty/Character of the surrounding area
- Architectural Style / Character of the property

15. Have you considered purchasing a property in another country other from Greece?

- No
- Yes

16. Are you using a bank product (mortgage/loan) to finance the purchase of a property in Crete?

- No
- Yes

17. How would you rate the information on the internet for sale properties?

- Very Bad
- Bad
- Average
- Good
- Very Good

18. How would you rate the service of the real estate agents?

- Very Bad
- Bad
- Average
- Good
- Very Good

19. How would you rate the resale properties you have seen?

- Very Bad
- Bad
- Average
- Good
- Very Good

20. How would you rate the access to the developments you have seen?

- Very Bad
- Bad
- Average
- Good
- Very Good

21. How well did the housing developments you have seen meet your requirements/expectations?

- Not at all
- A little
- Satisfactory
- Totally
- Exceeded Expectations

22. How would you rate the value for money of the developments you have seen?

- Very Bad
- Bad
- Average
- Good
- Very Good

23. How do you find the way of life in Crete?

- Very Bad
- Bad
- Average
- Good
- Very Good

24. Do you feel safe in Crete?

- Not at all
- A little
- Satisfactory
- Totally
- More than I expected