Erasmus University Rotterdam
Erasmus School of Economics
Department of Business & Economics
Section Accounting & Finance

Thesis

Research into investment possibilities in the second home market

Abstract: Second homes, a good investment? Second homes have gained popularity in recent year especially through world globalization, it is no longer seen as purely an option for those in retirement but as a sound opportunity for investors. However the credit crunch has seen many housing markets collapse and a decrease in house prices on a worldwide scale. Are there still good opportunities? This research has been written with the Dutch individual investor in mind and is a review of the world property markets, in search of countries with good investment opportunities. Determining the profitability of an investment requires the use of multiple valuation tools: Analysis of economic factors, risk and juridical implications, reviewing tax policies and cost implications. This study shows all the factors needed to ensure a sound decision over a second home investment.

Keywords: Second homes, Investment possibilities, Individual investor

Author: Maarten Voorhorst 314142
Coach : Drs. R. van der Wal
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Preface

The purpose of this thesis is to investigate investment possibilities in the second home market and has been written in order to complete my Masters Degree in Business and Economics at the Erasmus University Rotterdam.

I first became interested in the second home market a few years ago while travelling. I thought that somewhere in the world there were good investment opportunities. The only question was where?

This thesis has given me the opportunity to seriously explore the second home market.

I have successfully completed this thesis and I sincerely thank Drs. R. van der Wal of the Erasmus University for his critical overview and willingness to help.

Maarten Voorhorst, December 2009

Executive Summary

Interest in second homes has grown over the last few years not only for tourists and pensioners but also for investors. A second home can be used as a holiday home, retirement destination or as investment. The holiday home market is expanding rapidly; many younger people have joined the traditional pensioner buyers.

Through globalization, developing countries are becoming increasingly attractive as vacation destinations due to both low prices and an attractive environment. Another effect of globalization is that economies have grown strongly, also influencing the rise in house prices. Also the affordability of owning a second home has become easier due to expansion of financial products, better communication and air traffic.

Ironically this expansion of financial products, loans with variable interest rates, sub-prime lending (higher-interest loans to people with poor credit histories) and untried lending products such as "interest-only" loans led to the credit crunch that started in the USA. Triggered by a huge rise in mortgage default and ensuing foreclosures, a situation which proved catastrophic for banks and financial markets around the globe.

The crisis had a major impact on the housing market and in turn, the second home market. Especially in developed countries, where house prices have risen year upon year have seen their markets collapse. However there are still possibilities in the second home market where it is possible to make a profitable investment.

This research is aimed at the individual Dutch investor looking for investment opportunities in the second home market. This study will examine 133 countries (Global Property Guide) to establish as to whether they provide a good investment opportunity. In the search for good opportunities in the second homes market it is important to know what drives house prices. Wherever in the world a house is located, its value can rise or fall. House prices are influenced by multiple factors, Gross Domestic Product, inflation, interest rates, supply and demand and information. Markets also affect each other, as seen in the current credit crunch. House buyers however pay little attention to economic factors but are more likely to be influenced by recent changes in house prices according to a study by *Karl Case and Robert Shiller*.

Different theories and models are used to formulate a wise investment decision for the individual investor. Theories and models indentifying risk factors such as risks towards the behavior of information (information asymmetry), risk attitude of users and developers are applied. Models that analyze profit; traditional valuation models, discounted cash flow and economic value added models are also brought into play.

Initially, countries likely to provide returns on investments will be determined, followed by comparisons between those countries. Each country is assessed on its individual investment criteria, based on geography, political structure, costs, economic growth, interest rates, inflation, supply and demand, tax regime and other procedures as well as rules of the national government, this is a complex task.

In order to find prime locations for investment, a set of criteria is used to narrow down the research area. The selection criteria demanded that sufficient information was available and that the individual investor was allowed to buy and sell in each considered location. Gross rental yields were set at least 9% and the Property Rights Index, which is an international list indicating on a numerical scale how property is protected is set at a level 5.0.

After applying the selection criteria, the initial 133 selected countries are now reduced to just three countries being considered for the purposes of this research.

The nominated countries are further examined and compared. Another factor applied to the selected countries is to identify whether capital value is likely to increase as well as showing the true value of an investment.

This research also establishes whether property in each of these countries is under or overvalued. A few valuation tools are used to indentify whether a housing market is considered to be under or overvalued, the tools used are; gross rental yield and house price to income ratio. Supply and demand, which is another tool that can be used to determine whether prices are likely to rise or fall, is also investigated. In addition economic factors such as the Gross Domestic Product (GDP), inflation and interest rates are studied to predict any likely increase in value.

Finally, the actual related taxation and associated costs for each individual country are revealed, assessing the real worth of investments.

Chapter 1 Introduction

1.1 Introduction

Second homes are an increasingly popular and worthwhile form of investment, particularly in a time of falling stock markets. Net returns on investment can be excellent, as can the increase in capital value according to the website *second place*. Both can be achieved but careful study of investment possibilities is essential.

Currently, any investment in real estate is threatened by the credit crunch, which has already hit the housing market very hard. The crunch started in 2007 when the housing market collapsed in the USA. After years of rising house prices, we are seeing a worldwide decline and the prospects for 2009 are gloomy. Clearly, investing in property is very risky at present; however other markets are also failing. Recently, stock markets around the world have become very volatile, leaving investors insecure and mostly, poorer! Property has traditionally been a safer investment and even now, despite the credit crunch, there are still opportunities for better investment returns, providing you know where to look (Source: World Economic Outlook 2008).

So why invest in holiday homes? There are countless holiday homes around the world, many in markets not badly affected by the economic downturn. This report will show where good investment possibilities are for second homes market worldwide. This thesis is written primarily to inform Dutch investors from the private sector as well as developers, general investors and individuals interested in holiday homes, so they can see which area may be a good place to invest in 2009. This is done through intensively researching countries for their investment possibilities with the use of economic factors, fiscal and tax policies, an outline for risks and cost, multiple valuation tools and methods for analyzing profit.

The initial research into countries that fit the profile for high investment returns used the Global Property Guide and other data sources. The data in the Global Property Guide is drawn from sources such as national banks, the IMF, and OECD etc. After highlighting good countries to invest in, comparisons will be made between them using criteria which will be explained later in this thesis. Prominence is also given to a number of issues that affect house prices and investment returns. Examples are monetary policy, inflation and interest rates, fiscal aspects and other characteristics of the countries studied.

1.2 Problem definition

Where, in today's second home market is investment the most valuable? The answer can only be found through detailed analysis of the many varied aspects of this market. Careful research will show where a good return can be found for Dutch investment for individuals from the private sector.

Evolution of home ownership and the start of the credit crunch

Home ownership has changed quite significantly in recent times. Previously it was normal to live in a house long enough to pay off the mortgage before moving often at retiring age.
According to the *U.S. Census bureau,* people now sell their property once every 5 to 7 years, thus moving 11.7 times during a lifetime.
There is also a growing trend in buying a second home. Nearly 6% of American households now have a second home. The reasons for this are varied. In most cases this appears to be as an escape from day to day routine, though the investment potential is an important consideration.

Second home buying was fuelled by a combination of historically low interest rates, sub-prime lending (higher-interest loans to people with poor credit histories) and untried lending products such as "interest-only" loans.
The relationship between income and debt is now a very serious problem for many people. As interest rates creep higher this becomes an even greater worry. (*Lankarge/Nahorney for Home Insight).*

The start of the credit crunch and its effect on the second home market

The economic crisis which started in the United States (2007) affected many economies worldwide. The crisis was actually caused by the sub-prime mortgages granted in the USA. It was triggered by a huge rise in mortgage default and ensuing foreclosures, a situation which proved catastrophic for banks and financial markets around the globe.
The problem was that 80 percent of mortgages were variable rate mortgages *(DODD. 2007-02-07)*. In 2005/2006 house prices began to decline, thus making it more difficult to refinance. The situation was compounded by the rise in variable rate mortgages. Sub-prime mortgages increased 292%, from 2003 to 2007 *(Center for Responsible Lending 27 November 2007)*. Most securities on sub-prime mortgages which were held by financial firms lost value. The banks worldwide saw a serious decline in their capital value, making further lending impossible, causing what we now know as the credit crunch.
At the end of 2008 (Q3) house prices fell in the States by 21% (inflation adjusted) according to the Case-Shiller house price index.

In this report to identify the best investment opportunities in second homes, is it important to know what triggered the economic crisis. It is also essential to show the places to avoid in times of crisis, as well as those ripe for investment. Using the experience gained from the credit crunch we can now pin point good investment opportunities in second homes worldwide.

Initially, it will be necessary to determine which countries are likely to provide returns on investments followed by comparisons between the countries. As each country has its individual investment criteria, based on geography, climate, history, political structure, culture, population, economic growth, crime rates, tax regime and other procedures as well as rules of the national government, this is a complex task.

Further problems to be addressed are the political and economic stability of the country, valuation of property, inflation, interest rates, language barriers, cost of living, permits, ownership of private property and liability thereof.
This research also investigates why, despite falling house prices worldwide, some countries seem unaffected and may even be seeing an upturn in their internal housing markets.

Past performance demonstrates that it can be beneficial to invest in holiday homes because of the greater net returns and increased capital value. Future expectations in some strongly developing countries are still high despite the credit crunch.

The main objective of this study is to locate good investment opportunities in the second homes market for the individual investor. Provide analysis of the situation and offer information leading to a good investment decision.

Research questions

- What are the changing factors that influence house prices?

- Which theoretical model can be used by an individual investor to make a good investment decision

- How does taxation and regulation influence the individual investor?

- Where are prime locations for investment in the global housing market?

- What is an investment worth and is it likely to increase in value?

1.3 Demarcation

This thesis is primarily aimed at individual Dutch investors in the purchase and sale of second homes lying in the private sector and partly targeted towards developers and other investors involved in buying and selling second homes.

Criteria used to identify suitable countries for investment possibilities:

- Is it possible for Dutch investors to buy and sell?
- Is there enough information about the process available?
- Are high rental returns and increased capital value likely?
- Are fiscal and tax policies favorable?

All countries included in this study need to meet the following criteria:

- Availability of Information
- Gross rental yields above 9%
- Property rights index above 5,0
- The possibility for Dutch individuals to buy and sell.

Initially, 133 countries will be examined to establish as to whether they provide a good investment opportunity; to the results will then reduce the number of potential countries to be included in the study. Countries fulfilling the first criteria will be subjected to further investigation.
In addition, further adjustments are made so that countries are comparable in terms of valuation methods, taxes, investment returns and other risk and rewards.

Limitations

Not all countries have or publish house price statistics; it is much easier to find detailed statistics for developed countries than developing countries.

For 57 countries there are price time series available.
It is interesting to look at house price history in the selected countries. This gives an indication as to what extent house prices have risen and the stability of the housing market.

1.4 Thesis outline

This study consists of both theoretical information and a research survey. A general introduction in investing in second homes is provided in the first chapter. This is followed by a definition of the research problem and an outline of the key questions and limitations.

Although the main objective of this paper is to investigate good investment opportunities in the second homes market, it is also important to establish the factors that influence house prices; this is discussed in the next chapter.

The theoretical framework of the study is presented in chapter three. This includes a discussion of the theories and models, with particular reference to the influences on private buyers when making an investment.

In order to locate good opportunities in the second homes market it is important to understand the implications of tax regulations. For that reason chapter four discusses juridical questions, taxation and the implications for monetary policy.

Chapter five begins the search for suitable investment locations in the global housing market. This chapter contains a review of the housing market covering 133 countries. As the world housing market is too large a research subject for the purpose of this study, criteria has been established and applied to the selected countries in order to reduce the research area. These remaining countries are explored in more depth in chapter six.

The second, third and fourth chapters provide information which is used to evaluate the countries discussed in chapter six. The nominated countries are subjected to valuation models, economic factors, taxation policies and other rules and regulations. This is intended to give a picture to individual investors of which factors influence the designated countries. It also gives an indication of what an investment is really worth and whether a rise in capital value is likely.

The final chapter is the Conclusions and Recommendations and provides answers to the central research problem. In addition, the conclusions, main findings and implications for research and future expectations will be disclosed.

Schematically view:

Chapter 1	Introduction
Chapter 2	What are the changing factors that influence house prices?
Chapter 3	Which theoretical model can be used by an individual investor to make a good investment decision?
Chapter 4	How does taxation and regulation influence the individual investor?
Chapter 5	Where are prime locations for investing in the world housing market?
Chapter 6	Is increased value likely and what is an investment worth?
Chapter 7	Conclusions and Recommendations

Chapter 2 Changing factors that influence house prices

The central question in this chapter is; what are the changing factors that influence house prices? In the search for good opportunities in the second homes market is it important to know what drives house prices. Wherever in the world a house is located, its value can rise or fall. Economic growth, inflation, interest rates and other financial indicators will not be in line across the world. Movement in house prices is thus hard to predict and historical performance has proved to be of little use.
This chapter explains which factors are important in explaining house prices and rental yields. Chapter 2.1 shows how real estate moves to understand when a good time is to invest. In chapter 2.2 several valuation methods will be used to explain where a rise in capital value is likely. Chapter 2.3 looks at the housing market and shows the components of supply and demand and how they affect the market.

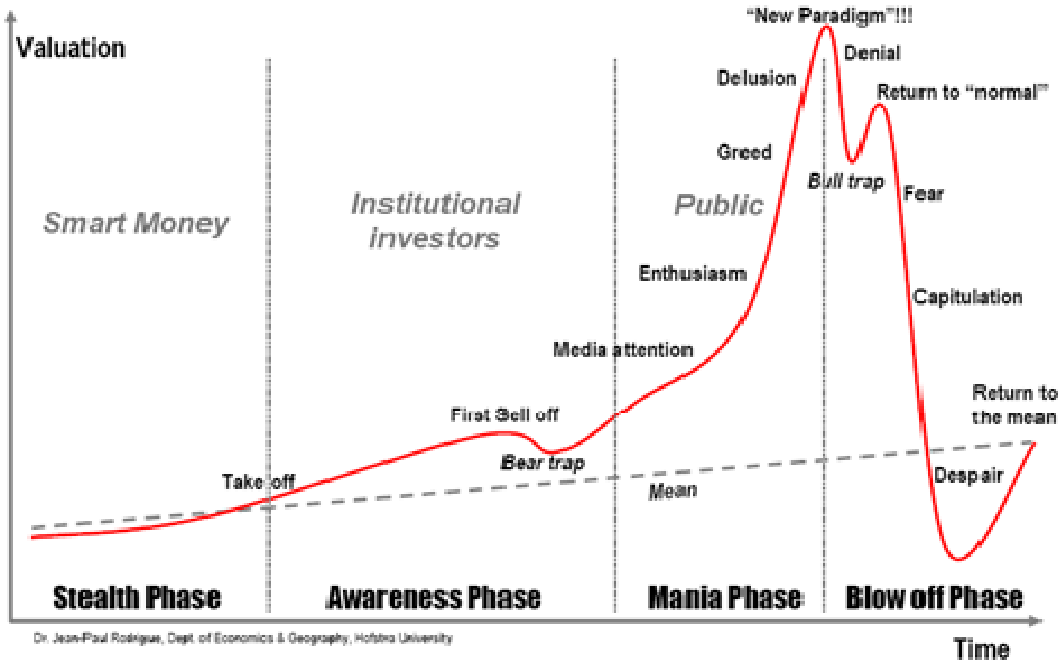
In addition, the movements in the rise and fall of house prices are examined in the final subchapter under the heading economic factors.

2.1 Real estate bubbles

What is a real estate bubble or housing bubble? A real estate bubble is a type of economic bubble which regularly occurs in the local or global housing markets. A housing bubble is characterized by quick increases in valuation of property values; this growth is relatively high compared to income and other economic elements. A problem with these bubbles is that they are hard to identify beforehand.

House prices normally move in long cycles and are mostly longer, deeper and quite different from economic cycles according to the (S. A. Pyhrr et al, Real estate cycles and their strategic implications for investors and portfolio managers in the global economy, Journal of Real Estate Research Vol 18, No1).This suggests that it is unlikely that house prices are much affected by recent changes in economic conditions. The last long period of rising house prices ended in 2007. Prior to that period house prices continued to move upwards for an extended period.

Below in figure 1 is a chart of a world property bubble.



This chart, shows a bubble of the probable collapse of a world property bubble. The different phases are derived from approximately 500 years of economic history. Not all the property bubbles are the same but these are the most probable steps.

Source: Jean-Paul Rodrique – Hofstra University

Karl Case and Robert Schiller, two economists, have shown in their research, that house buyers pay little attention to 'fundamental' economic factors but are more influenced by recent house price changes. The most important period for house buyers to make their decision is period t-1. Simply, house buyers are influenced by the most recent trend in house prices. Buyers are guided through discussions rather than the economy or housing supply according to research conducted by Case and Schiller.

2.2 Over and under valuation

Normally, property markets tend to fluctuate between under and over valuation. To know whether a market is over or under valued is difficult. This is crucial, as people don't want to buy just before a property market explodes. This is especially so when house buyers are buying a house for investment purposes. There are a few methods according to (GPG, 2009, School of Profit, How to avoid buying into a bubble) to predict whether a market is under or overvalued. The following three valuation tools for testing over or underpriced markets will be explained; price to rent ratio or yield, relative prices and affordability and last price to replacement cost.
The first valuation method is the *Price to Rent Ratio or Yield*. This method is also adopted by companies as the price-earnings ratio. Company's earnings are measured in relation to stock. This works the same for the property market only here the rental yield is compared to the price of a house.

Below is figure 2 explaining valuation criteria for the housing market according to the rules of thumb.

PRICE/RENT RATIO	GROSS RENTAL YIELD (%)	
5	20	Very undervalued
6.7	15	Very undervalued
8.3	12	Undervalued
10	10	Undervalued
12.5	8	Borderline undervalued
14.2	7	Fairly priced
16.7	6	Fairly priced
20	5	Borderline overvalued
25	4	Overvalued
33.3	3	Overvalued
40	2.5	Very overvalued
50	2	Very overvalued

Source: GPG

To determine why a low price/rent ratio value needs to be increased there has to be good understanding of what happens in the market. When rental yields are high it is very probable that costs of interest for buying a house are low, especially when compared to the cost of renting a

house. This mean that more people are willing to buy a house then rent one as it is cheaper to borrow money from a bank. Investors want know buying houses to rent them out will be profitable. So a shift will take place from renters to buyers. All these new buyers will push the housing market higher.
Conversely, a high price/rent ratio puts pressure on housing prices and works more less the same. Here the rental yield is low which indicates that the interest is high. For individual investors it is much easier to rent a house as it is difficult to finance a house with these high interests and it is cheaper to rent than borrowing the money from a bank to purchase a property. Additionally, investors are not willing to buy houses as the buy to let market is no longer an attractive investment.
In figure 3 the house price cycles shown in a circle:

Source: GPG

The diagram illustrates the previous explanation and shows that high yield gives a low price/rental ratio and pushes the market up whereas low yield and a high rental/ price ratio put pressure on the property market.

The Second valuation method is used to determine over or under valuation is the Relative Prices and Affordability model. In this context, house buyers are always looking for the best alternative. In the case of property being highly priced they search for an alternative only cheaper.

House prices are compared internationally in relation to relative income. In areas where house prices are much higher than income, then the market seems overvalued. The same true when house prices are low compared to the relative income of the inhabitants. This usually happens in big cities such as Moscow (overvalued) or in Brussels (undervalued). These contrasts can exist for a long time but in an economic crisis house prices can fall out of line with the normal pattern.

In order to assess whether houses are overpriced it is possible to use the rate of GDP per capita compared to the property price per square feet. When the ratio of GDP per capita in comparison to the price per foot of house prices is high then it is very probable that house prices are overvalued. The best way to compare this is to take countries which have more less the same GDP per capita because in poor countries houses are often relatively expensive in comparison to the standard of living.

The third and last valuation method is the Price-To-Replacements Costs. This is a valuation method which compares new building construction to buildings which already exist. When the cost of building new houses is much lower than existing constructions then developers are prepared to build new properties. This puts pressure on the housing market which then tends to fall. But not everyone wants this and governments in particular try to stop this practice through regulation. Europe in particular sees restrictions of this kind, in the form of permits and other building codes.

However, even in the absence of these regulations, when construction costs are lower than house prices this is a sign of an over valuated market.

For the reason that there are so very many rules and regulations existing in the countries selected for this research, price to replacements costs have not been included in the final analysis.

These tools for establishing whether a market is under or over valuate are important indicators in the buy to let investment sector of the housing market.

2.3 The house market

The housing market is a competitive one with many players. This is referred to as monopolistic competition. There are four players in the property market, the user market, development market, the financial asset market and the land market all of whom influence the price mechanism in particular where rental income is considered.
Rental income can be viewed in various ways according to (The Economist of Commercial Property Markets, Ball et al, 2002, p 13-17). Rent can be considered as the amount a business is able and willing to pay to occupy a particular site and building. This, in turn enables the firm to carry out profitable trading. Rent can also be seen through the eyes of the owner of the property who anticipates a return on capital invested that is competitive when compared to other possible investment assets and allowing for the risks of ownership.

Supply and demand is a basic economic principal and a very important factor in determining house prices. It works the same as any regular product, in that when there is more demand than supply, prices will fall until a level when people are willing to buy again, which in turn increases supply again followed by an increase in prices. This will keep prices fluctuating between supply and demand.
There are forces which determine whether there is demand or supply in the housing market. Through a lack of forward planning of house building by government and developers, property will be in short supply in that particular area and this will naturally force up prices. The same holds if social trends such as wide scale migration are ignored, as there has been and always will be a shortage of homes in certain places. This leads to the demand exceeding supply. Historically Australia has had this problem, as well as the U.K. which seemingly, will always have overpriced housing through chronic lack of investment.
It can also work the other way around, where there are attractive places to live that have low priced housing and good yields, this will lead to a high demand for houses. However, after a while house prices in these areas will move upwards and eventually there will be decrease in demand, which means that the market has gone a full circle.

For potential house buyers it is good to look at the real estate market conditions in their area. When future house purchasers understand the economic conditions in which the property is located, they can take their advantage in buying a house.

People buy a second home for various reasons. They often seek a better climate and today's retirement and financial products make it much easier to move. However, some people want a second home to enrich the quality of their lives.
Other motives can be purely financial. Here investors are looking for the highest yields and a good future capital increase in the value of the property. In many cases it is a combination of some or all of these reasons.

The holiday home market is expanding rapidly; many younger people have joined the traditional pensioner buyers. The forces of supply and demand attract each other through economic circumstances.

2.4 Economic factors

Other factors which explain movements in rising or falling house prices are market fundamentals such as interest rates, inflation, national income (GNP) and equity prices.

One of the market fundamentals are interest rates and these are mostly regulated by government. In chapter 4.3, regulation of monetary policy is discussed. A good explanation of the impact of a rise or fall in interest rates would be that an increase in the interest rates means that prices tend to fall or increase at a slower rate. This is because it is more expensive to borrow and indirectly people have less to spend.
This is seen as the economy slows down and prices increase less or even decrease. The changes in interest will not be immediately reflected in the prices. Normally it takes a couple of months before this is reflected in prices of both consumer goods and the property market.

Not only are people affected by recent changes to house prices but the t-1 period also becomes important to house buyers as they are influenced by recent nominal interest rates changes rather than real figures. However, for the purpose of this study real interest rates are adjusted against inflation rates to give a more realistic picture.
With the decrease in nominal rates and the recent development in mortgage products the ability to buy a house dramatically increases. Although the amount of floating mortgage products has made the property market more volatile. Some of these financial products, such as fixed rate mortgages, led to homeowners defaulting at the end of their term as interest rates had risen sharply. This was one of the reasons for the start of the credit crunch.

Inflation is the sustainable increase of goods and services. Inflation is measured in an annual percentage rate and shows the purchasing power in comparison to previous years. The rate of Inflation has thus an effect on house prices.The higher the rate of inflation the higher the increase in house prices, until at some point the prices reach such levels that people can no longer afford to buy.

Another factor is the growth in GNP or economic growth. There is an expectation that when national income increases, this inevitably leads to higher house prices. Higher GNP makes it easier for people to buy a house which in turn leads to more demand in the market which indirectly stimulates house prices.
Research conducted by Gregory Sutton (Explaining Changes in House Prices) with regard to house price increases in the US, UK, Canada, Ireland, the Netherlands and Australia (1995-2001) shows that a 1% increase in GNP is associated with a 1% - 4% rise in house price after 3 years.

GNP and interest rates not only affect house prices, but it would appear that the stock market may also contribute to fluctuations in house prices. In the same study, Sutton suggests the existence of a positive relationship between changes in equity and house prices. The model shows that an increase in share prices in Canada, Ireland and the United States reflect 1% increase in house prices after 3 years. For The Netherlands and Australia this was a 2% increase and in the UK 5%.
However these results were only tested in 6 countries over a period of 7 years. To get a more reliable picture and in order to be able to use this data for this thesis, more countries worldwide should be adopted and the research conducted over a longer period. This would establish as to whether the rise and fall of equity prices really is related to fluctuations in house prices.

Summary

In the search for good investment opportunities in the second home market is it important to know what the changing factors are that influence house prices. There is no one specific factor which indicates the level of property prices but there are however, multiple identifiable factors that determine house prices. Real estate cycles are important since buyers react to latest price movements. For house buyers it is good to be familiar with the situation in the real estate market and to establish whether a property market is under or overvalued. To identify if a market is in a state of over or under valuation use the standard of comparison which is described earlier in this chapter.
It is obvious that supply and demand drives house price increases, the user market, development market, the financial asset market and the land market all affect each other and react to supply and demand in those markets. Also economic factors contribute towards the declaration of house prices. Interest rates determine whether people will invest or save, increase in GNP leads to demand in property markets and also equity prices influence house prices.

In any cases not always go out of economic because they do not always indicate whether a market is over or under valued. This is because house buyers do not give much attention to fundamental factors.

However there are few standards of comparison for explaining house prices, it is still hard to see whether one country performs better than another, this being due to different tax systems, regulations, subsidies and demographic developments.

Chapter 3 Theories & Models for investment decisions

The description of the theoretical models starts by examining the investment decisions taken by private investors. Although several models are described, a choice of the model that best fits the investment decision of an individual investor will be made. Therefore the main question in this chapter is; which theoretical model can be used by an individual investor to make a good investment decision?

First, this study provides an explanation of the factors involved in making an investment decision (chapter 3.1), followed by an outline of the different players in the property market. This subchapter also considers portfolio theory which presents an explanation of the risk return rate.

This is followed by chapter 3.2 information asymmetry and risk and the gains of investment. This subchapter informs the individual investor over the risks and opportunities in buying a house and how to make a good investment decision.

The chapter concludes with a discussion of the various theories and models. Starting with the efficient market hypothesis chapter 3.3; this theory discusses the relation between information and house buying.

Chapter 3.4 considers the theories and models and the various characteristics of commercial property investment. The discounted cash flows method chapter 3.4.1 shows how price analyses are developed. Investment in the housing market, like the gilt and share market can be seen as an exchange for future income and capital which is outlined in the DCF method. Secondly traditional valuation models are examined and an explanation of the estimated likely selling price is given. Descriptions of each traditional model along with economic indicators are used to indicate why house prices and rents change over time.
Finally, a more advanced model: Economic Value is added which analyses the profit in buying and selling of second homes.

Apart from the model considerations, other factors also play a role in the buying and selling process, taxes, costs and other fiscal rules, these will be addressed in the next chapter. These factors can have influence on the outlined models.

3.1 Investment decisions

There are many factors that influence the decisions of investors when they are looking for a property. Before an investor can make an informed decision it is crucial to carry out an analysis of the prospective investment. In addition, it is important to consider the rate of return required by an investor balanced to the amount of risk involved. In order to answer this question, it is necessary to identify the returns and establish the associated risk. Analysis of risk and return are discussed in detail later in this chapter. The future expectations of output and demand are important especially for developers in new commercial property.

First for Investment analyses purposes it is important to establish the cost for one investment unit, including related usage costs. This is known as user cost of capital according to the book (The Economist of Commercial Property Markets, Ball et al, 2002, p 151-152).

There can be four components derived from user costs, real rate of interest, extra capital stock, operating cost and tax effects.

Real rate of interest means the actual rate of interest charged on equity and borrowed money. To produce the desired capital an individual has to borrow money or use existing funds, which is considered an opportunity cost.

As the extra capital stock can run out during the course of the year, the depreciation rate needs to be included. Property can appreciate or depreciate in value over the year, so that any real price fluctuation should also be included. When investment decisions are influenced by the user cost capital, then it is the expected change in real value over the year which is relevant.
Further operating costs and taxation fees should be added. Where tax rates are with direct respect to the property and deductions or depreciation are incurred this is reflected by tax relief on borrowing. A further explanation over cost and taxes can be found in chapter 4.2 Taxes and Costs.

Future expectations

It is not only a cost implication that is important in deciding whether an investment is a good one. Expected cash flows are significant in determining the returns over the next few years.

It is very important for developers to estimate their expectations in new commercial property for several reasons. First according to the book (The Economist of Commercial Property Markets, Ball et al, 2002, p 152), developers have one of the longest lasting forms of private investment and they have to guess demand patterns in the long term. Secondly, they have to speculate business expectations over output. Additionally they have to form expectations over the other variables previously considered in this research.

There are various models that consider cost, risks and profits over a longer period. These models will be discussed later and the model best suited to this study will be identified.

The choice between the different models will focus on the fact that this study is based on individual investors of second homes. First, a market outline will be made of all the different players in the property market to show what their function is in the process making properties.

Market environment

In the property market the four distinct types of market are interrelated according to (The Economist of Commercial Property Markets, Ball et al, 2002, p 20-21). The next section shows how these markets are interrelated.

A stock of offices which are either currently in use as office accommodation or temporally vacant is used as an example to provide an explanation of this interrelation. These offices may be directly owned by the users or rented from a corporation or property company. This stock is subjected to depreciation and maintenance and can be technologically obsolescent. The stock of offices can also be a financial asset for those who own it. When the owners are economically rational they compare the risks and rewards of property ownership with holding other financial assets. This behavior in the markets is driven by opportunity costs.

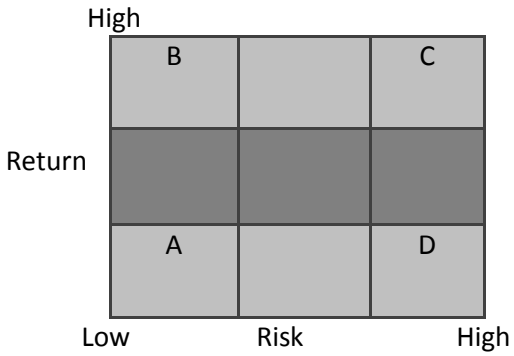
In some places there is a growing demand for these offices, so developers start replacing obsolete buildings and with the help of construction companies they create new office buildings. The user and development market is again connected to the land market because there is a limited availability of land driving competition. New offices are competing with older ones and maybe land must be used otherwise. In any case, opportunity cost is an important indicator to determine rent at a particular location.

Portfolio theory

Investors use the portfolio theory to achieve the satisfactory return compared to the risk involved in the investment.

Investors have varying investment objectives; some want guaranteed real income while others prefer nominal income or have the aim of long-term growth. However, there is always a tradeoff between risk and return. When higher risks are taken, a higher investment return is expected.
According to the book (The Economist of Commercial Property Markets, Ball et al, 2002, p 264) this tradeoff can be expressed in mean-variance criterion. Where the mean is the average return and the variance (or its positive square roots, standard deviation) which gives a range of possible returns, is a measure of risk.

A rational investor should choose for the lowest risk and the highest returns. Figure 4 is taken from the publication "The Economics of Commercial Property Markets, p 265" and shows the risk return in lines.



The horizontal grid line shows the risk and the vertical grid line depicts the returns. An investor should choose A rather than D because A has the same return and a lower risk. If investors have to choose between A and B, then they should choose B because it has a higher expected return and the same risk. For A and C this is different, C has a higher return but also higher risk than A. In economics A and C are variance efficient which means that how higher the expected return, how higher the risk. Here investors make a tradeoff between risk and return.

3.2 Information asymmetry & Risks and Gains

Information is needed to process economic activities but it is bounded to. For an individual it is only possible to process simple sets of information and have a limited range of expertise, the future is also an unknown entity. Individuals rely on the effects of habits or they can accept the consequences of ignoring key features of their activities. This is also known as bounded rationality according to(The Economist of Commercial Property Markets, Ball et al, 2002, p 117).

Normally, information asymmetry is seen between parties moving towards a transaction where one party has superior knowledge to the other. In this situation the two parties are the buyer and the seller whereby the seller can be the developer. The seller has more information than the buyer and therefore the superior party can use their knowledge opportunistically. This will lead to strategic behaviour of the seller in turn leading again to adverse selection and moral hazard following(The Economist of Commercial Property Markets, Ball et al, 2002, p 118).

Adverse selection occurs when one party has more information than another. Sellers are at an advantage because they know more about the conditions than the buyers and should therefore not

reveal any problems such as those concerning repair and maintenance costs. The theory of adverse selection suggests that the risk of opportunism is at its highest when infrequent and expensive transactions are conducted, such as buying a house or a second-hand car. This is because sellers have the incentive to maximise their returns. Only through repetitive transactions can experience be gained and so provide the appropriate experience.

Moral hazard is the term applied when a party isolated from risk behave differently than when it is fully exposed to the risk.
For property developers this can lead to larger risks being taken when they are financially well equipped to do so as they take larger risks than their creditors expect them to. When the risk of failure by developers is high, the costs of failure are mainly borne by the lenders as opposed to the developers, which is an advantage for the developer.

However, because of the information gap between seller and buyer, quality is disappearing from the market because sellers have to accept low prices since buyers have no effective means of discriminating (Akerloff, 1970)

Because of the knowledge of the buyer towards the strategic behaviour of the seller there is a lack of trust which leads to less than ideal outcomes (Axelrod, 1990; Binmore, 1992). In The game theory is concerned with strategic behaviour where predefined situations and rules of behaviour are put into context. A good example of the game theory is shown in the classic Prisoner's Dilemma approach. In this approach a person holding less than full information of someone's behaviour, assumes the worst scenario of an agreement being broken. Seen in the context of two prisoners, this game supposes both prisoners are worried that under interrogation one will implicate the other in order to get a lighter sentence. If rational they both end up confessing and are worse off. This game can have more players and outcomes depending on the exact rules by which it is played. In a construction project there are more players and the Prisoners' Dilemma approach can explain some of the organisational frameworks and difficulties of construction projects according to (The Economist of Commercial Property Markets, Ball et al, 2002, p 120). Unfortunately the game theory is not often referred to in commercial property literature.

Associated Risks and Benefits of Buying Second Homes

In addition to information asymmetry and the associated risks, house buyers are also subject to other areas of risk.
Different countries offer different opportunities when buying a second home. Some areas may be politically stable and thus a reasonable investment, while other countries may suffer from problems such as a bad government, corruption and terrorism.
This paragraph gives a global overview of the risks involved and will suggest how these risks should be handled as well as providing an overview of the opportunities of investing in property.

To judge the risks involved when buying a holiday home a thorough knowledge of a country's legislation, fiscal, juridical and financial policies is required. In this overview, only the most common risks are discussed. Risk factors which are country related will be discussed in more specific detail in the last chapter.
One of the more common risks is capital risk, which is the chance of an investor losing the money he has invested in a property. To reduce capital risk a good overview of the pro's and contras for investing in the area needs to be made in order to see if capital value can rise. The valuation methods described in chapter 2 can be used to determine if growth is likely. In addition, an analysis should be made of each the seller, developer, conditions of the house and financial constructions.

However there is also the possibility that capital value can rise. Most gains are very clear, high yields and capital growth thus profit in the short and long term. Identifying how to actually achieve and retain these profits is of paramount importance. As always, painstaking research into the best places to invest is absolutely necessary.

A second risk investors have to deal with is currency risk which is the risk of exposure to fluctuating currency. If a property is purchased in the local currency, the value of that investment is subject to the value of the local currency. A fall in the value of the currency value will mean a loss of value of the property.

A third risk is one concerning property loans according to (The Economist of Commercial Property Markets, Ball et al, 2002, p 323-324). The significance and nature of risk depends on the structure of the loan, interest rates and the degree of inflation. The risk of Interest rates is when the rent on a loan rises, especially when there are loans with a variable rate mortgage. These loans are subjected to a rise in the rate. To avoid these problems, interest rates can also be arranged as a fixed rate mortgage, loans can be fixed for 5, 10 or 15 years etc.
When holding a variable mortgage it can also work advantageously when rents decline.
To reduce the risk of interest rates use can be made of hedging, a practice that involves interest rate swaps whereby parties agree to exchange a short period interest rate for a longer one or vice versa.
Inflation risk can appear when, for example, a mortgage which is based on savings is taken out but through inflation the value of the capital becomes eroded.
Different mortgage structures are affected by different risks. However it is not applicable to discuss all types of risk subjected to various mortgages in this study.

Another problem is that of liquidity risk. For most people a house is a very important purchase, perhaps leaving little room for other spending. Buying an easily sellable property will keep funds reasonably liquid. An unwise purchase could see the investor's money tied up long term and therefore, unavailable if needed immediately.

Finally, geographical location can pose a risk when buying an investment property in an area which is political unstable or where natural disasters frequently occur.

An overall way to reduce risk is to buy in a variety of countries creating a property portfolio for long and short term investment. According to the *investment provident* diversifying, by adding international property to an investment portfolio can significantly increase returns and reduce risk, even during a recession. A loss of value in domestic investment can be offset by gains in markets at a different stage of the economic cycle.

Gains and risks listed in summary

Gains

- Increase in capital
- High yields
- A stable income from yield over a longer period
- A lower risk through a wider spread portfolio
- Lower interest on loans
- Higher returns through intensive management
- Possibilities for fiscal advantages (dependent on country)
- Opportunities in real estate markets

Risks

- Buying while insufficiently informed
- Bogus developers
- Decline in property values due to market circumstances (Capital Risk)
- High roundtrip transaction costs (depends on country)
- Taxes on capital gain and rental income
- Disruption in financial affairs
- Property loans (Higher interest on loans)
- Un-let holiday homes
- Currency risk
- Lower yield than expected
- Political instability
- Liquidity risk
- Geographically nature

The risks seem to outweigh the potential gains. However, this should not deter investment in overseas property as thorough research and good management will offset the risks involved.

In the following subchapters various theories and models are explained and the value of these theories and models will be identified. Starting with the efficient market hypothesis which shows the basic principles of how the information reaches the market participants and their reaction to this information.

3.3 Efficient market hypotheses

How does efficient market hypothesis (EMH) work it in the property market? In financial markets it is well established that the EMH are "information efficient", in that prices on traded assets already reflect all known information, and directly change to reflect new information. Meaning that in theory, it is impossible to outperform the market by using information; as the market already holds all known information. In practice, the information reflects current prices and the efficiency of the market. There are 3 forms of market efficiency defined by (FAMA 1970);
Weak form: efficiency requires prices to reflect the information in all past prices.
Semi-strong: efficiency requires that prices reflect all publicly available information, such as company accounts and reports, brokers reports and economic forecasts.
Strong form: efficiency requires that prices reflect all information whether publicly available or not, including insider information.

There has been not much empirical work done to test the efficiency of commercial property markets. (Gatzlaff and Tirtiroglu 1995) indentified 5 studies where studies were done to search the EMH in the commercial property market.
Brown (1985) conducted research for the United Kingdom and tends to provide evidence in supporting the weak form of EMH. Only one study, carried out by Evans in 1990 reported results that were inconsistent but the findings by Evans did not preclude periods of systematic mispricing in particular markets.
In 1989, Adams suggested in studies into the share market that problems arise because tests don't help with assessing whether the market is valuing a share efficiently. In other words they were not being able to assess mispricing. Today mispricing is a considered as a factor in the property market.

Some people are benefiting more than others through the property market and this is particularly so in the second homes sector of the market, where large differences are reflected between sellers, buyers and developers. Property is traded locally on a market where sellers seek potential buyers.

Buyers are required pay for physical structural surveys and legal documentation; this is because of the unique situation for each individual house. In the housing market, where there is no established market price, buyers try to figure out what a house is worth. They do this by references which are available for similar houses, the comparison tactic. In normal cases this should be the basis for negotiation.

In the Netherlands there is an organization called 'Mondi', which acts on behalf of those who wish to buy property. This organization supplies information about the entire process of purchasing property and even offers after-sales advice. They help with the legislation, fiscal, juridical and financial aspects as well as practical information about services and providers. The primary responsibility of Mondi is to protect their members from unscrupulous developers. Suppliers are screened and the international market is clearly set out making investments a great deal safer.

Dutch individual purchasers often prefer to buy from Dutch based developers since it is easier to understand foreign countries rules and regulations if they are explained in one's own language. People often find it easier to trust the reliability of companies they are familiar with.

However not all the information is easy to find, especially where similar property is traded infrequently and where the information is not always published. Both parties should therefore always use the help of a specialist, for information as well as for marketing, renting and management.

3.4 Models for valuating property and return on investment

In the last few years, the application of financial economics in the analysis of property investment has received more attention with increasing focus on the characteristics of financial economics directly being linked to property investment. Direct investment is when there is real owner of a house rather than paper assets which are backed by property. For the purposes of this research the focus is on direct investment.

Patterns of Cash flow for property can vary from country to country and can have debt and equity characteristics.
Some of the characteristics of future cash flow are variability of income, unpredictability of capital value, security of income and security of capital value.
Income can be fixed in a nominal or real term and can change because of economic growth or inflation. The same thing goes for capital value, this can also be variable. There is also income for compensating the risk for non payment's by tenants (security of income) and for the risk of loss of capital value (security of capital value).

3.4.1 Discounted cash flow methods and WACC

The basic principles of a model to analyze property prices can be established from explicit cash flow analyses linking property to the gilt market through the gilt yield and connecting the real economy to rental growth (Baum and Macgregor, 1992). For the basic analyses of prices in asset classes DCF can be used.

The benefits of using the Discounted cash flow (DCF) is a method for valuing a project, company, assets or a property by using the time value of money. In this case all future cash flows are estimated and discounted to give their present value. So the DCF is the value someone wants to pay today for the expected cash flows in future years.

When making an investment of US$150.000, the actual worth of that investment is currently US$150.000 however, through interest rates (discount rate) the future value may be worth more. This is why someone will be willing to pay more than the US$150.000 for the same investment in the future. To accept an offer of a future payment it is necessary to calculate the future value of a property. The future formula of DCF can be helpful in these circumstances. However, first the interest rate (discounted rate) needs to be determined.

The discounted rate is in most cases the weighted average cost of capital (WACC) which reflects the risk of cash flow. It reflects the exposure divided into two risk components.
First, the risk referred to as the time value of money. This indicates that investors prefer to have cash immediately in their hands rather than having to wait for it, so they have to be compensated for any delay in payment.
The other factor included in the WACC is a risk premium. A risk premium reflects the extra return investors want as compensation for the risk should the cash flow not materialize after all.
WACC is the minimum return that an investor must earn on an existing asset base to satisfy its creditors, owners, and other providers of capital.
According to (Bradford, D.J. Jaffe J. Westerfield R.W. and Ross S.A. (2008), Modern Financial Management, eighth edition, Extensions of the Basic Model, pg 352-358) WAC needs to calculate the capital structure weight. The capital structure weight is divided in two components; the cost of debt and cost of equity. The first step is to calculate the percentage of debt and equity over the total value. For example the total value of a house is US$150.000. Whereas the equity is US$60.000 and the debt US$90.000, as a percentage this is US$60.000/ US$150.000= 40% and US$90.000/ US$150.000= 60%.
The second step is to determine the percentages of interest for equity and debt. As far as equity is concerned it can be assumed that a certain rate is expected when not investing in property but saved with a bank. In this example a rate of 4% is expected. The debt component depends on the borrowing rate assumed at 7%. The last factor to be identified is the tax rate which is assumed as 25%.

If all components are taken into consideration then this formula can be written as.

$$\text{WACC}= \frac{90.000}{150.000} *7\% + \frac{60.000}{150.000} *4\%*(1-0.25)=4.35\%$$

When the WACC is calculated it can be used as input (Discounted rate) for the future formula of DCF. In this example the discounted rate is set at 4.35%.

The following formulas and explanation of DCF formulas are derived from (Bradford, D.J. Jaffe J. Westerfield R.W. and Ross S.A. (2008), Modern Financial Management, eighth edition, Discounted Cash flow valuation, pg 89-129).

The future formula is,

$FV= C_0 x\ (1+r)^t$

Where C_0 is cash to be invested at date O, r is the discounted rate per period and t is number of periods over which the cash is invested. Calculations show the FV for one, five and ten years. After the first year this is,

FV= 150.000x (1+0.0435) = US$156.525

FV= 150.000x $(1+0.0435)^5$= US$185.590

FV= 150.000x $(1+0.0435)^{10}$= US$229.623

All the above assume that the interest rate remains constant throughout the entire period. So an offer of payment would have to reflect at least the amount indicated by the results of the FV in order for it to be considered a good investment decision.

Conclusions

Discounted cash flow is a simple but effective method; however it does not take into account all forms of risks, for example the rise and fall of interest rates, inflation and rent reviews.

Property market versus share and gilt market

The property market does not work in the same way as the share and gilt markets according to (The Economist of Commercial Property Markets, Ball et al, 2002, p 272-273). The difference between the two forms of investment can be seen from the very start, when comparing the valuations of property and shares and gilt. Whereas two shares or gilts can be the same there will be never 2 identical properties. This is why the property market is required to work in a slightly different way than the share or gilt market.
Moreover properties vary greatly in size, design, contract, tenant, lease terms and purpose, all of which affect value.
In the property market the unit cost and lot size is much greater than in other investor markets as a result of direct ownership. The heterogeneity and lot size have important consequences for property investment. In property investment, it is impossible to create a portfolio which is identical to those of their competitors. Whereas it is possible in the share and gilt market to hold such an identical structured portfolio and so create an identical return. Also the lot size means it is difficult to have a well diversified portfolio. Even when a portfolio is worth 100 million dollars it is still not well diversified. This is also the reason behind there being no established trading market such as the stock market.
Because of the characteristics of the share and gilt market it is possible to adopt valuation methods like DCF. It is only possible to adopt this method in part to the property market.

Conclusions

This subchapter considers that the gilt and share market differ considerably from the property market and therefore, should use different valuation methods. However the DCF method can be applied to both markets.

Nonetheless, through the lack of a central market, heterogeneity and a lack of available information it is a difficult procedure put into operation when valuating property.

3.4.2 Traditionally valuation methods

Although DCF helps in understanding the valuations process in the property markets, the DCF method does not take all factors into account, like rise in interest rates, inflation and rent reviews. The DCF uses techniques which permit a logical and explicit approach.

Three widely accepted methods in the property market according to (The Economist of Commercial Property Markets, Ball et al, 2002, p 118) will be described and are not proper DCF techniques as previously set out.
These are methods where income is derived from market comparable transactions. The first of them is **the fully let method**. This method assumes that interest is just reviewed or has been let at open market rental value. The open market value (OMV)[1] is a valuation of the most likely selling price, also known as appraisals.

The fully let method, where rental income is capitalized at a rate called all risk yield(ARY) and in terminology used as the factor 'k'. This is determined from recently sold property with the same yield of similar property. Similar property with same yields is referred to as 'comparables'. From these comparables it is possible to collect market information and make adjustments. This is done in order to take account of all market movements. Factors that are taken into account are lease terms, tenant, size, condition and date of sale and differences of location etc.
The two elements examined as income are firstly, the capitalization rate (ARY) for incorporate rent reviews and income growth and secondly, when income is treated as a fixed perpetuity. ARY reflects risk, depreciation and expected income growth, while 1/k is known as the years purchased in perpetuity.

The valuation derived from the Economics of Commercial Property Markets: OMV=I/k=I.YP

OMV: Open market value
I : rental income
k : Capitalization rate
YP : Years purchase

However when the current rent is smaller than OMV then property has reversionary potential which means that with the first review an increase in rent is expected. This needs to be taken into account alongside two other forms (Baum and Crosby, 1995): term and reversion and the layer method.

Term and reversion

This method shows that income has two components, the current rent fixed from the present to next rent review; this is indicated as the term. Secondly, is the estimated rental value (ERV), which is treated as a fixed perpetuity, indicating the reversion. The yield from the reversion is taken from a comparable fully let property this is because they have the same characteristics, income growth every five years on review. Income from reversion or ERV has then been discounted back to the present. Conventionally this at the same rate as the yield applied to the reversionary income, although as ERV may be subject to annual growth until the review, the rate should be lower than a yield derived from a comparable with growth every 5 years, according to (The Economist of Commercial Property Markets, Ball et al, 2002, p 276-278)

[1] This 'most likely selling price', referred to as open market value is determined under a set of conditions established by the Royal Institution of Chartered Surveyors (RICS). These include a willing seller, a reasonable period to negotiate a sale, a reasonable period for marketing, values remaining static during this period and the absence of a special purchaser. In 1995, new guidance was issued by the RICS to professional valuers on additional and different bases for valuation, depending on the purpose of the valuation. It remains to be seen which of these clients will wish to use.

Yields from the term are normally one percent lower than from reversion and thus more secure. When there is no income growth this yield should be higher but this is arguable.
Baum and Crosby (1995) suggest that the low yield applied to the term tends to cancel the high discount applied to the reversion but that the method is 'logically incorrect and practically difficult to understand'.

The Layer method

The term and reversion method shows according to (The Economist of Commercial Property Markets, Ball et al, 2002, p 274-279) that the cash flows are split. This can be referred to as vertical spitting because cash flows are split at the time of the next rent review. This differs from the technique applied by the layer method; here the cash flows are split horizontally. Again, there are two parts of income, a constant income from the present in perpetuity and a constant income from the review date in perpetuity. In this case there is a bottom slice and a top slice.
We can see this as a low yield which is derived from a comparable fully let, applied to the (fixed) bottom slice. This one being the most secure of the two.
The other return is more risky, the top slice. This is capitalized at a higher yield. This is calculated as the difference between the estimated ERS and current rent.
The difference between the bottom slice and top slice is that the top slice has potential for income growth and the bottom slice does not. In practice it is the horizontal that is more frequently used.

Conclusions

In practice these methods are used a great deal following a survey of 203 valuations, Adair et al(1996). However Baum and Crosby (1995) criticize the above methods as lacking logic, being irrational and 'devoid of reality'. This is because all methods are unable to deal with short leaseholds and over-rented properties. The term over-rented properties refers to the situation when the contract rent exceeds ERV.
This survey has found that high rental yields and capital gains do exist and while it is certainly possible that contract rent exceeds ERV it is not fully applicable for this research.

3.4.3 Economic Value Added

The next model considered in this research is a more advanced model in analyzing profit, concerning the profit that can be made when buying a second home. The Economic Value Added model(EVA) is an indicator to measure profit.
EVA is a periodic metric and is one of most successful metrics used by large companies. It is important to measure the true profit in relation to the investments made. EVA is a financial performance model based on residual wealth. This is calculated by deducting the cost of the capital from the operating profit. Whereby, the operating profit is adjusted for taxation purposes.

The formula and explanations for EVA is derived from (O'Byrne Stephen F, 1996, EVA and Market Value, p 116 – 126.);

EVA =Net Operating Profit After Taxes (NOPAT)-(Capital * Cost of Capital)

The Formula has been developed by the consulting firm Stern & Stewart who capture the true economic profit of a company.

EVA is used to show the difference between operating income and cost of capital, debt and equity and to explore the impact of financing costs. In establishing economic profit, it is essential to calculate net operating profit after taxes (NOPAT).

First, the result before rents and taxes needs to be determined, this is known as earnings before interest and taxes (EBIT). Next accounting distortions need to be eliminated, whereby accruals are converted to cash. This applies to companies calculate NOPAT. Thirdly, some expenses have to be reclassified as investment and finally the operating taxes need to be subtracted.

However, as the focus of this study is on the individual investor, adjustments relating to large companies will not be taken into consideration.

The formula is, NOPAT = Operating Income x (1 - Tax Rate)

Operating income is gross income minus all operating expenses during the year such as maintenance and repair costs as well as depreciation. Unfortunately, determining these costs accurately is very difficult because of the variation in prices and the materials used.

After finding NOPAT, the invested capital needs to be calculated because the use of capital has to be charged in order to get the true profit. Invested capital can be money borrowed from a bank or other financial source, so the rents are charged accordingly. This is known as the cost of capital or WACC.

Precise methods for calculating the WACC can be found in chapter 3.4.1 Discounted cash flow and WACC. In this methods were also calculated using WACC.

When all elements are calculated, EVA can be derived and true profit can be measured.

Constraints of EVA

Calculations in EVA are mostly based on larger institutes while in this study it is assumed that the investor is a private individual investor.

Summary

The main question in this chapter is which theoretical model can be used by an individual investor to make a good investment decision?

When examining the different models, it became apparent that there were some constraints or difficulties for applicability.
Not all Models are fully applicable due different properties of models; some models are more useful than others when it comes to making investment decisions.

The traditional valuation methods are lacking in logic, being irrational and ‘devoid of reality’. This is because none of these methods are able to deal with short leaseholds and over-rented properties. This is also a model that is more commonly used for large institutions instead of individual investors.

This research has selected the Economic value added method to calculate the true economic profit made when an investor buys a property overseas. In addition to EVA other risks and opportunities are also considered. Information asymmetry becomes important in indentifying the risks in combination with other risks and benefits.

The next chapter will examine taxes and regulations more closely.

Chapter 4 Regulation and Taxes of Second homes

Like elsewhere there are rules and regulations, the second home market is no exception. Therefore the central question in this chapter is; how does taxation and regulation influence the individual investor? Other questions addressed are, whether Dutch investors are permitted to buy in certain areas, which party is responsible for drawing up contracts etc, and whether it is the tenant or landlord which needs to pay the associated costs. Additionally, investors need to know which tax system to use and the like.

Chapter 4.1 discusses the juridical practice of buying or selling a house including the different forms of taxation. As the taxation issue is such an important part of the buying process, the second subchapter is divided into categories to outline the taxation and costs. The last subchapter discusses the influence of monetary policy which regulates fiscal policies and other factors such as interest rates.

4.1 Juridical practice of buying or selling a house

When exploring as to whether there are any restrictions for private Dutch investors to buy overseas property, the first rule is to be aware that every area has its own rules and in many countries this is very different to the process in the Netherlands. When buying a house in a foreign country you are confronted with foreign civil laws, rules, procedures and other provisions which differ greatly per country.

Therefore, there is an international list which indicates on a numerical scale how property is protected. This list is referred to as the Property Rights Index. According to (The Property Rights Index, 2009 Report, conducted by Anne Chandima Dedigama, 2008 Hernando de Soto Fellow) indicates to what extent the country protects private property rights, so to what extent foreigners can buy territory or houses and to what extent the government complies with these rules. Scores are from 0-10 and how higher how better, which means that the higher the score the better protection offered to property rights. The Property Rights Index of the examined countries is shown in appendix 1.

Additionally, this Index indicates the independence of the judiciary as well as revealing any corruption within the judiciary. Another important measure of this Index is to point to the chances of private property being expropriated as well as to show whether companies or individuals can enforce contracts. The Property Rights Index is one of the pillars for the Economic Freedom Index.
Economic freedom means the fundamental right of every individual to control his or her own labour and property, according to the heritage foundation. Other pillars for the economic freedom are Business Freedom, Trade Freedom, Fiscal Freedom, Government Size, Monetary Freedom, Investment Freedom, Financial Freedom, Labour Freedom and the Freedom from Corruption.
The Property Rights Index is one of the important indicators for investing in overseas property and is used in the analyses for searching for good opportunities in the second homes market.

When letting a house are a few laws to which house owners must adhere but there are also rules for the tenants. There are vast differences between countries in the landlord and tenant laws. Unfortunately, it is not possible to discuss all laws in this study.
Some countries are pro-tenant and others are pro-landlord. Questions derived from the GPG website is used to establish whether a country is pro-landlord or pro-tenant.

- Can rents be freely agreed between landlord and tenant?
- Can the landlord collect security and rental deposits, and are the amounts limited?

- Must contracts be for a specified period? Can either landlord or tenant terminate the contract early, and what are the penalties for early termination? Does the tenant have a right to extend?
- Does the court system work? How long can it take to evict a tenant for non-payment of rent?

The questions used to ascertain an overall picture of the relationship between landlord and tenant. Other juridical steps in buying and selling a house are discussed below:
In a normal situation where a house buyer wants to borrow money from a bank, a mortgage on the house should be arranged. Only the individual(s) buying the property can apply for the mortgage. Notaries are helping individuals by the use of a notary, specialising in property law.
Notaries are public officials who are allowed to make deeds, to keep copies of those deeds and extract it. Property transfer is not possible without a notary. The notary also investigates if the seller is authorized to sell. It is his duty to transport the transportation and mortgage deed and to register the deeds in public registers.

Next is the real estate agent. Real Estate Agents are very useful when it comes to matching supply and demand in the housing market but not obligated.

In the Netherlands we have several distinct phases to register the transfer of property (published in Buying and Renting, Legal issues when buying a house, 2007, E Senger). When buying in other countries different rules may apply, these rules will be outlined for the countries that matter in terms of this research.

- The Purchase Agreement
- Delivery
- The Registration of the Transfer

The first phase is the Purchase Agreement, in this phase, one party undertakes to handover the property and the other party agrees to pay the agreed price. This is known as the (provisional) Sale Deed.

In phase 2, after the sale has been agreed delivery is taken place, the Transfer Act is created. This is imposed when the buyer is able to pay the purchase price. The Transfer Act differs from the Sale Deed, the Transport Act refers to ownership transfer and the Deed calls for the obligation to transfer property ownership.

The last phase is registration in the competent Registry. This is the official transfer from seller to buyer. The purchase sum is paid to the notary for the registration and the notary provides for the cancellation of redeemed mortgages from the seller. This is so the buyer gets an unencumbered property.

Every country has these rules, more or less. Only in some countries these rules are better observed than others. In addition, registration time and costs can vary from country to country. The rules and regulations related to taxation and payment of taxes is explained in the next subchapter on Taxation of Second Homes.

4.2 Taxation and cost of Second Homes

When buying a house in a foreign country it is important to consider all the different forms of taxation. Which taxes must be paid can be divided into a different categories.

- Transfer tax or transaction costs

- Property tax
- Income from sales and letting

One of the most important costs to be taken into consideration is *transaction costs*. The transaction costs described in this section are derived from The Global Property Guide research, with inputs from local real estate agents, government agencies and the World Bank. As well as the website: Doing Business.

There are big differences between countries regarding the level of these costs. It is also important to know whether the costs of the transaction are to be met by the buyer or the seller.

The amount of these cost not only differ from country to country but also from buyer to seller. Many of these costs are negotiable, such as agents and lawyers costs. These differences between countries make it is hard to compare the transaction costs.
However, there are methods available for comparing these costs. GPG made some assumptions and factored in all the major costs in order to calculate transaction costs. It is always assumed that a house is bought by a non resident.
For an investor in second homes it is vital to know how these costs are split up and the amount. These major costs are divided in to registration costs, real estate agents fees, legal fees and sales and transfer taxes. Registration costs include registration fees, stamp duties and notary fees and are the costs incurred in registering a property in a Registry. Secondly, are the real estate agent fees, these can best be described as search fees paid to an agent who assists the buyer through the registration process. The third costs which are incurred in the transaction costs are legal fees which are paid to lawyers who prepare the sales and purchase agreements and ensure that there are no lines are on property. All sales and transfer taxes including deed taxes, transfer taxes and local taxes that are regulated by local and national government concerning the buying or selling of properties. Some other cost are omitted to make comparison possible. The omitted costs are survey fees, acquisition fees for a tax number or a residency permit or costs of setting up a company.

Property Tax; Payments and Deductions.

After property has been registered and the transfer tax has been paid, house buyers still need to pay property tax. Property tax is mandatory and is calculated on the value of the property being taxed. In the Netherlands all second home properties are covered by Box three. This applies to a holiday home either in the Netherlands or abroad.

In the Netherlands, mortgage interest for the main residence is deductable for tax purposes in box 1. This is different for a second home. In the case of a second home it is only deductable when the taxpayer uses the second home for personal use throughout the year. So in the case of second homes used for investment purposes this is not the case.
Rate of Taxation:
The website of the Dutch tax authority provides clear answers to many questions arising from questions of taxation. They note the following,

A second home is not always deemed a second home by the tax authority and so does not always have to be indicated as so in box 3. Box 3 is the box for income from savings and investment. The following examples show a second home that does not have to be classed as a second home.

A property is not considered as second home when:
• your own property was your principal residence in 2008. Not even on a 'temporary' basis. This allows you to own a home in Box 1.

• An estate under the 1928 Countryside protection-law which was fully your property. Usufruct (a lifetime tenancy) and limited ownership of an estate are noted as other assets in box 3 showing that the second home and associated buildings stand on the estate.
• A forest or nature reserve which you wholly own. The usufruct and limited property are indicated as other property in box 3.

A property in the Netherlands that during 2008 was at the owner's disposal for 30% or more of the time, shows the WOZ value, dated January 1, 2007. If the house was at the owners disposal for less than 30% of the time (eg rental), or is it a house abroad, give the value in the economic traffic to enter then the value to the level dates.

The amount payable when an investment falls in BOX three is dependent on the deemed yield of net asset and will be a flat rate of tax levied of 30%. So when a property is rented out the payable tax is 30% based on the assumption that a taxable yield is made on the net assets. In total this is an annual tax of 1.2% on the value of the property.
However, in box 3 there is an exemption of 20.315 Euros for 2008 and with a partner this amount rises to 40.630 Euros for the current tax year in dollars is this with a exchange rate for 2008 with a yearly average**:** 1 U.S. Dollar = 0.683 Euro, which makes 20.315/0.683= US$29.744.

Income from sales and letting

House owners can let their property in order to earn income. This is not the only income the property may provide. When selling a house there may be income generated from capital gain.

In the Netherlands a capital gains tax is charged on capital gain. But not all countries have capital gains taxes and they use different tax rates for individuals and corporations.

Under Dutch law, when buying a house in a foreign country there is no tax payable on rental income. However, taxes may have to be paid in country where the property is located; this differs from country to country. When making a profit from selling a foreign property, Dutch individuals don't have to pay capital gains tax in the Netherlands, although, they may be liable for tax in the country concerned. In the Netherlands, the price achieved for the sale of the foreign property needs to be declared and the amount is taxed in Box 3.

For research purposes and to make a comparison between countries, these taxes will be classified as effective income tax and effective capital gains tax on gross rental earnings. The effective tax rate is used since the amount payable is after deductions on gross earnings. Another advantage in using these effective rates is that they allow comparison of tax burdens between countries.

4.3 Monetary Policy

It is a task of government to regulate factors such as interest rates and fiscal policies which can positively influence the wider economy as well as the housing market. The main reason for monetary policy is price stability. This means that prices do not increase too rapidly (Inflation) or decrease too rapidly (deflation). If prices move by just less than 2% per annum over the medium term according to the Dutch Bank there is price stability. This is important for consumers as well as entrepreneurs; they have to have trust in the value of their currency. When people lose faith in the currency, high increases and decreases of prices will lead to uncertainty and undermine the economy. Price stability is therefore a prerequisite for a healthy economy.

There are a few tools to regulate price stability. Every country applies this in its own way. In some areas, such as the European Union, a wider scope of price stability is emphasised by strong regulation. The most effective tool for regulation is to adjust interest rates.

Monetary policy has implications for the housing market. House prices are affected by the regulation of interest rates. If a government raises the interest rates it means house prices become more expensive. This in turn leads to more people entering the rental sector as opposed to buying a property. It is interesting for house buyers to know if a government plans to make adjustments in the interest rate in the short or long term.
During the credit crunch when many financial markets are in a state of collapse, new fiscal policies are being applied to them. According to (World Economic Outlook 2009, Policy Challenges, p xii) are interest rates in advanced economies to be lowered or remain near the zero bound and Central banks try to find new ways to ease credit conditions and provide liquidity.

It is always important to compare interest rates with house prices. In the last 20 years house prices in Europe have greatly increased as interest rates have declined. Individuals have reacted to low interest rates and innovative financial products to buy larger houses and in many cases, second homes. They have seen their investments rise to unprecedented levels.
Different countries used different types of mortgage products as well as fixed and variable interest rates. The conclusion is that variable rates make for a more volatile housing market.

Summary

There are many aspects of regulation and taxation in the second homes market. For the individual investor to understand where favourable tax regulations are in force it is important to know which rules are applied to which country. Significant factors which influence the investor are transaction costs, property taxes, income from sales and letting, landlord and tenant laws, buying and selling restrictions and other government policies.

Chapter 5 Research into prime locations for investment in the world housing market

This chapter starts the analysis of prime locations for investment in the global housing market. The research examines 133 countries, see appendix 2, based on criteria set out in chapter 1.3 Demarcations. Chapter 5.1 Methodology gives an outline of how the research presented in chapter 5 and 6 is conducted. A further explanation concerning the criteria to find prime locations is given in subchapter 5.3 while chapter 5.4 shows which countries meet the criteria.

5.1 Methodology

Research design

The introductory chapter commences with a definition of the problem and the posing of the research questions. In order to answer the questions it was necessary to set up valuations models, establishing the factors influencing house prices (chapter 2) and using this information to provide a clear answer.

Chapter three supplies various theories and models which can be used by the individual to make an investment decision. Chapter four presents the research conducted in the study and examines prime locations alongside taxes and cost implications.

Chapters 5 and 6 concentrate on applying the research to find prime investment locations and to examine these locations for potential increase in capital and to show what an investment is worth.

To locate prime locations is the first requirement is to identify the countries meeting the criteria. The countries which meet the criteria will be assessed by the valuation methods described in chapter 2.2 Over and under valuation, supply and demand and to economic factors chapter 2.4. Moreover, tax regimes will be identified and calculated and other fiscal rules will be recorded for these nominated countries.
Comparisons of rental yields, property rights index, supply and demand and other previously described economic factors will be made. All these valuation techniques, economic factors, tax regimes, fiscal rules and methods are covered in detail in Chapter 6.

Research setting

The research setting is centered on a worldwide desire to locate good places for investment in second homes. This is limited to 133 countries where 120 of them supply price and/or rental data (GPG). Appendix 2 shows which countries are investable and which are not suitable for investment. The researched data set will be limited by the assumptions set. After all assumptions are set the aim will be to explore three countries in more depth. This research provides a good insight and better understanding of what characterizes a place as being a good investment.

Selection methods

There are some groups in particular who find it interesting to invest in foreign countries. This thesis will be primarily written for Dutch investors from the private sector and partly aimed at developers and larger investors.
The selection criterion for the countries is explained in chapter 1.3 Demarcation.

The criteria are set from the point of view of the individual investor who wants high yields (minimum 9%) not too much risk (Property Rights Index with a minimum of 5 out of 10) and the possibilities to buy a sell a property without restrictions. For the point of this study there had to be enough

information available from each country to make it possible to be used for research purposes. A further explanation of the criteria is described in chapter 5.4.

Data collection methods and measurement

This section outlines the variables which are used in the research, including a wide arrange of house price statistics and rental yields as the most important indicators. Valuation of sales data for overseas property is based on upper end apartments in prestigious areas as those properties appeal to foreign renters. This data is collected by the Global property guide.

In addition, The Global Property Guide (GPG) is a backbone for comparable data sets. GPG uses many sources, like the IMF, OECD and many national banks but they also make their own independent investigations.
The GPG is mainly used to compare variables from the same levels, such as gross rental yields and GDP but also for valuation methods to establish whether a market is under or overvalued. This site is the largest and most up to date when it comes to information related to second homes. A list of sources used for reference is provided at the end of this study.

The quality of data sets is very important to guarantee reliability. Through the comparison of similar data sets this study was able to ensure reliability and quality of the research.

Global Property Guide

The Global Property Guide data is considered to be reliable and generally seen to be of a high standard containing their own statistics as well as figures collected from respected accountancy firms. The Global Property Guide is also totally independent since they are not involved in selling property or connected to other property firms.

The Global Property Guide's mainly obtains its information from the following sources:

1. In-house research.
The following data comes from in-house research:

- Square metre purchase prices, estimates of rentals, gross income returns (yields)
- Round-trip buy-and-sell transaction costs

2. Accountancy firms.

The following data is provided by accountancy firms:

- Rental income tax estimates
- Capital gains tax liabilities

3. Law firms.

The following data is provided by law firms:

- Landlord and tenant law

4. Central bank and national statistical data

- House and apartment price trends

Source: GPG

The data should serve as an overall guide. The situation may differ widely between cities and even between particular districts within a city.

Earnings: figures for earnings are for desirable districts in the premier city. The data is also based on current conditions; these may change dramatically within a period of months. In very small markets, a completion of a single building or development can suddenly swamp the market with new supply. On the other hand, the closure of a foreign firm or embassy may suddenly lead to a serious fall in demand.

5.2 Setting the Criteria

This subchapter sets out to establish the possible locations for good investment opportunities. The first step in the process is to determine what criteria a country must fulfill in order to qualify for investment. Additionally, some constraints are discussed.

The aim of this study is to locate good possibilities for investment in the second home market and to clarify why some countries are more suitable for investment than others.

This report considers the sector of investors that use their holiday homes as an investment in order to obtain high yield and a good prospect for capital growth.

There will be a number of criteria adopted to achieve good results for a country. Obviously not only factors such as increase in capital and high rental yields need to be considered but also other important issues such as political stability. Fiscal policies will be observed in order to provide an accurate result.
A summary of the countries reviewed is given below:

Criteria for all countries:

- Availability of information
- Gross rental yields above 9%
- Property Rights Index above 5,0
- Are there possibilities for Dutch individuals to buy and sell?

When countries fulfill the first criteria further investigation continues. An explanation about the criteria will be given. The first important criterion is the availability of information.
Availability of information is important because results of the study have to be compared and categorized.

However not all countries have enough information to determine whether they provide good opportunities for investment. That is why the countries selected are those where enough information is available to make an analysis.

Unfortunately not all countries have or publish statistics concerning house prices. One of the main reasons that countries do not publish this information appears to be that as it is the government who

is responsible for collecting taxes they also use house sale revenue to collect taxes. Therefore individuals are likely to under report sale prices. Governments are aware of this and sensibly do not collect property price statistics. In addition some countries do not have square feet prices or rental yield.

Because of the weakness in available house price statistics, the GPG has started to produce rental data from in-house research. This is unfortunately no time series because they just start collecting these data.

Gross rental yield is what a landlord can expect to earn and is expressed as percentage of property purchasing price before taxes, maintenance fees and other charges.

Good rental income indicates a healthy investment climate, often this is the basis to determine whether a proposition is a good investment or not. The gross rental yields for the chosen countries have to be at least 9%. Appendix 3 shows all gross rental yields for countries available.

Data for rental yields is collected through systematically searching web advertisements in prestigious areas which are appealing for foreign tenants. The apartments are mostly not new but in good condition with good facilities and have been refurbished within the last five years.
They carefully select appropriate price classes and take average prices and reject deviant outliers.

A third criterion is the Property Rights Index which is an international list which indicates on a numerical scale how property is protected. The Property Rights Index indicates to what extent the country protects private property rights, so to what extent foreigners can buy territory or houses and to what extent the government complies with these rules. Scores are rated 0 up to and including 10 and in order to be selected, a country has to have a rating of at least 5.0 where the highest nominated country is Finland with 8.7 and the lowest Bangladesh with a 2.5.

The last important criterion is the willingness of foreigners to allow Dutch investors buy properties. In some countries it is not possible to buy properties located nearby government buildings, in other areas it is not allowed for foreigners to purchase property at all. Every country has its own fiscal policies and rules concerning the buying of property.

After using the selection criteria to filter out the majority of countries, the remaining countries will be examined in further detail. The countries which meet the criteria will be assessed for standards described in over and under valuation. Moreover, for these nominated countries tax regimes and costs will be identified and calculated and other fiscal rules will be applied.

The majority of countries in the study will also be examined and compared for market fundamentals such as interest rates, inflation, yields, economic growth, prospects for capital gain and non fundamentals like political and social stability and geographical position. Differences and comparison over chosen countries will be revealed and conclusions made as to the best location for investment in second homes.

5.3 Which countries meet the criteria?

Where are prime locations for investment in the global housing market? In order to provide an answer to this question, further investigation is required to see what affect the criteria has on the investable countries. This subchapter will consider the impact of the criteria.

5.3.1 Information availability

To begin with a total of 133 countries were considered for this study. However, only the countries with enough available data will be selected and further researched as to whether second homes are a potentially good opportunity for investment. Information has to be available concerning rental yields, Property Right Index, taxes and transaction costs so that comparisons between countries can be made.

There appears to be less availability of house price statistics for the selected countries. This is because most appropriate countries lie in developing and emerging regions where data is not tracked or where annual housing price increase or decreases are not recorded.

In this study, only the countries providing enough information to determine if a country is good investment opportunity or not will be selected. However, it is not necessary for house price statistics to be published as other valuation methods can be used to see if increased capital value is likely.

5.3.2 Rental Yield

Next, research into the level of gross rental yields is conducted. Rental Yield is one of the most important indicators as to whether or not an investment is a good opportunity.
Through the study of rental yields it can be determined whether a market is under or over valued. This is shown in the model for over or under valuation in chapter 2. Good yields indicate that there are rewarding prospects in the long-term. Where yields are high, more buyers are attracted, which leads to even higher prices.
The gross rental yield is an expectation of what landlords can expect as a return for their investment. This is the annual rent income as a percentage of their current property purchase price.

The level of rental yield is set at 9% which indicate that just 11 countries meet the last two requirements. The last column shows when gross rental yields were for the last time updated according to the GDP.

Countries	**Gross Rental Yield % per annum**	**Last Update**
Asia		
Indonesia	12.34	Mar. 30, 2009
Philippines	10.99	Oct. 01, 2008
Malaysia	9.22	Oct. 15, 2008
Europe		
Macedonia	14.17	Aug. 29, 2008
Moldova	10.11	Aug. 29, 2008
Latin America		
Peru	10.09	Sep. 16, 2008
Panama	9.98	Nov. 12, 2008
Colombia	9.19	Oct. 18, 2008
Nicaragua	9.12	Nov. 26, 2008
Middle East		
Egypt	12.00	Aug. 22, 2008
Jordan	9.73	Sep. 10, 2008

The gross rental yield is based on 120-sq m apartments located in appealing areas. Rental yields are taken over a period from August 29, 2008 till March 30, 2009. Selected countries do not have published figures for rental yields after these dates.
However as the statistics show the gross rental yields; a deduction needs to be made to this figure. Since not all countries apply the same treatment to taxes, transaction costs and other charges, it is important to know what impact these factors have on selected countries.

In addition, gross rental yields should also be compared to the rate of inflation and interest rates per country. Another important consideration is the risk factor involved with each investment.

5.3.3 Property Rights Index

The 2009 report of the International Property Rights Index (IPRI) is conducted by Anne Chandima Dedigama and Hernando de Soto Fellow.
The index of property rights consists of four separate mechanisms. The most important one is the IPRI, which is the overall measurement. The other three core components which together constitute the IPRI, consider the strengths and protection of a countries property system. The components are legal and Political Environment (LP), Physical Property Rights (PPR) and the Intellectual Property Rights (IPR).
The LP therefore represents a free environment and juridical independence (Economic Forum's 2007-2008 Global Competitiveness Index). With rule of law enabling individuals the right to benefit from a strong private property system. Additional LP indicates to what extent there is political stability and corruption (World Bank Institute's 2008 Governance Matters). The other two elements PPR and IPR stress the importance of protection of economic development.
PPR is based on the Protection of Physical Property Rights, Access to Loans (Economic Forum's 2007-2008 Global Competitiveness Index) and Registering Property (The World Bank Group's 2008 Doing Business Report). The IPR which reviews countries policies and the effectiveness a country is in enforcing patents and copyrights. The main elements of IPR are Protection of Intellectual Property Rights (Economic Forum's 2007-2008 Global Competitiveness Index), Patent Protection (Ginarte-Park Index of Patent Rights, 2005*)* and Copyright Piracy (U.S. Trade Representative's 2008 301 Watch List Report).

Scores are from 0-10 with 10 denoting the highest ranking, therefore, the higher the score the better protection offered to property rights. The Property Rights Index of the examined countries is shown in more detail in appendix 4.

Property protection is one of the most important indicators for an individual investor to ensure that an investment is secure. A score of 5.0 on the Property Rights Index implies that it is a reasonably secure country in which to invest.
It is not only the importance of this list that requires a rating of more than 5.0 in order for a country to be included in the study but in terms of research purposes, it is a useful tool in limiting the size of the study.

After selecting countries which are measured by yields the remaining countries are then measured by the Property Rights Index.

Rank	**Country**	**IPRI**	**LP PPR IPR**
36	Malaysia	**6.2**	5.9 6.8 5.9
41	Jordan	**5.9**	5.6 6.6 5.5
53	Panama	**5.3**	4.2 6.8 5.0

This indicates that only the following countries will be further considered for this study. Panama, Malaysia and Jordan are considered to offer good property investment options in the second homes property market.

5.3.4 Is it possible for Dutch individuals to buy and sell?

In this section, selected countries are examined as to whether Dutch individuals are allowed to buy and sell.

Every country in the world has their own regulations in buying and selling a property and there are also different rules applied to foreigners wishing to buy a property in another country. It is not always clear as to whether foreigners can buy a property and land in another country and sometimes complicated rules apply.

Panama

Dutch individuals are allowed to buy property in Panama according to the GPG, Panama: Guide to Buying Costs and Procedures.

However, there is one restriction; the article 121 of the Panamanian Tax Code states that foreign persons, or Panamanian corporations with foreign ownership, cannot purchase property located less than ten kilometers from the frontiers, nor on islands under the jurisdiction of Panama. So in principle, Dutch individuals can do business without any limitations.

Furthermore, Panama encourages a retiree program which is not age related. In this program they stimulate foreigners through the use of tax exemptions, basic services and discounts on utilities.

In addition if individuals invest in property in Panama, it is advisable to establish a Panamanian corporation which reduces the amount of legal proceedings and restricts the confiscation of goods as well as offering certain advantages under Panamanian law. According to the Constitution, the Government cannot take private property.

Malaysia

In Malaysia it is possible for Dutch individuals to buy a property Malaysia (GPG, Malaysia: Guide to Buying Costs and Procedures). However this has to be above the value of MYR 250.000(around 68.000 dollar) and it is not permitted to purchase more than two properties or condominiums in blocks where there is max 50% foreign ownership. Although there are no restrictions in the buying and selling process and this is purely a juridical procedure.

It is advisable to hire a lawyer who can assist in the transaction. Other necessary steps required are that a letter of Offer/Acceptance is signed once the property is selected and that after 14 days the Sale and Purchase agreements shall be signed. The Sale and purchase agreement have to be stamped at the Stamp office and the transfer has registered at the Land Office Registry. Full and final settlement for the property needs to be made within three months from signing the Purchase and Sale agreement.

Jordan

When buying property in Jordan there has to be a reciprocal relationship with the country in question, in this case, the Netherlands and approval is needed from the Cabinet or Council of Ministers(GPG, Malaysia: Guide to Buying Costs and Procedures). Normally Dutch investors will have no difficulties. Another obstacle is that investors are only able to sell their property five years after acquisition.

A real estate agent is needed when purchasing a property in Jordan but there is no requirement to hire a lawyer for legal and other procedures. Authorities such as the Land and Surveys Department and Ministry of Finance are required when registering the property. At the Land and Surveys Department an official form of sale is available, together with a cadastral map and certificate ownership. Tax clearance can be obtained from the Minister of Finance.

Pro landlord or pro tenant

In Addition to the possibilities of buying and selling in the selected countries, consideration will also be given as to whether a country is pro landlord or tenant.

Various laws exist to which house owners must adhere but there are also rules for the tenants. There are vast differences between countries in the landlord and tenant laws.
Some countries are pro-tenant and others are pro-landlord. From an investment point of view, it is considered favourable if a country is pro landlord.

The factors for evaluating according to the GPG website for whether a country is pro landlord or tenant are as follows;

- Can rents be freely agreed between landlord and tenant?
- Can the landlord collect security and rental deposits, and are the amounts limited?
- Must contracts be for a specified period? Can either landlord or tenant terminate the contract early, and what are the penalties for early termination? Does the tenant have a right to extend?
- Does the court system work? How long can it take to evict a tenant for non-payment of rent?

In Panama rent can be freely agreed between landlord and tenant. The landlord is allowed to make rent reviews every few years as agreed between the two parties. Only rents which are equal or lower than 150 dollar can be reviewed with written authorization by the Ministry of Housing. This is regulated by law No, 93 of October 4, 1973.

Tenants have to pay a security deposit equal to one month rent to the Ministry of Housing. This is paid via the landlord and recoverable by the tenant on the expiry of the rental agreement unless there is a claim by the landlord because of unpaid rents or damage.

Furthermore, there are no limitations or restrictions concerning the duration of the lease agreement. In general the duration of the lease contract is freely negotiated. The tenant is not bound to the duration of the contract and can terminate the agreement by giving a month's notice period to the landlord.

Finally, this research looks at the Panamanian legal system in order to see how effective it is when the tenant does not pay or makes consistently late payments. Generally speaking the court system in Panama works effectively. However it may take several months before evictions can be finalized. The

various proceedings fall under the jurisdiction of the municipal or circuit civil courts of the Judicial Branch.

Figure 5.1 below is derived from the GPG site; and shows figures for eviction for non-payment of rent.

EVICTION FOR NON-PAYMENT OF RENT		
Duration until completion of service of process	30	
Duration of trial	60	
Duration of enforcement	30	
Total Days to Evict Tenant	**120**	
Courts: The Lex Mundi Project		

figure 5.1

After reviewing tenancy regulations, it can be concluded that Panama is pro landlord. The same questions are used to establish whether Malaysia is pro landlord or pro tenant. Under Malaysian law rents can be freely negotiated, however tenants can appeal to the court if they consider the rent increase to be too great.

Tenants have to pay a pay a security deposit of 2 or 3 months from the gross rental yield and an additional 0.5 security deposit as utility deposit. Rents are paid one month in advance.

Contract periods are normally for a year and renewal of contracts with a possible rent adjustment can be agreed between both parties. If a tenant wants to terminate a contract this must be done three months in advance.

The final research examines how effective the Malaysian courts are. The court in Malaysia is ineffective and very costly compared to the amount owing. In addition it takes a considerable time to recover unpaid rents, see figure 5.2 below,

EVICTION FOR NON-PAYMENT OF RENT	
Duration until completion of service of process	60
Duration of trial	90
Duration of enforcement	120
Total Days to Evict Tenant	**270**
Courts: The Lex Mundi Project	

figure 5.2

When analyzing the landlord and tenant laws of Malaysia it can be conclude that there are advantages for the landlord. However in practice the rental market is pro tenant and when laws are pro landlord the court is too slow and ineffective.

Finally the landlord versus tenant situation in Jordan is analyzed. Unfortunately there is not much information available for landlord and tenant law in Jordan. However rents are paid one year in advance and deposits are not required.

Normally a lease period is one year but can also be shorter. Shorter contracts are allowed but mostly at a higher rate. As far as it is possible to establish, it can be said that Jordan is pro landlord.

Conclusion

All three of the countries considered in the final part of this study allow Dutch individuals to buy and sell property. In some countries, the rules are more favorable than others. For example, in Jordan investors can only sell their property five years from the date of acquisition which is unfavourable for investors who may want to sell their home in the short term.

Analysis of the pro landlord and tenant status of the three countries finds that both Panama and Jordan is pro landlord and that Malaysia is pro tenant, according to research from the GPG concerning the landlord and tenant laws.

Summary

To find prime locations for investment in the global housing market criteria was set out to show the places with an acceptable level of risk and with a minimum of gross rental yields return. The prime locations should also satisfy the requirement that sufficient information was available and that the individual investor was allowed to buy and sell.

From the initial 133 selected countries, with requirements for rental yields of at least 9% and a Property Rights Index set at 5.0 points on a scale of 10 this has now been successfully reduced to just three countries being considered for the purposes of this research.

The next chapter examines the selected countries on the basis of whether capital value is likely to rise and calculations showing the true value of an investment.

Chapter 6 Increased capital value and the true value of an investment

This chapter examines the selected countries and identifies whether capital value is likely to increase as well as showing the true value of an investment. This is done by using multiple valuation tools and identifying the actual related and taxation costs for each individual country.
Firstly, chapter 6.1 determines whether the selected countries have house price time series. In order to assess whether house prices are likely to increase chapter 6.2 uses various methods to determine whether a market is over or under valued. Consideration will be given to price to rent ratio or yield and house price to income ratio. Supply and demand is another tool which can be used to determine whether prices are likely to rise or fall.

In addition, chapter 6.3 studies economic factors such as the Gross Domestic Product (GDP), inflation and interest rates to predict any likely increase in value. Furthermore, the value of an investment can be identified through taxes and cost implications; this is conducted in the forth subchapter. Subchapter 6.4.6 determines the net operating income after tax and EVA.

6.1 House price statistics

Firstly, this research needs to determine whether the selected countries publish house price statistics. Unfortunately no house price statistics are available for Panama, with only a handful of very basic statistics held at Superintendencia de Bancos de Panamá. Jordan also does not publish its house price statistics.

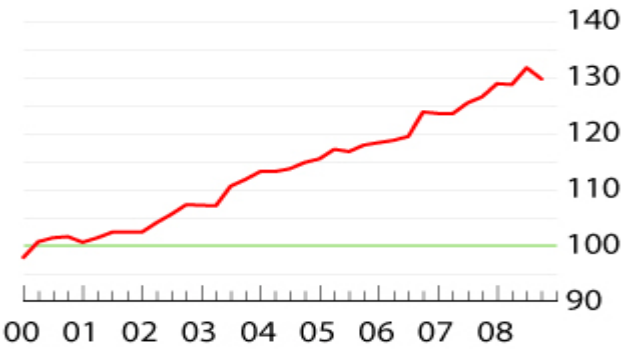
Malaysia does have a quarterly house price index which is available from the Bank Negra Malaysia (BNM). The index released by the Central Bank of Malaysia covers the following property types: terraced, semi-detached, detached and high-rise unit.

	Q1	Q2	Q3	Q4
2008	1.85	-0.13	2.33	-1.51
2007	-0.20	-0.04	1.55	0.89
2006	0.37	0.35	0.58	3.65
2005	0.56	1.47	-0.34	0.99

% change over a quarter

Source: Bank Negara Malaysia

House price index (2000=100)



The graph (figure 6) above illustrates that since the year 2000 house prices have increased by 30%. It also indicates that a decline is visible in 2008, probably due the credit crunch. This also corresponds to the table showing house prices declining by 1.51% in the last quarter of 2008.

This study will not conduct a comprehensive analysis as it is not possible to compare the results to the other two countries.

6.2 Over or under valuated

Statistics can determine whether a housing market is under or over valued in relation to a rise or fall in house prices. In this section are selected countries examined to what extent a country is under or overvalued. Valuation tools that are used in research are price to rent ratio or gross rental yield, house to price ratio and supply and demand.

6.2.1 Price to rent ratio or gross rental yield

The first valuation tool is price to rent or gross rental yield. Panama has a gross rental yield of 9.98% which is considered to be very high when considered in a global context. According to Figure 2 from chapter 2.1 shows that houses in Panama are undervalued. This also applies to Jordan with a gross rental yield of 9.73% and Malaysia 9.22%. The differences are small because the rental yields are close almost similar. Even in these countries which currently offer some of the highest yields in the world; the markets are not particularly undervalued which means that extreme growth is not expected.
As previously explained; when rental yields are high it is very probable that the rates of interest for buying a house are low, especially when compared to the cost of renting a house. This mean that more people are willing to buy a house than rent one as it is cheaper to borrow money from a bank. Investors want know that buying houses and renting them out will be profitable. So a shift will take place from renters to buyers. All these new buyers will push the housing market to a higher level.

6.2.2 House price to income ratio

In this section, a comparison is made of international house prices in relation to relative income. In areas where house prices are much higher than income, then the market appears to be overvalued. The same is true when house prices are low in comparison to the relative income of the inhabitants. In order to assess whether houses are overpriced it is possible to use the rate of GDP per capita compared to the property price per square foot. When the ratio of GDP per capita in comparison to the price per foot of house prices is high then it is very probable that house prices are overvalued. The best way to compare this is to take countries which have more or less the same GDP per capita because in poorer countries the houses are often relatively expensive in comparison to the standard of living.

The ratio to determine house price to income is the ratio of the cost of a housing unit of 100 square meters, compared to the country's GDP per capita. Normally this ratio will be much higher in low income countries than in high income countries.

The data relevant to Panama, Malaysia and Jordon has been provided by statistics from the IMF and the GPG. These figures are broken down into population, GDP growth and total income per capita as well as per country. The price per square metre is obtained from in- house research conducted by the GPG based on apartments of 120 sq. metres set in prime real estate locations.

GDP is a country's national output divided by the population. In 2008 the population of Panama was 3.403 million people and the country had a gross domestic product (in current prices) of 23.424 billion US dollars which gives a GDP of 6.883 US$ per capita at today's prices.

The formula used to calculate the house price to income ratio is (Price per square meter / GDP per capita)*100

Panama has a square meter price of 1740 US$ which makes the house price to income ratio (1740/6.883)*100= 25.27x

To understand the result of the house to income ratio, it is important to make a comparison of countries with more or less the same GDP ratio. Unfortunately not all countries have a house to income ratio as the square feet price is not always known. In order to make a comparison, countries are selected with a GDP which falls roughly in range of one 1000 GDP. In the case of Jordan, this is only rated at 500 as the GDP is just 3.267 US$ per capita.

Jordan does have a further population of 5.854 million people with a GDP of 19.124 billions dollars. Their house price to income ratio is $(1,151/3267)*100=35.23x

Malaysia's population is 27.297 million with a GDP of 214.734 billon US$ that gives a GDP of 7.866 US$ per capita. This shows Malaysia as having a house price to income ratio of (1.366 square meters price/ 7866)*100=17.37x

Panama has a GDP of US$6.883 which indicates a range from US$5.883 to US$7.883 when compared to house price to income ratio in other countries.

Panama	GDP 6.883
Botswana	7.554
Mauritius	6.872
Serbia	6.782
Belarus	6.234
Bulgaria	6.857
Lebanon	7.617
Costa Rica	6.580
St Lucia	6.033
Grenada	6.006

However only for Bulgaria, Lebanon, Costa Rica and St Lucia are house price to income ratio known.

Panama	25.27x	GDP 6.883
Bulgaria	47.62x	6.857
St Lucia	35.87x	6.033
Lebanon	29.26x	7.617
Costa Rica	24.35x	6.580

Analyses

The nominated, counties have been selected because of their good yields and good IPRI so the expectation is that these countries have a low house price to income ratio compared to countries with the same GDP.

Analysis shows that Panama has a low house price to income ratio which means that Panama's property market is undervalued and that growth is very likely. Only Costa Rica has a lower house price to income ratio. Costa Rica, situated in Latin America, where there are good possibilities for growth through globalization, has a rental yield of 7,06% which explains the their low house price to income ratio.

Malaysia	GDP 7.866
Botswana	7.554
Mauritius	6.872
Kazakhstan	8.502
Bulgaria	6.857
Argentina	8.214
Brazil	8.197

Lebanon	7.617

Only for Bulgaria, Lebanon, Brazil, Argentina, are house price to income ratio known.

Malaysia	17.37x	GDP 7.866

Bulgaria	47.62x	6.857
Lebanon	29.26x	7.617
Argentina	27.92x	8.214
Brazil	23.07x	8.197

Analyses

Malaysia has a great house price to income ratio. Compared to countries with the same GDP is their house price to income ratio the lowest of all. Even to countries as Brazil and Argentina who have a slightly higher GDP, where also a good growth potential is they perform better.

Jordan	GDP	3.267

Cape Verde	3.422
Swaziland	2.781
Maldives	3.649
Armenia	3.361
China	3.315
Georgia	2.925
Ecuador	3.776
Guatemala	2.848
Paraguay	2.601
Iraq	2.989
Syria	2.757
Samoa	2.798
Morocco	2.748
St Martin	4.102

Since the nominated country Jordan having house price to income ratio are considered to be too few to make an accurate comparison, this study has also added Morocco and St Martin to the list, these two countries have the closest GDP ratio which also have a house price to income ratio. This correlates to China, Morocco and St Martin being of comparable value. Below the house price to income ratio's and GDP.

Jordan	35.23x	GDP 3.267

China	85.48x	3.315
St Martin	79.64x	4.102
Morocco	57.20x	2.748

Analyses

Jordan has a higher house price to income ratio than Panama and Malaysia. However house price to income ratio needs to be compared in countries with the same GDP. The house price to income ratio is 1.5 times lower than Morocco and even more than twice as low as St Martin and China both of whom have an even better GDP ratio.

For house price to income ratio it can be said that Jordan has the best opportunities for potential growth when compared to both Malaysia and Panama.

Conclusion

House price to income ratio is a good measurement for establishing potential growth, and to see whether a country's property market is under or overvalued. Although this measurement has its limitations and in the current climate it is difficult to determine the present market conditions using house price to income ratio. Estimating expected growth is also particularly challenging. However, by using a combination of two other measuring tools, gross rental yield and supply and demand a reasonable estimate can be made for valuation purposes.

6.2.3 Supply and Demand

Demand and supply can be difficult to analyze (following the website Nu Wire Investors, art How to Avoid a Panama Real Estate Disaster, May 30 2008, Claire Saylor) this is because land is a finite commodity and it takes time to produce buildings. To estimate supply in a particular area an investigation needs to be conducted into how many projects are underway, which are near completion and which housing is currently inhabited. In order to analyze demand there has to be a study in to economic growth, since growth leads to more willingness to buy property and more jobs lead inevitably to a growing population. Migration is also an important indicator for demand in real estate.

Demand and supply in Panama

Panama's economy is growing very fast according to the IMF, in the last 5 years it has exceeded 8% per annum and this is mainly due to the construction industry. There are many new projects; new oil refineries, expansion of the Canal and planned mining projects. In addition there is new infrastructure in the construction of recreational spaces, highways and port facilities, so the expectation is for demand to increase.

However, Panama is also seeing a large scale increase in housing projects. In Panama City, there are currently 50.000 units offered for sale, with 8000 of them being completed in the last three years. In some areas demand has slowed down.

In the art, Worries concerning over supply have hit the Panama City condo market, Nu Wire investors, 04 June 2008, Paul McBride of Prima Panama said 'We have seen a period of high speculation and property flipping but it is coming to an end, adding 'The market now shows more potential as a location for long term investment.'

McBride's suspicion is that the predicted large delivery of condominium units between 2009 and 2011 will see prices being tested,'

On the other hand, the world is in the middle of a credit crunch and this is having a global knock on effect. Panama has a strong economy and coupled with a low cost of living with a high standard of quality of life, long term growth is expected. The market still offers good opportunities for investment. It seems that for the moment demand and supply in Panama are fairly equal. However, it is possible that supply may increase in the future.

Supply and demand in Malaysia

House prices in Malaysia are increasing at a slower rate but the market is more stable than neighboring Hong Kong and Thailand.

Many countries are currently suffering from a downturn although the levels of supply and demand in Malaysia are in balance according to art, Malaysian property and the hare and the tortoise, 12 December 2008 Malaysia property news, Mark Benson.

Malaysia has managed to keep the level of supply and demand at a consistent level. Being as almost everywhere else in the world is effected by the economic slowdown it is a remarkable achievement.

Malaysia runs campaigns to attract more foreign investors and they have comparative laws for buying and selling houses. Property prices in Malaysia are some of the lowest in the region, making it very attractive to investors.

Supply and demand in Jordan

When analyzing Jordan's housing market, it becomes apparent that there is a lot activity going on. Jordan is undergoing a period of unprecedented construction activity, according to the Jordan Real Estate Sector, Global Investment House Jordan, September 2008.
Jordan's property market is usually a demand driven market, however following the construction and building permits data is activity strongly increased. There is still a shortage of affordable housing for the low and middle income class. This, in combination with a growing population and internal migration has lead to high prices especially in recent times.

Currently demand is still outstripping supply although with the amount of new building construction this maybe about to change.

Conclusions

It is particularly difficult to predict supply and demand within a country especially when there is a lot of movement in the property market. Whereas currently we are seeing unprecedented construction activity on one hand and increased demand through economic growth, migration and increasing population on the other. Property markets have to be careful that increased demand does not result in too many new construction projects. This is a complex task calling for skilled government regulation as although economic growth is desirable it needs to be controlled.

Real estate investors, constructors and builders are all drawn to countries where investments were successful in the past and tend to return to those areas. The danger is that too many developers invest in these areas which in turn lead to oversupply.

The markets in both Panama and particularly, Malaysia have managed to maintain a balance between supply and demand. Jordan is currently seeing an unprecedented level of demand and in turn offers even better opportunities through increasing property values. This means that their property markets are currently strong enough to cope in the global economic crisis. However all countries have to be aware of the dangers of oversupply.

Overall conclusions under and over valuations and supply and demand

When countries are examined by the different valuation criteria for growth there are opportunities to compare the selected countries on the basis of gross rental yield, house price to income ratio and supply and demand.

Country	Gross rental yield	House price to income ratio	Supply and demand
Panama	9.98%	25.27x	In balance
Malaysia	9.22%	17.37x	In balance
Jordan	9.73%	35.23x	More Demand

figure 7

It can be concluded that Panama has the highest gross rental yield; however it does not vary much from the other two countries. For house price to income ratio it can be said that Jordan has the best opportunities for growth potential when compared to Malaysia and Panama. Whereas Jordan has the highest house price to income ratio but it needs to be compared to countries with the same GDP. The house price to income ratio is 1.5 times lower than Morocco and even more than twice as low as St Martin and China both of whom have an even better GDP ratio.
A good second place is Malaysia with its excellent growth potential and finally Panama which also has good opportunities however not as favourable as those in Jordan and Malaysia.

It is difficult to compare supply and demand between the nominated countries since there is a lot of activity in the housing market for each country. For Malaysia it can be said that the two components are more or less in balance. Also Panama is currently in balance however there are expectations that in near the future more supply will enter the market. Jordan currently shows a demand for property in its housing market.

6.3 GDP growth, inflation and interest rates which influence property prices

Selected countries will be examined in order to determine whether economic factors are favorable as a good opportunity for investment. The three economic factors examined are GDP, inflation and interest rates.

6.3.1 GDP growth

Growth in GDP or economic growth in general is an important factor which is worth considering. There is an expectation that when national income increases, this inevitably leads to higher house prices. Higher GDP makes it easier for people to buy a house which in turn leads to more demand in the market which indirectly stimulates house prices.

On the next page figure 8 the GDP growth is shown in Billions, Units are indicated as the years 2008 till 2013.

Country	Subject	Units	Scale	2008	2009	2010	2011	2012	2013
Panama	GDP	U.S. dollars	Billions	23.424	26.912	30.230	33.930	37.945	41.864
Panama	GDP	U.S. dollars	Units	6.883	7.768	8.571	9.450	10.382	11.252
Panama	GDP	Anual percent change		18,7	14,9	12,3	12,2	11,8	10,3
Panama	Inflation	Anual percent change		9,2	5,9	3,9	3,9	4,0	4,0
Panama	Real GDP	Anual percent change		9,5	9,0	8,4	8,3	7,8	6,3
Malaysia	GDP	U.S. dollars	Billions	214.734	231.105	251.095	272.815	296.414	322.054
Malaysia	GDP	U.S. dollars	Units	7.866	8.325	8.894	9.501	10.151	10.844
Malaysia	GDP	Anual percent change		15	7,6	8,6	8,7	8,7	8,7
Malaysia	Inflation	Anual percent change		6,0	4,7	3,0	2,5	2,5	2,5
Malaysia	Real GDP	Anual percent change		9,0	2,9	5,6	6,2	6,2	6,2
Jordan	GDP	U.S. dollars	Billions	19.124	21.654	24.136	26.739	29.385	32.031
Jordan	GDP	U.S. dollars	Units	3.267	3.616	3.940	4.267	4.583	4.884
Jordan	GDP	Anual percent change		20,4	13,2	11,5	10,8	9,9	9,0
Jordan	Inflation	Anual percent change		15,8	7,6	5,4	4,5	3,7	2,8
Jordan	Real GDP	Anual percent change		4,6	5,6	6,1	6,3	6,2	6,2

figure 8

Source : International Monetary Fund

Furthermore, the table presents the annual growth in GDP after it has been corrected for inflation. This illustrates that a country is really moving forward. Therefore, the figures shown are the annual percent change for GDP, inflation and the real GDP in annual percent. The most important indicator is the annual percent change of real GDP as this predicts the real GDP rise in a country.

Further is figure is shown annual growth in GDP which have to be corrected for inflation to see what a country is really moving forward. Therefore figure shown the annual percent change for GDP, inflation and the Real GDP in annual percent. Where annual percent change of real GDP is the most important indicator to see how countries Real GDP rise.

When comparing counties we can see that Panama has the highest real GDP with real GDP of 9.5% in 2008 and in 2013 its real GDP is given as 6.3%. The Real GDP of Panama is extremely high when taken

in a global context but a slowdown is expected by the International Monetary Fund's over the next few years. This indicates that strong growth is expected over the next 5 years, leading to higher house prices.

The Real GDP for Malaysia is high in 2008 at 9% but shows a huge drop in 2009 towards 2.9%, this is almost certainly due to the credit crunch which made its appearance in 2008. The expectation is that Malaysia's GDP growth will continue to rise.

Jordan's real GDP is 4.6% in 2008 and is going to rise in the next few years, remaining stable after 2010 according to data provided by the IMF.

Conclusions

Higher GDP leads to higher prices. All three countries have high real GDP that means it is expected prices will rise. Panama, with the highest GDP has the best opportunities followed by Malaysia and Jordan. Although Jordan's GDP is the most stable of the three countries concerned. Therefore, it can be concluded that it is likely that prices will rise in accordance to their GDP.

6.3.2 Inflation

Inflation is the sustainable increase of the average goods and services. Inflation is measured in an annual percentage rate and shows the purchasing power of a dollar in comparison to previous years.

In times where high inflation is predicted it can be a good time to buy a house but if inflation is already high it is better to wait.

How higher the rate of inflation how higher the increase in house prices until the prices reach such levels that people can no longer afford to buy.
With regards to the economy, it is preferable that house prices rise in a more appropriate rate to keep pace with the general increase in the economy. Below in figure 9, inflation for Panama, Malaysia and Jordon.

Country	Subject	Units	2005	2006	2007	2008	2009	2010	2011	2012	2013
Panama	Inflation	Anual percent change	2,9	2,5	4,2	9,2	5,9	3,9	3,9	4,0	4,0
Malaysia	Inflation	Anual percent change	3	3.6	2	6	4.7	3	2.5	2.5	2.5
Jordan	Inflation	Annual percent change	3.5	6.3	5.4	15.8	7.6	5.4	4.5	3.7	2.8

figure 9

Notes
Panama, Malaysia, Jordan: Inflation, average consumer prices (Annual percent change)
Definition: Consumer price index annual average
Source: IMF

Inflation in Panama has been relatively low in recent years. However, during the credit crunch in 2008 it rose to 9,2% showing a drop to lower levels at the current time with the prediction following the world economic outlook that inflation will remain stable.

Panama is not the only country with high inflation throughout 2008. Also Malaysia and Jordan show their highest inflation rates in this year. It can be concluded that the global economic crisis has a negative influence on inflation rates.

It is likely that in times of high inflation, prices will rise, so it would be good to invest before inflation increases. However all countries show an inflation peak in 2008 followed by a subsequent decline in the rate of inflation.
Not only property prices increase during times of rising inflation but also general costs such as maintenance and repairs. While the revenues from rental yields not directly adjusted.

Whereas the rate of inflation in Malaysia is both the lowest and the most stable, in Jordan inflation is somewhat high as well as being unstable. This may be related to the fluctuations in the economy.

It can be concluded that Malaysia has the lowest and most stable inflation rates which has a positive influence in keeping costs down. Malaysia is followed by Panama where the rate of inflation has slightly increased compared to recent years and finally, Jordan, that suffers the most from unstable inflation. However the predictions according to the WEO are that inflation rates will decrease.

6.3.3 What is the influence of interest rates?

In the next paragraph the selected countries are subjected to interest rates and the influences on a rise or fall in interest rates is examined.

In Panama there is an absence of a central bank according to the website (The Ludwig von Mesis Institute art, Panama has no central Bank, April 2007, David Saied). Through the absence of a central bank there is fully market driven money supply. Panama has therefore chosen the U.S. dollar as its currency. Approximately 85 international banks have a presence in Panama and it is shown to be one of the most stable banking centers in the world. In addition it is the second largest international banking centers. Because of the absence of a central bank there are competitive interest rates. Banks are currently offering interest rates between 4% and 7% on savings according to the website Panama Offshore legal services. This is dependent on the length of investment; normally this is between 3 and 12 months and the longer the term, the higher the rates.

The IMF and European banks do not have any information concerning a forecast of interest rates in Panama. However, although Panamanian banks publish interest rates they do not publish forecasts.

Nevertheless in line with the World Economic Survey (WES) the short and long term interest rates for Latin America are expected to decline further. This indicates that people are more willing to spend instead of saving their money, which in turn has a positive effect on house prices.

Malaysia has a central bank with interest rates according to Bank Negara Malaysia, on average showing interbank deposit rates of 2%. However these are not the interest rates given on savings and referred to for the purposes of this study. Interest rates on savings depend on the amount and time outstanding. According to Standard Charter Bank, Malaysia has interest rates between 0 and 2% which is more frequently nearer 0.
This will have a positive effect on house price increases because in this situation people are more willing to spend than to save.

The central bank of Jordan has interest rates depending on the currency outstanding and time. According to the Central Bank of Jordan interest rates are between 0 and 0.5% on deposits. With the exception of the Euro currency where the rate over 12 months is 0.66%. These rates are very low as

the government probably wants to stimulate spending among its people in order to move the economy forwards.

Overall conclusions economic factors

Country	GDP	Inflation	Interest rates
Panama	Very High, Good prospects for an increase in house prices	Relatively low, Moderate toward revenues, cost but an expectation of an increase in house prices	High, negative effect on house prices
Malaysia	High but fluctuating, reasonable prospect of an increase	Low and stable, good for revenues and cost, moderate chance of an increase in house prices	Very low, positive influence on house prices.
Jordan	Moderate but stable, reasonable prospect of an increase	High and unstable, bad for revenues and cost but good for increase in house prices	Very low, positive influence on house prices

figure 10

When comparing the economic factors it can be concluded that Jordan has the best prospects for an increase in house prices due the high rate of inflation coupled with the low rate of interest. Its GDP is a little lower than Malaysia's but expectations are the same. Panama has the highest GDP but its interest rates are also high. Therefore Malaysia has better prospects for an increase in housing prices.

Economic factors are an important consideration. However according to research conducted by two economists, Karl Case and Robert Shiller, house buyers pay little attention to 'fundamental' economic factors but are more influenced by recent house price changes. The most important period for house buyers to make their decision is period t-1.

6.4 Are tax policies favorable and what is the true value of an investment?

Before buying a house in a foreign country it is important to consider all the different forms of taxation.

- Transfer tax or transaction costs
- Property tax
- Income from sales and letting

This sub-chapter portrays the rate of taxation in Panama, Malaysia and Jordan.

Under Dutch law, when buying a house in a foreign country there is no tax payable on rental income. However, taxes may have to be paid in the country where the property is located; this differs from country to country. When making a profit from selling a foreign property, Dutch individuals don't have to pay capital gains tax in the Netherlands, although, they may be liable for tax in the country concerned. In the Netherlands, the amount achieved from the sale of the foreign property needs to be declared and the amount is taxed in Box 3. For the remaining countries there shall be a choice made based on favourable taxes and transaction cost.

This part of the study also evaluates what the investment is really worth. For comparing and calculation purposes is as example taken that there is bought a house of US$150.000 in Panama,

Malaysia and Jordon. In this part of the research, revenues, cost and taxes is taken as a basis. This study shows the rate of be earnings when investing in property in Panama as well as evaluating the same criteria for Malaysia's and Jordan's property markets.
Naturally, rental yields are not the only source of investment income; there are also prospects of a rise in capital value.
Although the income from capital gains is not measurable it is certainly an important factor for investment analyses. The last subchapter investigates opportunities in an increase in capital value in the selected countries.

Constraints

For the purposes of this study it was not possible to include all costs connected with the purchase of a property. Costs such as municipal charges, maintenance and repair expenses, administration fees and insurances are difficult to measure as these are an unknown quantity.

This is due to the difference in geographical locations, materials used and wages paid. The fact that these costs are not included, directly impacts on the analysis made for taxation. Chapter 6.4.5 shows that deductions can be made from income by subtracting expenses. Which expenses can be deducted varies per country.
To overcome these problems, this study has used estimated costs. For Malaysia and Jordan the relevant costs are estimated through a chartered accountants (Ahmed Abdullah & Coh in Malaysia[2]) and in Jordan[3] by Grant Thornton. In the case of Malaysia the costs are estimated at US$18.000 annual rental income at US$3585 and in Jordan this is US$2932. Unfortunately the costs for Panama are not estimated by any accountancy firm or corporation. However, this research has previously established that Malaysian GDP is closest to that of Panama, therefore, the costs for Panama are estimated to be the same as those for Malaysia.

6.4.1 Financing

In addition to the example there is assumed that a mortgage has to be bought, in order to calculate taxes and costs.
In Panama it is possible to get a mortgage for between 60 and 70% of the purchase price of a property. Mortgage rates vary depending on the risk a lender poses to the bank.
The average rate in Panama is 6.5% following Banking Finance Panama which is relatively high. Amortization is possible in Panama where the maximum amortization is for a period of 20 years with additional conditions, but the example provided assumes a term of 20 years.

The following example shows the cost and taxes for purchasing a house valued at US$150.000 dollar in Panama. It is assumed that 60% is financed by the banks and 40% is equity.
It must be borne in mind that money can be used in various ways. Instead of investing in property it is possible to set aside money in a bank, Dutch Banks currently offer a rate of 4% interest. When this is taken into consideration, first 4% has to be earned in order to get a net result, 60.000*0.04= US$2400. It is assumed that 6.5% is paid for the debt of US$90.000 which makes 90.000*0.065= US$5850. In total an annual payment is required for financing 2400+5850= US$8250.
The same example is taken for Malaysia and Jordan, where a house is bought for US$150.000 with US$60.000 equity and US$90.000 loans. However mortgage rates vary. The current mortgage rate, known as Base lending rate, is set at 5,95% for 2009. This average is obtained from 22 banks in

[2] Estimated costs; includes quit rent, assessment, repairs and maintenance, fire insurance, service charge, sinking fund, and management fees.

[3] Estimated costs. Maintenance and repairs, salaries, and sewer contribution are all deductible.

Malaysia, (Malaysia Base Lending Rate 2009). An annual payment for financing is US$2400 equity and US$90.000*0.0595=US$5355 produces together 2400+5355= US$7755

Jordan has rates between 4% and 5% according to Utah Mortgage Rate Trends and Analysis, the longer the fixed term, the higher the rate. This study assumes a rate of 4,5% which is relatively low. The annual cost for Jordan is US$2400 equity and US$90.000*0.045= US$4050, produces 2400+4050=US$6450. Lending costs in Jordan are the lowest after Malaysia and Panama. This corresponds to the interest rates paid on savings which are the lowest in Jordan after Malaysia and Panama which have relatively high rates.

6.4.2 Transaction costs

This analyse starts by investigating investment in Panama, which has a rental yield of 9.98%. A gross rental yield of 9.98% produces on an investment of US$150.000 revenue of US$14.970. Deductions for costs and taxes need to be made from these yields in order to obtain a net result.

A closer look at costs in Panama starting with their transaction costs (figure 11.1) is detailed below:

Transaction Costs		
		Who Pays?
Lawyer's/Notary's Fee	2.00%	buyer
Transfer Fee	2.00%	seller
Agent's Fee	3.00% - 5.00%	seller
Costs paid by buyer	2.00%	
Costs paid by seller	5.00% - 7.00%	
ROUNDTRIP TRANSACTION COSTS	7.00% - 9.00%	
Source: GPG		

figure 11.1

The transaction costs are between the 7% and 9%, giving an average of 8.0%. When buying a house, the buyer is liable to pay 2% of the purchase price as part of the transaction costs. These are one off costs and are 150.000*0.02=US$3000.

Transaction costs Malaysia

Transaction Costs		
		Who Pays?
Stamp Duty	1% - 3%	buyer
Lawyer/Solicitor's Fees	0.4% - 1%	buyer
Other Fees	MYR180 (US$49)	buyer
Real Estate Agent's Fees	2% - 2.75%	seller
Costs paid by buyer	1.40% - 4.00%	
Costs paid by seller	2.00% - 2.75%	
ROUNDTRIP TRANSACTION COSTS	3.40% - 6.75%	
Source: Global Property Guide		

figure 11.2

Malaysia's gross rental yield of 9.22% produces revenue of US$13.830. The average roundtrip costs are 3.40% + 6.75% divided by two makes 5.08%. The buying costs are between 1.4% and 4% which is on average 2.7%. The one off buying cost is 0.027* 150.000=US$4050.

Transaction costs Jordan

Transaction Costs		
		Who Pays?
Stamp Duty	0.6%	buyer
Transfer Duty	6% 4%	buyer seller
Real Estate Agent's Fee	2% 2%	buyer seller
Costs paid by buyer	8.92%	
Costs paid by seller	6.32%	
ROUNDTRIP TRANSACTION COSTS	15.24%	
Source: GPG		

figure 11.3

Jordan's gross rental yield is 9.73% giving an annual rate of US$14.595 on a US$150.000 investment. The Transaction costs for Jordan are the highest when compared to the other two countries. Total roundtrip costs are 15.24%. The one off buying costs are 0.089*150.000=US$13.350

6.4.3 National taxes

There is also a tax liability in the Netherlands. This is 1.2% of US$150.000 minus exemptions and deductions of debt of the mortgage debt.
Exemptions for Dutch investors in 2008 are 20315 Euro's, in US dollars this equates to 20315/0.638= US$29.744 and for married couples this rate is doubled. This example assumes the investor to be single. Liabilities of US$90.000 are also deducted in Box 3.

So the individual investor has to pay 150.000-(90.000+29.744)*1.2%= US$363

6.4.4 Property Tax

Panama's property tax is based on the total value of land and improvements, this subjected to Land Commission.
Following the property tax schedule it is possible to calculate how much property tax has to be paid for a house valued at US$150.000. However, it must be remembered that when capital value is rising, property taxes are also rising. Level dates are January 1 and December 31.

The table below (figure 12) shows progressive rates of property tax in Panama.

TAX BASE, US$	TAX RATE	Tax payment
Up to US$30,000	nihil	US$0
US$30,000 – US$50,000	1.75% on band over US$30,000	0.0175*20.000= US$350
US$50,000 – US$75,000	1.95% on band over US$50,000	0.0195*25.000= US$487
Over US$75,000	2.10% on all value over US$75,000	0.0210*75.000= US$1575
Total Tax payment	**350+487+1575**	**US$2412**
Source: GPG Feb 18, 2009		

figure 12

Property tax for Malaysia is based on an annual rental value of the property; according to the GPG website. Tax is a fixed rate of 6% and payment is required in two instalments. The annual Gross rental yield for Malaysia is US$13.830, which makes 13830*0.06=US$830. Property tax in Malaysia is rated at US$830 annually.

Finally, the figures for property tax in Jordan. Property tax in Jordan is treated as a tax credit which can be deducted from income tax. A charge of 10% over 80% of annual rental income is incurred. This can be calculated as [(annual rental income x *80%) x 10%]. This makes 14595x0.8= US$11.676 11.676x0.1= US$1168.

6.4.5 Income Tax and deductions

If Dutch investors are non-resident they are only taxed on their income in Panama. If buyers are married there is a possibility of joint taxation. Income is taxed at a progressive rate.

Deductions in Panama can be claimed on the value of the property at the moment of disposal for capital gains purposes, which is also so for acquisition costs, improvement costs, and transaction costs.

Income from capital gains is subjected to progressive income tax rates when it is part of ordinary business activities. However, when capital gain is realized from transactions and not part of ordinary business then it is taxed at a special flat rate of 10%.

Rental income is also subjected to the progressive rate as shown in the tax table below. Deductions can be made against income for: municipal and national taxes, maintenance and repairs, administrative expenses and depreciation of the property.

The rates of the municipal taxes, maintenance and repair costs and administrative expenses are estimated at (3585/18.000)x US$14.970= US$2982. National taxes are calculated on a basis of US$363 and depreciation is 100.000/ 20= US$5000. So the taxable income is estimated as nil. According to the income tax table: no taxes have to be paid on the first US$9000 while the gross yield is US$14.970- 363 National tax – 5000 depreciation- 2982 Maintenance cost etc = US$6625.

The table below (figure 13.1) shows the progressive rate of income tax for Panama;

TAABLE INCOME, (US$)	TAX RATE	Tax payment
Up to US$9,000	0%	0
US$9,000-US$10,000	13% on band over US$9,000	0
US$10,000 – US$15,000	16.5% on band over US$10,000	0
US$15,000 – US$20,000	19% on band over US$15,000	0
US$20,000 – US$30,000	22% on band over US$20,000	0
Over US$30,000	27% on all income over US$30,000	0
Total Tax payment	-	**0**
Source: GPG Feb 18, 2009		

figure 13.1

The data for income tax and deductions in Malaysia is provided by the GPG website: Malaysia; taxes and costs, January 5, 2009. Dutch investors are required to pay taxes over income generated in Malaysia. In Malaysia, any income from capital gain generated through sales, has been suspended indefinitely since 01 April 2007.

Tax on rental income is fixed and is levied for 28% of rental income. Expenses such as repairs, assessment tax, and agent's commission and interest expense are deductible from this income. For Malaysia the repairs, assessment tax, and agent's commission charges are estimated at (2932/18.000)x US$13.830= US$2253 and the interest paid on debt is US$5355. Depreciation is however not deductable. Factoring in all the variables, provides a calculation of rental income tax. Gross rental yield is US$13.830 which produces a levied tax of (US$13.830-5355-2253=US$6222, 6222*0.28= US$1742).

Jordan

Net rental income is taxed in Jordan, according to pages from the GPG website: Jordan taxes and costs, March 19, 2007. No taxes are levied on capital gains. Income from a rent of US$14.595 is taxed at a progressive rate according to the income tax table. Deductions of expenses such as property taxes, maintenance and repairs, salaries, and depreciation are deductable from the income. The depreciation rate in Jordan is 2% but for tax purposes this can be doubled. Depreciation deductions are therefore 150.000*0.04= US$6000. The estimated maintenance and repairs and management fees are (3582/18.000)x US$14.595=US$2904 and property tax is US$1168. After all deductions are made from rental income (US$14595-6000-2904-1168= US$4523) the remaining sum is considered for rental income tax purposes.

Below the income tax table,

INCOME TAX		
TAXABLE INCOME, JOD (US$)	TAX RATE	
Up to 2,000 (US$2,803)	5%	2803*0.05= US$140
2,001 – 6,000 (US$8,408)	10%	1720*0.10= US$172
6,001 – 14,000 (US$19,618)	20%	
Over 14,000 (US$19,618)	25%	
Total tax payment	-	**US$312**
Source: GPG march 2007		

figure 13.2

6.4.6 Net Operating Income after Tax and EVA

The last section of this study provides an explanation of net operating income and calculations for EVA after the first year of operation. These figures provide a clear idea of the revenues and expenditures for properties in the three selected countries. The table below presents the calculated operating income or EBIT, taxes and net operating income after tax.

Country	Panama	Malaysia	Jordan
Gross rental Income	US$14.970	US$13.830	US$14.595
Estimated Costs[4]	US$-2982	US$-2253	US$-2904
Buying cost[5]	US$-3000	US$-4050	US$-13350
Total operating costs[6]	US$(-5982)	US$(-6303)	US$(-16.254)
EBIT/Operating income	US$ 8988	US$7527	US$-1659
National tax	US$ -363	US$-363	US$-363
Property tax	US$ -2412	US$-830	US$-1168
Income Tax	US$ 0	US$-1742	US$-312
Total tax	US$(-2775)	US$(2935)	US$(-1843)
Taxes as % of gross rental yield	(18.5%)	(21.2%)	(12.6%)
Net operating income after taxes	US$6213	US$4592	US$-3502

figure 14.1

The table shows that operating income is high in both Panama and Malaysia; this is due to the low buying costs in these countries. The high buying costs associated with Jordan leads to the net operating income being shown as negative. Taxes, however are low in Jordan compared to the other countries. Nevertheless this is not the only cost implication as there are also costs associated with the financing of a property purchase. To understand the impact of financing, the Economic Value Added model is used.
The next table outlines how EVA is determined. Stern and Stewart define EVA as the difference between operating income and cost of capital and debt and equity. Now that all costs and taxes have been mapped EVA can be calculated per country.

[4] Maintenance, repair, insurance, management costs, assessments and sinking funds
[5] One time costs
[6] Not included depreciation cost because this study assumes a rise in capital

The formula used for calculating EVA is:

EVA = Net Operating Profit after Taxes (NOPAT)-(WACC * Invested capital).

Country	Panama	Malaysia	Jordan
EBIT/Operating income	US$8988	US$7527	US$-1659
NOPAT[7]	US$7325	US$5931	US$-1450
WACC[8] *** Invested capital**	US$-6720	US$-6105	US$-5640
EVA	US$605	US$-174	US$-7090

figure 14.2

A positive EVA calculation shows that an investor has created more after tax profit than the cost of the asset, so creating wealth. However, a negative EVA is unable to deal with the capital costs and is consuming capital. Panama shows a positive EVA during the first year, which is a very good result. Malaysia has a negative outcome of only US$-174 which is recoverable in the following year. Only Jordan has a high negative result and this is purely due to the high buying costs.
However, in the second year, when the buying costs are no longer a consideration, having been a one off expenditure, all three the countries have a positive EVA

Summary

This chapter has examined whether the countries of Panama, Malaysia and Jordan are likely to show any increase in capital value. In addition it has explored the true value of an investment. The increase in value is determined through multiple valuation tools, price to rent ratio or gross rental yield, house price to income ratio, supply and demand, GDP, inflation and interest rates. These factors, taken together determine the degree to which an increase is likely.
By calculating associated costs and ascertaining the tax demand in a respective country it is possible to determine the true value of an investment.

[7] NOPAT = Operating Income x (1 - Tax Rate)
[8] WACC is Panama 4%*40%(equity)+6.5%*60%(debt)*(1-0.185)= 4.48%.
(4.48*150.000)= US$6720
WACC Malaysia 4%*40%(equity)+5.95%*60%(debt)*(1-0.212)=4.07%
(4.07*150.000)= US$6105
WACC Jordan 4%*40%(equity)+4.5%*60%(debt)*(1-0.126)=3.76%
(3.76*150.000)= US$5640

Chapter 7 Conclusions and Recommendations

This final chapter outlines the conclusions and recommendations of this research. The main objective of this study is to locate good investment opportunities in the second homes market for the individual investor. In addition, providing an analysis of the situation and offering information that will lead to a good investment decision. This study started with an initial data set of 133 countries and made careful selections in order to locate good investment opportunities. Using set criteria to establish which countries are most suited for investment; countries were selected according to availability of information, prospects for buying and, gross rental yield and the Property Rights Index**.** Conclusions concerning the selected countries are conducted in subchapter 7.1.

Obviously, these are not the only countries where a good return can be achieved. There may be places in the world where house prices increase more rapidly due political and economic factors or in countries with little or no information, as well as some countries having higher revenues through improved tax policies and even lower costs. It should also be noted that the countries themselves have significant differences relating to returns and risks.

There are also countries where lower returns can be achieved with less risk such as Norway and riskier countries with higher returns such as Egypt. However, ultimately these countries may prove not to be profitable. There will always be a balance between risk and revenue. A rational investor chooses the highest yield with the lowest risk.

Nevertheless, the method in this study has looked at the perspective of the Dutch investor with a considered view point of efficiency (9%) and risk (Property Rights Index). This does not mean that the results of this study provide the answer to the best investment opportunity at this time but certainly point to a good one. Investors can review the information based on a thorough analysis and thus make a good investment decision, which is the purpose of this study. In the final subchapter recommendation will also be made.

7.1 Conclusions

The overall conclusions of this study are presented in four parts and provide an analysis of the situation in the selected countries. The conclusion also pinpoints the country most likely to offer a good return on an investment in the second home market. The first part concerns revenues, cost and taxes, indicating how high they are and the impact of each one.
The second part indicates how high the risks are for each country. Not all risks are described; the risks applicable to individual countries will not be further outlined. These can be found in chapter 3.2. Information asymmetry & Risks and Gains.
The third part assesses the opportunities for a rise in capital value using the previously described valuations tools.
The final part concludes with the rules and regulations favorable to Dutch investors.

However the choice between these countries depends on the individual investor, the invested amount, duration of investment and the acceptable amount of risk balanced against the return.

The diagram below shows the focus of all four conclusions, which when considered jointly, provides an overview of whether an investment is a good decision. The data for revenues, costs and taxes assumes the property to be valued at US$150.000.

Country	Panama	Malaysia	Jordan
Gross rental Yield	9.98%	9.22%	9.73%
Transaction Costs as % of property value	8.0%	5.08%	15.24%
Financing cost as % to gross rental yield	55.1%	56.0%	44.2%
Estimated costs as % of gross rental yield	19.9%	16.3%	19.9%
Taxes as % of gross rental yield	18.5%	21.2%	12.6%
Total annually cost as % of gross yield	93.5%	93.5%	76.7%
Capital gain tax	progressive income tax rates	Tax free	Tax free
Property rights index	5.3	6.2	5.9
Currency risk	Low, Strong currency	Low, Strong currency	Low, Strong currency
Geographic Nature related to economic profit	Low risk	Low risk	High risk
Price to rent ration or yield	House prices are under-valuated	House prices are under-valuated	House prices are under-valuated
House price to income ratio	25.27x Good potential	17.37x Very good potential growth	35.23x Excellent potential growth
GDP	Very good	Good	Good to moderate
Inflation	moderate effect on house prices	moderate effect on house prices	positive influence on house prices
Interest rates	negative effect on house prices	positive influence on house prices.	positive influence on house prices
Supply and demand	In balance	In balance	More Demand
Allowed to buy and sell?	Yes	Yes, however not more than two condominiums	Yes, However can only be sold after 5 years
Pro land lord pro tenant	Pro landlord	Pro tenant	Pro landlord

figure 15

Opportunities versus Revenues, Costs and Taxes

The table presents a comparison of annual costs and gross rental yield. Whereas the costs for Malaysia and Panama (93,5%) are equal. Jordan has the lowest annual costs (76.6%). Indicating that Panama and Malaysia have annual net revenue of 6.5% which covers the transaction costs. These transactions costs are relatively low when compared to Jordan, which makes up 15.24% of property value with net revenues of 23.3%. Therefore Jordan is not a good option for a short term investment because transaction costs bring too much pressure to bear on the revenues.
Rental yields are however not the only revenues, as after selling the house it would be expected that house prices have increased. Whereas in Malaysia and Jordan no capital gains taxes have to be paid, in Panama this is charged at the progressive income tax rate, chapter 6.4.5 Income tax and deductions.

Risk factors

The risks factors which are presented per country and divided into three risk components: Property Rights Index, geographical nature and currency risk. Of which the Property Rights Index is the most important since it converts multiple risk into one measurement, see chapter 5.3.3 Property Rights Index for further information.

Geographic nature is measured in terms of a country's economic vulnerability to natural hazard; according to (The Global Assessment Report on Disaster Risk Reduction (2009), 2.6 Economic Resilience, vulnerability and development constraints in developing countries, pg 54-58, United Nations, Geneva, Switzerland). According to this report, Panama and Malaysia are both classified as a low risk and Jordan a high risk experiencing limitations in international trade. In addition Jordan is lying in an area which is political instable.

The final part of this study discusses currency risk. This is the risk of a currency in the country chosen for investment declining against the Euro. It is always difficult to determine how exchange rates will perform, especially on a long term basis. This is why it is important to look at the strength of a currency. A strong currency is one that is well known in the global economy, the US Dollar and the Jordanian Dinar are among the most handled currencies in the world. The Malaysian ringgit is also considered to be a strong currency, one of the strongest in Asia according to the website CRN India.

When considering the risks factors it can be concluded that Malaysia is the safest option because of the IPRI and geographical nature. There after Jordan in respect of the IPRI however it is lying in an unstable area. Lastly, Panama because of its IPRI rating, however Panama's location is considered to be a safer one than Jordan.

Increase in capital value

The measurements around an increase in capital value have previously been explored. To summarize, when considering all the components of the table as to whether an increase is expected and comparing them it can be conclude that Jordan has the best opportunities for investment owing to the excellent house price to income ratio, where demand is in turn and where inflation and interest rates have a positive influence on house prices. As a second option, Malaysia shows very good potential, this is due to good performance shown by house price to income statistics and positive economic factors. Of the three countries considered for investment, Panama has the least potential due to high rates of interest and expectations of increased housing supply. However due to the high GDP rates, there are still good prospects on offer in Panama.

Rules and regulation favorable

The restrictions on Buying and selling along with a pro landlord culture demonstrates the convenience with which a property can be purchased and sold and the security of revenues. According to the table it can be concluded that all three of the countries allow Dutch individuals to buy and sell property. However in Jordan property can only be sold after 5 years from the date of acquisition and the regulations in Malaysia prevent the purchase of more than two condominiums in one apartment block.
Analysis of the pro landlord and tenant status of the three countries finds both Panama and Jordan to be pro landlord and Malaysia to be pro tenant; this is according to research from the GPG concerning the landlord and tenant laws. The conclusion that can be drawn therefore is that Panama is favourable concerning rules and regulations as it is pro landlord and has no restrictions for buying and selling. The next most favourable option would be Jordan because it is pro land lord and finally Malaysia since there are some buying restrictions and it is pro tenant.

End note

Taking all findings into consideration it can be stated that Jordan has the best investment options, however not the safest. As second, Malaysia provides a secure option with good prospects for a rise in capital. Finally, Panama, which performs well in respect of rules and regulations but does not offer the best prospects for an increase in capital along with the risks being slightly higher.

7.2 Recommendation

In this section are recommendations divided in a few steps when buying a second home, the individual investor should look to the next procedures. In addition in the last part of this section is recommended were good expectations are concern the second home.

First determine the duration and height of an investment, risks taking and yield requirements. The second step is making market analyses, search for a safe location to invest in.
View the area in which the country is, there may be good indications that the country is politically stable, however maybe are neighboring countries not. Furthermore, avoid places where natural disasters occur frequently.

To determine whether the value of a house is rises make use of valuation tools described in this research.

For the short term investment it is important to see the latest price developments since people are very influenced by prices t-1. This could mean that buying a home just after a crisis is not the most sensible. For the longer term it is better to look to supply and demand and economic factors. Because most of these factors gradually change.

Buying

The third step is take advantage of reliable sources and aid organizations such as Mondi and or realtors before buying a house. Try also to let advice by people in country of purchase which are better aware of market conditions.

Further look at costs, tax policies and other rules and regulation. Look closely at the tax policies, this of importance for the value of a house, there are fixed tax rates but also progressive. In addition for short term investment it is important that the transaction cost are not too high.

As fourth step invest in a market that is pro landlord and where legal procedures are not with too many problems. As last for the larger investor is it advisable to make an investment portfolio for risk spreading.

Current situation and Expectations

In this subpart a few places are recommended which have good prospects too. In the Middle East is Morocco seeing a tourist boom and has a high GDP. Moreover, Egypt has very high rental yields although unfortunately this is balanced out by a strict government.

Countries which are worth considering in Asia are Cambodia, Mongolia and Thailand. Each land has its own advantage, ranging from high yield, strong GDP growth and good long term prospects.

Currently Latin America offers the best opportunities; this market is very suitable for retirees from the United States. Beautiful beaches, in close proximity to the USA and low houses prices are all good reasons for retirees to come to Latin America. In addition, South America currently provides good prospects through strong economic growth, low transaction cost and advantageous tax constructions. This could also be a good time for Dutch investors to look at this region. Good prospects are seen in Uruguay, Nicaragua, Peru and Colombia. Property is available at lower price/ rental ratios than found in most developed countries.

Over the next few years it is likely that even more countries will be classified as a vacation destination due to increasingly better transport links, communication, a growing population of retirees and general world globalization. Maybe this globalization will also see countries in Africa become attractive to investors in future. There are good opportunities in the housing market with prices on the increase, however currently this is an unstable area.

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Appendices

Appendix 1: property right index

Rank	Country	IPRI	LP PPR IPR
1	Finland	**8.7**	8.9 8.5 8.6
2	Netherlands	**8.5**	8.4 8.6 8.6
	Denmark	**8.5**	8.6 8.3 8.6
4	New Zealand	**8.3**	8.8 8.3 7.9
	Sweden	**8.3**	8.6 8.5 7.8
	Germany	**8.3**	8.3 7.9 8.7
	Norway	**8.3**	8.5 8.7 7.7
8	Switzerland	**8.2**	8.8 8.0 8.0
	Australia	**8.2**	8.3 8.1 8.2
10	Austria	**8.1**	8.4 7.8 8.1
	Iceland	**8.1**	8.9 8.5 6.8
	Singapore	**8.1**	8.2 8.2 7.8
13	Ireland	**8.0**	8.1 7.9 7.8
14	Canada	**7.9**	8.3 7.5 8.0
15	United Kingdom	**7.8**	7.9 7.1 8.5
	United States	**7.8**	7.1 7.8 8.6
17	Japan	**7.6**	7.4 7.2 8.2
18	Belgium	**7.5**	7.4 6.7 8.2
19	Hong Kong	**7.3**	7.8 7.8 6.2
20	France	**7.2**	7.1 6.4 8.1
	Luxembourg	**7.2**	8.4 5.1 7.9
22	Portugal	**7.1**	7.1 7.2 7.0
23	United Arab Emirates	**6.9**	6.6 7.7 6.4
24	Spain	**6.8**	6.1 7.1 7.3
	Korea (South)	**6.8**	6.3 7.3 6.8
	South Africa	**6.8**	5.9 7.1 7.4
27	Estonia	**6.6**	6.8 7.4 5.5
	Malta	**6.6**	7.5 6.3 6.0
29	Chile	**6.5**	6.6 7.0 6.0
	Israel	**6.5**	6.0 6.6 7.0
	Qatar	**6.5**	7.0 6.8 5.6
	Taiwan	**6.5**	5.9 7.3 6.3
33	Hungary	**6.4**	6.1 6.6 6.5
34	Slovakia	**6.3**	5.6 7.1 6.2
	Cyprus	**6.3**	6.6 6.4 5.9
36	Malaysia	**6.2**	5.9 6.8 5.9
37	Italy	**6.1**	5.6 5.9 6.8
	Czech Republic	**6.1**	6.0 5.7 6.5
39	Greece	**6.0**	5.8 6.1 6.0
40	Tunisia	**5.9**	5.7 7.1 5.0
	Jordan	**5.9**	5.6 6.6 5.5
	Lithuania	**5.9**	5.5 6.9 5.2
43	Botswana	**5.8**	6.7 6.4 4.1
44	Bahrain	**5.7**	5.5 6.5 5.2
	Mauritius	**5.7**	6.3 6.0 4.9
46	Costa Rica	**5.6**	6.3 5.9 4.7
	Kuwait	**5.6**	6.3 6.9 3.7

	Slovenia	**5.6**	6.6 4.7 5.5
	India	**5.6**	4.9 6.7 5.1

Rank	**Country**	**IPRI**	**LP PPR IPR**
50	Uruguay	**5.5**	6.5 5.2 4.9
51	Latvia	**5.4**	5.7 6.2 4.2
	Thailand	**5.4**	4.5 7.0 4.6
53	Panama	**5.3**	4.2 6.8 5.0
	Poland	**5.3**	5.3 4.8 5.8
	Turkey	**5.3**	4.8 6.1 4.9
	Malawi	**5.3**	4.2 7.3 4.3
57	Trinidad and Tobago	**5.1**	4.7 5.1 5.5
	Morocco	**5.1**	4.4 5.8 5.0
	Bulgaria	**5.1**	4.5 5.6 5.1
60	Croatia	**4.9**	5.0 5.2 4.6
	Colombia	**4.9**	3.7 5.7 5.3
62	El Salvador	**4.8**	4.2 6.0 4.2
	Mali	**4.8**	4.5 4.9 4.9
	Mexico	**4.8**	4.1 5.4 4.9
	Jamaica	**4.8**	4.5 5.8 4.0
	Mauritania	**4.8**	4.0 5.2 5.0
68	Benin	**4.7**	4.6 4.7 4.8
	China	**4.7**	4.0 5.6 4.4
	Brazil	**4.7**	4.2 5.0 4.8
71	Egypt	**4.6**	4.6 5.0 4.3
	Sri Lanka	**4.6**	4.0 6.0 4.0
	Burkina Faso	**4.6**	4.2 4.4 5.3
74	Tanzania	**4.5**	4.5 4.6 4.5
	Philippines	**4.5**	3.3 5.5 4.8
	Dominican Republic	**4.5**	4.2 5.2 4.1
77	Honduras	**4.4**	3.6 5.6 4.1
	Vietnam	**4.4**	4.4 5.5 3.4
	Uganda	**4.4**	3.5 3.6 6.0
80	Argentina	**4.3**	3.8 4.5 4.8
	Guatemala	**4.3**	3.4 5.6 3.9
82	Mozambique	**4.2**	4.0 4.8 3.9
	Madagascar	**4.2**	4.3 4.2 4.1
	Ukraine	**4.2**	3.7 4.6 4.3
	Kenya	**4.2**	3.1 5.6 3.9
	Peru	**4.2**	3.3 5.6 3.7
87	Kazakhstan	**4.1**	3.8 5.6 3.0
	Russia	**4.1**	3.1 4.8 4.3
	Indonesia	**4.1**	3.3 5.6 3.4
90	Zambia	**4.0**	4.1 5.1 2.8
	Pakistan	**4.0**	2.7 6.0 3.3
	Algeria	**4.0**	3.7 4.6 3.7
	Ecuador	**4.0**	2.7 4.6 4.6
94	Nepal	**3.9**	3.1 5.4 3.3
	Montenegro	**3.9**	4.1 5.6 1.9
96	Cameroon	**3.8**	3.0 4.5 4.0
	Macedonia	**3.8**	3.8 4.6 2.9

98	Ethiopia	**3.7**	3.0 4.4 3.7
Rank	**Country**	**IPRI**	**LP PPR IPR**
	Armenia	**3.7**	3.7 5.6 1.8
100	Serbia	**3.6**	3.6 4.7 2.6
	Nicaragua	**3.6**	3.0 4.2 3.6
	Bolivia	**3.6**	3.1 4.2 3.4
	Moldova	**3.6**	3.5 5.0 2.2
104	Albania	**3.5**	3.6 4.9 2.1
	Nigeria	**3.5**	2.6 4.3 3.6
	Paraguay	**3.5**	2.7 4.7 3.0
107	Azerbaijan	**3.4**	3.2 5.0 2.1
108	Bosnia-Herzegovina	**3.3**	3.9 3.3 2.8
109	Chad	**3.2**	1.8 4.1 3.8
	Venezuela	**3.2**	2.0 4.5 3.2
	Guyana	**3.2**	3.7 3.3 2.6
	Burundi	**3.2**	2.3 4.2 3.1
	Zimbabwe	**3.2**	2.0 4.5 3.1
114	Angola	**2.8**	3.0 3.0 2.4
115	Bangladesh	**2.5**	2.8 2.8 2.1

Appendix 2: Investible versus uninvestable countries

Africa

Investible Countries

- Botswana
- Cape Verde
- Ghana
- Kenya
- Mauritius
- Namibia
- Niger
- Nigeria
- Reunion Is.
- Senegal
- Seychelles
- South Africa
- Tanzania
- Uganda

Uninvestible Countries

- Angola
- Benin
- Burkina Faso
- Burundi
- Cameroon
- Central African Republic
- Chad
- Comoros
- Congo (Brazza)
- Congo Dem Rep
- Cote d'Ivoire
- Djibouti
- Equatorial Guinea
- Eritrea
- Ethiopia
- Gabon
- Gambia
- Guinea
- Guinea-Bissau
- Lesotho
- Liberia
- Madagascar
- Malawi
- Mali
- Mauritania
- Mozambique
- Rwanda
- Sao Tome and Principe
- Sierra Leone
- Somalia
- Sudan
- Swaziland
- Togo
- Zambia
- Zimbabwe

Asia

Investible Countries

- Armenia
- Cambodia
- China
- Georgia
- Hong Kong
- India
- Indonesia
- Japan
- Malaysia
- Pakistan
- Philippines
- Singapore
- South Korea
- Sri Lanka

Uninvestible Countries

- Afghanistan
- Azerbaijan
- Bangladesh
- Bhutan
- Brunei
- Kazakhstan
- Kyrgyz Republic
- Laos
- Macau
- Maldives
- Mongolia
- Myanmar
- Nepal
- North Korea
- Tajikistan
- Timor-Leste
- Turkmenistan
- Uzbekistan
- Taiwan
- Thailand
- Vietnam

Caribbean

Investible Countries

- Anguilla
- Antigua and Barbuda
- Aruba
- Bahamas
- Barbados
- Belize
- Bermuda
- British Virgin Is.
- Cayman Is.
- Dominica
- Dominican Republic
- Grenada
- Guadeloupe
- Jamaica
- Martinique
- Montserrat
- Netherlands Antilles
- Puerto Rico
- St. Kitts & Nevis
- St. Lucia
- St. Vincent & Grenadines
- Trinidad and Tobago
- Turks & Caicos Is.
- US Virgin Is.

Uninvestible Countries

- Haiti
- St. Martin

Europe

Investible Countries

- Andorra
- Austria
- Belgium
- Bulgaria
- Croatia
- Cyprus
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Liechtenstein
- Lithuania
- Luxembourg
- Macedonia
- Malta
- Moldova
- Monaco
- Montenegro
- Netherlands
- Norway
- Poland
- Portugal
- Romania
- Russia
- Serbia
- Slovak Republic
- Slovenia
- Spain
- Sweden
- Switzerland
- Turkey
- Ukraine
- United Kingdom

Uninvestible Countries

- Albania
- Belarus
- Belarus
- Bosnia and Herzegovina
- Iceland

Latin America

Investible Countries

- Argentina
- Brazil
- Chile
- Colombia
- Costa Rica
- Ecuador
- El Salvador
- Guatemala
- Honduras
- Mexico
- Nicaragua
- Panama
- Paraguay
- Peru
- Uruguay
- Venezuela

Uninvestible Countries

- Bolivia
- Guyana
- Suriname

Middle East

Investible Countries

- Bahrain
- Egypt
- Iran
- Israel
- Jordan
- Lebanon
- Morocco
- Oman
- Qatar
- Saudi Arabia
- Tunisia
- United Arab Emirates

Uninvestible Countries

- Algeria
- Iraq
- Kuwait
- Libya
- Syria
- Yemen

North America

Investible Countries

- United States
- Canada

Pacific

Investible Countries

- Australia
- Commonwealth of Northern Mariana Islands
- Cook Islands
- Fiji
- French Polynesia
- Guam
- New Zealand
- Vanuatu

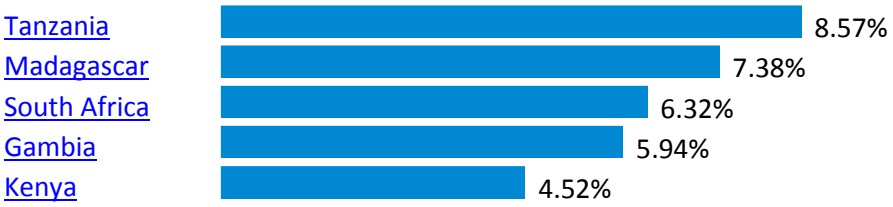
Uninvestable countries

- Nauru
- New Caledonia
- Norfolk Is.
- Palau
- Papua New Guinea
- Samoa
- Solomon Is.
- Tonga
- Tuvalu

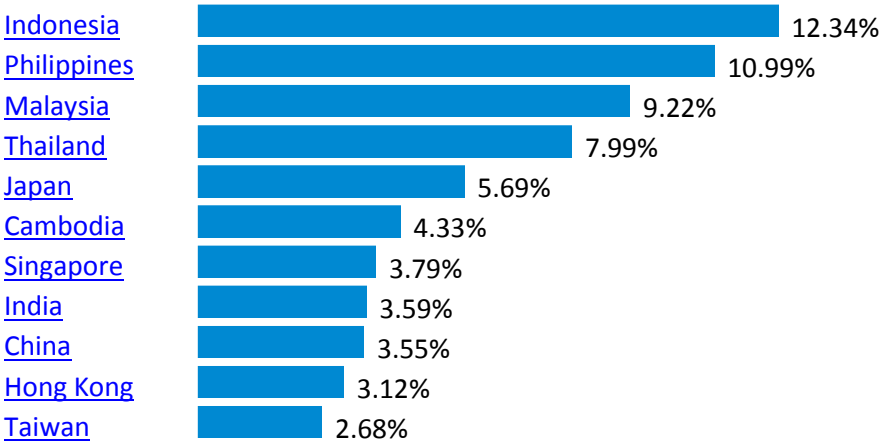
- American Samoa
- Kiribati
- Marshall Is. Micronesia

Appendix 3 : Gross Rental yields per Area

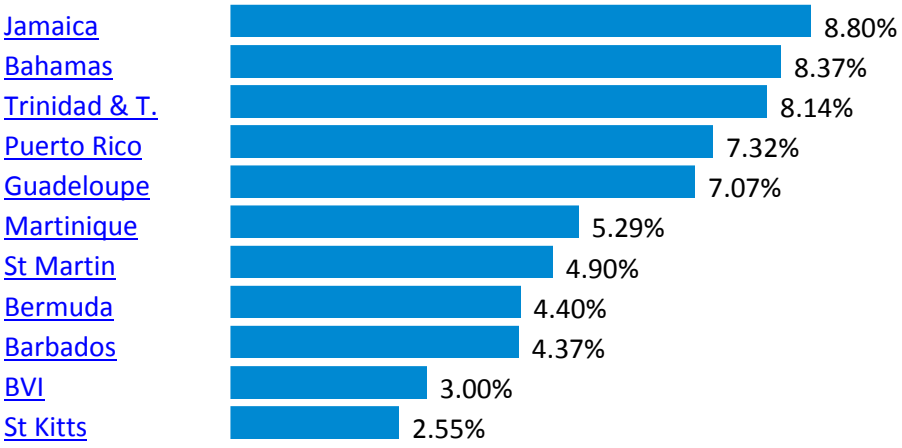
Africa



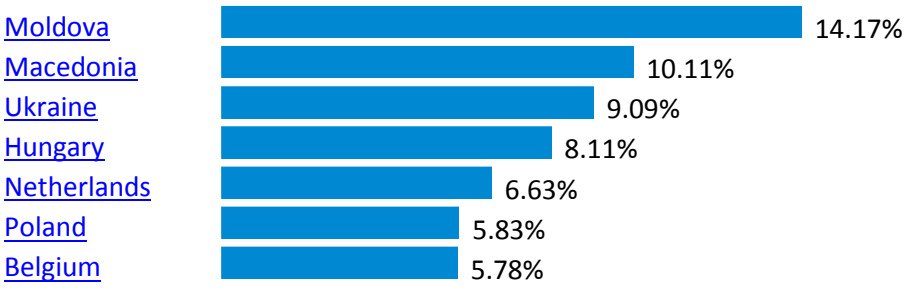
Asia

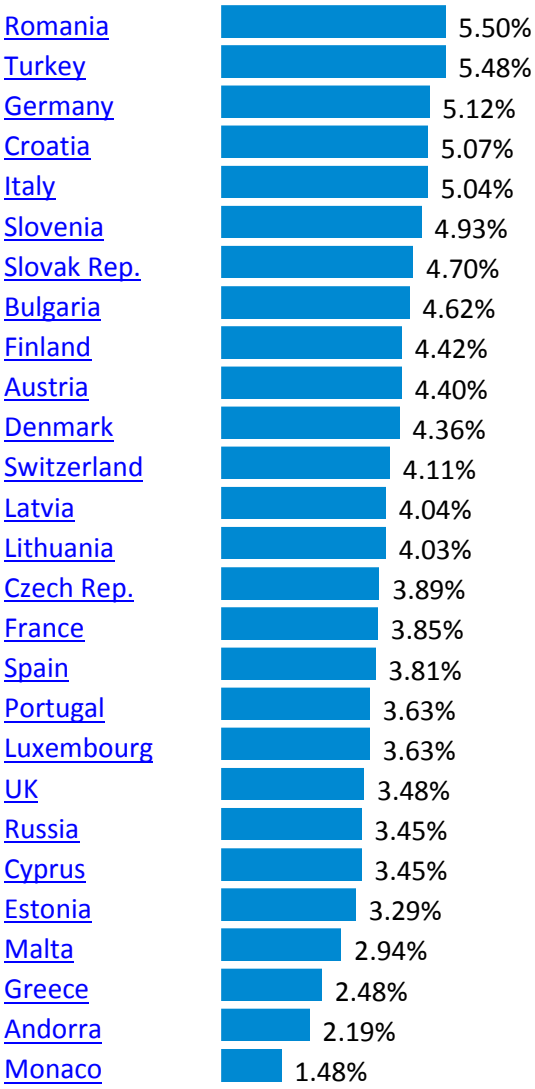


Caribbean

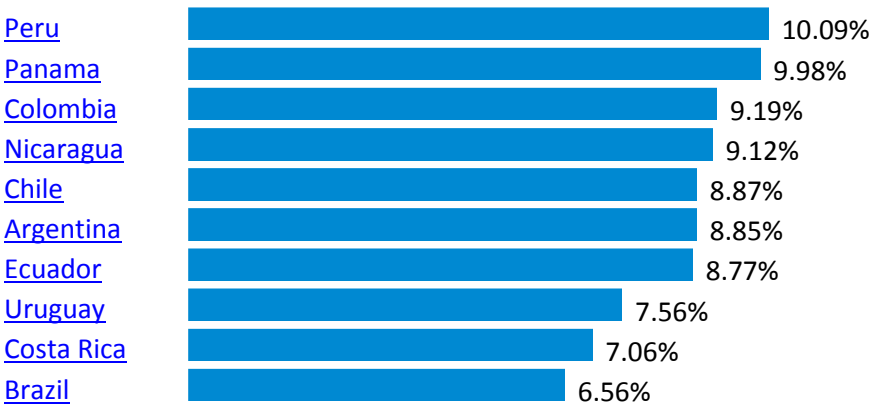


Europe





Latin America



Appendix 4 : International property right index in category

Panama

Category	Score	World Rank	Regional Rank
Overall	**5.3**	**53 of 115**	**4 of 20**
Legal and Political Environment	**4.2**	**67 of 115**	**6 of 20**
Judicial Independence	2.5	97 of 115	13 of 20
Rule of Law	4.6	61 of 115	4 of 20
Corruption	4.3	64 of 115	8 of 20
Political Stability	5.3	55 of 115	4 of 20
Physical Property Rights	**6.8**	**33 of 115**	**2 of 20**
Property Rights Protection	6.8	43 of 115	2 of 20
Registering Property	7.8	54 of 115	10 of 20
Ease of Loan Access	5.7	21 of 115	1 of 20
Intellectual Property Rights	**5.0**	**51 of 115**	**4 of 20**
IP Rights Protection	5.2	40 of 115	1 of 20
Strength of Patent Rights	7.3	48 of 115	6 of 20
Copyright Piracy	2.6	66 of 115	9 of 20
Gender Equality	**8.0**	**58 of 90**	**15 of 16**
Access to Land	10.0	1 of 90	1 of 16
Access to Property Other than Land	10.0	1 of 90	1 of 16
Access to Bank Loans	10.0	1 of 90	1 of 16
Inheritance	0.0	81 of 90	16 of 16
Social Rights	10.0	1 of 90	1 of 16

Malaysia

Category	Score	World Rank	Regional Rank
Overall	**6.2**	**36 of 115**	**8 of 18**
Legal and Political Environment	**5.9**	**40 of 115**	**7 of 18**
Judicial Independence	7.0	29 of 115	7 of 18
Rule of Law	6.1	41 of 115	8 of 18
Corruption	5.3	48 of 115	8 of 18
Political Stability	5.4	52 of 115	9 of 18
Physical Property Rights	**6.8**	**33 of 115**	**9 of 18**
Property Rights Protection	7.8	22 of 115	6 of 18
Registering Property	6.6	86 of 115	17 of 18
Ease of Loan Access	6.0	16 of 115	5 of 18
Intellectual Property Rights	**5.9**	**37 of 115**	**8 of 18**
IP Rights Protection	6.8	24 of 115	7 of 18
Strength of Patent Rights	7.0	50 of 115	11 of 18
Copyright Piracy	3.8	47 of 115	7 of 18
Gender Equality	**8.5**	**56 of 90**	**9 of 15**
Access to Land	10.0	1 of 90	1 of 15
Access to Property Other than Land	10.0	1 of 90	1 of 15
Access to Bank Loans	10.0	1 of 90	1 of 15
Inheritance	5.0	58 of 90	9 of 15
Social Rights	7.3	70 of 90	10 of 15

Jordan

Category	Score	World Rank	Regional Rank
Overall	**5.9**	**40 of 115**	**6 of 12**
Legal and Political Environment	**5.6**	**46 of 115**	**8 of 12**
Judicial Independence	6.5	37 of 115	8 of 12
Rule of Law	6.0	43 of 115	8 of 12
Corruption	5.6	41 of 115	8 of 12
Political Stability	4.4	75 of 115	7 of 12
Physical Property Rights	**6.6**	**38 of 115**	**5 of 12**
Property Rights Protection	7.7	25 of 115	2 of 12
Registering Property	7.9	49 of 115	3 of 12
Ease of Loan Access	4.2	54 of 115	9 of 12
Intellectual Property Rights	**5.5**	**41 of 115**	**6 of 12**
IP Rights Protection	5.7	35 of 115	6 of 12
Strength of Patent Rights	6.9	57 of 115	5 of 12
Copyright Piracy	4.0	45 of 115	7 of 12
Gender Equality	**5.6**	**68 of 90**	**8 of**
Access to Land	5.0	58 of 90	6 of
Access to Property Other than Land	5.0	67 of 90	8 of
Access to Bank Loans	5.0	62 of 90	7 of
Inheritance	5.0	58 of 90	3 of
Social Rights	7.8	65 of 90	5 of