Which Way is More Suitable for Turkey's Real Estate Market?

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Abstract: Real Estate Finance or mortgage finance is more popular economic issue around the World and Turkey. Real estate markets are more productive markets than other markets. This market energize nearly 200 other main and submain sector. Because of that, after the economic crises and recessions countries start going to vitalize this sector for accelareting other sector and whole economy.

Nowadays, Mortgage finance's negative effects have been shocked to economies. Turkey is among to countries which effected less than other countries. The question of " Which strategy is more sutiable and useful for Turkey's real estate market?" is more controversial now adays in Turkey.

Because of that we prepared a survey and studied to detemine more sutiable strategy for vitalizing to real estate market of Turkey. We applied to survey to certificated or working in any bank 200 real estate specialists. After the survey, we entered the data to SPSS program and we found the econometric market, credit structure, funding, demand, strategy models which suitable to Turkey.

Keywords: real estate, mortgage, Turkey, Survey, models

Introduction

Housing market has an effect on national economies more than other markets. Housing market is directly connected to other sectors which are supposed to exceed 600. In addition, housing market has a direct or indirect stimulant effect on other sectors (Klein and Bestani, 2004:77). Housing sector is not only a technical application, but also is a sector which has some aims to control system risks, labour market and macro economic conditions (Stephens, 2006:60). According to a research conducted in USA in 1984, USA housing sector increased in value exactly seventeenfold from 1947 to 1982 (Koh and Edward, 2005:2). This show us the importance of housing sector in countries` development. States attaches priority to housing sector at the time of economic stagnation and economic crisis to restore their economies (Arslan, 2008:29).

Housing sector has quite different attributes than other sectors. One of the important one of these attributes is that housing sector is accounted of a development indicator of other sectors. That is, sanitary housing sector means sanitary other sectors. On the contrary, unsanitary housing sector means unsanitary other sectors (Kirecci, 2005:7).

Housing sector is an indicator and cause of prosperity. Housing sector gives us information about national economies. If looked at developed countries, it can be seen easily that housing market is quite in good condition in terms of economic indicators.

Housing sector also gives us information about socio-cultural attributes of states as well as their economic conditions. The housing sector reflects personal preferences of citizens, their domestic attributes as well as attributes of human capital of states (Bicakova and Serminska, 2008:7).

Mortgage System

Mortgage system is the transfer of an interest in property to a lender as a security for a debt - usually a loan of money. Mortgage system is the lender's security for a debt. It is a transfer of an interest in land (or the equivalent) from the owner to the mortgage lender, on the condition that this interest will be returned to the owner when the terms of the mortgage have been satisfied or performed. In other words, the mortgage is a security for the loan that the lender makes to the borrower (Deloitte,2005:3). Since long term funds are provided by capital markets, mortgage system serves as bridge between housing markets and capital markets (Mufad,2007;126).

In mortgages system, the agreement is that the loan is repaid in fixed periodic payments, typically monthly. The contract interest rate is the interest rate that the borrower pays the lender in exchange for having the money today. There are two risks connected with lending. The first, named *default risk*, is the prospect that the borrower fails to refund the loan. The second, named *market risk*, appear when interest rates change over time.

The possibility of default has led societies to create laws and mechanisms to protect the lender. One of these is collateral. In the case of mortgages, the collateral is almost always the property being purchased. Loan agreements can also comprise a variety of restrictions. Some of these are aimed at protect the lender, while others protect the borrower. For instance, in the past, many mortgages were "assumable," meaning that if the borrower sold the house, the mortgage could be assumed or transferred to the new owner. This harm lenders when interest rates increased as the new owner could get a "below market interest rate" by assuming the previous mortgage. Now, mortgages are typically not assumable. There was also a time when many mortgages had a prepayment penalty. Today, mortgage contracts typically stipulate that there is no penalty for paying the loan off before its maturity date.

Mortgage System in the World

Financial markets has been experiencing significant changes especially within the last 20-25 years. Today` financial markets, which base on technology, comprise of banks, insurance companies as well as hundreds of other financial institutions and financial instruments instead of banks and insurance companies of 1960s and 1980s. The market has been varied and deepened.

In the world, the biggest and the most developed mortgage market is in the USA. The ratio of mortgage in GDP in 1949 was %20 and %73 in 2001 (Green and Watcher,2005:93). Prosperity of many people in this country comes from their investment in real estate sector and it constitute %50 of total assets (Klein and Bestani,2004:77). Citizens spends %25-30 of their incomes on their mortgage loans (Englund et.al, 2002:167).
The application of mortgage systems goes back to the beginning of 1900`s, especially to  the great depression in 1929. Before the great depression, the mortgage market of the USA was the market which could provide loan for 5 to 10 years and up to %50 of house` value (Green and Watcher,2005:93). House prices decreased significantly in 1930 as a result of the crisis leaving mortgager in a situation that they could not sell their houses as well as pay their debts (Green and Watcher,2005:94-95).

In order to mitigate the effects of the great depression on financial markets, the Federal government founded financial institutions in the beginning 1930s. These were Freddie Mac, Fannie Mae and Ginnie Mae. These financial institutions afford implicit guaranty to banks in the case of default. By these institutions, banks reach the secondary markets and keep cash flow open as well as remove risks from their balance sheets (Covan,2003:2). That is, banks in the USA provide housing loan with the help of these financial institutions to market and sell their receivables converting them into property under the guaranty of these institutions. The customers of mortgage backed securities are mostly index directors, pension funds, banks and hedge funds (Heidari and Wu,2004:6). As a result of the balance between supply and demand, around the half of volume of security is provided by this market. (Heidari and Wu,2004:6)

Mortgage System in Turkey

Turkey's dynamic economy and attractive demographical feauters show that real estate sectors future will be brilliant. Half of the population is under 25 in Turkey with 1,5 % of population increase rate, 2,7 % of urbanization rate and 2,8 % of household expanding level, is quite more when compared with the other countries.

Its shown that in a recently research, close to half of the Turkey's people's first investment choice is to real estate market (www.gyoder.org.tr).

Turkey begin mortgage system to put into practice in 2007 with a mixture of two different mortgage system thats are applied in the world. But with the global financial crisis and the absence of appropriate substructure conditions of mortgage system, it could not be applied efficiently in Turkey.

This system planned to setup secondary markets and work it together with international markets. Also in primary markets there are many regulations that the bank and the customer come face to face.

Its called as "mortgage financing agency" that buy or take over the receivables of "mortgage credit establishments". These establishments will obtain of funding these establishments that are acting in primary markets like, banks, special financing agencies, real estate developers, leasing companies, Housing Development Administration of Turkey (TOKİ), by lending or by buying these receivables with guarantee of receivables got from given credits.

These agencies that are acting in the secondary markets and buy or take over the receivables will find new funds by exporting bonds or mortgage-backed securities with a guarantee of receivables that they lend or buy.

There are 2 kinds of securities in the system. First one is "mortgage-backed securities" that are exported by banks by showing their receivables in their balance sheets and showing them with their financial power as guarantee without lending them to secondary market enstitutions.

The second one is "mortgage-based securities" that banks lend their receivables to intermediaries or secondary market establishments that give possibility to show their balance sheets less risky and more liquid. With the mortgage law two different funds are formed. "Housing Finance Fund" for whom wants to invest to mortgage-backed securities, "Assets Finance Fund" for whom wants to invest to assets-backed securities. These funds can be called as "special aimed establishments" as we know from the samples in other countries.

Methodology

In this study, We aimed to design a real estate finansing model for Turkey's real estate market using a survey and we think over carefully to be special to Turkey's culturel, social and economical condition
Our survey paper was filled by 200 real estate specialist working in a bank or not.
Survey expressions designed like ;
1: I strongly agree……5: I do not strongly agree in accordant to 5 likert scale.
Survey took into practise usinng witk 2 different style. One of them is by telephone and other web page. The data recorded by cd and limevire survey program. Our web site was www.mortgageanket.com
The survey took 3 month (february, march, april) and analyses of survey took nearly 1 week.

Results of Survey

In accordane to survey result, we constitute 5 factor. First of all is finding fund factor.

Finding Fund Factor Analyses:

Our first factor is divided to 3 secondary factor. These are encouragement, state assistance and small funds aid. Our factor's Cronbach Alpha value is 0,599. This means that our factor passed to reliability test.
The result of KMO test is %73. becauese of 0,73>0,50, data set is suitable for factor analyses. Bartlett's test shows this data (0,00<0,05). This means that there is a high coralation between variables. Thus data set is suitable for factor analyses

Constitution Of Statistical Model With Multiple Regression Model

Multiple regression model is like this: $y = \beta_0 + \beta_1 x_1 + \cdots + \beta_n x_n + \varepsilon$

Factors represent to variables of Model. We found this opinion using with R Square test. R Square test was found % 97. This means that independent variables explain to model with very powerfully.
The estimation result of model is below;

$$FF = 3,69 + 0,38 . ENC + 0,32 SA + 0,24 SFA + e$$

FF: Finding fund   ENC: Encouragement   SA: State Assistance   SFA: Small Funds Aid
This means; When the encouragement subfactor increase 1unit, finding fund factor will increaes 0,38 unit.
This means; When State Assistance subfactor increase 1unit, finding fund factor will increaes 0,32 unit.
This means; When : Small Funds Aid subfactor increase 1unit, finding fund factor will increaes 0,24 unit.

Credit Sructure Factor Analyses:

Our second factor is divided to 2 secondary factor. These are personel credit and personel peciluarities. Our factor's Cronbach Alpha value is 0,584. This means that our factor passed to reliability test with low degree

The result of KMO test is %58. becauese of 0,58>0,50, data set is suitable for factor analyses. Bartlett's test shows this data (0,00<0,05). This means that there is a high coralation between variables. Thus data set is suitable for factor analyses

R Square test. R Square test was found % 99. This means that independent variables explain to model with very powerfully.

The estimation result of model is below;

$$CS = 3,77 + 0,54.PC + 0,35 PP + e$$

CS: Credit Structure   PC: Personel Credit   PP: Personel Peciluarities

This means; When the Personel Credit subfactor increase 1unit, credit structure factor will increaes 0,54 unit.

This means; When Personel Peciluarities subfactor increase 1unit, credit structure factor will increaes 0,35 unit.

Role Of The State And Market Structure Factor Analyses :

Our thirth factor is divided to 6 secondary factor. These are market organisation, adequacy, REIP (Real estate investment partnership) , local market, central establishment and foreign partner . Our factor's Cronbach Alpha value is 0,701. This means that our factor passed to reliability test with strong degree.

The result of KMO test is %70. becauese of 0,70>0,50, data set is suitable for factor analyses. Bartlett's test shows this data (0,00<0,05). This means that there is a high coralation between variables. Thus data set is suitable for factor analyses

R Square test. R Square test was found % 99. This means that independent variables explain to model with very powerfully.

The estimation result of model is below;

$$RS\_MS = 3,85 + 0,28 MO + 0,20 REIP + 0,17 AD + 0,13 LM + 0,15 CE + 0,10 FP + e$$

RS_MS: **Role** Of The State And Market Structure   MO: Market organisation   LM: Local Market
REIP: Real Estate Investment Partnership   CE: central establishment   FP: Foreign Partner
AD: Adequacy

This means; When the Market organisation subfactor increase 1unit, Role Of The State And Market Structure Factor factor will increase 0,28 unit.

This means; When the REIP subfactor increase 1unit, Role Of The State And Market Structure Factor factor will increase 0,20 unit

This means; When the Adequacy subfactor increase 1unit, Role Of The State And Market Structure Factor factor will increase 0,17 unit

This means; When the local market subfactor increase 1unit, Role Of The State And Market Structure Factor factor will increase 0,13 unit

This means; When the central establishment subfactor increase 1unit, Role Of The State And Market Structure Factor factor will increase 0,15 unit

This means; When the Foreign Partner subfactor increase 1unit, Role Of The State And Market Structure Factor factor will increase 0,10 unit

Demand Factor Analyses

Our fourth factor is divided to 2 secondary factor. These are decrease to cost and increaes to demand. Our factor's Cronbach Alpha value is 0,687. This means that our factor passed to reliability test with strong degree

The result of KMO test is %67. becauese of 0,58>0,50, data set is suitable for factor analyses. Bartlett's test shows this data (0,00<0,05). This means that there is a high coralation between variables. Thus data set is suitable for factor analyses

R Square test. R Square test was found % 37. This means that independent variables explain to model with %37 rate

The estimation result of model is below;

$$DM = 3,85 + 0,23 DC + 0,13 ID + e$$

DM: Demand Factor   DC: Decrease To Cost   ID: Increaes To Demand

This means; When the decrease to cost subfactor increase 1unit, demand factor will increase 0,23 unit

This means; When the demand subfactor increase 1unit, demand factor will increase 0,13 unit

Other Alternate Suggestion factor Analyses:

Our fifth factor is divided to 8 secondary factor. These are HDAT (Housing Development Administration of Turkey), Turkey's condition, Market Data, rent prices, Istanbul finance center, dual structure, European Union, partnership Our factor's Cronbach Alpha value is 0,745. This means that our factor passed to reliability test with strong degree.

The result of KMO test is %77. becauese of 0,70>0,50, data set is suitable for factor analyses. Bartlett's test shows this data (0,00<0,05). This means that there is a high coralation between variables. Thus data set is suitable for factor analyses

R Square test. R Square test was found % 97. This means that independent variables explain to model with very powerfully.

The estimation result of model is
below

$$OAS = 3,91 + 0,23\,HDAT + 0,21\,TC + 0,19\,MD + 0,17\,RP + 0,15\,IFC + 0,11\,DS + 0,11\,EU + 0,10\,PA + e$$

OAS: Other Alternate Suggestion HDAT: Housing Development Administration of Turkey
TC: Turkey's Condition MD: Market Data RP: Rent Prices
IFC: Istanbul Finance Center DS: Dual Structure EU: European Union PA: Parthnership

This means; When Housing Development Administration of Turkey subfactor increase 1unit, other alternate suggestion factor will increase 0,23 unit

This means; When the Turkey's Condition subfactor increase 1unit, other alternate suggestion factor will increase 0,21 unit

This means; When the Market Data subfactor increase 1unit, other alternate suggestion factor will increase 0,19 unit

This means; When rent prices subfactor increase 1unit, other alternate suggestion factor will increase 0,17 unit

This means; When the Istanbul Finance Center subfactor increase 1unit, other alternate suggestion factor will increase 0,15 unit

This means; When the Dual Structure subfactor increase 1unit, other alternate suggestion factor will increase 0,11 unit

This means; When the European Union subfactor increase 1unit, other alternate suggestion factor will increase 0,11 unit

This means; When the parthnership subfactor increase 1unit, other alternate suggestion factor will increase 0,10 unit

Conclusions

Turkey's real estate market is very strong structure. Turkey is the country which has alot of advantages which more country have not these advantages. For example, house demand is very high, builder sector is very strong, building resource is very plentiful. This is the most importtant work is that advantegeus must be used productive and thinking of common benefit.

Turkey is in the financial crises of which its effects feel less in accordant to other countries like USA and developed european countries. It is not true that to behave fast and in panic.This conditions mark to recession period all of world. Turkey's real estate market is stable period. This period must be though to solve this problem " How we will set a new and strong real estate market and finance?"

There is no a concensus on optimal real estate market and finance. Every country had established to real estate market in accordance to their culturel, sociel, geographic, economic conditions.

In according to our survey and last financial cirises, turkey need to new real estate structur and finance. Common benefit, working together inside or outside of Turkey will be most important issues in near future.

At this important point, new conditions must be read very carefully and true. This period is open to new financial and economic period.

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