

REAL ESTATE RESEARCH REPORT - 8

PREDICTIONS FOR THE NEW ECONOMIC ERA AND REAL ESTATE SECTOR

A stylized city skyline graphic composed of various rectangular blocks in shades of brown and orange, arranged to resemble a cityscape. The blocks vary in height and are scattered across the lower half of the page.

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The Association of Real Estate Investment Companies



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PREDICTIONS FOR THE NEW ECONOMIC ERA AND REAL ESTATE SECTOR

Dr. Can Fuat Gürlesel

Economy And Strategy Consultancy Services

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PRESENTATION

There is a close relationship between the real estate sector and the economic development and progress. Performance of the real estate sector is high when there is a rapid growth and development in the economy.

Both the world economy and the Turkish economy has shown a rapid increase during the period following 2001, rapid growth has accelerate the development and deepening of the real estate sector both on the global scale and in Turkey.

World faced a deep financial and economic crisis in 2008 and Turkey has been affected from this crisis as well. A new post-crisis era is emerging in the economy after the results of the crisis and as a result of the preconditions taken. The macro framework and conditions of this new period will create a new environment for the real estate sector.

Report named "Predictions For the New Economic Era and Real Estate Sector" is presenting previsions for the real estate sector in the new period by comparing the rapid growth in Turkey and in the World with the new period.

Report is comprised of five sections. The first section is Period of Expansion in the World Economy and Real Estate Sector. In the second section, there are predictions on the New Era and the Real Estate Sector After the Economic Crisis. In the third section Growth Period and Real Estate Sector in the Turkish Economy is examined. In the fourth section, predictions on the New Era in the Turkish Economy and Real Estate Sector are presented. In the fifth and the conclusion section Comparison of the Conditions of the Economic Growth Period and Post-Crisis Era For Real Estate Sector is presented.

In the report, for all actors in the real estate sector, economic conditions of the new era is examined in detail and in this framework, predictions are made for housing and the commercial real estates. We hope that our study would be useful for all the actors in the real estate sector.

Respectfully yours,

Dr. Can Fuat Gürlelel
Economy And Strategy Consultancy Services
May 2009

EXECUTIVE SUMMARY

The main aim of the report is to evaluate the macro framework and conditions of the new economic era that will emerge after the global crisis and to make predictions for the real estate sector. Report is comprised of five sections.

EXPANSION PERIOD IN THE WORLD ECONOMY AND THE REAL ESTATE SECTOR

World economy has entered into a rapid growth and expansion period after 2001. The main determinative factor of this period is the expansionary monetary policies which were started by USA in 2001 and which were followed by the other developed countries. Together with the expansionist monetary policies, cheap and abundant dollar liquidity had been created by the expansionary monetary policies and world economy has started to accelerate to grow.

World economy has grown 5 percent annually on average between the years 2003 and 2007 and the total income has reached to 60 trillion dollars in 2008. In the same period, while the private disposable incomes and private consumption expenditures expanded 4 percent, incomes per capita has increased 4 percent annually on average. World trade had expanded annually 12 percent on average between the years 2002 and 2007 and it reached to 17.2 trillion dollars in 2007. In this period, private sector activities rapidly increased and private sector fixed capital investments has increased 8 percent annually on average between the years 2003 and 2007. Financial opportunities had expanded on a global scale after the period of rapid growth after 2001 and the volume of the financial assets which was 91 trillion dollars, reached to 184 trillion dollars in 2007. International capital flows rapidly increased. While it was 3.7 trillion dollars in 2001, it reached to 9.5 trillion dollars in 2007. Developing countries benefited from the capital flows and while the capital flow to a developing country was 73.5 billion dollars in 2001, it reached to 627.5 billion dollars in 2007. In the same period, US dollar had been devalued compared to all other currencies.

Growth in the world economy after 2001 affected the real estate sector in the direction of growth. Both the housing sector and the commercial real estate sector showed a rapid expansion. Financing opportunities primarily increased in the housing sector and in the developing countries, the mortgaged system rapidly increased. While the mortgaged housing credit stock was 7.4 trillion dollars in 2001 in USA, it reached to 14.1 trillion dollars in 2008. Securities stock backed on mortgage system reached from 3.6 trillion dollars to 8.9 trillion dollars. Mortgaged credits and mortgaged backed securities in



Europe and Asia rapidly increased. Decreasing in interest rates of mortgaged credits and securities issued accelerated the expansion of the mortgage system. Very rapid growth has been experienced in the housing supply and sales especially in USA. housing prices has shown a rapid bounce in USA and other countries.

Commercial real estate sector has entered into a rapid expansion period during the expansion period. Commercial real estates have created strong economic bases in the economic growth period and commercial real estate supply expanded in USA, Europe and Asia-Pacific region. For instance, while office area was 102 million m² in 2001 in Europe, it reached to 208 million m² in 2008. Financing opportunities used by the commercial real estates expanded, especially securitization market has undertaken a significant role. Both the capital returns (value increase) and the investment returns of the commercial real estates increased between the years 2001 and 2007. Significant part of the returns has been provided by the capital returns (value increase).

Commercial real estate investments provided higher returns than the other investment returns in this period. While the investable stock in the commercial real estate market was 8.7 trillion dollars in 2002, it reached to 14.5 trillion dollars in 2007 and the invested stock volume reached from 5 trillion dollars to 8.8 trillion dollars. Especially global commercial real estate investments have expanded in overseas, it reached to 759 billion dollars in the year 2007. Investment funds, private capital funds, investment trusts, insurance companies, sovereign asset funds, pension funds and other institutional investors' commercial real estate investments significantly expanded.

THE NEW ERA AND THE REAL ESTATE SECTOR AFTER THE ECONOMIC CRISIS

World economy has confronted with a deep economic crisis in 2008, after the rapid growth period experienced between the years 2001 and 2007. A new period is being created after the economic crisis together with the effects of the economic crisis and results of the precautions taken. In the second part of the report economic conditions of the new era are examined and predictions are made related to the real estate sector. Predictions for the new economic era and real estate sector include medium-term perspective until the year 2014.

Economic crisis experienced in the year 2008 includes the financial systemic crisis and recession together; and it is predicted that it will more deep and longer than the 1975, 1982 and 1991 crisis.



Against the crisis experienced globally, precautions are taken under four titles and they have been put into implementation. These are loose monetary policy, support for the financial institutions, economic stimulus actions, and regulatory precautions. It is predicted that deterioration and fluctuation will be finished with the precautions taken in 2009, normalization and amelioration will be achieved in 2010 and suitable conditions will be created for the limited and stable growth after the year 2011.

The new era that will be created together with the effects of the economic crisis and the precautions taken, will be two staged. 2009-2010 period will be contraction and normalization, 2011-2014 period will be transition to stable and limited growth period. More determinative period for the real estate sector in the new economic period will be 2011-2014 period. Growth in the world economy during 2011-2014 period is predicted to be annually 3 percent on average. As a result of this growth, economic foundations supporting the real estate sector will become restricted. Private disposable income, private consumption expenditures and private sector activities will limitedly grow. World trade had grown 6.4 percent between the years 2011 and 2014. In the new period expansion in the financial opportunities and capital flows will limitedly grow. In the new economic period, years of 2009 and 2010 will be a period of regression for the real estate sector. The years between 2011 and 2014 will a period of normalization and re-development.

Amelioration in the housing sector will take time as a result of the deterioration in the housing financing system which is the result of the crisis as well. It is predicted that debts not repaid taken from the banks in the USA, Europe and Japan as mortgaged credits will be 623 billion dollars for the period between the years 2007 and 2010. Increase in the housing prices will start in the house prices between the years 2011 and 2012, demand will increase compared to the limited supply. It is predicted that there will be a balanced increase both in supply and demand in the housing sector in the years 2013 and 2014 and a limited and stable increase in the house prices will be seen.

It is predicted that for the developments in the commercial real estate sector, there will be a deterioration and normalization period in 2009 and 2010, and a limited and stable increase will be seen between the years 2011 and 2014. It is predicted for the period between the years 2011 and 2014 that commercial real estate supply will limitedly increase, commercial real estate need and demand will limitedly expand, slow down will be seen in the financing opportunities, financing based on the banking credits, contraction in the leverage rates, shortening in the terms, limitation in the real estate returns and especially in capital returns and limited expansion in the cross border investments.

GROWTH PERIOD IN THE TURKISH ECONOMY AND THE REAL ESTATE SECTOR

Turkish economy firstly experienced a normalization period with programs and policies implemented after the economic crisis of 2001. Successively, it experienced a rapid growth between the years 2002 and 2006. Positive conditions of the rapid growth period in the world economy has provided to the rapid growth in Turkey. Turkey has shown a growth based on foreign savings and foreign trade.

Turkish economy grew annually 7.5 percent on average between the years 2002 and 2006, in the same period private consumption expenditures grew annually 8 percent on average, and per capita incomes 6 percent and private sector fixed capital investments expanded 23 percent. Foreign trade volume of Turkey grew annually 15 percent on average between the years 2002 and 2007. Financial opportunities and capital inflow rapidly increased in Turkey. Net capital inflow was 138 billion dollars between the years 2003 and 2008. Inflation and interests in the economy rapidly decreased. Budget deficits and public sector borrowing need decreased significantly. National income reached to 742 billion dollars by the year-end of 2008 and the per capita income to 10.436 dollars.

Growth period in the real estate sector has created a macro environment and conditions for the real estate sector. A significant growth was realized in the same period for the housing and the commercial real estate sector. A rapid expansion was experienced in the housing supply and demand in the housing sector between the years 2004 and 2008. The number of construction permits taken in this period became 2.55 million. Impulsive force for the supply and demand in housing has become housing financing system and housing credits. While the housing credits were 1.6 billion TL in 2003, it reached to 37.5 billion TL in the end of 2008.

In the period of amelioration and growth in the commercial real estate sector after 2001, firstly a market has been created. A significant expansion was seen the commercial real estate supply. While the leasable space volume of shopping centers throughout Turkey was 1.15 million m² in 2000, it reached to 4.37 million m² in 2008. While the office stock was 1.27 million m² in 2001, it reached to 2.66 million m² in 2008. Industry and especially logistics area stock has been expanded as well.

Istanbul has become one the most attractive commercial real estate markets of Europe. Shopping centers, office and logistics areas started to bring relatively high returns. Foreign capital investments for commercial real estates and foreign involvement to the market developed as well. Another important development in the commercial real estate sector has become the expansion of the financial

opportunities in this period. While the domestic banking credits sector used was 1.9 billion TL in 2003, it reached to 10.5 billion TL in 2008. While the foreign banking credits were 4.1 billion dollars, it reached to 18.5 billion dollars in 2008.

NEW ERA IN THE TURKISH ECONOMY AND THE REAL ESTATE SECTOR

Turkish economy is entering into a new economic era depending on the global economic crisis and its own inner dynamics. Conditions and dynamics of growth for the Turkish economy are changing in the new era. Main conditions and dynamics of the new era are slower growth in the world economy, slow down in the foreign saving usage, dependency to domestic savings, slow down in the foreign demand, growth need depending on the domestic demand, lower inflation and interest rates, limitation in the capital inflows and stability in the value of the Turkish Lira.

In the framework of these conditions and dynamics, we make predictions on the main figures of the Turkish economy. Predictions are made in for the medium-term perspective until the year 2014. For the years between the years 2009-2011, targets are used that government revised with the Pre-Accession Economy Program. The predictions on the years 2012-2014 which are compatible with the revised assumptions of the government, has been prepared by the report group. The year 2009 is a contraction and the year 2010 will be a normalization year. Performances of the years 2011 and 2014 will be more determinative for the real estate sector.

It is predicted for the years 2010-2014 that economic growth will be annually 4 percent on average, per capita income increase will be annually 3 percent on average, growth in the private consumption expenditures will be 3 percent and expansion in the private sector fixed capital investments will be 8 percent. Based on these predictions, Turkish economy will reach the 2008 figures only in the year 2014. Predictions on the financial indicators are slow down in the financial opportunities and in the capital flows, lower inflation and interest rates and increasing borrowing need of the public sector.

In the new economic era, real estate sector will show a limited expansion compared to the growth period. Housing need will continue independent from the economic developments in the housing sector. Housing need will be 3.28 million between the years 2009 and 2014. As a result of the weakening in the income and borrowing capacity of the households and relatively limited growth predicted in the housing financing system, housing demand will limitedly increase. Additional housing supply will start to expand after the consumption of the large existing housing stock. Housing financing



system will limitedly grow, as result of the economic and financial conditions of the new period. As a result of the weakening in demand and financing, there will be downward pressure on the housing prices. It is predicted to be slow down in the economic foundations that determine development in the commercial real estate sector. This slow down will primarily limit the users' demand of the commercial real estate sector. As the weakening in the demand for office and logistics areas will remain more limited, retail sector-shopping center relations will be determinative in the shopping center demand. There will be a significant slow down in the commercial real estate supply in the years 2009 and 2010. In these years, there will be delays especially in shopping center projects. There will be more limited slow down in the office and logistics area supply.

Commercial real estate financing opportunities will be restricted in the new economic period. Financing will be based on higher costs, shorter terms, lower leverage rates, higher need for equity, run away from risks and banking credits.

Commercial real estate returns will diminish. Capital returns will limitedly decrease. Depending on the decrease of returns in rents and other incomes, investment returns will decrease more rapidly. There will be a downward pressure on the rents. Istanbul real estate sector will sustain its attraction in the medium term which is one of the primary investment cities of Europe in the real estate sector. Despite of the slow down in the returns, Istanbul will continue to offer high returns compared to other cities. Cheapening of the real estates on a global scale and contraction in the financing opportunities will create negative effects.

COMPARING OF THE CONDITIONS BETWEEN THE ECONOMIC GROWTH PERIOD AND POST-CRISIS ERA FOR REAL ESTATE SECTOR

In the last section of the report, conditions of the economic growth period and post-crisis era are compared and predictions are presented on the real estate sector of the new economic conditions. The most important and evident distinction between the two periods is that growth will be on global scale in the new economic period and it will be realized on a lower rates in Turkey.

While the annual growth on average was 5 percent between the years 2002 and 2007 in the world, it will be 3 percent between the years 2011 and 2014. While the annual growth on average was 7.5 percent between the years 2002-2006, it will be 4 percent between the years 2010-2014. This slow down in the growth rate will result into the slow down of the growth in all other economic indicators. In this framework, real estate sector in the post-crisis era will have more limited growth in the new conditions.

Section I

PERIOD OF EXPANSION IN THE WORLD ECONOMY AND REAL ESTATE SECTOR

INTRODUCTION

In the first part of the report, the period of expansion in the world economy and the real estate sector is examined and evaluated. World economy has entered into a rapid growth and expansion period since 2002. This expansion continued until the global crisis experienced in 2008. Real estate sector has been affected positively from the expansion period and sector has shown an important growth and deepening on the global scale.

In this framework, in the first section of the report, macro economic conditions emerged after 2002 in the world economy and their effects and results on the real estate sector, housing and commercial real estate sectors, are examined and evaluated in detail.

I.1 PERIOD OF EXPANSION IN THE WORLD ECONOMY

Expansionary period in the world economy is examined and evaluated under the titles: Expansionary Monetary Policies in the Global Economy, Rapid Growth in the World Economy 2002-2007, Expansion in the Private Consumption Expenditures in Developed Countries, Rapid Growth in the World Trade, Expansion in the Global Financial Assets, Expansion in the International Capital Flows, Value of the US Dollar and and Other Currencies.

I.1.1 EXPANSIONIST MONETARY POLICIES IN THE GLOBAL ECONOMY

World economy has experienced a period of expansion and deepening of all the factors of globalization during 1990s. Especially when the financial integration has been



experienced, globalization has affected both developed and emerging and developing countries.

Economies and markets of the developed and emerging and developing countries has started to be open to outside effects and dependencies to each other have rapidly increased. Hastening of the globalization has accelerated the growth in the world economy.

Accelerating globalization in the world economy has faced an important crisis in 1997. Emerging and developing countries in Asia-Pacific region has faced with a deep financial crisis in 1997 and this has turned into a reel economic crisis rapidly.

Crisis emerged in Asia-Pacific region experienced by the developing countries has affected negatively other all developing countries in the global scale. Russia has declared moratorium in 1998 and Brazil, Mexico and Argentina crisis followed it.

This financial and economic crisis experienced by the developing countries has spread to the world economy in general and it resulted into stagnation on the global scale. Decline in demand has started to be experienced.

In response to the decline in demand on global scale and as stagnation has become continuous, USA among the developed countries made a radical change of policies in 2001. In order to revitalize the declining demand and meet the deficit of effective demand, expanding monetary and financial policies were embraced.

Implementations of USA Central Bank FED are the basis of easing monetary policies. When the policy interest rates were 6.50 percent at the end of 2000, FED has cut the policy interest rates to 1.75 % at the end of 2001, 1.25 percent in 2002 and 1.0 percent in 2003. European Central Bank and Bank of England (Central Bank) also more limitedly cut interest rates at the same period. Bank of Japan (Central Bank) has cut the interest rates from 0.25 percent to 0 in 2001, as it is in recession since 1991.

USA, Japan and England supplemented easing monetary policies with loose fiscal policies. As European Union preparing to introduce Euro as a single currency, do not make concession about its strict monetary policies.

The target of preventing the decline in demand and to vitalize the economies is met in the years 2001-2002-2003 as implementing expansionary monetary and fiscal policies. In addition to this, rapidly increasing dollar liquidity with lowest cost emerged on a global scale. Dollar has lost value compared to other all developed and developing country currency units, depending on the expansion in dollar supply and liquidity and decline in dollar interest rates.

Together with expansionary monetary policies, expanding dollar liquidity and low interest rates, negative interest rates emerged, rapid expansion in the financial assets, especially in credits experienced, prices of financial assets and other assets increased and overseas capital movements rapidly increased.

TABLE. I INTEREST RATES OF CENTRAL BANKS OF DEVELOPED COUNTRIES

	2000	2001	2002	2003	2004	2005	2006	2007	2008
USA CENTRAL BANK FED	6.50	1.75	1.25	1.00	2.00	4.00	5.25	4.25	0.25
EUROPEAN CENTRAL BANK ECB		3.25	2.75	2.00	2.00	2.25	3.25	4.00	2.50
BANK OF JAPAN	0.25	0.00	0.00	0.00	0.00	0.00	0.25	0.50	0.10
BANK OF ENGLAND	6.00	4.00	4.00	3.75	4.75	4.50	5.00	5.50	2.00

RESOURCE: ANNUAL REPORTS OF CENTRAL BANKS

I.1.2 RAPID GROWTH IN THE WORLD ECONOMY 2002-2007

Depending on the expansionary monetary and fiscal policies of developed countries with the leadership of USA implemented since 2001, world economy has started to be vitalized, growth has accelerated since 2003 and the world economy has experienced a rapid growth not seen before between 2004 and 2007. Growth rose to 5 percent in 2006.

Economic growth spread on the global scale, both the developed and developing countries has experienced very rapid economic growth rate in this period. While the developed countries has grown 3 percent and over, developing countries has reached to 8 percent growth rates and in 2006 to 7.8 percent and in 2007 to 7.9 percent.

Together with this rapid growth in world economy, total world income, which was 31.7 trillion dollars in 2002, reached to 41.7 trillion dollars in 2004, 48.8 trillion dollars in 2006 and 60.7 trillion dollars in 2008.

Depending on the rapid growth in the world economy and increase in income, a large income per capita, purchasing power and an effective demand have been created. Depending on the expansion in income worldwide, income per capita and increase in purchasing power, at the same period, private consumption expenditures of the households, retail expenditures of households, fixed asset investments of the households (house etc.) and financial borrowing capacities of the households has expanded significantly.

TABLE.2 GROWTH IN THE WORLD ECONOMY 2000-2008

	2001	2002	2003	2004	2005	2006	2007	2008
GROWTH IN WORLD ECONOMY %	2.2	2.8	3.6	4.9	4.4	5.0	4.9	3.2
GROWTH IN DEVELOPED COUNTRIES %	1.2	1.6	1.9	3.2	2.6	3.0	2.6	0.9
GROWTH IN DEVELOPING COUNTRIES %	3.8	4.7	6.2	7.5	7.4	7.8	7.9	6.1
WORLD INCOME BILLION DOLLAR	31.707	32.988	37.087	41.728	45.090	48.761	54.841	60.690

RESOURCE: IMF WORLD ECONOMIC OUTLOOK 2009, APRIL 2009

I.1.3 EXPANSION IN THE PRIVATE CONSUMPTION EXPENDITURES IN DEVELOPED COUNTRIES

World economy has entered into a rapid growth process together with expansionary monetary and fiscal policies implemented after 2001. The driving force of this rapid growth process is the expansion in the private consumption expenditures in developed countries.

With the effect of increase in incomes, lower cost and abundant borrowing opportunities, expansion in the financial borrowing capacities and asset effect of the expansion in the prices of assets that people hold, consumption tendencies of households and private consumption expenditures increased.

This expansion in the private consumption expenditures of the households in developed countries has primarily vitalized the domestic demand in the developed countries. Additionally, with the expansion of the consumption expenditures for the imported goods, rapidly increasing foreign demand is created for developing countries exporting goods to developed countries. In this way, the expansion in the private consumption expenditures in developed countries has become a determinative and driving force both for the economic growth of the developed and developing countries.

TABLE.3 WORLD PRIVATE CONSUMPTION EXPENDITURES ANNUAL PERCENTAGE CHANGE

COUNTRIES	2001	2002	2003	2004	2005	2006	2007	2008
DEVELOPED COUNTRIES	2.4	2.3	1.9	2.8	2.5	2.7	2.5	0.6
USA	2.5	2.7	2.8	3.6	3.0	3.0	2.8	0.2
EURO ZONE	2.0	0.9	1.2	1.6	1.8	2.0	1.6	0.5
JAPAN	1.6	1.1	0.4	1.6	1.3	1.5	0.7	0.5
GREAT BRITIAN	3.1	3.5	3.0	2.9	1.9	2.1	3.1	1.4
OTHER DEVELOPED COUNTRIES	2.8	4.0	1.5	3.6	3.5	3.7	4.4	1.2

RESOURCE: IMF, WORLD ECONOMIC OUTLOOK 2009, APRIL 2009

I.1.4 RAPID GROWTH IN THE WORLD TRADE

Together with the expansionary monetary and fiscal policies implemented after 2001 and expansion of private consumption expenditures and accordingly accelerated growth rate, have also resulted into a rapid expansion in the world trade as well.

Another main determinative factor for the expansion of the world trade is the non-quota or free trade opportunities in the eye of World Trade Organization since 2005 in the world trade.

As a result of growth in the private consumption expenditures, expansion in the dollar liquidity, lower cost financing opportunities (financing trade) and free trade opportunities, world trade has started to rapidly expand and this expansion fed the global economic growth.

World trade has been expanded by the increase of import depending on the private consumption expenditures of the developed countries and increase of export of the developing countries to the developed countries and accordingly growth in the world economy has been accelerated (growth of the developing countries depends on export).

Both merchandise trade and service trade has rapidly increased on the global scale. While the world's merchandise trade was 6.1 trillion dollars in 2001, it rose to 15.9 trillion dollars in 2008. While the service trade was 1.5 trillion dollars in 2001, it rose to 3.9 trillion dollars in 2008. This rapid growth in the world trade, increased the demand for these goods and the inputs of these goods, expansion in the demand has increased the prices of final goods and intermediate goods. An historical increase is

experienced in the prices of manufactured industrial goods, energy foods, metals, food and other raw materials, commodity prices. Growth of the value of the world trade has more rapidly realized with the price increases.

Depending on the rapid expansion experienced in the world trade between the years 2002-2008, de-industrialization (change-disintegration in the industrial production areas), diversification of markets, demands of consumers and changes in the consumer tendencies, new industrial zones and regions developed, transportation, distribution, logistics and retailing has rapidly grown.

As a result of liberalization in the trade, facilities to reach market information and reaching to goods, increasing domestic and foreign competition, supply-production-marketing-distribution process has rapidly changed and in this process place of the production (industrial zones) and access to the market (logistics-distribution) has become the most critical factors.

TABLE.4 WORLD TRADE 2001-2008

	2001	2002	2003	2004	2005	2006	2007	2008
MERCHANDISE AND SERVICE TRADE AMOUNT GROWTH %	0.3	3.5	5.4	10.7	7.6	9.2	6.8	3.3
MERCHANDISE TRADE AMOUNT GROWTH %	-0.4	3.7	6.3	11.0	7.5	9.3	6.6	3.2
MERCHANDISE AND SERVICES TRADE BILLION DOLLAR	7.615	7.995	9.312	11.304	12.840	14.774	17.149	19.694
MERCHANDISE TRADE BILLION DOLLAR	6.078	6.356	7.428	9.023	10.294	11.907	13.738	15.875
MANUFACTURING INDUSTRIAL GOODS PRICE CHANGE %	-3.4	2.1	14.4	9.5	3.6	3.7	8.8	9.6
OIL AND OIL PRODUCTS PRICE CHANGE %	-13.8	2.5	15.8	30.7	41.3	20.5	10.7	36.4
FOOD PRODUCTS PRICE CHANGE %	-2.0	3.5	6.3	14.0	-0.9	10.5	15.2	23.4
METALS PRICE CHANGE %	-10.3	-3.5	11.8	34.6	22.4	56.2	17.4	-8.0

RESOURCE: WORLD TRADE ORGANIZATION, INTERNATIONAL TRADE STATISTICS

I.1.5 EXPANSION IN THE GLOBAL FINANCIAL ASSETS

Expansionary monetary policies and very low interest rates implemented by developed countries and especially by USA since 2001, a rapid expansion has been experienced in the global financial assets.

Cheap and abundant liquidity resulted into rapid expansion of borrowings from financial sectors by credits and with security issuance. An increase seen in the values of the financial assets depending on the decrease in interest rates and volumes of the financial assets started to increase.

As a result of the rapid economic growth, company profitability has increased, prices of equities started to increase, this made the issuing of new equities and other securities attractive.

Depending on the economic growth, increase in the incomes of the households and company profitability, capacity of savings and borrowings of the households and companies strengthened. Savings and additional borrowings of the households and companies accelerated the expansion of the financial assets.

In the framework of all these developments, while the value of the global financial assets was 92 trillion dollars in 2001, it reached to 184 trillion dollars in 2007. Equities securities, private sector fixed income securities, public sector securities and deposit accounts have significantly expanded.

TABLE.5 GLOBAL FINANCIAL ASSETS 2001-2007 TRILLION DOLLAR

	2001	2002	2003	2004	2005	2006	2007
TOTAL FINANCIAL ASSETS	92	96	117	134	142	167	184
EQUITIES	28	24	32	38	44	54	58
PRIVATE SECTOR FIXED INCOME SECURITIES	23	26	30	34	36	43	48
PUBLIC SECTOR SECURITIES	14	17	20	24	24	26	28
DEPOSITS	26	30	34	38	39	45	50

RESOURCE: IMF, GLOBAL FINANCIAL STABILITY REPORT 2009, APRIL 2009

I.1.6 EXPANSION IN THE INTERNATIONAL CAPITAL FLOW

One of the most important results of loose monetary and fiscal policies started to be implemented after 2001 in the world economy is the expansion of the international capital flow on the global scale.

While the total international capital flow was 3.7 trillion dollars in 2001, it reached to 9.5 trillion dollars in 2007. International credits and bank accounts are the first with 4.0 trillion dollars in the capital flow of the year 2007. Fixed income securities' (public and private sector) total capital flow is 2.8 trillion dollars. Direct capital investments are 1.5 trillion dollars and equities are 1.2 trillion dollars.

Together with the expansion of the international capital flows, financing opportunities are expanding on the global scale and saving deficits are covered.

Financing institutions and real sector companies can benefit from the international financing opportunities. So, financing needs and deficits are met.

As financing opportunities expand with the international capital flows, interest rates and borrowing costs decrease, additional borrowing opportunities emerge, direct financing flows like direct capital investments, acquisitions and mergers, portfolio investments and demand and prices of these assets increase.

TABLE.6 INTERNATIONAL CAPITAL FLOWS 2001 - 2007 TRILLION DOLLAR

	2001	2002	2003	2004	2005	2006	2007
TOTAL CAPITAL FLOW	3.7	3.0	4.0	5.5	6.9	8.2	9.5
DIRECT CAPITAL INVESTMENTS	1.0	0.9	0.7	0.8	1.1	1.3	1.5
EQUITIES INVESTMENTS	0.7	0.2	0.5	0.5	1.0	0.9	1.2
FIXED INCOME SECURITY INVESTMENTS	1.0	1.0	1.4	2.0	2.2	2.5	2.8
CREDIT AND DEPOSIT	1.0	0.9	1.4	2.2	2.7	3.5	4.0

RESOURCE: IMF, GLOBAL FINANCIAL STABILITY REPORT 2009, APRIL 2009

International capital flows on the global scale are expanding not only toward developed countries but also toward developing countries. As economic and financial integration of the developing countries accelerates, capital inflows toward these countries expand.

Rapid economic growth and economic growth potential of the developing countries constitute significant opportunities and returns of the global capital. While the capital inflow toward developing countries was 73.5 billion dollars in 2001, it reached to 617.5 billion dollars in 2007.

Capital inflows toward the developing countries realized as direct investments, portfolio investments and credits. As capital inflows expand, local currency gains strength in the developing countries, interest rates decrease and prices of assets increase.

TABLE.7 NET PRIVATE CAPITAL INFLOWS TO DEVELOPING COUNTRIES 2001 - 2008 BILLION DOLLAR

	2001	2002	2003	2004	2005	2006	2007	2008
TOTAL	73.5	54.0	154.2	222.0	226.8	202.8	617.5	109.3
DIRECT INVESTMENT	180.5	144.4	161.3	183.9	243.7	241.4	359.0	459.3
PORTFOLIO INVESTMENT	-76.9	-86.4	-86.4	10.0	-5.6	-100.7	39.5	-155.2
OTHER CAPITAL	-30.1	-4.1	-4.1	28.0	-11.3	62.2	219.2	-194.6

RESOURCE: IMF, WORLD ECONOMIC OUTLOOK 2009, APRIL 2009

I.1.7 VALUE OF US DOLLAR AND OTHER CURRENCIES

On the basis of the developments experienced in the world economy after 2001 lies the monetary policy of USA. Monetary policy of USA expands the dollar supply and liquidity significantly on the global scale.

As a natural result of this policy, USA dollar has lost value compared to other all developed and developing countries' currencies since 2002. Loss in value continued until the September 2008 that global crisis triggered.

Economic scales and asset values of the other all countries, except USA, have increased in terms of dollar as dollar lost value. This primarily started from the increase in national income of the countries. With the appreciation of other currencies compared to dollar, dollar term national incomes of the countries have expanded over real growth. For this reason, national incomes and assets of other countries' companies and households have ballooned, as calculated in terms of dollar, prices and values of assets have ballooned in terms of dollar as well.

Balloon effect of calculating the incomes, possessions and assets in terms of dollar has created an additional wealth effect in terms of dollar. Depending on this wealth effect, borrowings increased and expansion of consumption based on this wealth effect has accelerated the economic growth.

TABLE.8 VALUES OF USA DOLLAR AGAINST OTHER CURRENCIES

	2002 DECEMBER	2008 SEPTEMBER
EURO / DOLLAR	1.04	1.42
POUND STERLING/ DOLLAR	1.62	1.79
CHINA YUAN	8.28	6.79
S.KOREA WON	1186.3	1206.3
INDIA RUPE	48.00	45.93
HUNGARY FORINT	225.2	168.8
RUSSIA RUBLE	31.78	25.70
UKRAINE HRYVN	5.33	5.08
POLAND ZLOTY	3.84	2.37
BRASIL REAL	3.54	1.80
TURKISH LIRA	1.61	1.26
DOLAR/YEN	118.67	105.28

RESOURCE: IMF, GLOBAL FINANCIAL STABILITY REPORT 2009, APRIL 2009

I.2 CONDITIONS OF EXPANSION PERIOD AND CHANNELS TO AFFECT REAL ESTATE SECTOR

Expansionary period experienced in the world economy after 2001 has examined and evaluated in detail above. The channels that the conditions of this period affect in the real estate sector, housing and commercial real estate sector, are presented below. These channels are evaluated under titles of expansionary monetary policy, rapid economic growth, expansion in the merchandise and service trade in the world, expansion in the financial opportunities, expansion in the international capital flows and dollar's loss of value against to other currencies.

CONDITIONS OF EXPANSION PERIOD AND CHANNELS TO AFFECT REAL ESTATE SECTOR		
CONDITIONS OF THE EXPANSION PERIOD	HOUSING SECTOR	COMMERCIAL REAL ESTATE SECTOR
<p>EXPANSIONARY MONETARY POLICY</p> <p>LOW INTEREST RATES</p> <p>ABUNDANT AND CHEAP DOLLAR LIQUIDITY</p> <p>EXPANSION IN THE FINANCIAL ASSETS</p>	<ul style="list-style-type: none"> ● PRICE INCREASE ● REDUCTION IN THE FINANCING COSTS ● EXPANSION IN HOUSING CREDITS ● EXPANSION IN THE OPPORTUNITIES OF SECURITIZATION, REDUCTION IN COSTS ● INCREASE IN THE HOUSEHOLD'S BORROWING APETITE 	<ul style="list-style-type: none"> ● INCREASE IN VALUE (INCREASE IN CAPITAL RETURNS) ● REDUCTION IN FINANCING COSTS ● EXPANSION IN THE FINANCING OF THE INVESTMENT ● INCREASE IN THE FINANCING LEVERAGE RATES ● EXPANSION IN THE SECURITIZATION OPPORTUNITIES AND REDUCTION IN THE COSTS ● EXPANSION IN DOMESTIC AND OVERSEAS INVESTMENTS
<p>RAPID ECONOMIC GROWTH</p> <p>INCREASE IN NATIONAL INCOME, NATIONAL INCOME PER CAPITA, HOUSEHOLD INCOME</p> <p>INCREASE IN THE PURCHASING POWER IN TERMS OF DOLLAR (WITH THE LOSS OF VALUE IN DOLLAR)</p>	<ul style="list-style-type: none"> ● INCREASE IN HOUSING DEMAND ● INCREASE IN THE USE OF HOUSING CREDIT AND CAPACITY TO PAY BACK THE DEBT ● INCREASE IN DEMAND FOR THE HOUSING CREDIT 	<ul style="list-style-type: none"> ● EXPANSION IN PRIVATE CONSUMPTION EXPENDITURES AND RETAIL EXPENDITURES ● EXPANSION IN DEMAND AND SUPPLY FOR SHOPPING CENTER AND OTHER RETAIL UNITS ● EXPANSION OF DEMAND FOR THE INDUSTRIAL REGIONS
<p>EXPANSION IN THE MERCHANDISE AND SERVICE TRADE IN THE WORLD</p> <p>DE-INDUSTRIALIZATION</p> <p>CHANGE IN THE SUPPLY-PRODUCTION-MARKETING-DISTRIBUTION CHAIN</p>		<ul style="list-style-type: none"> ● EXPANSION OF DEMAND FOR THE INDUSTRIAL REGIONS ● EXPANSION IN LOGISTICS SERVICES ● EXPANSION AND DIVERSIFICATION IN DEMAND FOR LOGISTICS ZONE ● EXPANSION IN DEMAND FOR THE OFFICE BUILDINGS

CONDITIONS OF EXPANSION PERIOD AND CHANNELS TO AFFECT REAL ESTATE SECTOR

CONDITIONS OF THE EXPANSION PERIOD	HOUSING SECTOR	COMMERCIAL REAL ESTATE SECTOR
EXPANSION IN THE FINANCIAL OPPORTUNITIES	<ul style="list-style-type: none"> ● EXPANSION IN HOUSING FINANCING SYSTEM OPPORTUNITIES ● INCREASING COMPETITION IN THE FINANCE INSTITUTIONS AND REDUCTION IN CREDIT COSTS ● EXPANSION OF SECURITIZATION OF THE MORTGAGED HOUSING CREDITS AND DERIVATIVE OPPORTUNITIES ● INCREASE IN THE HOUSING PRICES 	<ul style="list-style-type: none"> ● EXPANSION IN THE OPPORTUNITIES FOR THE COMMERCIAL REAL ESTATE FINANCING ● EXPANSION IN THE FINANCING OPPORTUNITIES OF THE INVESTMENTS AND INCREASE IN THE INVESTMENT APPETITE ● EXPANSION IN THE OPPORTUNITIES FOR SECURITIZATION AND ITS DERIVATIVES ● INCREASE IN THE COMMERCIAL REAL ESTATE VALUES ● EXPANSION IN THE INSTITUTIONAL INVESTMENTS
EXPANSION IN INTERNATIONAL CAPITAL FLOWS	<ul style="list-style-type: none"> ● EXPANSION IN HOUSING FINANCING SYSTEMS (WITH OVERSEAS FINANCING) ● REDUCTION IN THE COSTS OF HOUSING CREDITS 	<ul style="list-style-type: none"> ● EXPANSION IN THE OVERSEAS INVESTMENTS (ACQUISITIONS) ● DEMAND AND VALUE INCREASE (INCREASE IN CAPITAL RETURNS) ● EXPANSION IN ACQUISITION AND GREENFIELD INVESTMENT FINANCING OPPORTUNITIES ● INCREASE IN THE LEVERAGE RATES
LOSS OF VALUE IN DOLLAR AGAINST TO OTHER CURRENCIES	<ul style="list-style-type: none"> ● INCREASE IN THE PRICES OF HOUSINGS IN TERMS OF DOLLAR EXCEPT IN THE USA ● INCREASE IN THE PURCHASING POWER OF USA HOUSES WITH OTHER CURRENCIES 	<ul style="list-style-type: none"> ● INCREASE IN THE PURCHASING POWER TO BUY COMMERCIAL REAL ESTATE IN USA WITH OTHER CURRENCIES ● INCREASE IN THE PRICES OF COMMERCIAL REAL ESTATES IN TERMS OF DOLLAR OUTSIDE USA (ASSET AND WEALTH INCREASE EFFECT) ● BALLOONING OF THE ECONOMIC INDICATORS IN TERMS OF DOLLAR IN THE COUNTRIES EXCEPT USA (EXAMPLE RETAIL EXPENDITURE)

I.3 EXPANSION PERIOD AND REAL ESTATE SECTOR

Expansion and growth experienced in the world economy after 2001 and realized very higher than the other periods has positively affected real estate sector like all other sectors. Economic conditions of the new period have created main development dynamics for real estate sector as well.



In this framework, effects of the expansion period of the world economy are separately examined and evaluated as housing and commercial real estates.

I.3.1 EXPANSION PERIOD AND HOUSING SECTOR

Expansion period experienced in the world economy after 2001 has primarily affected housing sector in the real estate sector. A rapid increase is seen in the mortgaged system and credits in the expansion period, usage of housing credits and housing demand and housing prices has increased.

Growth in the housing sector during the expansionary period in the economy has started to create an unsustainable financial balloon and the basis of the global financial and economic crisis was the crisis started in the mortgaged system in USA.

For this reason, in order to make healthy previsions about the global crisis and the following period, interaction and relations between the economic conditions of the rapid economic growth period and housing sector have to be well analyzed and evaluated.

I.3.1.1 Growth in the Mortgaged System

Main policies of the economic growth period has been loose monetary policies and low interest rates, dollar supply and liquidity has been expanded with these policies, increase was seen in the financing opportunities, reduction has seen in the costs of financing and borrowing and from time to time people borrowed with negative interest rates (in inflaiton adjusted calculation).

As a result of these conditions occurred about financial opportunities, the first direct effect of the economic growth period on the housing sector is the rapid increase in supply, demand and usage of mortgaged credits.

Mortgaged system is comprised of 3 submarkets. The first one is primary markets supplying mortgaged credits directly to households. The second one is secondary markets supplying refinancing for the private financing institutions by the public

authorities on bases of the credits given to households. The third one is secondary markets supplying refinancing by issuing securities based on mortgaged credits used by households.

In the total of the mortgaged system and separately in primary and secondary markets, there has been rapid expansion during the economic growth period. Mortgaged credit stock in has rapidly increased after 2001, starting from 2002 in USA and in Europe.

While the mortgaged credit stock was 7.4 trillion dollars in 2001 in USA (Table. 9), it reached to 14.7 trillion dollars in the third quarter of 2008. Mortgaged credit stock has doubled in 7 years.

TABLO.9 MORTGAGED CREDITS STOCK BILLION DOLLAR IN USA

YEARS	TOTAL	PRIVATE FINANCING INSTITUTIONS	PUBLIC FINANCING INSTITUTIONS	REAL ESTATE INVESTMENTS TRUSTS AND FUNDS	OTHER AUTHORIZED FINANCING INSTITUTIONS
2001	7.421	2.791	373	3.544	713
2002	8.242	3.089	434	3.956	765
2003	9.235	3.387	537	4.456	854
2004	10.663	3.926	704	4.830	1.203
2005	12.101	4.396	667	5.684	1.354
2006	13.489	4.781	689	6.607	1.412
2007	14.568	5.067	726	7.414	1.361
2008/Q3	14.724	5.039	755	7.581	1.349

RESOURCE: FEDERAL RESERVE BOARD, USA

PRIVATE FINANCING INSTITUTIONS: Commercial Banks, Saving Institutions, Life Insurance Companies

PUBLIC FINANCING INSTITUTIONS: Federal National Mortgage Association, Federal Home Loan Mortgage Corporation

REAL ESTATE INVESTMENT TRUSTS AND FUNDS: Government National Mortgage Association, Federal Home Loan Mortgage Corporation, Federal National Mortgage Associations, Private Mortgage Corporation

OTHER AUTHORIZED FINANCING INSTITUTIONS: Mortgaged Financing Companies, Real Estate Investment Trusts, Credit Unions, Financing Companies, and Pension Funds.

Credits in the mortgaged system are used in four main real estate groups in USA. Single house is the group that people mostly use credits for. While the mortgaged credit for single houses was 5.6 trillion dollars in total, it reached to 11.3 trillion dollars in the third quarter of 2008.

Commercial real estates are the second most in mortgaged credits. While the credit volume was 1.2 trillion dollars for commercial real estates in 2001, it reached to 2.4 trillion dollars in 2008.

TABLE.10 DISPERSION OF MORTGAGED CREDIT STOCK AMONG REAL ESTATES IN USA BILLION DOLLARS

YEARS	TOTAL	SINGLE HOUSING	MULTI APARTMENT HOUSING	COMMERCIAL BUILDING	AGRICULTURAL BUILDING
2001	7.421	5.571	429	1.218	203
2002	8.244	6.244	466	1.314	220
2003	9.234	7.026	536	1.437	235
2004	10.663	8.273	592	1.575	223
2005	12.101	9.379	664	1.813	245
2006	13.489	10.452	716	2.083	238
2007	1.468	11.158	814	2.356	240
2008 Q3	14.724	11.270	827	2.380	247

RESOURCE: FEDERAL RESERVE BOARD, USA

While the credit volume significantly expands in the mortgaged system in USA, other indicators of the mortgaged system reflects the developments as well. (Table.11)

While the value of the houses purchased by using mortgaged housing credits was 242 thousand dollars on average in 2001, in the following years it continuously increased and reached to 361 thousand dollars in 2007.

While the average volume of the used mortgaged housing credits was 186 thousand dollars in 2001, it reached 270 thousand dollars in 2007.

These two data indicates both the increase in prices of average houses and the increase in borrowing capacities depending on the increase in households' incomes.

The ratio between the used credit amount and sale price of houses (LTV) has shown a limited fluctuation after 2001 and remained between 74-78 percent. The recession in the average interest rates in the years 2003, 2004 and 2005 has triggered the rapid increase in the usage of credits.

Consequently, 496 billion dollars of credits was used for the single houses in 2001. 1.1 trillion dollars credit was used in 2005.

TABLE.11 MORTGAGED SYSTEM MAIN INDICATORS IN USA

INDICATORS	2001	2002	2003	2004	2005	2006	2007	2008
AVERAGE VALUE OF THE HOUSES PURCHASED BY USING MORTGAGED CREDITS THOUSAND DOLLAR	241	261	272	292	327	346	361	354
AVERAGE AMOUNT OF USED CREDITS THOUSAND DOLLAR	186	197	205	215	239	253	270	253
RATIO OF CREDIT/HOUSING VALUE %	77.1	77.8	77.9	76.0	75.3	75.4	77.1	73.9
AVERAGE DUE DATE YEAR	29.0	28.9	28.7	28.8	29.2	29.5	29.4	28.6
AVERAGE INTEREST RATE	6.46	6.35	5.71	5.68	5.86	6.50	6.30	5.93
AMOUNT OF CREDIT USED IN A YEAR BILLION DOLLAR	658	814	984	1229	1421	1404	973	361
SINGLE HOUSE	496	673	782	1028	1106	1072	619	230
MULTI APARTMENT HOUSE	41	37	70	48	72	53	130	48
COMMERCIAL BUILDING	114	96	124	150	238	271	215	80
AGRICULTURAL BUILDING	8	8	8	3	5	8	9	3

RESOURCE: FEDERAL RESERVE BOARD, ABD

A significant expansion has been experienced in the secondary markets of the mortgaged system during the economic growth period. The secondary markets in the mortgaged are comprised of securities issuing based on mortgaged credits. An important expansion has seen in the financing opportunities for housing financing system with the method of securitization. With the reduction seen in the interests and borrowing costs, issues increased, demand for mortgage based securities of institutional investors increased.

While the security issues based on mortgaged housing credits in USA was 684.4 billion dollars in 2000, it reached to 2.2 trillion dollars in 2002 and 3.1 trillion dollars in 2003. While the security stocks based on mortgaged housing credits was 3.56 trillion dollars in 2000, it reached to 8.93 trillion dollars in 2007. Refinancing expanded in the secondary markets of the mortgaged housing credits during the economic growth period's suitable conditions. Consequently, credit volume expanded in the primary markets.

TABLE.12 SECURITY ISSUES AND STOCKS BASED ON MORTGAGED HOUSING CREDITS IN USA BILLION DOLLAR

YEARS	SECURITY ISSUES	SECURITY STOCK
2000	684.4	3.565.8
2001	1.671.3	4.127.4
2002	2.249.2	4.686.4
2003	3.071.1	5.238.6
2004	1.779.0	5.862.0
2005	1.966.7	7.127.7
2006	1.987.8	8.452.8
2007	2.050.3	8.931.4
2008	1.339.7	8.897.3

RESOURCE: SECURITIES INDUSTRY AND FINANCIAL MARKETS ASSOCIATION, USA

Conditions occurred as a result of the economic growth experienced after 2001 has contributed to the expansion of the housing sector in Europe as well and mortgaged system rapidly increased after 2000. In EU-27 countries, while the mortgaged housing credit in total was 3.3 trillion Euros in 2000, it reached to 6.15 trillion Euros in 2007. Mortgaged backed securities in the secondary markets has expanded by years and stock volume reached to 1.14 trillion Euros in 2007. Expansion in the opportunities for housing financing in EU-27 countries triggered the housing supply as well. While the annual growth rate of housing credits was 0.1 percent in 2001, it continuously increased in the following years and reached to 3.4 percent in 2006.

TABLE.13 MORTGAGED HOUSING CREDITS AND MORTGAGE BACKED SECURITY STOCKS BILLION EUROS

YEARS	MORTGAGED HOUSING CREDITS EU-27	MORTGAGED BACKED SECURITY STOCK	MORTGAGED BACKED SECURITY ISSUES	HOUSING INVESTMENTS ANNUAL CHANGE % EU-27
2000	3.292	311	96	2.1
2001	3.548	376	148	0.1
2002	3.946	492	185	1.3
2003	4.226	596	206	2.2
2004	4.671	664	198	2.8
2005	5.123	772	272	2.6
2006	5.721	952	297	3.4
2007	6.147	1.145	339	2.4

RESOURCE: EUROPEAN MORTGAGE FEDERATION, EUROPEAN COVERED BOND COUNCIL

One of the most important reasons of the expansion seen in the supply and demand for mortgaged housing credits in the European Union in general is the reduction in credit interest rates depending on the expansionary monetary politics. Reduction in the credit interest rates in the following years compared to 2001, increased demand for credits significantly.

TABLE.14 AVERAGE ANNUAL INTEREST RATES OF MORTGAGED HOUSING CREDITS IN THE EUROPE %

COUNTRIES	2001	2002	2003	2004	2005	2006	2007
ENGLAND	5.48	4.58	4.18	5.04	5.23	5.10	5.75
GERMANY	5.87	5.52	5.14	4.63	4.19	4.64	5.03
FRANCE	5.40	5.10	4.40	4.25	3.50	3.90	4.60
SPAIN	4.50	3.80	3.18	3.30	3.50	4.03	5.06
ITALY	5.30	5.03	4.75	4.50	4.10	4.56	5.20
NETHERLANDS	5.50	5.20	4.90	4.80	4.11	4.37	4.96
SWEDEN	4.70	4.90	3.70	3.04	2.36	3.63	4.75
DENMARK	6.40	5.66	5.45	4.97	4.44	5.22	5.94
POLAND	10.40	9.60	7.60	8.10	6.00	5.70	5.90
ESTONIA	10.30	7.40	4.60	3.70	3.70	4.40	5.48
BULGARIA	15.14	13.14	12.62	10.58	6.88	8.50	10.40
SLOVENIA	14.80	13.50	10.16	7.58	6.13	5.64	6.27

RESOURCE: EUROPEAN MORTGAGE FEDERATION

1.3.1.2 Increase in the House Supply and Sales

The second important effect of the economic expansion period of the housing sector is the rapid growth in the housing supply and housing sales. Growth effect was experienced more powerfully especially in USA.

With the expansion in the opportunities for the housing financing system in order to meet the rising demand for housing, increase in the housing supply accelerated as well. Existing and new housing sales expanded.

While the annual existing housing sales were 5.34 million in 2001 in USA, it reached to 7 million in 2005. While the average house price in the existing houses was 153 thousand dollars in 2001, it increased to 222 thousand dollars in 2006. Sales of new houses expanded and while the annual sales of new houses were 905 thousand, it reached to 1.28 million annually in 2005.

Depending on the increase in house demand and house sales, house production increased. While the new housing constructions were 1.51 million in 2001, it realized as 2.13 million in 2006.

During the economic expansion period, while the house stock (number of dwelling units) was 118.7 million in 2001, it reached to 130.1 million in 2008 in USA.

TABLE.15 SALE OF EXISTING HOUSES AND START TO CONSTRUCTION OF NEW HOUSES

YEARS	SALE OF EXISTING HOUSES	AVERAGE SALE PRICE OF EXISTING HOUSES DOLLAR	SALE OF NEW HOUSES	START TO CONSTRUCTION OF NEW HOUSES	HOUSE STOCK THOUSAND
2001	5.336.000	153.100	905.000	1.516.000	118.720
2002	5.631.000	165.000	990.000	1.535.000	119.297
2003	6.178.000	178.800	1.097.000	1.774.000	120.834
2004	6.778.000	195.400	1.203.000	2.095.000	122.187
2005	7.076.000	219.600	1.276.000	1.977.000	123.925
2006	6.478.000	221.900	1.035.000	2.135.000	126.012
2007	5.652.000	219.000	790.000	1.490.000	127.958
2008	4.913.000	198.100	465.000	970.000	130.113

RESOURCE: NATIONAL ASSOCIATION OF REALTORS, USA, US CENSUS BUREAU

I.3.1.3 Increase in House Prices

The third effect of the expansion period on the housing sector is the nominal and reel increase in prices of houses. A significant increase was seen in the housing prices after 2001, depending on the expansion in opportunities for housing financing and increase in demand for houses.

Increase in the prices of the houses resulted into both an increase in security deposits for institutions supplying credits and a decrease in the ratio of the financial commitments of the households to asset values. Decrease of this ratio and increase in the house prices has created a positive asset effect for households and their borrowing capacity increased.

House prices increased significantly in USA generally since the year 2000. While the index of housing prices monitored for 10 states was 100 in the year 2000, it rose to 222.39 in the year 2006. Index of housing prices monitored for 20 states increased to 203.33 in 2006. Nevertheless, housing prices rapidly decreased in the years 2007 and 2008. In the economic expansion period, a significant increase is seen in housing prices.

TABLE.16 DEVELOPMENT OF HOUSING PRICES USA 2000- 2008 STANDARD AND POORS CASE SHILLER HOUSING PRICE INDEX 2000 JANUARY=100

YEARS	COMPOSITE 10	COMPOSITE 20
2000	113.56	111.58
2001	123.64	120.43
2002	142.18	135.15
2003	161.27	150.49
2004	191.42	174.83
2005	221.91	201.97
2006	222.39	203.33
2007	200.67	184.97
2008	162.17	150.66

RESOURCE: STANDARD AND POORS

During the economic expansion period, house prices increased globally. Housing prices had expanded in reel between the years 2000 and 2006 in OECD countries. The fastest annual average reel increase between 2000 and 2006 in housing prices was seen in Spain with 11.2 percent. It was 9.5 percent in France and 8.8 percent in England. Increase in reel increase in housing prices is higher in Europe than in USA. Germany and Japan are the two countries where reel housing prices decreased in the same period. While the reel housing prices had a complex progress in 2007, it decreased after the crisis in 2008.

TABLE.17 ANNUAL PERCENTAGE CHANGE IN REAL HOUSING PRICES

COUNTRIES	2000-2006	2007	2008
USA	5.4	-0.4	-6.2
JAPAN	-4.3	-1.1	-2.4
GERMANY	-2.9	-1.2	-2.7
FRANSA	9.5	4.9	-1.1
ITALY	6.1	3.1	-1.1
ENGLAND	8.8	8.4	-4.3
CANADA	6.7	8.5	-3.4
AUSTRALIA	7.1	8.8	0.4
DENMARK	7.9	2.9	-6.0
FINLAND	4.7	5.6	-2.4
IRELAND	8.3	-1.8	-9.6
NETHERLANDS	2.9	2.6	0.7
SPAIN	11.2	2.6	-3.7
SWEDEN	6.7	8.6	0.0
SWITZERLAND	1.7	1.3	0.2

RESOURCE: OECD ECONOMIC OUTLOOK, INTERIM REPORT 2009 MARCH
 Real Housing Prices: Selected and weighted nominal house prices are cleared of by consumer price index.

1.3.1.4 Expansion in the House Credit Commitments of Households

The fourth important effect of the economic expansion period in the housing sector is the expansion in the house credit commitments of households. The level that house credit commitments reached by households will be indicative for the usage of house credits in the following periods.

The share of the mortgaged housing credits that are used by the households in the GNP has significantly increased in USA. While the share of the mortgaged housing credits in the GNP was 59.0 percent in 2000, it reached to 96.3 percent in 2008.

House ownership rates of households limitedly increased in USA. While the rate of house ownership in USA was 65.2 percent in 2000, it rose to 68.9 percent in 2006. Nevertheless, it decreased to 67.5 percent in 2008.

The ratio of the annual capital and debt services of households based on housing credits to disposable income limitedly increased. While this rate was 12.88 percent in 2000, it reached to 14.33 percent in 2008.

Together with the rapid expansion in the usage of housing credits, disposable incomes of the households increased significantly during the economic growth period

and for this reason the ratio of the debt services of the households to disposable incomes remained on a reasonable level. It is observed that depending on the disposable income level of the households, there are additional borrowing opportunities of the households. Nevertheless, it has not to be ignored that there will be a decrease in the disposable income levels of the households depending on the economic recession and increase in unemployment.

TABLE.18 DEBT SERVICES OF THE HOUSE OWNERSHIP OF THE HOUSEHOLDS IN USA AND THEIR TOTAL FINANCIAL OBLIGATIONS

YEARS	RATIO OF HOUSEHOLDS' HOUSE OWNERSHIP %	DEBT SERVICE OF THE HOUSEHOLDS/ DISPOSABLE INCOME %	TOTAL FINANCIAL OBLIGATIONS OF THE HOUSEHOLDS/ DISPOSABLE INCOME %	HOUSEHOLD HOUSING CREDITS / GNP %
2000	65.2	12.88	18.24	59.0
2001	65.4	13.38	18.85	59.3
2002	65.8	13.56	18.83	64.1
2003	66.5	13.50	18.53	69.0
2004	67.8	13.56	18.51	75.9
2005	68.6	14.03	19.00	80.8
2006	68.9	14.35	19.33	84.6
2007	67.8	14.31	19.31	86.5
2008	67.5	14.33	19.36	96.3

RESOURCE: US DEPARTMENT OF COMMERCE

I.3.2 EXPANSION PERIOD AND COMMERCIAL REAL ESTATE SECTOR

Expansion period experienced in the world economy after 2001 has positively affected the real estate sector; commercial real estate sector had a significant development in this period.

Together with the powerful economic growth in the commercial real estate sector and a powerful increase seen in the demand side, supply in the sub-markets like retail, office, industry-logistics areas and hotels has significantly increased. A significant expansion is seen in the financing and credit flow for the commercial real estate sector. Commercial real estates has become a primary asset and increased its share in the investment portfolio. Annual total returns of the commercial real estates have increased together with the increase in capital values and investment returns. Commercial real estate returns has become higher than the returns of the other financial investment. Accordingly, a significant expansion was seen in the domestic and overseas direct commercial real estate investments.

I.3.2.1 Strong Economic Basis and Expansion in the Supply of Commercial Real Estates

World economy has entered into a globally rapid and steady growth period after the year 2001. This rapid and steady growth created economic foundations on the commercial real estate sector's demand side which has expansionary effects.

Increase in the national incomes as a result of growth in the economies, resulted increase in the individual incomes. Disposable incomes, private consumption expenditures of the households and retail expenditures rapidly expanded. This expansion provided growth in the retail and shopping centers in the commercial real estate sector.

Economic growth and world trade accelerated in this period in supporting each other and accordingly industrial production and wholesale-retail trade, transportation, logistics and distribution activities has expanded on a global basis. This expansion resulted into growth in the industrial and logistics area supply in the commercial real estates.

Together with the industry, services sector has entered into a rapid growth period in the economic expansion period. Markets of the goods and services production became foreign markets, these tendencies increased and experienced in the developing countries. Accordingly, office supply expanded in the commercial real estate sector.

TABLE.19 EXPANSION IN THE COMMERCIAL REAL ESTATE SECTOR INVESTMENTS AND STOCK

REGIONS / COMMERCIAL REAL ESTATES	2001	2002	2003	2004	2005	2006	2007	2008
USA								
Shopping Center ⁽¹⁾ Leasable Space Million feet ²	5.855	5.962	6.081	6.215	6.364	6.523	6.667	6.793
OFFICE ⁽²⁾ million m ²	191	192	195	199	202	206	213	218
LOGISTICS AREA ⁽³⁾ million feet ²	4.677	4.757	4.948	5.034	5.141	5.564	5.710	5.835
EUROPE								
Shopping Center ⁽⁴⁾ Leasable Space Million m ²	70.4	77.5	83.0	86.5	88.0	100.0	108.5	122.0
OFFICE ⁽⁵⁾ million m ²	120	131	139	151	168	195	204	208
ASIA-PASIFIC								
OFFICE ⁽⁶⁾ million m ²	21	27	31	39	46	72	88	105

RESOURCE: (1) NATIONAL RESEARCH BUREAU, (2) DEGI RESEARCH, (3) PROLOGIS US Property Market Review, (4) Cushman Wakefields European Retail Market Outlook 2008, (5) DEGI RESEARCH, (6) DEGI RESEARCH

I.3.2.2 Expansion in the Finance of the Commercial Real Estates

One of the important results of the growth in the world economy after 2001 is the reduction in the interest rates of dollar and increase in the financing opportunities of dollar depending on the expansion in dollar liquidity. Expansion in the financing opportunities positively affected the commercial real estate sector in this period and access to financial resources by the commercial real estate sector expanded. Transfer of financial resources from credit markets and capital markets to commercial real estate sector increased.

Together with the global decrease in the interest rates, on the one hand the asset values of the commercial real estates increased, on the other hand, financing costs (interests and spreads) of commercial real estates decreased.

Increase in the asset prices of commercial real estates increased the financing appetite for this area. As a result of the expanding liquidity, financing was given with higher leverage rates.

Credits given to commercial real estates have rapidly increased after the year 2001. While the mortgaged commercial real estate credits were 1.22 trillion dollars in 2001 in USA, it reached to 2.38 trillion dollars in 2008. In the European Union, while the credits given to commercial real estates were 641 billion euro in 2001, it reached to 1.24 trillion euro in 2008.

TABLE.20 CREDITS USED IN THE COMMERCIAL REAL ESTATE SECTOR

YEARS	MORTGAGED COMMERCIAL REAL ESTATE CREDITS IN USA BILLION DOLLAR	COMMERCIAL REAL ESTATE CREDITS IN EUROPE BILLION EURO
2001	1.218	641
2002	1.314	688
2003	1.437	748
2004	1.575	795
2005	1.813	949
2006	2.083	1.069
2007	2.356	1.210
2008	2.380	1.241

RESOURCE: COMMERCIAL MORTGAGE SECURITIES ASSOCIATIONS, EUROPEAN CENTRAL BANK, BANKING SUPERVISION COMMITTEE

The second source of the expansion in the financial opportunities for the commercial real estate sector is capital markets. Commercial real estate sector has financing from the capital markets by issuing of securities. Securitization is made backed on the mortgaged credits given in the commercial real estate sector and other mortgaged financial debts.

The most important security that is issue by securitization and making mediation for the financial resource flow for commercial real estate sector is mortgaged commercial real estate bonds. (Commercial Mortgage Backed Securities)

Security issues that provide financial flow from capital market to commercial real estates have accelerated after 2004; issues in 2005, 2006 and 2007 have reached to annually 300 billion dollars levels. The most important part of the security issues are realized in the USA capital markets.

Together with the security issues, security stock based on commercial real estate credits expanded. While the stocks were 564 billion dollars in 2001 on a global scale, it reached to 1.36 trillion dollars in 2007. 67 percent of the stock is in USA.

Other important determinative factor for the expansion of financial flow from capital markets to commercial real estate sector is the increase in the investment appetite for the securities issued from the commercial real estate sector. Investors of commercial real estate credits backed securities (data of Commercial Mortgage Securities Associations by the end of the year 2008) are Investment Funds with 28 percent, Banks with 23 percent, Pension Funds and Finance Companies with 19 percent, Insurance Companies with 16 percent, Sovereign Wealth Funds with 10 percent.

TABLE.21 SECURITIZATION BACKED ON THE COMMERCIAL REAL ESTATE CREDITS BILLION DOLLAR

YEARS	SECURITY ISSUE				SECURITY STOCK			
	USA	EUROPE	OTHER	TOTAL	USA	EUROPE	OTHER	TOTAL
2001	67	16	7	90	358	157	49	564
2002	52	18	11	81	402	169	58	629
2003	78	13	8	99	472	179	65	716
2004	93	22	13	128	527	188	76	791
2005	169	56	14	239	643	221	87	951
2006	203	78	17	298	753	279	100	1.132
2007	230	64	21	315	919	326	116	1.361
2008	12	10	7	29	896	327	122	1.345

RESOURCE: COMMERCIAL MORTGAGE SECURITIES ASSOCIATIONS

1.3.2.3 Growth in the Commercial Real Estate Returns

The most important effect of the expansion period on the commercial real estate sector experienced after 2001 in the world economy is the increase in the commercial real estate returns.

Total commercial real estate returns are comprised of two main elements. The first one is capital returns. Capital returns is calculated by the increase (decrease) in the asset price of the commercial real estate.

The second one is investment returns. Investment returns is calculated by the ratio of total investment expenditure (purchasing price or investment cost) to annual return (rent and other incomes).

Total commercial real estate returns have significantly increased on the global scale after 2001. Two thirds of this increase is as a result of the growth of capital returns and one third is as a result of investment returns.

After the decrease in the interest rates, asset prices of the commercial real estates have significantly increased compared to other periods during the growth period. As a result, capital returns of the commercial real estates grew in the same rate.

Change in the commercial real estate returns experienced after 2000 is presented in Table.22 for the selected countries. Returns of the commercial real estates are reflected in 2000=100 index. Capital returns, investment returns and total returns are indicated separately.

Total returns of the commercial real estates were high during the 200-2007 period. Although returns in the mature markets like USA, England, and Germany were low, returns in these markets became high compared to other periods.

Higher part of the increase in the commercial real estate returns is as a result of the increase in the capital returns. In this period, investment returns were higher than capital returns only in USA and Germany in this period.

TABLE.22 COMMERCIAL REAL ESTATE RETURNS BY THE END OF 2007 2000=100

COUNTRIES	CAPITAL RETURNS	INVESTMENT RETURNS	TOTAL RETURNS
NEW ZELAND	254.1	181.4	457.6
SOUTH AFRICA	208.6	194.1	402.4
AUSTRALIA	234.3	163.9	382.1
IRELAND	266.6	141.4	375.5
NORWAY	225.3	163.4	366.4
FRANCE	242.7	151.1	365.1
CANADA	211.3	171.3	360.4
SPAIN	233.5	147.8	343.7
PORTUGAL	211.8	159.8	377.0
DENMARK	225.0	147.8	331.2
NETHERLANDS	202.4	148.9	300.3
ENGLAND	184.1	149.8	274.9
SWEDEN	172.7	145.8	251.1
USA	142.4	163.6	231.8
GERMANY	135.5	139.6	188.9

RESOURCE: INVESTMENT PROPERTY DATABANK (IPD)

Increase in the returns for commercial real estates was especially bounced in 2003 on a global scale and it increased more in the years 2003-2004-2005 and 2006. Total returns of the commercial real estates slowed down in 2007, it turned into negative in 2008 in almost all countries as a result of the crisis. The result of the negative returns is the negative returns in the capital returns. (Decrease in the of the commercial real estates' asset prices)

TABLE.23 TOTAL COMMERCIAL REAL ESTATE RETURNS ANNUAL PERCENTAGE

COUNTRIES	2001	2002	2003	2004	2005	2006	2007	2008
USA	7.3	6.7	9.0	14.5	20.0	16.6	15.8	-6.46
ENGLAND	6.8	9.6	10.9	18.3	19.1	18.1	-3.4	-22.4
GERMANY	5.3	3.9	2.9	1.1	0.6	1.4	4.5	3.2
SWITZERLAND	5.4	5.6	5.4	5.2	5.2	5.9	7.1	6.9
FRANCE	9.7	8.6	8.0	10.0	15.4	21.9	17.8	-1.0
CANADA	9.3	8.8	8.3	12.9	18.6	18.4	16.1	4.2
ITALY	-	-	10.8	8.3	8.8	8.0	9.2	1.7
SPAIN	9.2	8.3	8.4	11.3	17.3	16.9	12.9	-3.1
NETHERLANDS	11.4	8.8	7.1	7.8	10.2	12.5	11.3	3.0
SWEDEN	4.6	2.4	0.9	5.8	12.7	16.2	14.3	-2.9
NORWAY	10.8	7.0	7.6	10.4	15.2	17.6	18.3	-4.1
DENMARK	11.4	9.4	7.2	6.6	18.1	17.3	10.2	3.4
PORTUGAL	13.1	13.8	9.8	10.5	10.1	12.0	12.4	2.6
IRELAND	8.1	2.4	12.4	11.4	24.4	27.2	9.9	-34.1

RESOURCE: INVESTMENT PROPERTY DATABANK (IPD)

Commercial real estate sector is divided into sub-markets like shopping centers industrial and logistics areas, offices and hotels. It is observed that increase in the commercial real estate sector returns after 2001 is experienced in all sub-markets.

Increase in the shopping center returns has started in 2002, increase has accelerated until 2005, and increase started to slow down in 2006 and 2007. Total returns of the industrial and logistics areas have steadily increased after 2002, and upward trend had been preserved until the end of 2007. Increase in the returns of office markets started in 2004, increase was very effective in 2005-2006-2007.

TABLE.24 TOTAL COMMERCIAL REAL ESTATE RETURNS BY SUB-MARKETS ANNUAL PERCENTAGE

YEARS	GLOBAL INDEX OF SHOPPING CENTERS	GLOBAL INDUSTRY INDEX	GLOBAL OFFICE INDEX
2001	4.1	3.0	-1.0
2002	8.0	5.4	-1.3
2003	11.9	5.9	0.2
2004	14.7	8.9	11.9
2005	17.4	12.3	25.0
2006	15.9	11.5	28.7
2007	9.4	16.3	18.4
2008	-3.7	-0.9	-4.2

RESOURCE: INVESTMENT PROPERTY DATABANK

Nevertheless, increase in the year 2007 was slowed down compared to previous two years. Returns of commercial real estate investments became higher than the returns of other investments during the expansion period of the world economy after 2001.

Annual returns of real estate investment funds and real estate investment companies investing on commercial real estates brought returns higher than investments like commodities, gold, dollar, hedge funds and venture capital partnerships between 2003 and 2007. Returns of private capital funds brought the closest returns to commercial real estate returns.

TABLE.25 ANNUAL RETURNS OF COMMERCIAL REAL ESTATES AND OTHER INVESTMENT INSTRUMENTS 2003-2007

INVESTMENT INSTRUMENTS	2003	2004	2005	2006	2007
PRIVATE REAL ESTATE INVESTMENT FUNDS	12.4	14.5	20.1	16.6	11.8
HEDGE FUNDS	8.5	9.6	7.6	13.9	12.0
PRIVATE EQUITY FUNDS	21.9	24.4	27.6	25.8	3.8
GOLD	1.5	5.5	20.4	23.2	31.0
VENTURE CAPITAL INVESTMENTS	14.6	15.4	8.0	17.6	3.5
COMMODITIES	5.2	7.6	19.4	-2.7	11.1
US DOLLAR	-7.0	12.1	-6.9	-1.6	-7.9
REAL ESTATE INVESTMENT TRUST	40.7	37.9	15.35	42.4	-6.6

RESOURCE: DELOITTE 2008 REAL ESTATE CAPITAL MARKETS INDUSTRY OUTLOOK

I.3.2.4 Expansion in the Commercial Real Estate Investments

One of the other important impacts of economic expansion period on commercial real estate sector is the expansion in the commercial real estate investments. "Investments" is used in the meaning of purchasing ready stocks.

Most important determinators of the expansion of commercial real estate investments are increase in the commercial real estate returns in the period of expansion after 2001, higher returns of commercial real estate investments than other investment instruments, expansion in the investable commercial real estate stock.

While the stock volume of commercial real estate market was 14.1 trillion dollars in 2002, it reached to 22.4 trillion dollars in 2007. While the investable commercial real estate stock's share was 8.7 trillion dollars in 2002, it reached to 14.5 trillion dollars in 2007. Investable commercial real estate stock is comprised of commercial real estates for which long-term renting is possible or long-term renting returns is able to be gained. While the de facto invested commercial real estate stock was 5.0 trillion dollars in 2002, it reached to 8.8 trillion dollars in 2007.

33 percent of the total stock is in North America, 38 percent in Europe, 24 percent in Asia Pacific and 5 percent is in Latin America region by the year 2007. The 39 percent of the investable stock is in North America, 38 percent in Europe, 20 percent in Asia Pacific and 3 percent in Latin America.

The 46 percent of the invested stock is in North America, 33 percent is in Europe, 19 percent is in Asia-Pacific and 2 percent is in Latin America.

TABLE.26 VOLUME OF THE GLOBAL COMMERCIAL REAL ESTATE MARKET TRILLION DOLLAR

	2002	2007
TOTAL STOCK	14.1	22.4
INVESTABLE STOCK	8.7	14.5
INVESTED STOCK	5.0	8.8

RESOURCE: DEUTSCHE BANK RREEF RESEARCH, PRUDENTIAL REAL ESTATE INVESTORS



The most important development in the commercial real estate investments is that commercial real estates became investable prime assets after the year 2000. Commercial real estate investments are started to be evaluated in the portfolio theory as a good risk/return diversifier asset.

Commercial real estates have become an important investment choice for the institutional investors. Especially for the institutional investors searching for long-term steadily valued investments, investments that will provide long-term, regular and stable income and cash flow, commercial real estates have gained more attraction.

Similarly, commercial real estates have become an attractive investment instrument for the institutional investors that prefer diversifying risk/return distribution in their investments and portfolios. Share of the commercial real estates started to increase in the portfolios of the institutional investors.

Expectation of the value increase and realizations for the commercial real estates of institutional and other investors' commercial real estate investments has become more determinative after the year 2001. As commercial real estate markets have become more transparent and liquid, accelerated the expansion of the commercial real estate investments.

An important determinative and supportive factor for the expansion of the commercial real estate investments has become expansion in the financial opportunities for investments. Especially banking credits for the financing of the commercial real estate investments has been used with low interest rates and low costs and with high leverage ratios.

Together with the expansion in the financial opportunities, both the number and average transaction volumes increased in the commercial real estate investments. Depending on all these developments, commercial real estate direct investments have expanded on a global scale.

Direct commercial real estate investments realized as 408 billion dollars in 2003, 495 billion dollars in 2005 and 759 billion dollars in 2007.

Commercial real estate investments developed in America, Europe and Asia-Pacific in all regions. Commercial real estate investments expanded in developing countries as well. While the commercial real estate investments in the developing countries were 6 billion dollars in 2003, it reached to 59 billion dollars in 2008.

Another important tendency in the commercial real estate investments has become the increase in the share of the overseas investments in the total investments. While the overseas investments was 102 billion dollars in 2003 and its share was 25 percent in the total investments, it reached to 47 percent share with 357 billion dollars.

Increase in the values of the commercial real estate investments and expansion in the investment financing opportunities resulted into increase in the investments for the commercial real estates investments. With the increase in the capital returns, higher risks started to be taken and investment appetite for overseas mature and developed countries expanded.

Devaluation of the US dollar against to other currencies and strengthening of other currencies, encouraged investors outside of USA for the commercial real estate investments in USA.

**TABLE.27 GLOBAL DIRECT COMMERCIAL REAL ESTATE INVESTMENTS
BILLION DOLLARS**

REGIONS	2003	2004	2005	2006	2007	2008
TOTAL	408	457	495	700	759	387
AMERICA	184	203	216	283	304	144
USA	178	195	205	271	282	134
EUROPE	182	206	206	338	359	158
ENGLAND	96	108	115	96	101	40
ASIA-PACIFIC	42	48	67	95	121	85
JAPAN	16	18	23	52	60	39
DEVELOPING COUNTRIES	6	11	23	40	51	59
CROSS BORDER	102	99	183	294	357	174
INNER BORDER	306	358	312	406	402	213

RESOURCE: JONES LANG LASALLE, GLOBAL REAL ESTATE CAPITAL REPORT

It is observed that in the distribution of the commercial real estate investments in terms of the sub-markets, office investments have a 50 percent share on a global scale. When the commercial real estate investments reached to peak with 759 billion dollars in 2007, office investments were 440 billion dollars. Shopping centers are the second in the commercial real estate investments with 20 percent share. Industrial and logistics areas are the third and the hotels are the fourth.

TABLE.28 SECTORAL DISTRIBUTION OF THE GLOBAL DIRECT COMMERCIAL REAL ESTATE INVESTMENTS BILLION DOLLAR

SECTORS	2003	2004	2005	2006	2007	2008
OFFICE	233	270	277	399	440	232
SHOPPING CENTER	106	114	129	168	175	85
INDUSTRY-LOGISTICS	49	50	64	91	91	39
HOTEL	20	23	25	42	53	31
TOTAL	408	457	495	700	759	387

RESOURCE: JONES LANG LASALLE, GLOBAL REAL ESTATE CAPITAL REPORT

1.3.2.5 Expansion for the Commercial Real Estate Investors

Commercial real estates have become a prime investment asset after 2001 and investments rapidly increased. An important determinant of the expansion in the commercial real estate investments is naturally the diversification and increase of the investors to commercial real estates.

Commercial real estate investors are comprised of institutional investors and users (owner) like investment funds, real estate investment trusts and funds, private equity funds, sovereign wealth funds, insurance companies, pension funds.

Commercial real estates have become assets providing steady and long-term capital and investment returns for the institutional investors and sovereign funds. Commercial real estates have become high return assets to diversify and renew portfolios for the investment funds, investment partnerships and private funds.

In the total invested commercial real estates calculated as 8.8 trillion dollars by 2007, 18 percent of the investments are real estate investment trusts and funds, 14 percent is the funds and 68 percent is the assets of the other investors.

Total commercial real estate investments realized as 759 billion dollars by the year 2007. 40 percent of it is investments funds, 22 percent of it is private equity funds, 11 percent of it is sovereign wealth funds, 13 percent of it is institutional investors, 10 percent of it is real estate investment trusts and 3 percent of it is users.

An important investor group realizing commercial real estate investors is real estate investment trusts. The number and market capitalizations of the real estate investment partnerships have significantly increased after 2000.

TABLE.29 REAL ESTATE INVESTMENT TRUSTS

YEARS	USA		EUROPE		ASIA-PASIFIC	
	NUMBER	MARKET CAP. BILLION DOLLAR	NUMBER	MARKET CAP. BILLION DOLLAR	NUMBER	MARKET CAP. BILLION DOLLAR
2000	189	138.7				
2001	182	154.9				
2002	176	161.9				
2003	171	224.2				
2004	190	305.0				
2005	197	330.7				
2006	183	438.0	59	65.0	139	125.0
2007	152	312.0	102	157.6	151	196.7
2008	136	191.6	109	138.0	160	149.2

RESOURCE: NATIONAL ASSOCIATION OF REAL ESTATE INVESTMENT TRUST, NAREIT USA

Returns of the real estate investment trust (prices of equities) has increased in the period after 2001, when commercial real estate investments expanded and values of the commercial real estates increased. Especially between the years 2003 and 2007, prices of the equities of the real estate investment trust significantly increased. Nevertheless, as a result of the economic crisis, prices of the equities decreased in 2007 and 2008.

TABLE.30 RETURNS OF REAL ESTATE INVESTMENT TRUSTS

YEARS	GLOBAL	NORTH AMERICA	ASIA	EUROPE
2000	13.84	29.84	2.85	9.45
2001	-3.81	9.98	-17.22	-6.12
2002	2.82	2.42	-7.15	21.69
2003	40.69	37.70	44.83	44.68
2004	37.96	33.51	36.85	52.73
2005	15.35	13.21	23.37	9.43
2006	42.35	36.26	36.49	66.99
2007	-6.96	-14.92	14.80	-24.50
2008	-47.72	-40.63	-52.48	-51.13

RESOURCE: NATIONAL ASSOCIATION OF REAL ESTATE INVESTMENT TRUST, NAREIT USA

Section II

THE NEW ERA AND THE REAL ESTATE SECTOR AFTER THE ECONOMIC CRISIS

INTRODUCTION

The world economy has been experienced rapid economic growth and expansion since the year 2001 and this term constituted the economic conditions that open a rapid economic road in the real estate sector.

After this rapid growth and expansion period, the world economy, this time, faced a depth crisis. The results of this depth crisis and the taken precautions will emerge a new economic period globally and the economic conditions of this period will be different from period that based upon the rapid growth and expansionist conditions. Moreover, the affects of the different economic conditions on the real estate sector will also be different from the rapid economic growth and expansion.

In this framework, the analysis related with the global economic crisis and post-crisis era are studied and depending on these periods, the previsions and evaluations on the real estate sector are placed in the second part of this study.

II.1 PREVISIONS FOR ECONOMIC CRISIS AND POST-CRISIS ERA

Under the heading of previsions for economic crisis and post-crisis era, it is made analysis and estimations in three main issues. Firstly, the depth and the dimensions of the crisis that the world is experiencing are being analyzed. Secondly, the precautions for crisis and the financial dimension of this are being evaluated. Thirdly, in a medium dated perspective (2009-2014 period), progress previsions related with the world economy and the economic conditions of the new period will be settled.

II.1.1 THE DEFINITION, DEPTH, AND DURATION OF THE ECONOMIC CRISIS

The world economy faced a depth economic crisis which is the result of financial systematic crisis and recession.

The world economy faced financial crisis that causes economic crisis and recessions in the former periods. However, it is being experienced firstly that the economic crisis and recession foster each other.

The first component of the economic crisis is the financial crisis. Financial crisis was started primarily with non-repayment of the encumbered housing credits in the banks of the developed countries. Successively, banks lost the assets deprivations and the most important parts of their capital in their own balance sheets; depending on this they lost also the paying capacities (insolvency). Financial crisis wrapped rapidly into a systematic one and the all of the banks faced paying capacity and capital deprivations due to the interrelated situation of their balance sheets.

The second component of the economic crisis is the recession. The world economy entered into a depth recession originated with the developed countries. Recession means the shrinking of the national economies and the production of the goods and services according to the previous periods. Economies entered into a shrinking period in all of the developed countries. Entering of the developed countries into the recessions affected developing countries and it is experiencing that as growth is decelerating in some of the developed countries, shrinking is being experienced in some of them.

The economic crisis that started in the year 2008 includes both financial systematic crisis and recession; this also enforces the possibility that the crisis will be experienced more depth and longer.

The world faced recessions in the three times in the near future, years of 1975, 1982, and 1991. The effects on the economic indicators of those three recessions and the last one that has been experienced by 2008 are being presented comparatively below in the Table 31.

Accordingly, the effects of the recessions on the per capita growth, industrial production, global trade, capital flows, oil consumption, and unemployment between the beginning and the ending periods of recessions are being compared with the percentages. It is being predicted that per capita income, industrial production, global trade, and cross-border capital flows decreases and unemployment rises more acutely.

TABLE.31 THE ECONOMIC ACTIVITIES IN THE GLOBAL RECESSION PERIODS

ECONOMIC ACTIVITIES	1975	1982	1991	2008 PROJECTION	1975-1982-1991 AVERAGE
PER CAPITA INCOME (BY PURCHASING POWER)	-0.13	-0.89	0.18	-2.50	-0.40
PER CAPITA GROWTH (WITH MARKET PRICES)	-0.33	-1.08	-1.45	-3.68	-0.95
INDUSTRIAL PRODUCTION	-1.60	-4.33	-0.09	-6.23	-2.01
GLOBAL TRADE	-1.87	-0.69	4.01	-11.75	0.48
CROSS-BORDER CAPITAL FLOWS	0.56	-0.76	-2.07	-6.18	-0.76
OIL CONSUMPTION	-0.90	-2.87	0.01	-1.50	-1.25
UNEMPLOYMENT (RISE POINT)	1.19	1.61	0.72	2.56	1.18

RESOURCE: IMF, WORLD ECONOMIC OUTLOOK, APRIL 2009

As the effects of the recessions on the economic activities, the duration of them has the same importance. The average of the slowdown and the shrinking durations of the recessions between the years 1960-1985 were 3.1 year; the growth duration was 3.9 year after the recessions. Moreover, the slowdown and the shrinking durations of the recessions between the years 1986-2007 were 2.3 year; growth duration was 4.6 year after the recession. It is predicted that the duration of the recession that has been experiencing by 2008 will be longer than the recession between the years 1960-2007.

TABLE.32 THE DURATIONS OF THE RECESSIONS AND THE AMELIORATION IN THE POST-RECESSION PERIODS

PERIODS	THE DURATION OF THE SLOWDOWN AND SHRINKING OF THE RECESSION	GROWTH IN THE POST - RECESSION PERIOD (1)
1960-1985	3.1 YEAR	3.9 YEAR
1986-2007	2.3 YEAR	4.6 YEAR

RESOURCE: IMF, WORLD ECONOMIC OUTLOOK 2009, APRIL 2009

(1) BETWEEN THE ENDING OF RECESSION AND QUARTER PERIOD THAT IS THE RAPID GROWTH POINT

II.1.2 PRECAUTIONS IN THE PRESENCE OF ECONOMIC CRISIS

Countries are taking and executed political precautions in the presence of crisis in the world economy. The precautions started to be taken in the beginning of October in 2008 and will probably continue to the 2009 and 2010 by increasing the sphere and

the efficiency of them. The taking and the executed precautions in the presence of economic crisis are being composed of 4 main groups.

II.1.2.1 Easing Monetary Policy

The central banks of the developed countries rapidly took up seriously the very easy monetary policy (quantitative easing) and put into practice.

Interest rate cut are forming the basis of new monetary policy of the central banks. USA Central Bank FED cut down the interest rates from 2.0 percent that was in the year September to 0.25 percent in December 2008. European Central Bank extended interest rates over a period of time and cut down the interest rates from 4.25 percent that was in September 2008 to 2.5 percent in December, afterwards progressively 1.0 percent in May 2009. Central Bank of England cut down the interest rates from 5.0 percent that was in September 2008 to 0.50 in March 2009. Central Bank of the Republic of China cut down the interest rates from 7.20 percent that was in September 2008 to 5.31 percent in January 2009.

TABLE.33 THE INTEREST RATES OF CENTRAL BANKS %

CENTRAL BANKS	2007 December	2008 September	2008 October	2008 November	2008 December	2009 January	2009 February	2009 March	2009 April	2009 May
USA FED	4.25	2.00	1.00	1.00	0.25	0.25	0.25	0.25	0.25	0.25
EUROPEAN CENTRAL BANK	4.00	4.25	3.75	3.25	2.50	2.00	2.00	1.50	1.25	1.00
JAPAN JOB	0.50	0.50	0.50	0.30	0.10	0.10	0.10	0.10	0.10	0.10
ENGLAND BOE	5.50	5.00	4.50	3.00	2.00	1.50	1.00	0.50	0.50	0.50
CHINA	7.29	7.20	6.66	5.58	5.31	5.31	5.31	5.31	5.31	5.31

RESOURCE: CENTRAL BANK OF EACH COUNTRY

The Central Banks taking also efficient precautions for covering the liquidity needs, apart from the cutting down the interest rates. Central Banks extended the liquidity and lending utilities to the financial institutions; they transmitted liquidity to those institutions by buying securities of them; they increased the liquid opportunity by decreasing required reserves for deposits; they provided liquidity opportunity in each kind of money with swap transactions.

Central Bank FED began to make reel sector companies to use some of the liquidity utilities. Central Banks goals not only slowing down the economic shrinking but also

rolling back the loan costs by cutting down the interest rates; they also goal to prevent to loose the liquidity crisis and the payment capacities with the additional possibilities.

II.1.2.2 Supports for Financial Institutions

By the financial systematic crisis, high capital loss occurred and banks faced an insolvency problem. As a result of the credits which did not return back, problematic assets (toxic assets), and the fall in the value of those assets, the capital structure and the payment capacities of the banks significantly reduced.

In this context, the second important precaution group is the provided supports for financial institutions in the presence of economic crisis. The provided supports for financial institutions composed of in two groups. First one of these is cash and second one is non-cash supports.

Capital contributions, purchasing of the non-performing assets, and giving treasure bonds instead of non-performing assets are forming the basis of cash supports. Non-cash supports are the followings that ensuring the guarantees to banking commitments, guarantees to the banking deposits, and facilities of the additional liquidity depots.

The rate of the total amount of both cash and non-cash supports to the financial institutions by G-20 countries in the presence of crisis to GNP will reach 27.9 percent.

By these supports to the banks, it is being aimed that intensifying the banking capital structure, recovering the balance sheets, and a potentiality for banks to give a credits again.

**TABLE.34 THE SUPPORTS FOR FINANCIAL INSTITUTIONS
(As percent of GNP)**

SUPPORTS	G-20 COUNTRIES	DEVELOPED COUNTRIES	DEVELOPING COUNTRIES
CASH SUPPORTS			
CAPITAL CONTRIBUTION	1.90	2.90	0.22
PURCHASING NONPERFORMING ASSETS	3.29	5.20	0.09
GIVING TREASURY BONDS	0.96	1.34	0.32
TOTAL	6.15	9.44	0.63
NON-CASH SUPPORTS			
THE LIQUIDITY FACILITIES OF CENTRAL BANK	9.34	13.93	1.64
GUARANTEES	12.39	19.74	0.06
TOTAL	21.73	33.68	1.69
TOTAL SUPPORTS	27.88	43.12	2.32

RESOURCE: G-20 TASK FORCE WORKING PAPER MARCH 2009

II.1.2.3 Economic Stimulus Actions

The third precaution in the presence of economic crisis is composed of economic stimulus actions. The goal of the stimulus actions is to stimulate the economies by increasing the public and household expenditures. It was seen that stimulus measures for economies prevented recession to be more depth and shortened their duration in the previous recession examples.

It is also seen that the stimulus measures were executed in the presence of economic crisis in the year 2008. The content of stimulus actions for economies composed of such followings; tax reduction, expenditure cheque given to consumers, rising public consumption expenditures, expanding public infrastructure investments and social payments, and raising the unemployment payments. It is also planned that stimulus measures for economies will be executed entirely in the years 2009 and 2010.

In the process of executing the stimulating measures for economies in practice, public services discontinue some of the incomes and opposing to the makes some additional expenditure. In this context, it is predicted that budget deficits of the countries which are executing the stimulating measures for economies into practice will increase, moreover public sector debt stocks contracted due to additional borrowing to finance budget deficits that will expand. The increasing affect to the budget deficits and public sector debt stocks in the countries such as USA, Japan, Euro Zone and OECD which put stimulating package for economies into practice extensively are presented in Table 35.

TABLE.35 THE BREAKDOWN IN THE PRECAUTIONS TAKEN FOR CRISIS FISCAL INDICATORS OF THE OECD COUNTRIES

COUNTRIES	INDICATORS	2006	2007	2008	2009	2010
USA	GENERAL PUBLIC DEFICIT/GNP	-2.2	-2.9	-5.8	-10.2	-11.9
	GROSS PUBLIC DEBT STOCKS/GNP	61.7	62.9	71.9	88.1	100.0
JAPAN	GENERAL PUBLIC DEFICIT/GNP	-1.6	-2.5	-2.6	-6.8	-8.4
	GROSS PUBLIC DEBT STOCKS /GNP	172.1	167.1	172.1	186.2	197.3
EURO ZONE	GENERAL PUBLIC DEFICIT/GNP	-1.3	-0.7	-1.8	-5.4	-7.0
	GROSS PUBLIC DEBT STOCKS /GNP	74.6	71.2	71.0	77.7	84.4
OECD COUNTRIES	GENERAL PUBLIC DEFICIT/GNP	-1.3	-1.4	-3.0	-7.2	-8.7
	GROSS PUBLIC DEBT STOCKS /GNP	76.0	74.5	78.8	90.6	99.9

RESOURCE: OECD ECONOMIC OUTLOOK, INTERIM REPORT MARCH 2009

As the finance of the economic measures executed by public sector in order to stimulate the economy leads more public sector borrowing requirements, this will shrink the financial resources of the private sector who feel the draught. Getting more into a borrowing requirements of the public sector will limit stimulating package affect of the Central Banks by cutting down the interest rates.

II.1.2.4 Regulatory Precautions

The fourth group of the precautions in the presence of the economic crisis composed of new arrangements depended heavily on financial markets. As yet, there is no concrete execution precaution in this area. Related to this issue, some actions in the structure of G-20 are being executed and some preparations are being made for new global financial architecture. New global financial architectural banking sector will bring more strict rules and more efficient control and guard for its own sector and for all other financial markets. The financial expansion in the new architecture will probably be more limited but safer and more consistent.

The reformatory affect of those four group precautions in the presence of economic crisis will be experienced step by step and extend over a period of time. The time chart related to the taken precautions which have a reformatory affect and steps are presented in Table 36.

TABLE.36 THE TAKEN PRECAUTIONS THAT HAVE IMPROVEMENT AFFECT AND STEPS IN THE PRESENCE OF ECONOMIC CRISIS			
PRECAUTIONS	2009	2010	2011 AND AFTER
EASY MONETARY POLICY	RELATIVE STABILITY IN FINANCIAL MARKETS	STABILITY IN FINANCIAL MARKETS BEGINNING IN THE ECON. GROWTH	ECONOMIC GROWTH THAT ARE EXPERIENCED LIMITED
THE SUPPORTS FOR FINANCIAL INSTITUTIONS	MEETING THE CAPITAL AND LIQUIDITY NECESSITIES OF BANKS FORMATION OF ASSURANCE IN FINANCIAL MARKETS	MEETING THE CAPITAL ADEQUACY OF BANKS	STARTING TO GIVE CREDITS OF BANKS
STIMULATING PACKAGE FOR ECONOMIES	LIMITATION IN RECESSION	GROWTH IN PUBLIC SECTOR	BEGINNING IN THE HOUSEHOLD PRIVATE CONSUMPTION GROWTH
REGULATORY PRECAUTIONS	SEARCH FOR NEW FINANCIAL ARCHITECTURE RECONCILIATION	ARRANGEMENTS AND TRANSITION TO EXECUTION	STABLE GROWTH BEGINNING IN FINANCIAL MARKETS

II.1.3 THE PREDICTIONS CORRESPONDING TO THE POST-CRISIS ERA

The predictions corresponding to the post-crisis era will shape the economic conditions of new period and will define the economic framework for real estate sector.

The predictions corresponding to the post-crisis era are being analyzed and evaluated in two stages. First stage is the 2009-2010 year period and the economic indicators of more developed countries will be determinant. The second stage is the medium term including the 2011-2014 years. In this period, developed and developing countries will be determinant for the world economy.

The economic crisis which is experienced in a global scale started in developed countries and affected further the developing countries. For this reason, the economic performance of the developed countries in the years 2009-2010 will be important and distinctive in the process of economic amelioration and the transition to the post-crisis period.

Under this framework, the previsions for the economic indicators related to the 2009-2010 years of the developed countries are presented in Table 37.

The increase in the private consumption expenditures realized by the households of the developed countries slowed down in the year 2008 and was 0.6 percent. It is foreseen that private consumption expenditures will diminish 1.4 percent in the year 2009. The private consumption expenditures will increase 0.3 percent in the year 2010 in the developed countries.

The total fixed capital investments (public and private) narrowed 1.8 percent in the year 2008 in the developed countries. It is also predicted that after narrowing 12.5 percent of the fixed capital investments in the year 2009, it will continue in the year 2010 and diminish 2.6 percent.

The growth rate in the developed countries in the year 2008 occurred 0.9 percent. It is predicted that this will narrow 3.8 percent in the year 2009. It is also foreseen that developed countries will not expand and the growth rate will be experienced as zero in the year 2010.

The unemployment in the developed countries will continue to increase in the year 2009 and 2010. Due to the transition of the growth into a negative and became as zero in the year 2010, and the rapid narrow in the private sector investments, unemployment will increase. It is predicted that as the basic economic indicators related with the 2009-2010 years of the developed countries, the economic performance will be weak and the revive of the economic activities will stay more limited even at the end of 2010.

TABLE.37 PREDICTIONS FOR THE DEVELOPED COUNTRIES 2009-2010

INDICATORS	2008	2009	2010
PRIVATE CONSUMPTION EXPENDITURES			
DEVELOPED COUNTRIES	0.6	-1.4	0.3
USA	0.2	-0.9	1.0
EURO ZONE	0.5	-1.3	-0.5
JAPAN	0.5	-1.0	0.3
ENGLAND	1.4	-3.8	-1.5
OTHER DEVELOPED COUNTRIES	1.2	-2.1	0.5
FIXED CAPITAL INVESTMENTS			
DEVELOPED COUNTRIES	-1.8	-12.5	-2.6
USA	-3.5	-14.5	-3.1
EURO ZONE	0.7	-11.2	-3.7
JAPAN	-4.6	-10.7	0.6
ENGLAND	-3.1	-11.4	-6.2
OTHER DEVELOPED COUNTRIES	0.3	-12.3	-0.9
GROWTH			
DEVELOPED COUNTRIES	0.9	-3.8	0.0
USA	1.1	-2.8	0.0
EURO ZONE	0.9	-4.2	-0.4
JAPAN	-0.6	-6.2	0.5
ENGLAND	0.7	-4.1	-0.4
OTHER DEVELOPED COUNTRIES	1.6	-4.1	0.6
UNEMPLOYMENT			
DEVELOPED COUNTRIES	6.0	8.4	9.9
USA	5.8	9.1	10.3
EURO ZONE	7.5	10.1	11.7
JAPAN	4.0	4.9	5.6
ENGLAND	5.7	7.7	9.5
OTHER DEVELOPED COUNTRIES	5.6	7.8	9.4

RESOURCE: IMF, WORLD ECONOMIC OUTLOOK 2009, APRIL 2009

The world economy will enter a new economic period after the years 2009-2010 in which the economic crisis will be experienced stronger. The basic tendencies of the new economic period will be moderate growth in the world economy; moderate expansion in the world trade, and occur limited increase in the goods and assets prices.

The predicted growth since the year 2011 in the world economy, expansion in trade, and rising of prices will probably be the half amount of the indicators experienced as

rapid expansion and development between the years 2002-2007. The world economy will expand 3 percent in between the years 2011 and 2014 and world income will be 65.3 trillion dollar as come to the year 2014.

The world trade will also expand 6.4 percent in between the years 2011 and 2014 and the capacity of the world goods and services will be 19.56 trillion dollar as come to the year 2014.

The consumer prices will stay limited (goods, service, and assets prices); the consumer prices will be yearly 1.5 percent in the developed countries, 4.3 percent in the developing countries.

The medium term previsions about the world economy concerning the years 2011-2014 will present more limited but more stable macro economic conditions comparing to the rapid expansion and development period in between the years 2002 and 2007 for the real estate sector.

TABLE.38 THE INDICATORS FOR THE WORLD ECONOMY RECESSION (2008-2010) AND POST RECESSION PERIOD (2011-2014)

INDICATORS	2008	2009	2010	2011-2014*
ECONOMIC GROWTH PERCENT				
WORLD	3.2	-1.3	1.9	3.0
DEVELOPED COUNTRIES	0.9	-3.8	0.0	2.0
DEVELOPING COUNTRIES	6.1	1.6	4.0	5.5
WORLD INCOME BILLION DOLLAR				
WORLD TRADE PERCENT GROWTH	3.3	-11.0	0.6	6.4
IMPORT				
DEVELOPED COUNTRIES	0.4	-12.1	0.4	4.9
DEVELOPING COUNTRIES	10.9	-8.8	0.6	8.6
EXPORT				
DEVELOPED COUNTRIES	1.8	-13.5	0.5	5.8
DEVELOPING COUNTRIES	6.0	-6.4	1.2	7.8
WORLD TRADE BILLION DOLLAR				
CONSUMER PRICE PERCENT CHANGE	19.694	14.768	15.280	19.583
DEVELOPED COUNTRIES	3.4	-0.2	0.3	1.5
DEVELOPING COUNTRIES	9.3	5.7	4.7	4.3
INTEREST RATES PERCENT				
SIX MONTH PERIOD LIBOR (REAL INTEREST) ⁽¹⁾	0.9	0.5	1.0	3.1
LONG TERM REAL INTEREST (WORLD) ⁽²⁾	0.4	2.6	2.3	3.0

RESOURCE: IMF WORLD ECONOMIC OUTLOOK 2009, APRIL 2009

(1) LIBOR INTEREST RATE WAS ADJUSTED WITH USA NATIONAL INCOME DEFLATOR

(2) G-7 TEN YEARS TREASURY BONDS INTEREST RATE WAS ADJUSTED G-7 NATIONAL INCOME DEFLATOR

* Yearly Average

II.2 THE CONDITIONS FOR POST-CRISIS ERA AND AFFECTS TO THE REAL ESTATE SECTOR

The affects and the post era of the experienced economic crisis in the world economy was analyzed and evaluated above in detail. The affect channels of the conditions for post-crisis era on the housing and commercial real estate in the real estate sector are presented below. The affect channels are evaluated with the conditions that are the determinant for this period as follows; monetary policy with controlled, conceivable and stable growth, limited employment increase, the limited expansion in the world trade, limited price increase, limited expansion in the financial facilities, conceivable expansion in the global capital flows and gaining a value of the dollar over against to the other currencies.

THE CONDITIONS FOR POST-CRISIS PERIOD AND AFFECT CHANNELS ON THE REAL ESTATE SECTOR		
THE CONDITIONS FOR EXPANSION PERIOD	HOUSING SECTOR	COMMERCIAL REAL ESTATE
CONTROLLED MONETARY POLICY	<ul style="list-style-type: none"> ● STABILITY IN PROCESS AND LIMITED INCREASE ● LIMITED EXPANSION IN CREDIT AND FINANCE FACILITIES ● REGRESSION IN FINANCIAL COSTS 	<ul style="list-style-type: none"> ● STABILITY IN ASSETS VALUE AND LIMITED INCREASE (INCREASE IN THE CAPITAL YIELD) ● LIMITED EXPANSION IN CREDIT AND FINANCE FACILITIES ● REGRESSION IN FINANCIAL COSTS
CONCEIVABLE AND STABLE ECONOMIC GROWTH LIMITED INCREASE IN NATIONAL INCOME, PER CAPITA INCOME, AND HOUSEHOLD INCOME REGRESSION ON BUYING KINDS OF DOLLAR (WITH CURRENCY REVALUATION OF DOLLAR)	<ul style="list-style-type: none"> ● LIMITED INCREASE IN HOUSING DEMAND ● LIMITED INCREASE IN USING CREDITS FOR HOUSING AND CAPACITY FOR BACK PAYMENT 	<ul style="list-style-type: none"> ● LIMITED EXPANSION IN PRIVATE CONSUMPTION AND RETAIL EXPENDITURES ● LIMITED EXPANSION IN DEMAND AND SUPPLY OF SHOPPING CENTERS AND OTHER UNITS ● LIMITED EXPANSION IN DEMAND FOR INDUSTRIAL ZONES
UNEMPLOYMENT AND LIMITED INCREASE IN EMPLOYMENT	<ul style="list-style-type: none"> ● LIMITED INCREASE IN HOUSING DEMAND 	<ul style="list-style-type: none"> ● LIMITS IN RETAIL PURCHASING POWER
RELATIVELY LIMITED INCREASE IN WORLD GOOD AND SERVICE TRADE		<ul style="list-style-type: none"> ● LIMITED EXPANSION IN DEMAND FOR INDUSTRIAL ZONE ● LIMITED EXPANSION IN LOGISTICS SERVICES ● LIMITED EXPANSION IN LOGISTICS ZONES ● LIMITED EXPANSION ON DEMAND FOR COMMERCIAL BUILDINGS

THE CONDITIONS FOR POST-CRISIS PERIOD AND AFFECT CHANNELS ON THE REAL ESTATE SECTOR

THE CONDITIONS FOR EXPANSION PERIOD	HOUSING SECTOR	COMMERCIAL REAL ESTATE
LIMITED PRICE INCREASE	<ul style="list-style-type: none"> ● LIMITS IN HOUSING CONSTRUCTION COSTS ● DOWN DIRECTED PRESSURE IN HOUSING PRICES 	<ul style="list-style-type: none"> ● DOWN DIRECTED PRESSURE IN PRICES
LIMITED EXPANSION ON FINANCIAL FACILITIES	<ul style="list-style-type: none"> ● LIMITED EXPANSION IN HOUSING FINANCING FACILITIES ● LIMITED AND STABLE INCREASE IN HOUSING PRICES 	<ul style="list-style-type: none"> ● LIMITED EXPANSION ON FINANCIAL FACILITIES ● LIMITED EXPANSION IN INSTITUTIONAL INVESTMENTS ● LIMITED INCREASE IN COMMERCIAL REAL ESTATE ASSETS ● LIMITED INCREASE IN LEVER RATES
LIMITED EXPANSION IN CROSS BORDER CAPITAL FLOWS	<ul style="list-style-type: none"> ● LIMITED EXPANSION IN HOUSING FINANCING SYSTEMS (WITH CROSS BORDER FINANCE) ● UP DIRECTED PRESSURE ON FINANCE COSTS 	<ul style="list-style-type: none"> ● EXPANSION IN CROSS IN AND BORDER INVESTMENTS (PURCHASING) ● LIMITS FOR RISE IN VALUE ● LIMITS FOR LEVERAGE RATES ● UP DIRECTED PRESSURE FOR FINANCE COSTS
MONETARY DEPRECIATION OF DOLLAR OVER AGAINST TO OTHER CURRENCIES	<ul style="list-style-type: none"> ● REGRESSION IN HOUSING PRICES AS DOLLAR OUT OF USA ● REGRESSION OF THE OTHER CURRENCIES PURCHASING POWER FOR USA HOUSES 	<ul style="list-style-type: none"> ● DECLINE IN PURCHASING POWER FOR COMMERCIAL REAL ESTATE WITH OTHER CURRENCIES IN USA ● REGRESSION IN THE PRICES AS KIND OF DOLLAR OF COMMERCIAL REAL ESTATE OUT OF USA (ASSETS AND MEANS AFFECT) ● REGRESSION OF THE ECONOMIC INDICATORS OF THE COUNTRIES OUT OF USA KINDS OF DOLLAR (EXAMPLE RETAIL EXPENDITURES)

II.3 THE REAL ESTATE SECTOR AFTER ECONOMIC CRISIS

The results of the crisis experienced in the world economy, the affects of the taken precautions, and tendencies that will be common after economic crisis will determine the framework and conditions for real estate sector.

The real estate sector will enter into a new period under the economic framework and conditions. The analysis concerning the real estate sector in this new era will be made in two stages and designate for medium term perspective by the process of the year 2014. Between the years 2009 and 2010, there will be a global scale regression in the real estate sector. Successively, the period between the years 2011 and 2014 will be normalization and re-development period for real estate sector.

In this part of this study, there will be global scale previsions for 2009-2010 regression period and 2011-2014 normalization and re-development period for real estate sector. The previsions are presented separately for housing and commercial real estate sector.

II.3.1 HOUSING SECTOR AFTER THE ECONOMIC CRISIS

The breakdown of the mortgage and housing sector in USA are forming the basis of world economic crisis. The breakdown of the housing finance system and housing sector outspreaded to the other developed countries, and then economic crisis which started with the housing finance system turned into a financial crisis and the combined with the recession. For this reason, the previsions concerning the housing sector related with the period after the economic crisis gain a special importance. The amelioration in housing finance system and housing sector will be important indicator that the economic crisis is over.

II.3.1.1 Breakdown in Housing Finance System and Housing Sector

The housing sector in USA composed of two important components with the expansion period that started by the positive affect of the economic conditions after 2001. The first one of these is the increase in the housing prices, and the other one is the expansion in the mortgaged housing credits.

This expansion period has started to slowdown in the year 2005; however housing prices came to the vertex on August 2005. The housing sales began to regress and the housing stocks began to increase in between the August 2005 and August 2006. Depending on this, constructions facilities began to regress (beginning a new building). In between the December 2006 and December 2007, the housing prices started to regress this once. The regression in the housing prices began to affect the housing system negatively. Together with the regression of the housing prices, the balance

sheet structure of the households who used the mortgaged housing credits fell off and the households felt obliged to make high back payment to the housings of which the prices began to decrease at the same time.

For this reason, the rate for the non- repayment of the credits started to increase, specifically it highly increased in the credits which is qualified as sub-prime. It is due to the fact that housings which were taken with sub-prime credits started to be sold (foreclosed and resale), the prices for housings rapidly increase; the regression in the housing prices bounced to other housing prices which were taken with the prime-A qualified and Alternative-A qualified mortgaged credits, and the prices for them also began to regress.

The US housing finance and mortgaged credit system began to deteriorate in between the August and September 2007, and system entered into a depth crisis. The crisis in USA primarily spread to England and then to the other developed countries' housing finance system and the housing sector in a short time.

The economic crisis reflected to the financial institutions which are mediated the stocks and shares depending on the housing credits that are exported and also other financial institutions which are investing and so this became the preparatory act. The economic crisis that began in August 2007 in the housing finance system and housing sectors continued along a year despite taken all precautions and the financial systematic crisis that experienced since the September 2008 freshened by combining the recession.

**TABLE.39 THE HOUSING PRICES IN USA AFTER THE ECONOMIC CRISIS
SP & CASE SHILLER HOUSING PRICES INDEX**

PERIODS	COMPOSITE 20 INDEX	COMPOSITE 10 INDEX
2006 DECEMBER	203.33	222.39
2007 AUGUST	197.37	214.63
2007 DECEMBER	184.96	200.67
2008 JANUARY	180.68	196.07
2008 MAY	168.60	181.56
2008 SEPTEMBER	161.64	173.35
2008 OCTOBER	158.09	169.68
2008 NOVEMBER	154.51	165.96
2008 DECEMBER	150.57	162.12
2009 JANUARY	146.35	157.98
2009 FEBRUARY	143.17	154.70

RESOURCE: STANDARD AND POORS

The housing prices maintained the regression since August 2007 and regressed to the September 2008, and then regression continued by starting of the global crisis.

The second important effect of crisis experience in housing sector is the deterioration of the mortgaged housing credit market. The driving force behind the development period of the housing sector was the rapidly expanded housing finance system and offered finance facilities. In the deterioration period, the housing finance system and the constriction were effective.

The components of the deterioration in the housing finance system are as follows; difficulty in back payment of the mortgaged housing credits, the loss of the financial liabilities of the households who used mortgaged housing credits (loss of job, and income), forming the guarantee deficit in special bank credit plans with regression in the housing prices, the increase in the number of the houses due to the non-repayment, and deterioration of the capital structure and lose of payment capacities of the banks and other institutions with the affect of the reasons mentioned above.

The delinquency of the housing credits in the housing finance system broke the work structure of the general system. The information about delinquency and the foreclosed houses due to this are presented below Table 40. The increases in the credits concerning the delinquency and due to foreclosed houses show the deterioration. It is predicted that this deterioration will continue on limited in the years 2009-2010.

TABLE.40 MORTGAGED HOUSING CREDITS IN USA; DELINQUENCY AND THE RATE IN THE FORECLOSE OF THE REAL ESTATE DUE TO THE NON-REPAYMENT

YEARS	2002	2003	2004	2005	2006	2007	2008
THE DELINQUENCY RATE; THE PERCENTAGE OF CREDIT USE							
TOTAL CREDITS	4.79	4.67	4.52	4.51	4.95	5.82	6.99
PRIME CREDITS	2.87	2.84	2.51	2.47	2.57	3.24	4.34
SUB-PRIME CREDITS	14.40	13.65	11.90	11.63	13.33	17.31	20.03
FORECLOSE RATE ; THE PERCENTAGE OF CREDIT USE							
TOTAL CREDITS	0.44	0.40	0.44	0.42	0.54	0.83	1.07
PRIME CREDITS	0.23	0.18	0.17	0.16	0.24	0.41	0.61
SUB-PRIME CREDITS	2.10	1.54	1.81	0.80	2.00	3.44	4.13

SOURCE: MORTGAGE BANKERS ASSOCIATION, USA

The distinctive mark of the amelioration in the housing finance system will be providing the mortgaged housing credit facilities of the banks and other institutions and the expansion in the mortgaged housing credits.

However banks which were involved in housing finance system are facing the derogation which were resulted by and are still going on by the delinquency. The banks will probably face to the same problem in the years 2009 and 2010. The restituted of the derogation which were formed by the non-repaid credits,

TABLE.41 PREDICTIONS FOR NON-PERFORMING ASSETS IN FINANCIAL SECTOR IN 2007-2010 PERIOD

	STOCK YEAR END 2007 BILLION DOLLAR	NON-PERFORMING DEBT 2007-2010 BILLION DOLLAR	NON-PERFORMING DEBT 2007-2010 / STOCK YEAR END 2007 PERCENT
USA	26.554	2.712	10.2
CREDITS	13.507	1.068	7.9
Housing Credits	5.117	431	8.4
Commercial Real Estate Credits	1.913	187	9.8
Consumer Credits	1.914	272	14.2
Commercial Credits	1.895	98	5.2
Local Administrations	2.669	80	3.0
SECURITIES MARKET	13.047	1.644	12.6
Backed on Housing Credits	6.940	990	14.3
Backed Com. Real Estate Credits	640	223	34.8
Backed on Consumer Credits	677	96	14.2
Corporate Securities Market	4.790	335	7.0
EUROPE	23.807	1.193	5.0
CREDITS	20.759	888	4.3
Housing Credits	4.632	192	4.1
Commercial Real Estate Credits	2.137	105	4.9
Consumer Credits	2.467	175	7.1
Commercial Credits	11.523	416	3.6
SECURITIES MARKET	3.048	305	10.0
Backed on Housing Credits	1.390	195	14.0
Backed on Com. Real Estate Credits	181	31	17.4
Backed on Consumer Credits	250	18	7.1
Institutional Securities Market	1.227	61	5.0
JAPAN	7.358	149	2.0
CREDITS	6.569	132	2.0
Consumer Credits	3.230	65	2.0
Commercial Credits	3.339	67	2.0
SECURITIES MARKET	789	17	2.2
Corporate Securities Market	789	17	2.2
TOTAL CREDITS	40.835	2.087	5.1
TOTAL SECURITIES MARKET	16.884	1.966	11.6
TOTAL CREDITS AND TOTAL SECURITIES MARKET	57.719	4.054	7.0

RESOURCE: IMF GLOBAL FINANCIAL STABILITY REPORT, APRIL 2009

strengthening of capital structure and to become available for making credits of the banks will be able to realize in the year 2010 and starting to make new and additional credits will be able to realize in the year 2011.

The previsions concerning the non-repayment of the credits of the US, EU, and Japan banks in between the years 2007 and 2010 together with the current crisis are presented below in Table 41. According to this, it is predicted that the amount of the non-repaid mortgaged housing credits in between the years 2007 and 2010 in USA and EU are 623 billion dollar.

The amelioration in the housing finance system and re-making additional credits of banks in USA, EU and Asian regions will be the impulsive force for the amelioration after the economic crisis. As a matter of fact that as observe the credits and securities allocations of USA, EU and Japanese banks, it is seen that housing credits and depending on the securities market have an important share. It is also seen that this share specifically in USA is above 50 percent. For this reason, the amelioration in the housing finance system will mean the amelioration in the balance sheets and will be impulsive force in the economic amelioration.

TABLE.42 THE ASSETS STRUCTURE OF THE BANKS YEAR END OF 2007 PERCENT SHARE

CREDITS AND SECURITIES	USA	ENGLAND	EUROPE (1)	ASIA (2)
CREDITS	100.0	100.0	100.0	100.0
CONSUMER CREDITS	17.0	12.0	13.0	20.0
HOUSING CREDITS	52.0	23.0	25.0	26.0
COMMERCIAL REAL ESTATE CREDITS	6.0	6.0	5.0	5.0
COMMERCIAL CREDITS	15.0	49.0	43.0	27.0
OTHER	11.0	10.0	14.0	22.0
SECURITIES	100.0	100.0	100.0	100.0
BACKED ON CONSUMER CREDITS	4.0	6.0	5.0	2.0
BACKED ON HOUSING CREDITS	42.0	24.0	19.0	5.0
BACKED ON COMMERCIAL REAL ESTATE CREDITS	6.0	5.0	5.0	27.0
CORPORATE SECURITIES	32.0	27.0	27.0	60.0
OTHER SECURITIES	16.0	38.0	43.0	6.0

RESOURCE: IMF, GLOBAL FINANCIAL STABILITY REPORT, APRIL 2009-05-14
(1) EXCEPT ENGLAND (2) AUSTRALIA, HONG KONG, JAPAN, NEW ZEALAND, SINGAPORE

II.3.1.2 The Predictions for the New Era and Improvement in the Housing Sector

The improvement in the housing sector and depending on this, convenient conditions will take time. The most important reason of this is the following that crisis is being experienced together with the recession, financial systematic crisis, and housing finance crisis.

As experienced in between the years 1960 and 2005 that in case recession and financial crisis happen at the same time and credit crisis (housing finance system and other) is incorporated into this, crisis are being experienced more violent and ameliorations occurs longer.

Under this framework, the previsions for the new period and amelioration in the housing sector are presented below in Table 43. According to this, it is predicted that the period which goes to the year 2014 in a medium perspective will be experienced in 4 stages.

1. Stage 2008-2009 Period: At this stage the housing prices will rapidly regress, low demand and low supply will be come into being, the construction facilities will regress, and there will be no sale in the primary markets.

2. Stage 2010 Period: At this stage, the regression in the housing prices will stop, as the low supply goes, limited demand will occur, the regression in the constructions will stop, and investors who are wealthy of cash or liquid will make limited purchasing in the primary markets.

3. Stage 2011-2012 Period: Start of increase in the housing prices will occur, there will be increasing demand in the presence of limited supply, new starts in construction facilities, expansion of buyer and seller, and also increase in purchase and sale will be experienced.

4. Stage 2013-2014 Period: Limited and stable increase in housing prices, increasing in interacted stable demand and supply, strengthening in the purchase market (needy and investors), and stable increase in the construction facilities will be experienced.

In the previsions concerning for housing sector, 2011-2012 period forms the most critic stage. This stage will be the start for the re-growth period in the housing sector after the crisis. To be able to pass to this stage, making additional credits in the housing system, regeneration of the securities market, starting to increase in the work and income level of the potential households who will use the mortgaged housing credits, expansion in the capacity for borrowing and repayment, and most importantly re-strengthening of the consumer assurance will determinant. The delay in these components will be reason to shift of the amelioration in the 2011-2012 periods.

TABLE.43 THE PREDICTIONS FOR THE HOUSING SECTOR

PERIODS	HOUSING FINANCE SYSTEM	HOUSING SECTOR
2008-2009	CREDIT (DELINQUENCY) LOSS OF CAPITAL IN BANKS PUBLIC SUPPORT IN BANKS NO FACILITY FOR ANY ADDITIONAL CREDIT	RAPID REGRESSION IN HOUSING PRICES LOW DEMAND/LOW SUPPLY REGRESSION IN CONSTRUCTION FACILITIES NO SALE IN PRIMARY MARKETS
2010	DECELERATION IN NON-PERFORMING DEBTS (DELINQUENCY) MEET THE CAPITAL ADEQUACY	STOP IN THE REGRESSION OF THE HOUSING PRICES LOW SUPPLY/LIMITED DEMAND STOP IN REGRESSION IN CONSTRUCTION FACILITIES LIMITED PURCHASE IN PRIMARY MARKETS (LIQUID INVESTORS)
2011-2012	START IN THE OPPORTUNITY FOR ADDITIONAL CREDITS START TO WORK OF SECURITIZATION MARKET	START TO INCREASE OF HOUSING PRICES LIMITED SUPPLY/INCREASING DEMAND NEW STARTS IN CONSTRUCTION FACILITIES EXPANSION OF BUYERS AND SELLERS IN THE PRIMARY MARKETS
2013-2014	EXPANSION IN THE OPPORTUNITY FOR ADDITIONAL CREDITS EXPANSION IN SECURITIZATION	LIMITED AND STABLE INCREASE IN HOUSING MARKETS INCREASING SUPPLY/INCREASING DEMAND STRENGTHENING IN BUYER MARKET (NEEDY INVESTORS) INCREASE IN CONSTRUCTION FACILITIES

II.3.2 THE COMMERCIAL REAL ESTATE SECTOR AFTER THE ECONOMIC CRISIS

The conditions which caused by economic crisis, precautions in the presence of crisis, and new economic sphere that will occur after that will form a new period for commercial real estates. This new period will be different from the rapid expansion and development period that was experienced just after the year 2001.

The commercial real estate sector entered into a new period in the new conditions of the economic crisis. This new period are evaluated and made previsions under a medium term perspective. The medium term perspective includes the years between 2009 and 2014. 2009 and 2010 will be the years of deterioration and the experiencing

the affects of it. The years between 2011 and 2014 will also be a period for commercial real estate sector that new conditions will occur; amelioration and development will be experienced. Probably, as 2011-2012 will be amelioration and 2013-2014 will be development years.

The deterioration, amelioration and development in the commercial real estate sector are presented in four titles. These are the follows; commercial real estate supply, real estate finance, commercial real estate market, and commercial real estate investment.

II.3.2.1 Commercial Real Estate Supply

The most important development in the commercial real estate sector in the process of economic growth is the development on the supply side. It is experienced a rapid supply expansion in all of the sub-markets and segments of the developed and developing countries in the growth period.

It is predicted in and after the experienced economic crisis that the commercial supply will paused in between the years 2009 and 2010; will experience an amelioration period between the years 2011 and 2012; will experience a new and stable development in between the years 2013 and 2014.

It is also predicted need oriented limited supply in the developing countries due to the followings that new investments will pause in the commercial real estate sector in the years between 2009 and 2010, delay or slowdown in an existing investments, completion of the existing investments in the developing countries.

The years 2011 and 2012 are predicted as an amelioration period in the commercial real estate supplies. Limited new investments in developed markets, supplies in prime markets and core works, limited expansion in the developing countries' investments, new supplies according to the users' demands are predicted in these years.

2013 and 2014 are therefore predicted as years for entering again a stable growth period of the commercial real estate sector supplies. Dating from these years, the

investments will again start to expand in the developed countries; new investments will become widespread from prime markets and core works to other markets; investments accelerate in developed countries, as an addition to cover the demands of the users', a start for expansion in the extra investment property supplies are predicted.

TABLE.44 COMMERCIAL REAL ESTATE SUPPLY		
2009-2010 PERIODS	2011-2012 PERIODS	2013-2014 PERIODS
DISCONTINUATION IN NEW INVESTMENTS	LIMITED INVESTMENT IN DEVELOPED MARKETS	EXPANSION IN INVESTMENTS IN THE DEVELOPED COUNTRIES
DELAY OR SLOWDOWN IN EXISTING INVESTMENTS	SUPPLY IN PRIME MARKETS AND CORE WORKS	NEW SUPPLIES IN PRIME MARKETS, CORE WORKS AND OTHER MARKETS
COMPLETION OF THE INVESTMENTS IN PRIME MARKETS AND DEVELOPING COUNTRIES	EXPANSION IN INVESTMENTS IN THE DEVELOPING COUNTRIES	ACCELERATION IN INVESTMENTS IN THE DEVELOPING COUNTRIES
SPECIAL ORIENTED LIMITED SUPPLY IN DEVELOPING COUNTRIES	NEW SUPPLIES ACCORDING TO THE DEMANDS OF USER	NEW SUPPLIES FOR USERS' DEMAND AND INVESTMENT ORIENTED

II.3.2.2 The Commercial Real Estate Finance

During the economic growth period in the commercial real estate sector, a rapid expansion in the sector specific financial opportunities ere experienced. The commercial real estate sector was contributed increasing finance from both banking system and private finance institutions (fund, partnership, enterprise etc.). The opportunities in finance also contribute a rapid expansion for additional supplies in the commercial real estate sector.

The conditions for financial opportunities of commercial real estate sector during and after the economic crisis will be different. 2009 and 2010 will be the years of shrinking the financial opportunities of commercial real estate. Moreover, 2011 and 2012 will be the years for appropriate conditions of providing again finance for commercial real estate sector. Therefore, 2013 and 2014 will be the years of stable expansion for financial opportunities.

In the finance of commercial real estate, 2009 and 2010 will be the years of shrinking. Two main developments will be determinant in the commercial real estate finance in the years 2009 and 2010. First one is the shrinking in the financial opportunities; the second one is the transition of the financial opportunities used previously that were not



repaid back to expanded debts. Otherwise, due to the regression in the commercial real estate values (value and price of the project) concerning to the credits and other finances that were used previously there will be budget deficits of banks. For this reason, in the years 2009 and 2010 financial institutions will reorganize and put under cover of the credits that were used previously.

Together with the regression in the income of the projects that was made for the previously given credits and delaying and shifting the existing projects will lead to a trouble of banks while getting cash back. It is predicted that since there will be no additional finance assurance from the securitization market in the 2009-2010 period, depending on this, finance for equity capital in the capital market will be limited.

The ambiguity and the new balance quests in the finance market will continue in the years 2009-2010. The ambiguity of the market conditions will limit making finance desire.

The banks will ask for tight agreement conditions, high guarantees, low risk and high risk premiums in their own limited finance performances. The credit costs will stay high although the interest rate is low. The financial leverage rates regressed and small volume operation finance are preferable (max 70 million Euro).

The 2011 and 2012 will be the years in consisting appropriate and necessary conditions for providing again finance in the commercial real estate finance. At this period, the market risks will be measurable and credits will be re-gone up in price.

Started with primarily in prime markets and high qualified real estate projects, financial opportunities will begin again. At the first stage, additional finance will provide for institutions, which have a high credibility, and their projects.

It is predicted that securitization market also will start to work and provide additional finance opportunities again in this period.

An increase in the interest rates but regression in the finance costs, limited increase in the financial leverage rates, transition to the finance of the large scale works are also predicted in this period.

In the commercial real estate finance, 2013 and 2014 will be the years of the stable expansion of the financial opportunities. As the financial opportunities expand in this period, there will be concentration in the traditional banking credits of the commercial real estate finance.

This also become an expansion period for financial opportunities and strengthening the securitization market. The risk premiums will be normalized, the balance between interest rate and risk premiums will gain stability, the lever rates will continue to limited increase, and expansion in the large scaled finance will be experienced.

TABLE.45 THE COMMERCIAL REAL ESTATE FINANCE

2009-2010 PERIOD	2011-2012 PERIOD	2013-2014 PERIOD
SHRINKING OF THE FINANCIAL OPPORTUNITIES	LIMITED EXPANSION IN FINANCE FACILITIES	STABLE DEVELOPMENT IN FINANCIAL FACILITIES
INCREASE IN THE NON-PERFORMING DEBTS	FINANCE OF HIGHLY QUALIFIED REAL ESTATE PROJECTS IN PRIME MARKETS	CONCENTRATION ON TRADITIONAL BANKING CREDIT IN COMMERCIAL REAL ESTATE FINANCE
RESTRUCTURING THE EXISTING CREDITS AND ADDITIONAL GUARANTEES REQUIREMENTS	FINANCE FLOWS TO THE INSTITUTIONS WHICH HAVE HIGH CREDIBILITY	EXPANSION IN SECURITIZATION MARKET
REGRESSION IN THE INTEREST RATES	LIMITED WORKS IN SECURITIZATION MARKET	INCREASE IN SECURITIES MARKETS' CREDIT RATING
INCREASE IN THE FINANCE COSTS	CRYSTALLIZATION OF THE NEW PERIOD CONDITIONS IN CREDIT AND FINANCE MARKET	LIMITED INCREASE IN LEVERAGE RATES (%60-%70)
SHRINKING IN THE EQUITY FINANCE OPPORTUNITY	INCREASE IN INTEREST RATES	EXPANSION IN THE LARGES SCALED FINANCE
PAUSE IN THE SECURITIZATION MARKET	REGRESSION IN FINANCE COSTS	NORMALIZATION IN FINANCE COSTS AND RISK PREMIUMS
RAPID SHRINKING IN ACQUISITIONS/MERGER/ INVESTMENT FINANCE	LIMITED EXPANSION IN PURCHASING/INVESTMENT FINANCE	
AMBIGUITY IN CREDIT AND FINANCE MARKET (RISK, RETURN, PRICE)	LIMITED INCREASE IN LEVERAGE RATES (%50-%60)	
RAPID REGRESSION IN LEVERAGE RATES (%40-%50)	TRANSITION TO THE LARGE SCALED FINANCE	
TIGHT AGREEMENT CONDITIONS, HIGH GUARANTEES, LOW RISKS, HIGH RISK PREMIUMS		
SHRINKING IN THE LARGE SCALE WORKS' FINANCE		

II.3.2.3 The Prices and Returns of Commercial Real Estate

In the period of economic growth, the prices and returns increased, the real estate investments provided much more returns than the other investment tools.

Together with the economic crisis, the prices and returns of the commercial real estate was affected negatively. During and after the economic crisis, the prices and returns of the commercial real estate will be presented in three stages under a medium term perspective.

The prices and returns of the commercial real estate will regress in the years 2009 and 2010. Therefore, the prices and returns of the commercial real estate will gain stability in 2011-2012 periods. Moreover, the prices and returns of the commercial real estate will enter an increase period in 2013-2014 periods.

The prices and returns of the commercial real estate will regress in the years 2009 and 2010. One of the main reasons of the deterioration in the supply and demand balance in this period will be the shrinking in the financial opportunities behind of the supply and demand.

In the years 2009 and 2010, there will be an expectation deficit between tenants and house owners; buyer and sellers. It is predicted that there will be rapid shrinking of the users' demand and regression in the occupancy rates.

The most important tendency of this period is that sovereign market will occur between the tenants and buyers. The rents of the commercial real estate will regress. Users will demand lower rents. From the point of investors, decrease in the commercial real estate prices and decrease of the rental income will affect cash flows and capital accumulation of them negatively. These will also deteriorate the relations between creditor and investor.

It is predicted that there will be stability in the prices and returns of the commercial real estate in 2011-2012 periods. By this way, there will be a new supply balance in commercial real estates and according to this, stable foundation will occur for prices

and returns. Restructuring of the users' demands, re usage of the finance opportunities just behind of the supply and demand, increase compatibility between the expectations of the tenant-house owner, and buyer-seller will lead to establish a new supply and demand balance. After gaining stability of the new supply and demand levels and the risk premiums, the re-price of the commercial real estates will be completed.

Furthermore, there will be stable increase period in the prices and returns of the commercial real estate in between the years 2013 and 2014. Together with the expansion in the financial opportunities behind of the supply and demand balance, stability between the expectations of the tenants-house owners and seller-buyer re-start to increase of the occupancy rates, there will be a stable increase in the prices and returns of the commercial real estate.

However, the increase in the prices, rents, and returns of the commercial real estate will be below from the development period before the crisis and they will be stable.

Related to the post-crisis period, Table.46 and Table.47 will present the previsions of the international institutions concerning the returns of the commercial real estate.

TABLE.46 THE TOTAL RETURNS OF THE COMMERCIAL REAL ESTATE INVESTMENTS: REGIONS

REGIONS	2002-2007 YEARLY AVERAGE %			2008-2010 YEARLY AVERAGE %		
	CAPITAL RETURN	INVESTMENT RETURN	TOTAL RETURN	CAPITAL RETURN	INVESTMENT RETURN	TOTAL RETURN
EUROPE DEVELOPED MARKETS	2.4	6.1	8.5	-3.1	5.8	2.7
EUROPE DEVELOPING MARKETS	22.0	11.4	33.4	2.1	7.1	9.2
USA	5.5	7.8	13.3	-0.8	6.5	5.7
ASIA-PACIFIC DEVELOPED MARKETS	13.4	5.3	18.7	-6.3	4.2	-2.1
ASIA-PACIFIC DEVELOPING MARKETS	11.2	10.4	21.6	3.4	9.5	12.9
WORLD AVERAGE	9.3	7.9	17.2	-0.2	6.4	6.2

RESOURCE: DEGI RESEARCH

TABLE.47 THE TOTAL RETURNS OF THE COMMERCIAL REAL ESTATE INVESTMENTS: SUB-MARKETS (2006-2008 EXISTING, 2009-2012 PREVISION)

	2006	2007	2008	2009	2010	2011	2012
GLOBAL RETAIL INDEX	17.4	9.4	-3.7	-2.3	5.5	9.0	10.4
GLOBAL INDUSTRIAL INDEX	12.3	16.3	-0.9	-2.4	5.6	9.7	10.9
GLOBAL OFFICE INDEX	25.0	18.4	-4.7	-7.2	3.9	8.9	11.3
GLOBAL REAL ESTATE INDEX	19.6	14.3	-3.1	-4.7	4.4	8.7	10.6

RESOURCE: ING BANK GLOBAL VISION 2009

TABLE.48 THE PRICES AND RETURNS OF COMMERCIAL REAL ESTATE

2009-2010 PERIOD	2011-2012 PERIOD	2013-2014 PERIOD
REGRESSION IN THE PRICES	RE-PRICING STABILITY IN PRICES	STABLE INCREASE IN PRICES
DETERIORATION IN THE SUPPLY/DEMAND BALANCE	NEW BALANCE BETWEEN SUPPLY/DEMAND	STABLE EXPANSION IN SUPPLY AND DEMAND
SHRINKING IN THE FINANCIAL OPPORTUNITIES BEHIND OF THE SUPPLY AND DEMAND	REVIVAL OF FINANCE BEHIND THE SUPPLY/DEMAND	EXPANSION IN THE FINANCIAL OPPORTUNITIES BEHIND OF THE SUPPLY AND DEMAND
RAPID SHRINKING IN THE USERS' DEMANDS	RESTRUCTURING THE USERS' DEMANDS	STABLE EXPANSION IN USERS' DEMANDS
EXPECTATION DEFICIT BETWEEN TENANTS-HOUSE OWNER BUYER-SELLER	COMPATIBILITY IN EXPECTATIONS BETWEEN TENANT/HOUSE OWNER BUYER/SELLER	STABILITY IN EXPECTATIONS BETWEEN TENANTS/HOUSE OWNERS BUYERS/SELLER
REGRESSION IN THE RENTS	STABILITY IN RENTS	STABLE INCREASE IN RENTS
REGRESSION IN THE INVESTMENT RETURNS	STABILITY IN RETURNS OF INVESTMENTS	INCREASE IN INVESTMENTS RETURNS
DETERIORATION IN THE CASH FLOWS OF INVESTMENTS	NORMALIZATION IN THE CASH FLOWS OF INVESTMENTS	INCREASE IN CASH FLOWS OF INVESTMENTS
REGRESSION IN THE OCCUPANCY RATES	STABILITY IN OCCUPANCY RATES	STABLE INCREASE IN OCCUPANCY RATES

II.3.2.4 Commercial Real Estate Investments

One of the important effects of the economic growth period on the commercial real estate sector is expansion, diversification in the investments (purchasing) and especially increases in the overseas investments.

An important contraction started in the commercial real estate investments as a result of economic crisis. Commercial real estate investments has entered a new period that economic crisis and post-crisis conditions will shape it.

This period is comprised of three phases in the medium-term perspective. 2009-2010 will be the years that real estate investments will contract. In 2011-2012 commercial real estate investments will start to be revived. In 2013-2014, commercial real estate investments will start to grow and develop stably.

Commercial real estate investments will contract in 2009 and 2010. Overseas investments will contract faster than the domestic investments and capitals will return



to origin countries. In this period, a rapid contraction will be experienced in the financing of the investments. Market liquidity, operation numbers and operations volumes will contract.

Investment opportunities are getting more limited as existing investors caught to the crisis with large portfolios and high indebtedness rates. As users will be net sellers in this period, institutional investors will use wait-see attitude. Tendency to run away from risky investors and clearing the portfolios from risky investments will strengthen.

Investors in the commercial real estate sector will start to invest in 2011 and 2012 as compatible and as necessary conditions are created. In these years, commercial real estate investments will gain stability and they will enter into limited increase tendency.

New investments will be toward real estates offering high-quality, long-term and stable return in prime markets and centers. Investments will primarily increase in the developed markets and as domestic investments. It is predicted that there will be increase in the financing of investments of investors in the same period. In this period, institutional investors will start to invest, run away from risk will continue and less risky investment will be preferred.

Commercial real estate investments will enter into a stable growth period in sub-markets and segments with strong bases between the years 2013-2014. A stable period will start in the financing of the investors.

Weight and determination of the institutional investors will increase and portfolios of the institutional investors will start to re-grow with the approach of more limited returns and lower risks.

TABLE. 49 COMMERCIAL REAL ESTATE INVESTMENTS

2009-2010 PERIOD	2011-2012 PERIOD	2013-2014 PERIOD
RAPID CONTRACTION IN THE DIRECT INVESTMENTS	STABILITY IN THE DIRECT INVESTMENTS AND LIMITED INCREASE	EXPANSION IN THE DIRECT INVESTMENTS (MARKET AND SEGMENT WITH STRONG BASE)
SHIFT FROM CROSS-BORDER INVESTMENTS TO DOMESTIC INVESTMENTS AND CAPITAL RETURN	INVESTMENT TO HIGH QUALITY, LONG-TERM, STABLE RETURN REAL ESTATES IN PRIME MARKETS, CENTERS	RE-EXPANSION IN THE CROSS-BORDER INVESTMENTS
RAPID CONTRACTION IN THE INVESTMENT FINANCING	PRIMARILY IN DEVELOPING MARKETS AND DOMESTIC INVESTMENTS	STABLE EXPANSION IN THE INVESTMENT FINANCE
CONTRACTION IN THE MARKET LIQUIDITY, NUMBER OF OPERATIONS, OPERATION VOLUMES	REVIVING IN THE FINANCING OF THE INVESTMENTS	INVESTMENT ON REAL ESTATES OFFERING MEDIUM-LONG TERM STABLE CAPITAL AND INVESTMENT RETURNS
INADEQUACY OF DOMESTIC INVESTORS FREEZE IN THE MARKETS	INVESTMENT ON REAL ESTATES OF HIGH QUALITY, LOW-PRICE AND HAVING DEVELOPMENT POTENTIAL	EXPANSION IN THE MARKET LIQUIDITY, INCREASE IN THE OPERATIONS IN EVERY SCALE
INVESTMENTS CAUGHT THE CRISIS WITH LARGE PORTFOLIO AND HIGH INDEBTEDNESS BORROWING	REVIVAL IN THE MARKET LIQUIDITY, INCREASE IN THE OPERATION VOLUMES	EXPANSION IN THE INVESTMENTS OF THE INSTITUTIONAL INVESTORS NEW RISK-RETURN APPROACH IN THE PORTFOLIOS
USERS ARE NET SELLER	RE-INVESTMENT OF THE INSTITUTIONAL INVESTORS	
WAITING PERIOD FOR THE INSTITUTIONAL INVESTORS	RUN AWAY FROM RISK, LESS RISKY INVESTMENTS	
RUN AWAY FROM RISKY INVESTMENTS, CLEARING OF PORTFOLIOS		

Section III

GROWTH PERIOD AND REAL ESTATE SECTOR IN TURKEY

INTRODUCTION

Turkish economy firstly enter the normalization and convalescence process then experience a rapid growth period after the depth economic crisis in 2001 by applying economy programs. In the same process, the rapid growth of world economy and adequate external economic conditions positively affected the amelioration and growth of Turkish economy.

After the year 2001, economy followed a normalization and amelioration period. In this period real estate sector figured an important development that has both quantitative and qualitative aspects.

In the third period of the study, the development and amelioration period of Turkish economy and development in the real estate sector in the same period is researched and evaluated.

III.I THE GROWTH PERIOD OF TURKISH ECONOMY

Turkish economy experienced unstable and alternating performance from the beginning of 1980s. Economy rapidly enlarged in some years then encounter with sharp crisis. Moreover economy faced a depth economic crisis most recently in 2001.

Some important political changes occurred in the economy after the 2001 economic crisis. The transition program of more powerful economy started because of applying for executing these policies. The main objective of the program is the price stability and transition to the sustainable growth.

Inflation targeting, fluctuated exchange rate policy, fiscal discipline and reforms in economy put in to practice because of aiming to reach this goal. Program was executed with two different three-year period standby agreements with IMF.

Firstly a rapid amelioration period then a rapid economic growth period was started to be experienced because of sticking to transition program of powerful economy policies and stand-by agreements criteria.

Developments in main economic indicators which experienced amelioration and growth period after the year 2001 are presented below.

III.1.1 INCREASE IN ECONOMIC GROWTH, NATIONAL INCOME, AND PER CAPITA INCOME

Turkish economy diminished 5.7 percent in 2001 then enlarged with a yearly average of 7.5 percent between 2002 and 2006. The growing performance was started to weaken since 2007.

National income that was 196.1 billion in the year 2001, reached 390.4 billion dollars in 2004, 526.4 billion dollars in 2006 and 742.1 billion dollars with the rapid growth of economy.

National income of per capita had an important increase which related to increasing of the national income. Per capita income, which was 3037 dollars with 64.8 million populations in 2001, increased 10.436 dollars with 71.5 million populations in 2008.

TABLE.50 ECONOMIC GROWTH AND NATIONAL INCOME

	2001	2002	2003	2004	2005	2006	2007	2008
GROWTH %	-5.7	6.2	5.3	9.4	8.4	6.9	4.5	1.1
GNP MILLION DOLLARS	196.1	230.5	304.9	390.4	481.5	526.4	658.8	742.1
MID-YEAR POPULATION (000)	64.770	65.806	66.819	67.805	68.711	69.707	70.586	71.517
PER CAPITA INCOME DOLLARS	3.037	3.505	4.563	5.757	7.000	7.550	9.333	10.436

SOURCE: TURKISH STATISTICAL INSTITUTE

III.1.2 EXPANSION IN PRIVATE DISPOSABLE INCOME AND CONSUMPTION EXPENDITURES

Private disposable income, private consumption expenditures and retail expenditures were experienced an important expansion that related to increase of rapid growth and national income since 2002 in the economy.

Private consumption expenditures decrease 6.6 percent in 2001 than experienced a double-digit enlargement in 2003, 2004 and 2005. The increase of private consumption expenditures decelerated in 2004 and 2005.

Private disposable income was 179 billion dollars in 2001 then increased to 616 dollars in 2008. Savings and expenditure capacity of house holds was enlarged by this increase in private disposable income.

Private consumption expenditure was 125 billion dollars in 2001 then enlarged to 517 billion dollars in 2008 depending on the income increase. On the other hand as the retail expenditures was 69 billion dollars in 2001, it increased to 241 billion dollars in 2008.

TABLE.51 PRIVATE DISPOSABLE INCOME AND CONSUMPTION EXPENDITURES BILLION DOLLARS

	2001	2002	2003	2004	2005	2006	2007	2008
PRIVATE DISPOSABLE INCOME	179	216	284	349	412	434	550	616
PRIVATE CONSUMPTION EXPENDITURES	125	157	217	278	345	371	465	517
RETAIL EXPENDITURES	69	87	118	147	177	183	221	241
PRIVATE CONSUMPTION EXP. GROWTH %	-6.6	4.7	10.2	11.0	7.9	4.6	4.6	0.3

SOURCE: TURKISH STATISTICAL INSTITUTE

III.1.3 EXPANSION IN PRIVATE SECTOR ECONOMIC ACTIVITIES

Private sector was the impulsive force of amelioration and growth period in economy after 2001. A rapid enlargement was experienced in private sector activities after the year 2001.

Industrial production experienced a limited increase after shrinking in 2001 crisis, then industrial production experience a rapid enlargement.

Private sector fixed capital investments rapidly enlarged since the year 2002. Increases yearly reached 23.7 percent in 2003 and 36.1 in 2004. A very important capacity increase was experienced with the fixed capital investments.

A rapid enlargement was also experienced in construction activities of the private sector. Construction activities of private sector enlarged with double digit numbers from 2002 to 2006 after the shrinking in the year 2001.

TABLE.52 ECONOMIC ACTIVITIES OF PRIVATE SECTOR

	2001	2002	2003	2004	2005	2006	2007	2008
MANUFACTURING INDUSTRY GROWTH%	-7.6	2.9	8.4	11.9	8.2	8.4	5.6	0.8
PRIVATE SECTOR FIXED CAPITAL INVESTMENTS GROWTH %	-32.9	16.9	23.7	36.1	16.2	15.0	5.3	-7.3
PRIVATE SECTOR CONS. INVEST. GROWTH %	-17.6	17.9	15.0	19.8	7.6	20.3	6.2	-12.2

SOURCE: TURKISH STATISTICAL INSTITUTE

III.1.4 THE EXPANSION IN FOREIGN TRADE VOLUME

Export, import and total foreign trade volume exhibited an important enlargement in the period of amelioration and growth after the year 2001. Export and import numbers of Turkey extended together with rapid growth of world economy and trade. Also this experienced development in export and import contributed to economic growth.

As the export volume of Turkey was to 31 billion dollars in 2001, it increased to 132 billion dollars in the year 2008. Furthermore import rose from 41 billion dollars to 202 billion dollars. As the total foreign trade volume of Turkey was 72 billion dollars in 2001, it reached 334 billion dollars in 2008.

Foreign trade exhibited an important enlargement at the basis of both value and volume after the year 2001. Therefore important enlargements experienced in foreign trade related transportation, storage, logistic and distribution business.

TABLE.53 FOREIGN TRADE BILLION DOLLAR

	2001	2002	2003	2004	2005	2006	2007	2008
EXPORT	31	36	47	63	74	86	107	132
IMPORT	41	52	69	98	117	140	170	202
TOTAL FOREIGN TRADE VOLUME	72	88	116	161	191	226	503	334

SOURCE: TURKISH STATISTICAL INSTITUTE

III.1.5 AMELIORATION IN THE FISCAL INDICATORS AND PRICES

One of the important developments which provided after the year 2001 in economy is regression in inflation ratios. Depending on this, interest rates experienced an important regression.

A tight financial discipline applied in Central bank monetary policy and public sector after the regression in inflation and interest rates.. Rate of budget deficit to GNP decreased from 16.5 percent to 0.5 percent in 2006 after the applied tight financial discipline since 2001. Public sector borrowing requirements were decreased in a considerable extent and public pressure on market was limited together with the financial discipline.

TABLE.54 FISCAL INDICATORS AND PRICES

	2001	2002	2003	2004	2005	2006	2007	2008
BUDGET DEFICIT/ GNP %	16.5	14.6	11.3	7.1	3.0	0.5	1.7	2.0
PUBLIC SECTOR BORROWING REQUIREMENT/GNP %	16.4	12.6	9.3	4.7	-0.4	-3.0	0.2	0.0
CONSUMER PRICE YEAR END %	68.5	29.7	18.4	9.3	7.7	9.7	8.4	10.0
YEARLY INTEREST RATE%	62.5	48.1	28.6	24.4	18.5	16.3	16.5	15.8
DOLLAR TURKISH LIRA CURRENCY YEAR END	1.65	1.59	1.43	1.40	1.35	1.42	1.20	1.53

SOURCE: STATE PLANNING ORGANIZATION, TURKISH STATISTICAL INSTITUTE

After the consumer inflation was 68.5 percent in the year 2001, 29.7 percent in the year 2002, it regressed to one digit numbers as 9.3 percent for the first time.

Interest rates decreased 15.8 percent in 2008 when 62.5 in 2001 depending on the regression of inflation. The regression in the interest rates contributed to the economic and financial systems performed better.

Appreciation of Turkish Lira was another important development in financial indicators after the year 2001. Turkish Lira appreciated against dollar accompanied by other currency units.

Appreciation of Turkish Lira drove up all the economic magnitudes that are calculated by dollar currency. Purchasing power and wealth dominated in dollars of households and private sector increased.

III.1.6 EXPANSION IN CAPITAL INFLOW

In the period of amelioration and growth that was experienced after the year 2001, an important capital inflow expansion was observed.

Turkish economy enters in the process of a rapid amelioration after the year 2001. This benefited from capital flow that directed to developing countries with a global scale.

Capital inflows took place as 1.6 billion dollars out flowed because of 2001 crisis. Afterward it took place an inflow that remained very limited amounts in 2002 and 2003.

Capital inflow increase accelerated since 2004. Totally 138 billion dollars net capital inflow experienced between 2004 and 2007. Capital inflow experienced as direct capital investments, portfolio investments and credit account.

Turkey directed capital inflows contributed to finance of economic growth, enlarged financial scope and increase assets price.

TABLE.55 CAPITAL INFLOW BILLION DOLLARS

	2001	2002	2003	2004	2005	2006	2007	2008
TOTAL NET CAPITAL INFLOW	-1.6	1.4	3.1	13.4	19.5	32.0	36.6	36.5
DIRECT INVESTMENTS	2.9	0.9	1.3	2.0	9.0	19.3	19.9	15.1
PORTFOLIO INVESTMENTS	-4.5	-0.6	2.5	8.0	13.4	7.4	0.7	-4.8
CREDIT ACCOUNT AND OTHERS	0.0	1.1	-0.7	3.4	-2.9	11.4	16.0	26.2

SOURCE: CENTRAL BANK OF THE REPUBLIC OF TURKEY

III.2 THE AMELIORATION AND DEVELOPMENT CONDITIONS OF TURKISH ECONOMY AND CHANNELS AFFECTING THE REAL ESTATE SECTOR

The amelioration and development period in the Turkish economy since 2001 was researched and evaluated in detail above. The channels affecting the real estate sector of the conditions for this period are presented below. Affecting channels, that are determinant for its period, are being evaluated together with the rapid economic growth, expansion in private consumption and retail expenditures, expansion in private sector activities, expansion in foreign trade volume, regression in inflation and interest rates, appreciation of the Turkish Lira, and capital.

THE AMELIORATION AND DEVELOPMENT CONDITIONS OF TURKISH ECONOMY AND CHANNELS AFFECTING THE REAL ESTATE SECTOR		
CONDITIONS FOR AMELIORATION AND GROWTH IN THE ECONOMY	HOUSING SECTOR	COMMERCIAL REAL ESTATE SECTOR
<p>RAPID GROWTH IN THE ECONOMY</p> <p>INCREASE IN NATIONAL INCOME</p> <p>INCREASE IN PER CAPITA INCOME</p>	<ul style="list-style-type: none"> ● INCREASE IN THE HOUSING DEMAND ● INCREASE IN THE HOUSE PRICES ● INCREASE IN THE CAPACITY OF HOUSEHOLDS' PURCHASING AND USE OF HOUSING CREDITS ● INCREASE IN THE HOUSEHOLD NUMBER 	<ul style="list-style-type: none"> ● STRENGTHENING OF THE ECONOMIC BASES PROVIDING INCREASE IN DEMAND ● RAPID INCREASE IN THE COMMERCIAL REAL ESTATE SUPPLY
<p>EXPANSION IN PRIVATE CONSUMPTION EXPENDITURES AND RETAIL EXPENDITURES</p>		<ul style="list-style-type: none"> ● EXPANSION IN THE RETAIL MARKET ● EXPANSION IN THE SHOPPING CENTERS AND ORGANIZED RETAIL ● EXPANSION IN LOGISTICS AREA DEMAND AND SUPPLY
<p>EXPANSION IN THE PRIVATE SECTOR ECONOMY ACTIVITIES (MANUFACTURING, FIXED CAPITAL INVESTMENTS, CONSTRUCTION INVESTMENTS)</p>	<ul style="list-style-type: none"> ● EXPANSION IN THE HOUSING SUPPLY 	<ul style="list-style-type: none"> ● INCREASING DEMAND FOR THE INDUSTRIAL AREAS ● INCREASING DEMAND FOR OFFICE AREAS ● INCREASING DEMAND FOR LOGISTICS AREAS ● INCREASE IN VALUE OF COMMERCIAL REAL ESTATES ● EXPANSION IN THE SUPPLY OF THE REAL ESTATE MARKET
<p>EXPANSION IN THE FOREIGN TRADE VOLUME</p>		<ul style="list-style-type: none"> ● EXPANSION IN THE LOGISTICS AREA DEMAND ● EXPANSION IN THE LOGISTICS AREA SUPPLY ● INCREASE IN THE PRICES AND RETURNS OF THE LOGISTICS AREAS

THE AMELIORATION AND DEVELOPMENT CONDITIONS OF TURKISH ECONOMY AND CHANNELS AFFECTING THE REAL ESTATE SECTOR

CONDITIONS FOR AMELIORATION AND GROWTH IN THE ECONOMY	HOUSING SECTOR	COMMERCIAL REAL ESTATE SECTOR
DECREASING IN INFLATION AND INTEREST RATES	<ul style="list-style-type: none"> ● EXPANSION IN THE HOUSING FINANCING SYSTEM ● INCREASE IN THE DEMAND AND USE OF HOUSING CREDITS ● INCREASE IN THE HOUSING PRICES 	<ul style="list-style-type: none"> ● EXPANSION IN THE COMMERCIAL REAL ESTATE FINANCE ● INCREASE IN THE COMMERCIAL REAL ESTATE VALUES ● CREATION OF THE COMMERCIAL REAL ESTATE MARKET
APPRECIATION OF TURKISH LIRA	<ul style="list-style-type: none"> ● INCREASE IN THE PURCHASING POWER AND PAYMENT CAPACITY OF THE HOUSEHOLDS IN TERMS OF DOLLAR ● INCREASE IN THE PRICES OF THE HOUSES IN TERMS OF DOLLAR 	<ul style="list-style-type: none"> ● GROWTH OF THE ECONOMIC INDICATORS IN TERMS OF DOLLAR IN REAL ESTATES (FOR INSTANCE PER CAPITA RETAIL EXPENDITURES)
CAPITAL INFLOWS (CREDIT, PORTFOLIO, DIRECT INVESTMENT)	<ul style="list-style-type: none"> ● EXPANSION OF THE REFINANCING OPPORTUNITIES, LENGTHENING OF THE TERMS, DECREASE IN COSTS IN THE HOUSING FINANCING SYSTEM ● PARTICIPATION INTO DIRECT HOUSING FINANCING ● PARTICIPATION IN THE DIRECT HOUSING SUPPLY 	<ul style="list-style-type: none"> ● EXPANSION IN THE COMMERCIAL REAL ESTATE FINANCING OPPORTUNITIES ● PURCHASING OF THE COMMERCIAL REAL ESTATE ● PARTICIPATION TO COMMERCIAL REAL ESTATE DEVELOPMENT PROJECTS ● EXPANSION IN THE COMMERCIAL REAL ESTATE MARKETS AND ITS SUPPLY

III.3 GROWTH PERIOD IN THE ECONOMY AND THE REAL ESTATE SECTOR

Conditions of the amelioration and growth period started to be experienced after 2001 in the Turkish economy positively affected the real estate sector. Housing sector has entered into a rapid expansion period in the real estate sector; commercial real estate sector has started to be a market on international standards firstly, commercial real estates sector has experienced a significant expansion, Istanbul has turned into an important real estate market and entered into the most attractive markets of Europe, financing opportunities for the real estate sector and foreign capital investments expanded. Main developments experienced in the housing sector in the economic amelioration and growth period is presented in detail below.

III.3.1 EXPANSION AND DEEPENING IN THE HOUSING SECTOR

Housing sector has entered into an expansion and deepening process after 2001. the most important development in the housing sector was the increase in the housing

construction. The number of dwelling units having construction permits after the 2001 economic crisis decreased to 161 thousand, in the following years tendency of increase started again, together with the housing construction permits of 598 thousand in 2006, it reached the top. Between the years 2005-2008, the number of housing construction permits became 2.2 million.

Increase in the housing construction started in A-type houses, later on other middle-class and social housing construction expanded. Housing construction increase spread to other cities together with the large cities.

Housing market has deepened after 2001 and house supply and demand increased together and accordingly housing prices increased in the housing sector. In the increase of the housing prices, decrease in the interest rates and expansion of the house financing system became effective as well.

TABLE.56 HOUSING CONSTRUCTION PERMITS

YEARS	NUMBER OF DWEEELING UNITS	TOTAL AREA THOUSAND M ²
2000	315.162	45.351
2001	279.616	40.377
2002	161.431	25.622
2003	202.839	32.721
2004	329.777	51.643
2005	545.336	82.297
2006	597.786	92.941
2007	581.029	89.806
2008	501.005	74.340

RESOURCE: TURKISH STATISTICAL INSTITUTE, CONSTRUCTION PERMITS STATISTICS

III.3.2 EXPANSION IN THE HOUSING FINANCING SYSTEM AND ITS FACILITIES

Conditions of the economic amelioration and growth period provide opportunity for the establishment of the housing financing system and a significant expansion in the financing opportunities.

In this period, banks started to give housing credits to buyers starting from the year 2004. Triggering factor of this has become the reduction in the interest rates. In the following years, a rapid increase was seen in the housing credits given by banks. While the housing credits stock was 22.1 billion TL in 2006, it reached to 30.7 billion TL in 2007 and 37.5 billion TL in the end of 2008.

Total number of credits used in a year has reached 100 thousand first in the year 2004, 961 thousand credits were used in total in 2005-2008 period. One of the other important developments in the housing financing system is the issuing of the law on mortgaged housing credit financing system. Nevertheless, before the housing financing system with its all means and markets started to function and the law issued on the year 2007, global crisis was faced.

TABLE.57 EXPANSION IN THE HOUSING FINANCING SYSTEM

YEARS	HOUSING CREDITS BILLION TL	HOUSING CREDITS / GNP%	NUMBER OF HOUSING CREDITS (IN A YEAR)	AVERAGE MONTHLY INTEREST RATES IN HOUSING CREDITS % (YEAR-ENDS)
2001	1.31	0.54	2.911	-
2002	1.35	0.38	10.915	-
2003	1.58	0.35	26.992	-
2004	3.52	0.63	100.449	1.93
2005	12.38	1.91	242.582	1.08
2006	22.13	2.92	268.274	1.75
2007	30.73	3.59	240.799	1.24
2008	37.54	3.95	209.842	1.78

RESOURCE: CENTRAL BANK OF THE REPUBLIC OF TURKEY, THE BANKS ASSOCIATION OF TURKEY

III.3.3 ESTABLISHMENT OF THE COMMERCIAL REAL ESTATE MARKET

Until the year 2001, real estate sector in Turkey was mostly comprised of housing sector. One of the most important effects of the economic amelioration and growth period after 2001 on the real estate sector is the establishment of the commercial real estate market.

Commercial real estates which were previously supplied only for the users, started to develop after 2001, number and capacity of the commercial real estates having international standards increased, involvement of the foreign and domestic investors and developers expanded, purchase and sale, pricing and calculation of the returns of the commercial real estates started.

III.3.4 EXPANSION IN THE SUPPLY AND STOCK OF THE COMMERCIAL REAL ESTATES

Commercial real estate sector is comprised of sub-markets shopping centers, offices, industrial and logistics areas and hotels. An important expansion is being experienced in the all sub-markets of the commercial real estates after 2001.

Shopping Centers

Shopping centers has become the markets that has shown primary and the most powerful expanding market among the commercial real estate markets. Economic growth, per capita income increase, expansion in the private consumption expenditures and expansion in the retail expenditures has triggered development in the retail market.

While there were 44 shopping centers in total with 1.15 million leasable areas until 2000 in Turkey, in the following years this number started increase rapidly. 18 shopping centers in 2003, 15 shopping centers in 2004, 19 shopping centers in 2005 and 2006 and 21 shopping centers in 2007 and 36 shopping centers in 2008 were opened.

Total leasable area volume has rapidly increased, together with the increase in the shopping center numbers. While the total leasable area was 1.15 million m² in 2000, it reached to 4.37 million m² at the end of 2008. While the leasable space volume per thousand people was 18 m² in the year 2000, it became 61.1 m² in the year 2008.

Shopping centers as commercial real estates has started to become widespread in cities other than the large ones after 2000. The number of cities having shopping centers has risen to 32 by the year 2008.

TABLE.58 THE NUMBER OF SHOPPING CENTERS AND TOTAL LEASABLE SPACE

YEARS	NUMBER OF OPENED SHOPPING CENTERS	LEASABLE AREA IN THE OPENED SHOPPING CENTERS M ²	TOTAL NUMBER OF SHOPPING CENTERS	TOTAL LEASABLE AREA M ²
2000	10	240.186	44	1.148.146
2001	9	225.949	53	1.374.095
2002	9	176.504	62	1.550.599
2003	18	244.233	80	1.794.832
2004	15	161.046	95	1.955.878
2005	19	304.961	114	2.260.839
2006	19	392.507	133	2.653.346
2007	21	864.728	154	3.518.074
2008	36	848.484	190	4.366.558

TABLE.59 LEASABLE AREA VOLUME IN THE SHOPPING CENTERS BY THOUSAND PEOPLE

YEARS	TOTAL NUMBER OF SHOPPING CENTERS	TOTAL LEASABLE AREA M ²	LEASABLE AREA PER THOUSAND PEOPLE M ²
2000	44	1.148.146	18.0
2001	53	1.374.095	21.2
2002	62	1.550.599	23.6
2003	80	1.794.832	26.9
2004	95	1.955.878	28.8
2005	114	2.260.839	32.8
2006	133	2.653.346	38.1
2007	154	3.518.074	49.8
2008	190	4.366.558	61.1

RESOURCE: CENTRAL BANK OF THE REPUBLIC OF TURKEY, THE BANKS ASSOCIATION OF TURKEY

Office Market

The second market developing after the shopping centers in the commercial real estate sector was the office market. Office stock with international standards started to develop as Istanbul focused depending on the economic developments after 2001.

Together with the economic growth, expansion in the service sector, increase in the foreign trade volume, diversification in the economic activities and expansion in the foreign capital investments, need and demand for the A and B type offices started to increase after the year 2002. Istanbul has become the development center of the office market in which all office activities have become combined and which started to be a regional center.

For meeting the increasing office need and demand with international qualifications, Istanbul office supply expanded. While the total office stock was 1.27 million m² in A and B type offices in 2001, it reached to 2.66 million m² by the end of 2008.

TABLE.60 OFFICE STOCK IN ISTANBUL

YEARS	OFFICE STOCK M ²
2001	1.267.091
2002	1.441.805
2003	1.496.565
2004	1.578.820
2005	1.657.688
2006	1.839.767
2007	2.086.385
2008	2.657.524

RESOURCE: FOR 2001-2007 PEGA JONES LANG LASALLE, FOR 2008 NORTHWEST SAVILLS

Depending on the need and demand in Istanbul, office market has started to expanded from Central Business District to out of CBD. New office areas have developed on both Europe and Asia side. In spite of the expansion in the office supply, office demand has continued to increase as well. For this reason, office openness rates started to decrease.

TABLE.61 OCCUPANCY RATES IN ISTANBUL OFFICE MARKET PERCENTAGE

PERIODS	A CLASS OFFICES			B CLASS OFFICES		
	CBD	OUTSIDE OF CBD EUROPE	OUTSIDE OF CBD ASIA	CBD	OUTSIDE OF CBD EUROPE	OUTSIDE OF CBD ASIA
2005 1.HALF-TERM	16.2	32.1	20.2	17.2	31.1	20.2
2005 2 HALF-TERM	16.3	32.3	20.4	16.8	32.3	20.4
2006 1.HALF-TERM	16.6	32.8	20.0	16.6	32.8	20.0
2006 2 HALF-TERM	14.9	31.0	17.8	9.4	31.0	17.8
2007 1.HALF-TERM	5.4	30.9	16.2	9.5	30.9	16.2
2007 2 HALF-TERM	5.2	32.0	15.9	6.8	32.4	15.9
2008 1.HALF-TERM	4.8	28.2	17.9	5.2	32.2	19.3
2008 2 HALF-TERM	9.7	23.7	14.6	6.9	29.2	17.1

RESOURCE: PROPIN INVESTMENT CONSULTANCY, ISTANBUL OFFICE MARKET 2008

As the office market has expanded in order to meet the need and demands of the office market users in Istanbul, it has become an important and high-priority investment market as a commercial real estate investment. The most important reason of this is the increase in A and B type office rents significantly in Istanbul by years. A and B type office rents either in CBA or outside of CBA is in an increasing trend in the recent years.

TABLE.62 OFFICE MARKET AVERAGE RENTS IN ISTANBUL DOLLAR/M²/MONTH

PERIODS	A CLASS OFFICES			B CLASS OFFICES		
	CBD	OUTSIDE OF CBD EUROPE	OUTSIDE OF CBD ASIA	CBD	OUTSIDE OF CBD EUROPE	OUTSIDE OF CBD ASIA
2005 1.HALF-TERM	13.6	9.2	11.9	9.1	6.2	8.3
2005 2 HALF-TERM	14.0	9.3	12.0	9.2	6.2	8.4
2006 1.HALF-TERM	14.8	9.5	12.2	9.6	6.3	8.6
2006 2 HALF-TERM	15.0	9.4	12.3	10.7	6.5	8.9
2007 1.HALF-TERM	16.2	9.5	13.3	10.8	6.5	9.4
2007 2 HALF-TERM	19.6	9.7	14.0	11.4	6.5	9.2
2008 1.HALF-TERM	29.1	14.1	19.0	15.3	8.9	11.0
2008 2 HALF-TERM	31.6	17.4	20.1	15.5	9.2	12.5

RESOURCE: PROPIN INVESTMENT CONSULTANCY, ISTANBUL OFFICE MARKET 2008

Industry and Logistics Areas

Market that has developed following shopping centers and office market is the market for industrial and logistics areas in the commercial real estate sector. Especially logistics areas have started to develop as an important commercial real estate market.

In the period of economic amelioration and growth period after 2001 in the economy, growing industry, expanding domestic and foreign trade and again expanding retail market has resulted into increase in need and demand rapidly. Depending on increasing need and demand for the logistics areas, logistics area and industrial area supply has primarily developed as users-focused.

In provinces like İstanbul, Kocaeli, Bursa, İzmir, Tekirdağ, Ankara, Konya and Manisa which are industrial and/or port city, production of industrial and logistics areas increased. While the total number of industrial and logistics areas with construction permits throughout Turkey was 3.8 million m² in 2002, it reached to 10.6 million m² in 2007. all of these industrial and logistics areas do not have the quality of investable in the commercial real estate sector, nevertheless, this growth rate shows the development and potential for this market.

TABLE.63 INDUSTRY AND WAREHOUSE BUILDINGS CONSTRUCTION PERMITS M²

PROVINCES	2002	2003	2004	2005	2006	2007	TOTAL
İSTANBUL	897.314	1.190.588	2.305.106	2.376.800	1.577.348	1.819.025	10.166.181
KOCAELİ	380.064	400.039	490.311	947.349	1.193.505	845.105	4.256.373
BURSA	293.893	595.267	566.424	652.238	1.093.485	1.030.071	4.231.468
İZMİR	301.874	256.503	480.147	489.798	726.981	810.057	3.065.001
TEKİRDAĞ	320.002	458.835	448.292	339.167	493.205	712.728	2.772.229
ANKARA	206.691	159.428	255.939	332.439	478.191	592.994	2.025.682
KONYA	141.109	206.825	375.310	132.714	254.622	366.822	1.477.402
MANİSA	84.389	338.815	376.265	161.609	236.608	276.919	1.474.605
TURKEY	3.796.078	4.863.005	7.324.986	7.966.094	8.721.263	10.608.756	43.280.182

RESOURCE: TURKISH STATISTICAL INSTITUTE, CONSTRUCTION PERMIT STATISTICS

Istanbul has become the city of commercial real estate market with international quality. Logistics area capacity with international quality in the İstanbul metropolitan area has increased. Logistics area investments based on renting of many domestic and foreign companies were made.

Rents of the logistics areas in İstanbul are in an increasing trend since 2004. The main reasons of the tendency are the international quality of the newly established logistics areas and increase in the demand for such quality logistics areas.

For this reason, on the one hand while rents were increasing, on the other hand occupancy of the logistics areas are increasing as a result of areas vacated.

TABLE.64 ISTANBUL LOGISTICS WAREHOUSES AVERAGE RENT AND OCCUPANCY RATES

YEARS	AVERAGE RENT MONTH/M ² /DOLLAR	AVERAGE OCCUPANCY RATE %
2004	4.0	16.5
2005	4.5	19.0
2006	5.0	21.0
2007	5.5	23.5
2008	6.0	25.0

RESOURCE: COLLIERS INTERNATIONAL TURKEY, COMMERCIAL REAL ESTATE MARKET 2008

III.3.5 DEVELOPMENT IN THE ISTANBUL COMMERCIAL REAL ESTATE MARKET

During the economic amelioration and growth period, commercial real estate market was established and it started to develop by focusing on Istanbul. Istanbul real estate market has become one of the most attractive commercial real estate markets of Europe with its rapid development.

One of the most important factors increasing the attractiveness of Istanbul commercial real estate sector is the relatively high returns of the commercial real estate investments.

Although the returns of office, shopping center and logistics area investments of Istanbul commercial real estate sector which is on the first phase of its development, are in a downward trend, it still offers high returns compared to other European cities.

TABLE.65 RETURNS OF ISTANBUL REAL ESTATE INVESTMENTS ANNUAL PERCENTAGE

	2004	2005	2006	2007	2008
OFFICE INVESTMENTS	12.50	10.50	9.50	8.00	7.50
SHOPPING CENTER INVESTMENTS	10.00	9.50	9.00	8.00	7.50
LOGISTICS INVESTMENTS	11.50	10.00	8.50	8.00	7.75

RESOURCE: KING STURGE, CB RICHARD ELLIS, COLLIERS INTERNATIONAL TURKEY

Commercial real estate market of Istanbul which is on the development phase, is sharing the first line with Moscow among the most attractive cities of Europe, in terms of investment and development prospects. Istanbul is on the first line for the development prospects in Europe and on the third line in investment prospects.

TABLE.66 EVALUATION FOR THE ISTANBUL REAL ESTATE INVESTMENTS

YEARS	EVALUATION	POINT	RANKING
2009	DEVELOPMENT PROSPECTS	5.5	1
	INVESTMENT PROSPECTS	5.4	3
	RISK	4.8	20
2008	DEVELOPMENT PROSPECTS	6.7	2
	INVESTMENT PROSPECTS	7.2	2
	RISK	5.3	23
2007	DEVELOPMENT PROSPECTS	5.8	11
	INVESTMENT PROSPECTS	6.7	1
	RISK	4.9	21
2006	DEVELOPMENT PROSPECTS	5.3	19
	INVESTMENT PROSPECTS	6.5	1
	RISK	4.0	26

RESOURCE: URBAN LAND INSTITUTE PRICEWATERHOUSE COOPERS, "EMERGING TRENDS IN REAL ESTATE EUROPE"

As Istanbul commercial real estate sector is one of the most attractive cities in investment and development prospects, buyers' market tendency is still strong for the sub-markets of the commercial real estate sector as shopping centers, office, capital and logistics areas, residence and hotels.

It is observed that as a result of the effects of the global crisis, there is weakening in the buyer's market and strengthening in retaining the investments for the year 2008 tendencies.

TABLE.67 INTERNATIONAL SITUATION OF ISTANBUL REAL ESTATE INVESTMENTS

INVESTMENTS	YEARS	BUY	HOLD	SELL
SHOPPING CENTER INVESTMENTS	2008	36	44	20
	2007	74	24	2
	2006	63	28	9
	2005	85	11	4
OFFICE INVESTMENTS	2008	53	32	15
	2007	85	13	2
	2006	56	27	17
INDUSTRIAL AND LOGISTICS AREA INVESTMENTS	2005	25	63	12
	2008	43	43	15
	2007	77	21	3
RESIDENCE INVESTMENTS	2006	69	22	9
	2005	50	44	6
	2008	46	40	14
HOTEL INVESTMENTS	2007	58	39	3
	2008	48	35	17
	2007	73	24	2

RESOURCE: URBAN LAND INSTITUTE PRICEWATERHOUSE COOPERS, "EMERGING TRENDS IN REAL ESTATE EUROPE"

III.3.6 EXPANSION IN THE FOREIGN CAPITAL INVESTMENTS

Another effect of the economic amelioration and growth period on the commercial real estate sector is the expansion of the capital investments for the commercial real estate sector.

Economic amelioration, establishment of the commercial real estate market and its start to functioning, relatively high returns of the commercial real estate sector, growth and development potential of the market result into expansion in the foreign capital investments. Foreign capital investments on the real estate sector are realized through two channels. The first one is the foreigners' purchasing of the real estates. The second one is the establishment, purchase or establishing partnership with foreign capital company to function in the real estate sector.

Real estate sales to the foreigners (housing and commercial real estates) have an increasing trend since the year 2003. Foreigners purchased 13 billion dollars of real estates in total in 2003-2008 period. Direct capital investments to function in the real estate sector is in an upward trend and direct capital investments with commercial concerns has reached the top with 656 million dollars in the year 2008.

**TABLE.68 FOREIGN CAPITAL INVESTMENTS IN THE REAL ESTATE SECTOR
MILLION DOLLAR**

YEARS	SALE OF REAL ESTATES TO FOREIGNERS	DIRECT INVESTMENT FLOW
2003	998	8
2004	1.343	3
2005	1.841	80
2006	2.922	89
2007	2.926	560
2008	2.937	656

RESOURCE: CENTRAL BANK OF THE REPUBLIC OF TURKEY

III.3.7 EXPANSION IN THE COMMERCIAL REAL ESTATE FINANCING

An important expansion is experienced in the commercial real estate financing during the economic amelioration and growth period. Volume of the domestic and overseas banking credits used by the companies in the real estate sector has started to expand significantly starting from 2003.

Companies in the real estate sector are using financing opportunities from domestic and cross border banks in housing and commercial real estate projects and investments. Data on the credits used are produced together with housing and commercial real estates. For this reason, net data on the commercial real estates can not be found.

While the credits used by the real estate sector from domestic resources were 1.9 billion TL in 2003, it reached to 10.5 billion TL in 2008.

While the credits taken from cross border banking in the real estate sector were 4.1 billion dollars in 2003, it reached to 18.5 billion dollars in 2008.

Banking credits used from cross border resources by the real estate sector are medium-long term project credits. Credits taken from the cross border resources are larger than the domestic credits. Growth in the sector is financed through cross border financing opportunities.

TABLE.69 DOMESTIC AND OVERSEAS BANKING CREDIT FOR THE REAL ESTATE SECTOR

YEARS	DOMESTIC BANKING CREDITS OF THE REAL ESTATE SECTOR MILLION TL	FOREIGN BANKING CREDITS OF THE REAL ESTATE SECTOR MILLION DOLLAR
2003	1.928	4.140
2004	2.714	6.775
2005	3.717	9.246
2006	5.063	11.140
2007	6.182	13.770
2008	10.496	18.542

RESOURCE: CENTRAL BANK OF THE REPUBLIC OF TURKEY

III.3.8 GROWTH IN THE REAL ESTATE INVESTMENT TRUSTS

Legal arrangements on the real estate investment trust in Turkey were made in 1996 and the first real estate investment trust were first established in 1997. The portfolio value of the eight real estate investment trust established until 2001 has become 621 million dollars. Economic amelioration and growth period positively affected the real estate investment trust, and the housing and commercial projects and investments started to expand. Together with the newly established ones, total asset value of the 14 real estate investment partnerships have reached to 2.65 billion dollars by the end of 2008.

TABLE.70 REAL ESTATE INVESTMENT TRUSTS PORTFOLIO AND MARKET VALUE

YEARS	NUMBER OF REIT	PORTFOLIO VALUE		MARKET VALUE	
		MILLION TL	MILLION DOLLAR	MILLION TL	MILLION DOLLAR
1997	2	8.8	43	15.0	73.4
1998	5	135.8	434	37.5	119.9
1999	8	418.5	796	421.0	801.9
2000	8	531.8	792	313.3	466.9
2001	8	890.6	621	476.0	331.7
2002	9	1.081.1	661	338.7	207.0
2003	9	1.179.0	845	543.1	389.0
2004	9	1.383.0	1.030	981.6	731.1
2005	9	2.209.0	1.645	2.481.3	1.838.7
2006	11	2.480.9	1.756	2.109.1	1.485.2
2007	13	4.117.8	2.471	3.256.9	2.783.7
2008	14	4.269.4	2.652	1.171.1	763.4

RESOURCE: CAPITAL MARKET BOARD

Section IV

NEW ERA IN THE TURKISH ECONOMY AND REAL ESTATE SECTOR

INTRODUCTION

Turkish economy has been entering into a new era in which macro conditions has changed in the country and abroad and differentiated significantly from the period after 2001. New economic period will shape the real estate sector with its composing conditions.

In this framework, in the fourth part of the report, predictions for the new period in the Turkish economy and real estate sector are presented. Predictions include medium term perspective until 2014. Examinations and evaluations are presented under the titles of new period in the Turkish economy, conditions of the new period in the Turkish economy and effects of the real estate sector and real estate sector in the new period.

IV.1 NEW ERA IN THE TURKISH ECONOMY

Turkish economy has been entering into a new era depending on the crisis experienced on a global scale and its own inner dynamics.

The most important characteristic of the new era is the change in the growth model of Turkey. In the pre-crisis period, Turkey was financing its growth with increasing rates of foreign savings and its growth was based on rapidly increasing foreign demand (increase in the exports).

Together with the global economic crisis, financial opportunities that contribute to the growth period of Turkey and expansionary conditions of foreign demand disappeared. Accordingly, it is predicted that world economy will limitedly grow in the period after the crisis.

Conditions and dynamics of growth have been changing in the new era in the Turkish economy. Basic conditions and dynamics of the new period are stated below:

1. Slower growth in the world economy
2. Slow down in the usage of foreign savings, dependency to the usage of domestic savings
3. Slow down in the foreign demand, need to grow based on the domestic demand
4. Limitation to inflationist pressure; lower inflation and interest rate levels
5. Limitation of capital inflow, stability in the value of Turkish Lira

In the framework of this basic conditions and dynamics of the new era, Turkish economy will grow in the period until 2014 in a medium term perspective, below 7.5 percent which was the growth rate experienced between 2002 and 2006 and annually 4 percent on average. Depending on this growth rate predicted for the new period in the economy, slower expansions are predicted for the other all economic activities compared to previous growth period.

In the framework of these general evaluations, predictions for the main indicators of the Turkish economy until 2014 are presented below. Predictions for the period between 2009 and 2011 are the economic targets renewed by the government in April, 2009. Government used exactly the revised indicators for these years. For 2012-2013-2014, predictions are made according to the economic conditions of the new era explained above. Predictions for the period 2012 and 2014 are compatible with the presumptions that government used for the revision of the indicators of 2009-2011.

Economic indicators presented below for the 2009-2014 period will shape the new era in the real estate sector. Weaker predictions or realizations based on the economic indicators will limit the development in the real estate sector, stronger predictions and realizations will accelerate the development in the real estate sector.

IV.1.1 PREDICTIONS FOR ECONOMIC GROWTH AND NATIONAL INCOME

Growth targets for the Turkish economy is 3.6 percent contraction in the year 2009 and 3.3 percent growth in 2010 and 4.5 percent growth in 2011. It is predicted that growth will be 4 percent in the years 2012, 2013 and 2014.

According to these predictions, national income will contract to 578 billion dollars in 2009. In addition to the reel contraction, devaluation of TL and contraction of national income calculated denominated in dollars have a role in this recession.

Together with the re-growth of the economy, national income will start to increase. National income will reach to 660 billion dollars in 2011. It is predicted that national income will reach to 741 billion dollars in 2014. National income will be able to reach its volume of 742 billion dollars of the year 2008, in the year 2014 again.

National income per capita regressed to 8.039 dollars depending on the economic contraction in 2009. It will increase again with the re-growth of the economy. National income per capita will be 8.980 dollars in 2011. National income per capita will reach 9.770 dollars in 2014. National income per capita will still remain below the volume of the year 2008 in 2014.

TABLE.71 PREDICTIONS FOR ECONOMIC GROWTH AND NATIONAL INCOME 2009 – 2014

	2008	2009	2010	2011	2012	2013	2014
GROWTH%	1.1	-3.6	3.3	4.5	4.0	4.0	4.0
GNP BILLION DOLLAR	742	578	618	660	686	713	741
MID-YEAR POPULATION (000)	71.079	71.897	72.698	73.497	74.277	75.065	75.837
NATIONAL INCOME PER CAPITA DOLLAR	10.439	8.039	8.501	8.980	9.236	9.500	9.770

RESOURCE: 2009 - 2011 THE PRE-ACCESSION ECONOMY PROGRAMME 2012 - 2014 REPORT GROUP

IV.1.2 PREDICTIONS FOR PRIVATE DISPOSABLE INCOME AND CONSUMPTION EXPENDITURES

Economic growth and national income volumes determine the private disposable income and private consumption expenditures.

Volumes of private disposable income and private consumption expenditures reflect the savings, consumption and borrowing capacities of the private sector.

Private disposable income volume regressed to 480 billion dollars in 2009. It will start to rise in 2010 and will be 548 billion dollars in 2011. It is predicted that it will reach to 615 billion dollars in 2014.

Private consumption expenditures regressed 3.1 percent in 2009, however, it will start to increase in 2010 again. Private consumption expenditures are predicted to increase 4.3 percent in 2011 and 4 percent in the following years.

Private consumption expenditures will regress significantly to 403 billion dollars in 2009. Together with the increase in the following years, it is predicted to reach 517 billion dollars in 2014 again. Retail expenditures which is a significant indicator for the retail expenditures will regressed to 193 billion dollars in 2009, it will be 244 billion dollars in 2014.

TABLE.72 PREDICTIONS FOR PRIVATE DISPOSABLE INCOME AND CONSUMPTION EXPENDITURES 2009 – 2014 BILLION DOLLAR

	2008	2009	2010	2011	2012	2013	2014
PRIVATE DISPOSABLE INCOME	616	480	513	548	569	592	615
PRIVATE CONSUMPTION EXPENDITURES	517	403	431	460	478	497	517
RETAIL EXPENDITURES	241	193	207	221	230	239	244
PRIVATE CONSUMPTION EXPENDITURES GROWTH %	0.3	-3.1	3.0	4.3	4.0	4.0	4.0

RESOURCE: 2009 - 2011 THE PRE-ACCESSION ECONOMY PROGRAMME 2012 - 2014 REPORT GROUP

IV.1.3 PREDICTIONS FOR ECONOMIC ACTIVITIES OF THE PRIVATE SECTOR

As a result of the share of the economic activities of the private sector, it is the driving force of growth and expansion. Economic activities of the private sector will limitedly grow in the new economic period compared to rapid growth period.

Industry will contract 9.7 percent in the year 2009, it will grow 3.0 percent in 2010 and 4.7 percent in 2011. Industrial growth is predicted to be 4.5 percent in 2012, 2013 and 2014.

Fixed capital investments of the private sector will contract 14.4 percent in 2009; it will grow 6.8 percent in 2010 and 9.2 percent in 2011. Growth in the fixed capital investments of the private sector is predicted to be 8 percent in the years 2012, 2013 and 2014.

While the construction investments of the private sector will contract 15 percent in 2009, it will grow 7.5 percent in 2010 and 10 percent in 2011. It is predicted that growth in the construction investments of the private sector will be 10 percent in the years 2012, 2013 and 2014.

TABLE.73 PREDICTIONS FOR THE ECONOMIC ACTIVITIES OF THE PRIVATE SECTOR 2009 -2014

	2008	2009	2010	2011	2012	2013	2014
MANUFACTURING INDUSTRY GROWTH %	0.8	-9.7	3.0	4.7	4.5	4.5	4.5
PRIVATE SECTOR FIXED CAPITAL INVESTMENTS GROWTH %	-7.3	-14.4	6.8	9.2	8.0	8.0	8.0
PRIVATE SECTOR CONSTRUCTION INVESTMENTS GROWTH %	-12.2	-15.0	7.5	10.0	10.0	10.0	10.0

RESOURCE: 2009 - 2011 THE PRE-ACCESSION ECONOMY PROGRAMME 2012 - 2014 REPORT GROUP

IV.1.4 FOREIGN TRADE PREDICTIONS

One of the most important dynamics of Turkish economy during the rapid economic growth period was the rapid growth in export, import and foreign trade volumes. In the new economic period, export, import and foreign trade volume will first experience a sharp contraction, later on it will enter into a growth period again.

Growth in the export, import and foreign trade volumes will be much more limited. Growth in the trade of goods and services in the world will be annually 6.4 percent on average between the years 2011 and 2014. It is predicted that Turkey will be more over of this average with 8 percent annual growth in export and 10 percent annual growth in import.

Accordingly, it is predicted that export will be 104 billion dollars in 2009, 120 billion dollars in 2011 and 150 billion dollars in 2014.

Import is predicted to be 138 billion dollars in 2009, 174 billion dollars in 2011 and 231 billion dollars in 2014.

While the foreign trade volume will regress to 242 billion dollars in 2009, it will reach the volume of 381 billion dollars which is over the volume of the year 2008. This growth in the foreign trade indicators will create relatively positive circumstances primarily for logistics and related real estate sectors.

TABLE.74 FOREIGN TRADE PREDICTIONS BILLION DOLLARS

	2008	2009	2010	2011	2012	2013	2014
EXPORT	132	104	111	120	129	139	150
IMPORT	202	138	155	174	191	210	231
FOREIGN TRADE	334	242	266	294	320	349	381

RESOURCE: 2009 - 2011 THE PRE-ACCESSION ECONOMY PROGRAMME 2012 - 2014 REPORT GROUP

IV.1.5 FISCAL INDICATORS AND PRICE PREDICTIONS

Depending on the economic contraction and slow down in the economic activities in the year 2009, budget deficit will increase and public sector borrowing requirement will increase in the new economic period. On the contrary, inflation and interest rates will regress.

Budget deficit and public sector borrowing requirement will rise to 5.0 percent and 4.6 percent in 2009. It is predicted that in the following years, depending on the economic growth and financial discipline assumptions, budget deficit and public sector borrowing requirement will once more decrease.

Nevertheless, private sector savings and resources in the financial system will be used on increased rates by the public sector and resource inflow to the private sector (commercial-consumer) will be limited.

It is predicted depending on the contraction and slowing down in the domestic and foreign demand in the economy, consumer prices will move downward and it will be realized as 6.50 percent at the end of 2011. With the assumption that rigidity of the consumer prices will be softened in the period between the years 2009 and 2011, it is predicted that consumer prices will regress 5 percent in the end of the year 2014.

One of the most important indicators of the new period in the economy will be lower interest rates. Central Bank will continue to lower the interest rates as a result of the recession of inflation. It is predicted that interest rates of the Central Bank will be 8.5 percent at the end of 2009, 8.0 percent in 2011 and 7.0 percent in 2014.

Together with the reduction of the interest rates of the Central Bank, borrowing interest rates of the Treasury and deposit account interest rates will decrease concurrently. Reduction in the interest rates of the commercial and consumer credits will be probably more retarded and limited. Balance sheet of the banks and their resource structure, portfolio selections according to economic developments and risks will be more determinative for these interest rates.

Another important indicator for the new economic period will be the value of the Turkish Lira. Exchange rate of dollar that government used for the revision of the

indicators of the new economic period shows that Turkish Lira will not be revalued until the end of the year 2011. It is observed that government has such an economic preference for the new period. A prediction could not be made for the following years.

TABLE.75 FISCAL INDICATORS AND PRICE PREDICTIONS

	2008	2009	2010	2011	2012	2013	2014
BUDGET DEFICIT/ GNP %	2.0	5.0	3.75	3.5	3.0	2.0	1.0
PUBLIC SECTOR BORROWING REQUIREMENT/ GNP %	1.5	4.6	3.2	2.8	2.5	2.0	1.0
CONSUMER PRICES YEAR-END %	10.0	6.90	6.50	6.50	6.00	5.00	5.00
CENTRAL BANK OVERNIGHT INTEREST RATE	15.0	8.50	8.00	8.00	7.50	7.00	7.00
DOLLAR TURKISH LIRA RATE YEAR-END	1.53	1.66	1.70	1.75			

RESOURCE: 2009 - 2011 THE PRE-ACCESSION ECONOMY PROGRAMME 2012 - 2014 REPORT GROUP

IV.1.6 CAPITAL INFLOW PREDICTIONS

An important impulsive force of the economic growth in the Turkish economy after 2001 has been the usage of strong foreign savings and capital inflows which provide this usage. Especially, the use of credit of the private sector and the direct foreign capital investments has become determinative.

Together with the global economic crisis, capital flows has significantly slowed down. As a result of the resource need of developed countries and especially the public sector of the developed countries, capital inflows to the developing countries contracting faster and capital goes back.

In this framework, it is predicted that capital inflows will be much more limited to Turkey in the new economic period.

Government predicted in the revision indicators that there will be 6.4 billion dollars capital outflow from Turkey in 2009. It is predicted that there will be a rapid increase in the capital inflow again in the years 2010 and 2011. Accordingly, net capital inflow will reach 32.1 billion dollars again in 2011.

It is predicted that in the years 2012, 2013 and 2014, in the period after crisis, together with the assumptions that financial markets will reach stability again and capital inflows will enter into a stable growth period, capital inflows to Turkey will continue by increasing limitedly and in 2014 it will be 36 billion dollars.

TABLE.76 PREDICTIONS FOR CAPITAL INFLOWS BILLION DOLLARS

	2008	2009	2010	2011	2012	2013	2014
TOTAL NET CAPITAL INFLOW	36.5	-6.4	25.1	32.1	33.0	34.0	36.0
DIRECT INVESTMENTS	15.1	8.6	9.6	11.1	12.0	13.0	15.0
PORTFOLIO INVESTMENTS	-4.8	-1.4	1.2	2.8	3.0	3.0	3.0
CREDIT DEPOSIT ACCOUNT AND OTHER	26.2	-13.6	14.3	18.2	18.0	18.0	18.0

RESOURCE: 2009 - 2011 THE PRE-ACCESSION ECONOMY PROGRAMME 2012 - 2014 REPORT GROUP

IV.2 CONDITIONS OF THE NEW ERA IN THE TURKISH ECONOMY AND ITS EFFECTS ON THE REAL ESTATE SECTOR

Predictions for the economic conditions of the new era in the Turkish economy are presented in detail below. Economic conditions of the new era will be determinative for the real estate sector in Turkey as well. Channels that the conditions of the new economic period in Turkish economy that will affect the real estate sector are presented below under the titles; slow down in the economic growth, private disposable income consumption expenditures and limited expansion in the retail expenditures, slow down in the growth of the activities of the private sector, slow down in the growth of the foreign trade, regression in the inflation and interest rates, devaluation of Turkish Lira and slow down in the capital inflow.

CONDITIONS OF THE NEW ERA IN THE ECONOMY AND CHANNELS AFFECTING THE REAL ESTATE SECTOR

CONDITIONS OF THE NEW PERIOD IN THE ECONOMY	HOUSING SECTOR	COMMERCIAL REAL ESTATE SECTOR
SLOW DOWN IN THE ECONOMIC GROWTH LIMITED GROWTH IN THE NATIONAL INCOME AND PER CAPITA INCOME	<ul style="list-style-type: none"> ● LIMITED INCREASE IN THE CAPACITY OF HOUSEHOLDS' PURCHASING OF HOUSING AND USE OF HOUSING CREDIT ● LIMITED INCREASE IN THE HOUSING DEMAND ● LIMITATION IN THE PRICE INCREASE OF HOUSES 	<ul style="list-style-type: none"> ● LIMITED GROWTH IN THE ECONOMIC FOUNDATIONS THAT PROVIDE INCREASE FROM THE DEMAND SIDE ● SLOW DOWN IN THE GROWTH OF SUPPLY OF COMMERCIAL REAL ESTATE
LIMITED EXPANSION IN THE PRIVATE DISPOSABLE INCOME, PRIVATE CONSUMPTION EXPENDITURES AND RETAIL EXPENDITURES		<ul style="list-style-type: none"> ● SLOW DOWN IN THE GROWTH OF THE RETAIL MARKET ● LIMITED GROWTH IN THE SHOPPING CENTER AND OTHER RETAIL ● SLOW DOWN IN THE LOGISTICS AREA DEMAND
SLOW DOWN IN THE GROWTH OF THE PRIVATE SECTOR ACTIVITIES (INDUSTRIAL PRODUCTION FIXED CAPITAL INVESTMENTS, CONSTRUCTION INVESTMENTS)	<ul style="list-style-type: none"> ● SLOW DOWN IN THE HOUSING SUPPLY 	<ul style="list-style-type: none"> ● SLOW DOWN IN THE INCREASE OF INDUSTRIAL AREA, LOGISTICS AREA AND OFFICE DEMAND ● DOWNWARD PRESSURE IN THE COMMERCIAL REAL ESTATE PRICES ● SLOW DOWN IN THE INDUSTRIAL AREA, LOGISTICS AREA AND OFFICE SUPPLY

CONDITIONS OF THE NEW ERA IN THE ECONOMY AND CHANNELS AFFECTING THE REAL ESTATE SECTOR

CONDITIONS OF THE NEW PERIOD IN THE ECONOMY	HOUSING SECTOR	COMMERCIAL REAL ESTATE SECTOR
LOW DOWN IN THE GROWTH OF THE FOREIGN TRADE		<ul style="list-style-type: none"> ● LIMITED GROWTH IN THE DEMAND AND SUPPLY OF LOGISTICS AREA ● DOWNWARD PRESSURE ON THE PRICES AND RETURNS OF THE LOGISTICS AREA PRICES
REDUCTION OF INFLATION	<ul style="list-style-type: none"> ● DOWNWARD PRESSURE IN THE PRICES OF THE HOUSING PRICES 	<ul style="list-style-type: none"> ● DOWNWARD PRESSURE IN THE COMMERCIAL REAL ESTATE PRICES
RECESSION IN THE INTEREST RATES	<ul style="list-style-type: none"> ● APPROPRIATE CONDITIONS FOR THE EXPANSION OF THE HOUSING FINANCING SYSTEM ● UPWARD PRESSURE ON THE HOUSE PRICES 	<ul style="list-style-type: none"> ● APPROPRIATE CONDITIONS FOR THE EXPANSION OF THE FINANCING OPPORTUNITIES FOR THE COMMERCIAL REAL ESTATES ● UPWARD PRESSURE FOR THE COMMERCIAL REAL ESTATE PRICES
DEVALUATION OF THE TURKISH LIRA	<ul style="list-style-type: none"> ● REGRESSION OF THE PURCHASING POWER AND PAYMENT CAPACITY OF THE HOUSEHOLDS ● REGRESSION OF THE PRICES OF THE HOUSES IN TERMS OF DOLLAR 	<ul style="list-style-type: none"> ● CONTRACTION OF THE EXCHANGE VALUE OF THE INDICATORS RELATED TO COMMERCIAL REAL ESTATES IN DOLLARS (EXAMPLE PER CAPITA RETAIL EXPENDITURES)
SLOW DOWN IN THE CAPITAL INFLOWS	<ul style="list-style-type: none"> ● LIMITATION OF THE EXPANSION IN THE HOUSING FINANCING SYSTEM ● DOWNWARD PRESSURE ON HOUSING PRICES ● LIMITATION IN THE DIRECT INVOLVEMENT OF HOUSING SUPPLY 	<ul style="list-style-type: none"> ● CONTRACTION-SLOW DOWN IN COMMERCIAL REAL ESTATE FINANCING OPPORTUNITIES ● SLOW DOWN IN INVOLVEMENT TO COMMERCIAL REAL ESTATE PROJECTS ● LIMITATION IN COMMERCIAL REAL ESTATE SUPPLY AND DEMAND

IV.3 REAL ESTATE SECTOR IN THE NEW ERA

Turkish economy has been entering into a new era with the global crisis. Economic conditions of this new period is examined and evaluated in a medium-term perspective in detail.

Real estate sector in Turkey will enter into a new era in this new economic macro framework and conditions. This new medium-term period will probably have two stages. The year 2009 will be breakdown and contraction year, the year 2010 will be normalization and the year in which new balances will be established. Between the years 2011 and 2014 will be a more limited but more stable growth period.

In this framework, predictions on the real estate sector are presented separately for the housing and commercial real estate sectors.

IV.3.1 HOUSING SECTOR IN THE NEW ERA

Predictions related to housing sector for the new economic period are evaluated under the titles housing need, housing supply, housing demand, housing financing and house prices.

IV.3.1.1 Housing Need

Housing demand in Turkey will continue to increase independent from the economic developments and indicators and with the effect of other determinative factors.

Population continues to increase in Turkey. While the population was 71 million in the mid year of 2008, it will be 75.8 million in 2014. Marriage age population increase, immigration from the rural areas and continuation of the urbanization with decreasing rates, need for urban transformation as a result of shanty settlements and need for renovation of the buildings as a they become worn out continues independently from the economic developments. For this reason, housing need will continue in Turkey between the years 2009 and 2014. Total housing need is predicted to be 4.22 million houses in this period. Housing need except urban transformation will be 3.28 million houses.

TABLE.77 HOUSING NEED IN TURKEY 2009-2014 (000)

YEARS	INCREASE IN THE HOUSEHOLD NUMB.	IMMIGRATION TO URBAN AREAS	RENOVATION NEED	URBAN TRANSFORMATION	TOTAL
2009	382	120	79	140	721
2010	378	110	80	150	718
2011	372	100	81	155	708
2012	368	90	82	160	700
2013	365	80	83	165	693
2014	358	70	84	170	682

RESOURCE: DEVELOPMENT POTENTIAL OF HOUSING FINANCING SYSTEM BASED ON THE HOUSING NEED AND DEMAND IN TURKEY 2015, GYODER
NOTE: Figures based on increase of households are revised as a result of the new population data.

IV.3.1.2 Housing Demand

Housing demand in Turkey is closely related to economic growth, household incomes and financing opportunities. Together with the house prices, payment conditions and especially financing opportunities in the middle class housing demand has become determinative.

In the framework of the new economic conditions, it is predicted that housing demand will be limited compared to rapid growth period.

1. Contraction and slow down in the household incomes will slow down the housing demand. Housing demand will especially be limited in the years 2009 and 2010.

2. Uncertainty, fluctuation and regression expectation about the housing prices will put back the effective housing demand.

3. Together with the normalization of the economic indicators, it is predicted after the second half of 2010, housing demand will restart inside the "customer market".

IV.3.1.3 Housing Supply

In the new economic period during and after the economic crisis, housing supply will be significantly affected. Housing sector before the 2008 crisis in Turkey experienced a very rapid supply expansion. Turkey entered into crisis with a large supply surplus or housing stock not meet by an effective demand.

In this framework, developments stated below are predicted to be in the housing supply during the new economic period.

1. There will be a significant slow down in the additional housing supply. It is predicted that slow down will continue, until the existing supply surplus will be depleted.

2. One of the other reasons of the slow down in the housing supply is the predicted consolidation on the side of the producer. There will be a consolidation that will be focused on producers having strong equity capital, institutionalized, and having its own equipments.

3. Financing need of the new housing demand will be a significant constraint. Customer financing (pre-payment) opportunities and banking financing opportunities in the consumer market are significantly contracting. For this reason, new housing supplies will be limited.

4. In the framework of the new conditions of construction costs, land costs, inflation and financing costs, it is predicted that new housing supply costs will decrease, the producers' margin of profit will contract.

IV.3.1.4 Housing Financing System

One of the most important variable determining housing demand and accordingly housing supply in Turkey is consumer housing financing. While the uses of housing credits were 961 thousand between the years 2004 and 2008, the numbers of housing construction permits were 2.5 million.

The conditions of the new economic period will significantly affect housing financing system and housing credits. The developments stated below on housing financing system are predicted in the new economic period.

1. In the years 2009 and 2010 banks will primarily face with the increase with non-performing debts of housing credits taken before.

2. As a result of the contraction of the foreign financing opportunities of the banks and freeze of securitization markets, issuing of long-term housing credit opportunities will significantly be limited.

3. Aggregation of the deposit accounts of the banks in a very short-term (55 days on average) limits the issuing of long-term housing credit opportunities.

4. The years of 2009 and 2010 will be the years that appetite and capacity of the banks to issue housing credits will decrease.

5. Reduction in the incomes of the households decreases the household number having the capacity using housing credits.

6. Probably from the beginning of the year 2011, together with the normalization of the financial markets and start to fulfill the functions, banks issuing of additional housing credits will started to increase again. Nevertheless, this growth will be limited and stable.

7. Regression of the interest rates in the new economic period will be a positive development for the housing financing system as well. However, regression in the interest rates will affect the housing credits, only if terms will be extended in the source structure of the banks and restart of the refinancing opportunities from abroad.

IV.3.1.5 Housing Prices

Effect of the economic crisis on housing prices was seen as the recession on a global scale. Purchasing of houses mostly by mortgaged housing credits has affected this result as well.

Housing prices in Turkey will be determined again in the supply and demand balance that will be created in the new period. Nevertheless, together with the supply and demand in the housing prices, factors as financing structures of the producer/sellers, selling conditions, sale terms and production costs will be determinative as well.

It is expected that there will be a downward move in the housing prices, as a result of the creation of the buyer's market, large housing stock, insufficiency of the equity capital opportunities after a while and rapid contraction in the housing demand.

After the sale of the existing housing stock beginning from 2011, in the new supply and demand balance and together with new production costs and new financing conditions, housing prices will have a new balance.

IV.3.2 COMMERCIAL REAL ESTATE SECTOR IN THE NEW ERA

The economic period in Turkey will create new circumstances for the commercial real estate sector. This circumstances and conditions will be different from the conditions of rapid economic growth period. In this framework, predictions for the commercial real estate sector are presented under the titles commercial real estate need and demand, commercial real estate supply, commercial real estate financing, commercial real estate returns and Istanbul commercial real estate market.

Commercial real estates are comprised of area markets and asset markets. Area markets are comprised of logistics areas and offices, asset markets are comprised of shopping

centers. Asset markets that mean shopping centers are being more affected from the conditions of the new period in the economy. Predictions in the commercial real estate sector are evaluated separately as shopping centers, logistics areas and offices.

IV.3.2.1 Need and Demand for Commercial Real Estates

The main factor determining the need and demand for the commercial real estates is the needs and effective demands of the users determined in the framework of economic developments and predictions.

For this reason, commercial real estate need and demand is the most dependent variable to economic growth and development.

It is predicted that 2009 is the year of contraction, 2010 is the year of normalization and the years between 2011 and 2014 are the years of a limited growth. In the framework of these predictions, it is predicted that user's need and demand for the commercial real estates will be limitedly increase.

New needs and demand will contract in 2009, in the year 2010 a normalization will be experienced and beginning from 2011 a limited and stable growth period will be seen in the needs and demands of the users.

It is predicted that needs and demands of the users will be revived firstly for office areas, and then for logistics spaces and lastly for shopping centers. In the new period, it is predicted that there will be significant changes in the demand for office, logistics areas and shopping centers.

Office Demand

After the period following the economic crisis, together with the decrease in employment and consolidation, need and demand of the renters for the office areas decrease. Users aim to effectively use the existing areas and to make consolidation among several office spaces in order to reduce the office renting costs. Users are aiming to decrease the per capita m² spaces with flexible work arrangements. It is

predicted that together with leaving the extra spaces, relatively low rent places will be preferred in case of new renting. For this reason, more small scale or large space offices will be preferred. It is expected that office areas will be diversified and demand for the new office areas outside of Central Business District will increase.

Logistics Area Demand

New conditions come into existence for the users demanding logistics space in the period after economic crisis. For the producers in the manufacturing industry, production, consignment volume and stocks are decreasing. It is demanded to have zero stock. For this reason, demand for the logistics spaces is being limited. Recession in the retail sales and acceleration in the good procurement limits the demand for logistics area.

Demand for the logistics spaces will be concentrated toward logistics buildings that are decreasing transaction costs, having flexible usage, effectively used and tailor-made.

Users aim to decrease the rented areas and making consolidations, changing places and to be located in the regions compatible with the new trade flows depending on the change in their business strategies.

It is predicted that logistics area demand will increase depending on the factors as expansion plans of the retail chains, increasing logistics need between production-consumption markets, low usage of the outsourcing of industry in Turkey, turning of Turkey into a regional trade center and transportation bridge.

Shopping Centers Demand

Creating demand for the shopping centers is users of the retail sector. Retail sector feed the growth in the shopping centers in Turkey. Growth of the retail sector is dependent on the growth in the retail expenditures of the households.

There will be important developments and changes in the demands of the retail sector in the new economic period. Especially, as a result of the limitations in sales,

retailers will be more selective in shopping center demands. Limitations in the purchasing powers of the households will expand the demand for outlet, department store and discount stores.

One of the important changes in the demands of the retailers will be about the rents. Slow down in the purchasing power of the households and restrictive effect of the competition on sales in the retail sector, limits the rent payment capacity of retailers. For this reason, retailers will prefer lower rents, rental allowances and turnover rents in the new period.

Factor that will positively affect the demand for the shopping centers will be the limited situation of the organized retail markets and a large growth space in this area.

IV.3.2.2 Commercial Real Estate Supply

Predictions for the commercial real estate supply are presented for shopping centers, offices and logistics areas separately.

Shopping Centers

1. There will be a significant slow down in the shopping center supplies.
2. Slow down in the shopping center supplies results from the delay or cancellation of the shopping center investments that are planned to be opened in the years 2009 and 2010. The total rentable shopping center areas that were planned to be opened in the years 2009 and 2010 by April 2008 is 3.54 million m². It is predicted that 1.8 million of these rentable shopping center areas will be completed among them.
3. It is predicted that shopping center supply will have a limited and stable growth between the years 2011 and 2014.
4. The new period will be a period of suppression and balancing of the existing supply for the shopping centers. As the supply increased too rapidly and unstably in the growth period, this new period will especially be a period of respite for the years 2009 and 2010.

5. It is predicted that in the new period shopping center supply will be diversified and differentiated. Shopping centers will be diversified according to the criteria like size, brand content, location, number of visitors and social activities. Shopping centers will become expert with different brand contents.

Office Market

1. Supply of the office market will be the one the least affected from the conditions of the new economic period.

2. According to the prediction that there will be a stable growth in the medium term in office need and demand, office supply will limitedly slow down and it will sustain its growth after 2010.

Logistics Areas

1. Logistics area supply has entered into the new period with a large stock. There has been a rapid increase in supply of logistics areas in recent years.

2. Nevertheless, logistics area need and demand that is in international standards, large-scale and multi-purpose still continue. Logistics area need is increasing as a result of the decrease in the transaction costs and increase in productivity. Accordingly, it is predicted that logistics area supply will halt in 2009, it will normalize in the year 2010 and it will enter into a re-growth period after 2011.

IV.3.2.3 Financing of the Commercial Real Estates

The most important effect of the new economic era on the commercial real estate sector will be contraction in the financing opportunities and deteriorating financing conditions. In this framework, predictions related to commercial real estate financing are presented below.

1. Contraction in the financing opportunities will be effective in the years 2009 and 2010; amelioration and expansion will remain limited in the following years.



2. Important part of the projects that are in the stage of investment and financed with more credit opportunities will be negatively affected by the contraction in the financing opportunities.

3. Costs of the financing opportunities used are rising and their due date shifts from 7-8 years to 3-5 years. Indemnification conditions for borrowing are deteriorated.

4. Leverage rates are decreasing in the financing of the investments. Need for the equity capital is increasing.

5. Traditional banking credits will have more places in the investment financing of the new period.

IV.3.2.4 Commercial Real Estate Returns

Commercial real estate returns are comprised of capital returns (increase in value) and investment returns (rent and other incomes). Commercial real estate returns will decrease in the new period. Both the decrease in the capital returns and the decrease in the investment returns will be effective in the decrease of returns.

1. Returns of the shopping center investments will be limited as a result of the regression in the rents and other incomes. Limitations in the investment returns will negatively affect the capital returns as well.

2. Regression in the office returns will be more limited. Office rent returns and investment returns will be affected later and more limitedly. Regression in the capital returns will slower.

3. Logistics area returns will give more delayed and limited reaction to the conditions of the new period. Although there will be rent rental allowance and search for cheaper rents as a result of the reduction in the transaction costs, as there is not compatible supply, rental allowances in the logistics areas will remain more limited.

4. As a result of the limitation in the commercial real estate returns, length of return in investments will get longer.

5. Decrease in the investment returns depending on the decrease in the rents of the commercial real estate returns, negatively affects cash flows and this derogates the cash positions of the investors.

IV.3.2.5 Istanbul Commercial Real Estate Market

Along side that Istanbul is the sole city of Turkey with commercial real estate market, it is one of the cities in the Europe's investment area having high priority. New economic period will also affect the position of the commercial real estate market of Istanbul.

In this framework, developments stated below are predicted to occur in the Istanbul Commercial Real Estate Market:

1. Global crisis has negatively affected the real estate markets of all developed and developing countries. It is observed that comparatively Istanbul commercial real estate sector will be less affected from the crisis and there would not be a rapid deterioration in the supply-demand balance and returns.

2. Istanbul is still protecting its investment and development potential for the commercial real estates. After a short-term fluctuation, determinative effect of this potential will be more effective in medium term.

3. Office, logistics areas and hotels are still in the position of buyer's market and it will continue to protect this characteristic in the medium term. Shopping centers has become a mature market.

4. Despite of the predictions of the slow down in the incomes, it is predicted that Istanbul will continue to offer high returns compared to other cities.

5. Slow down in the financing opportunities will limit the new investments, purchasing and involvement of the foreigners.

6. Decrease of the real estate prices in all other country markets, results into increase in the alternative competitors for Istanbul.

Section V

COMPARING OF THE CONDITIONS BETWEEN ECONOMIC GROWTH PERIOD AND POST-CRISIS ERA FOR REAL ESTATE SECTOR

Economic conditions are the main determinants of development in real estate sector. Between the years 2001-2007 a rapid growth period has been experienced in the world and Turkish economies and this growth affected the development of real estate sector positively in a global scale and Turkey.

A new post-crisis era arises after the global crisis which has been experiencing by 2008 for world and Turkish economies. This new economic era conditions will be a determinant for real-estate sector. The period of economic growth and post-crisis era have been comparing at the end of this study, also the previsions about the real estate sector presented within the new economic conditions.

The most important and distinct discrimination between these two periods is that the growth in global scale and Turkey is going to occur in a lower ratio in the new economic period.

The average growth in the world between 2002 and 2007 was 5 percent but it is going to be 3 percent through 2011-2014. On the other hand, yearly average growth in Turkey between 2002 and 2007 was 7.5 percent but it is going to be 4 percent through 2010-2014.

This deceleration affects all the other economic growths that are going to be slower than the previous period. In this framework, real estate sector will be in a limited growth under the new conditions in post-crisis period.

The previsions about real estate sector and new economic conditions for this period are presented below Table78.

TABLE.78 ECONOMIC CONDITIONS OF GROWTH PERIOD AND POST-CRISIS ERA FOR REAL - ESTATE SECTOR

ECONOMIC CONDITIONS OF GROWTH PERIOD 2002-2007	NEW ECONOMIC ERA CONDITIONS AFTER CRISIS 2010-2014	THE CONDITIONS OF NEW ECONOMIC ERA FOR REAL-ESTATE SECTOR
<p>RAPID ECONOMIC GROWTH</p> <p>WORLD 2003-2007 % 5</p> <p>TURKEY 2002-2006 % 7,5</p>	<p>LIMITED ECONOMIC GROWTH</p> <p>WORLD 2011-2014 % 3</p> <p>TURKEY 2010-2014 % 4</p>	<p>LIMITATION IN THE ECONOMIC BASIS WHICH SUPPORTS THE REAL ESTATE SECTOR</p> <p>DECELERATION IN THE REAL ESTATE SUPPLY AND DEMAND</p> <p>DECELERATION IN THE REAL ESTATE YIELD</p>
<p>RAPID GROWTH IN PRIVATE DISPOSABLE INCOME AND PERSONAL CONSUMPTION EXPENDITURES</p> <p>WORLD 2003-2007 % 4.0</p> <p>TURKEY 2002-2007 % 8.0</p>	<p>LIMITED GROWTH IN PRIVATE DISPOSABLE INCOME AND PERSONAL CONSUMPTION EXPENDITURES</p> <p>WORLD 2011-2014 % 2.0</p> <p>TURKEY 2010-2014 % 4.0</p>	<p>DECELERATION IN THE RETAIL SECTOR GROWTH</p>
<p>RAPID GROWTH IN PER CAPITA</p> <p>WORLD 2003-2007 % 4.0</p> <p>TURKEY 2002-2006 % 6.0</p>	<p>LIMITED GROWTH IN PER CAPITA INCOME</p> <p>WORLD 2011-2014 % 2.0</p> <p>TURKEY 2010-2014 % 3.0</p>	<p>DECELERATION IN PER CAPITA PURCHASING POWER AND LOAN CAPACITY AND LIMITATION IN REAL ESTATE DEMAND</p> <p>DECELERATION IN REAL ESTATE PRICE ESCALATION</p>
<p>RAPID GROWTH IN FOREIGN TRADE</p> <p>WORLD 2002-2007 %12</p> <p>TURKEY 2002-2007 %15</p>	<p>LIMITED GROWTH IN FOREIGN TRADE</p> <p>WORLD 2011-2014 % 6.4</p> <p>TURKEY 2010-2014 % 8</p>	<p>DECELERATION IN LOGISTIC, INDUSTRY FIELD AND OFFICE DEMAND AND SUPPLY</p> <p>DECELERATION OF PRICE INCREASING IN LOGISTIC, INDUSTRY FIELDS AND OFFICE</p>
<p>RAPID ENLARGEMENT IN PRIVATE SECTOR ACTIVITIES (FIXED CAPITAL INVESTMENTS)</p> <p>WORLD 2003-2007 % 8</p> <p>TURKEY 2002-2006 % 23</p>	<p>DECELERATION IN PRIVATE SECTOR ACTIVITIES (FIXED CAPITAL INVESTMENTS)</p> <p>WORLD 2011-2014 % 4</p> <p>TURKEY 2011-2014 % 8</p>	<p>DECELERATION IN COMMERCIAL REAL ESTATE DEMAND</p> <p>DECELERATION IN COMMERCIAL REAL ESTATE SUPPLY</p> <p>LIMITATION IN COMMERCIAL REAL ESTATE RENTS AND RETURN ON INVESTMENT</p>

TABLE.78 ECONOMIC CONDITIONS OF GROWTH PERIOD AND POST-CRISIS ERA FOR REAL - ESTATE SECTOR

ECONOMIC CONDITIONS OF GROWTH PERIOD 2002-2007	NEW ECONOMIC ERA CONDITIONS AFTER CRISIS 2010-2014	THE CONDITIONS OF NEW ECONOMIC ERA FOR REAL-ESTATE SECTOR
RAPID ENLARGEMENT IN FINANCIAL FACILITIES	DECELERATION IN FINANCIAL FACILITIES	DECELERATION IN REAL ESTATE FINANCING, INCREASING IN EXPENDITURES, SHORTENING TERMS SHRINKING IN LEVERAGE RATIO, RISK AVERSION BANK CREDIT AS A SOURCE OF FINANCE DOWN DIRECTED PRESSURE IN REAL ESTATE PRICES INCREASING EQUITY NEEDS IN REAL ESTATE INVESTMENTS
HIGH INFLATION WORLD 2002-2007 %5.0 TURKEY 2002-2008 % 10.0	LOW INFLATION WORLD 2002-2007 %3.0 TURKEY 2010-2014 % 6.0	LIMITATIONS IN INCREASING REAL ESTATE PRICES
LOW FISCAL DEFICITS AND PUBLIC BORROWING REQUIREMENT	HIGH FISCAL DEFICITS AND PUBLIC BORROWING REQUIREMENT	LIMITATIONS IN FINANCING CAPABILITIES THAT WILL BE TRANSFERRED TO REAL ESTATE SECTOR
RAPID ENLARGEMENT IN CAPITAL FLOW	DECELERATION IN CAPITAL FLOW	DECELERATION IN REAL ESTATE FINANCING CAPABILITIES DECELERATION IN GROSS IN AND BORDER DIRECT INVESTMENT LIMITATION IN REAL ESTATE DEMAND AND SUPPLY DOWN DIRECTED PRESSURE TO THE REAL ESTATE PRICES

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