

*This is the English translation of the Annual Report for 2010, originally published in Greek (in April 2011).*

## **2 THE REAL ESTATE MARKET: DEVELOPMENTS AND PROSPECTS**

### **2.1 RESIDENTIAL PROPERTY PRICES**

Since early 2009, residential property prices in Greece have shown negative rates of change. In more detail, based on data collected by the Bank of Greece from credit institutions,<sup>1</sup> prices for all apartments (in nominal terms) are estimated to have fallen in 2010 at an average annual rate of 4.0% (declining by 1.8%, 4.7%, 4.1% and 5.7% year-on-year in the first, second, third and fourth quarter, respectively), compared with a decrease of 3.7% in 2009. During the first quarters of the current crisis and up to the first quarter of 2010, the decline in prices was stronger for old apartments (over 5 years old) than for new apartments (up to 5 years old) (2009: old -4.8%, new -2.0%). This seems to reflect the relatively higher persistence initially displayed by the prices of newly-built apartments available for sale by construction firms. However, the prices of new apartments may have remained resilient through the first quarter of 2010, but have been falling at a faster rate thereafter (-5.3%, -5.0% and -8.1% in the second, third and fourth quarter of 2010, respectively) than the prices of old apartments (-4.3%, -3.4% and -4.0% in the second, third and fourth quarter, respectively).

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<sup>1</sup> Detailed data on appraisals of residential property collected since the beginning of 2009 by the Real Estate Market Analysis Section of the Bank of Greece pursuant to the Bank of Greece Governor's Act 2610/31.10.2008 on "Reporting by credit institutions of data on residential property which is financed or used as collateral for loans granted by credit institutions". Among other things, these data include credit institutions' appraisals on the current market value of residential property, as well as information on qualitative characteristics. The number of appraisals already reported to the Bank of Greece (until end-March 2011) reached around 528,000 residential properties (68.6% concerns apartments, 19% detached houses, 5.5% maisonettes, 5.1% building plots, 1.8% other types of residential property).



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According to the data broken down by geographical area, in 2010 as a whole, the prices of apartments registered the strongest decline in Thessaloniki (average annual change: -6.9%) as well as in the other areas of Greece (-4.8%), which are semi-urban or mainly rural areas and include secondary residences or holiday homes, compared with Athens (-2.8%) and other cities (-4.5%, see Table V.7).

Based on these figures, the relative persistence of Greek house prices may be associated with specific features of the Greek residential property market, such as the very high rate of owner-occupancy (well above 80%), low residential mobility and real estate resale frequency, the high costs of transactions, the limited number of transactions relative to the available stock, etc.,<sup>2</sup> as well as to increased uncertainty and lack of investment alternatives amid the current crisis.<sup>3</sup> On the other hand, the total construction cost of new buildings and mainly material cost were rising faster than inflation in the 2004-2008 period (average annual change in total cost: 4.1%; in material cost: 5.1%). Despite the recession, residential construction cost still remained at high levels in 2010 (total cost up by 1.8%; materials up by 3.0%), thus hindering any further decline in residential property prices.

In spite of this stickiness of prices, there does not seem to be a major overvaluation in the Greek real estate market, also given that the house price-to-rent ratio has been

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<sup>2</sup> For a comparison of the characteristics of housing markets in the OECD countries, see “Housing markets and structural policies in OECD countries”, OECD Economic Department, Working Paper No 836, January 2011.

<sup>3</sup> The relative persistence of prices in the Greek housing market may also be associated with the social attitudes of Greek households, which see the residential property as a means of intergenerational transfer (by parental donation or inheritance) rather than an investment instrument. It also reflects the structure of the construction industry – and mainly residential construction – which is dominated by a large number of small, family businesses, with a limited entrepreneurial scope or experience. Given their high profitability in the last decade, prior to the crisis, when the real estate prices were rising at a very high rate, these businesses did not have to resort to increased bank borrowing, thus explaining their resilience during the crisis.



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declining over the past three years (see Chart V.5).<sup>4</sup> The house price-to-rent ratio is expected to keep falling at a moderate pace in the following quarters, as a result of a further decline in house prices and the persistence of a positive, albeit slightly lower, rate of change in the price index of rents (annual rate of change: 3.6% in 2009, 2.4% in 2010, and 1.6% in the first two months of 2011, see Table V.7).

## **2.2 DEMAND FOR HOUSE PURCHASES**

During the current crisis, household demand for house purchases is characterised by relative cautiousness.<sup>5</sup> It is estimated that the cautionary stance of households is mainly associated with increased uncertainty about employment and future incomes, which has been exacerbated in the last few months by soaring unemployment, as well as by the uncertainty regarding the overall economic outlook and the remedy of fiscal and structural problems. Furthermore, households' increased expectations of even lower house prices in the future could have made them postpone such a decision.

Moreover, banks' greater cautiousness and tightened credit standards for new housing loans, on account of the crisis, are estimated to have also contributed to the weakening of household demand for house purchases.<sup>6</sup> Likewise, the slight increase observed in the interest rates on new housing loans since March 2010 and their emerging upward trends

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<sup>4</sup> The house price-to-rent ratio is typically used in conjunction with other indicators (e.g. interest rates, yields of alternative investments, cyclical position) to determine whether there might be a bubble in current real estate prices.

<sup>5</sup> According to a survey by the Athens University of Economics, presented in the context of the "Property 2011: 4th International Exhibition and Conference on Real Estate" organised by HELEXPO (18-21 March 2011), 79.3% of the respondents reported that they were unlikely to buy a house within the next two years, while 13.9% stated that they might or might not make a purchase, 4.1% replied that they were most likely to buy, and only 2.2% reported that they would definitely purchase a house.

<sup>6</sup> Weakened demand is also evident in the declining growth rates of housing loans, especially in the wake of the recent financial crisis. More specifically, despite the lower interest rates on housing loans since November 2008, the annual rate of change in the outstanding balance of bank loans to households for house purchases stood at -0.4% at end-2010 (February 2011: -1.1%), i.e. down from 3.7% at end-2009 and 11.5% at end-2008.



in the next few months might have further discouraged households from purchasing a house. It should also be noted that, during the crisis, households' interest has shifted towards smaller, older and, above all, less costly houses.<sup>7</sup> Finally, the relative bank lending shortage has led to an increase in the share of transactions paid for in cash, as well as in the share of cash in the total financing of real estate purchases.

### **2.3 REAL ESTATE SUPPLY AND NUMBER OF TRANSACTIONS**

In the last two years the Greek real estate market has been characterised by excess supply and a sizable stock of properties available for sale. On the supply side, the excess stock that had accumulated until the end of 2008 is estimated to have remained roughly unchanged in the 2009-2010 period, despite the relative cautiousness on the demand side. The slowdown in private construction activity over the last two years (see Chart V.6) was broadly in line with a corresponding drop in the number of real estate transactions. Indeed, the number of new building permits fell by 16.1% in 2009 and 10.9% in 2010, while the total number of notarial acts for real estate transactions dropped by 13.9% in 2009, for which data are available.<sup>8</sup> A similar decline was observed in the number of real estate transactions, on the basis of contracts recorded in the Hellenic National Cadastre by "Ktimatologio S.A." (down by 16.3% in 2009 and 9.8% in 2010) and real estate transaction contracts signed in the presence of a lawyer according to the Athens Bar Association (-18.0% and -16.3%, respectively) for the area of Athens.

It should also be noted that private building activity in terms of floor space and volume, as well as the value of real estate items transferred in the last two years, decreased at considerably higher rates than the numbers of new building permits and of real estate

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<sup>7</sup> This is evidenced by the quarterly survey on the country's major real estate agencies conducted by the Real Estate Market Analysis Section of the Bank of Greece. For further details, see [http://www.bankofgreece.gr/BoGDocuments/TE\\_EREVNA\\_KTIMATOMESITON.pdf](http://www.bankofgreece.gr/BoGDocuments/TE_EREVNA_KTIMATOMESITON.pdf).

<sup>8</sup> Specifically, based on ELSTAT data collected from notaries nationwide, the number of notarial acts for real estate transactions fell from 167.7 thousands in 2007 to 158 thousands in 2008 and to 136 thousands in 2009.



transactions. This is consistent with the previous finding regarding the shift in households' interest towards smaller, more affordable houses (see Table V.7).<sup>9</sup>

## **2.4 COMMERCIAL PROPERTY MARKET**

The above findings on recent developments mainly in the residential property market, also refer – more or less – to the commercial property market (offices, retail properties, industrial buildings, storage/logistics buildings, etc.). In more detail, subdued demand by enterprises coupled with a shift towards less expensive commercial property, a considerable supply of mostly old property, lower prices and lending shortage are the main characteristics of the commercial property market in the last few years. In addition, an increase in vacant stores and offices, a sharp decline in rents with the elimination of the component corresponding to the intangible value of the property (goodwill) and a renegotiation of leasing contracts mainly in the secondary or regional markets are observed. Finally, cautiousness characterises the development of new investment plans, despite a considerable increase in the total floor space occupied by large shopping malls and department stores observed in the last two years mainly in the Attica region.

## **2.5 EXPECTATIONS AND PROSPECTS**

Undoubtedly, the negative medium-term expectations for both the real estate market and the Greek economy in general strongly affect the Greek real estate market's ability to recover. IOBE's business confidence index in the construction sector dropped by 40.9% in the first quarter of 2011, compared with a fall of 27.4% in 2010 and of 31.4% in 2009. In March 2011, business expectations in construction stood at strongly negative levels, in terms of activity relative to the previous quarter, planned future activity and

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<sup>9</sup> Similar findings emerge based on the number, total square metres and value of residential property transactions with MFI intermediation in the two years 2009-2010 (data collected from credit institutions). In this period, the average annual rate of decline in the number of such transactions was 18.4%, compared with a corresponding fall of 19.9% in square metres and of 23.5% in total value.



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prospects for employment over the next 3-4 months (weighted percentage balances of positive and negative answers: -69, -83 and -67, respectively).

In the upcoming quarters, a further slight correction is expected in real estate market prices, while it is estimated that the new emerging conditions may keep any risks of price shocks at bay. It should be noted, however, that the recovery of the real estate market is now directly linked with the improvement of household and business expectations, the easing of uncertainty and the availability of bank credit to the market, as well as with the overall outlook for the tackling of Greece's economic problems. The clear messages about the ability to effectively address Greece's fiscal and structural problems are expected, among other things, to contribute to a rapid unfreezing of the Greek real estate market.



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**Table V.7 Summary table of key-short indicators for the real estate market**

INDICATORS	Average annual percentage changes						
	2005	2006	2007	2008	2009	2010	2011
<b>1. Indices of prices of dwellings (BoG) and rents (ELSTAT)</b>							
1.1 Indices of apartments prices by age and geographical area ( <u>New series</u> )							
a. All apartments (Greece)	-	-	5.9	1.7	-3.7	-4.0	...
a1. By age							
a. New (up to 5 years old)	-	-	7.2	2.3	-2.0	-4.4	...
b. Old (5 years old and above)	-	-	5.2	1.3	-4.8	-3.8	...
a2. By geographical area: Total							
a. Athens	-	-	6.2	0.9	-4.6	-2.8	...
b. Thessaloniki	-	-	7.0	1.5	-6.0	-6.9	...
c. Other cities	-	-	6.3	1.8	-2.7	-4.5	...
d. Other areas	-	-	4.6	3.3	-1.9	-4.8	...
a2.1. By geographical area: New (up to 5 years old)							
a. Athens	-	-	9.6	0.0	-3.5	-2.9	...
b. Thessaloniki	-	-	3.7	3.5	-5.3	-7.1	...
c. Other cities	-	-	7.8	2.4	-2.1	-4.4	...
d. Other areas	-	-	4.1	5.4	1.0	-5.7	...
a2.2. By geographical area: Old (5 years old and above)							
a. Athens	-	-	4.5	1.4	-5.2	-2.8	...
b. Thessaloniki	-	-	8.4	0.6	-6.3	-6.8	...
c. Other cities	-	-	5.3	1.4	-3.2	-4.6	...
d. Other areas	-	-	5.0	1.4	-4.4	-4.0	...
1.2 Indices of prices of dwellings ( <u>Historical series</u> )							
a. Urban areas	10.9	12.4	5.1	1.7	-4.3	-3.9	...
a1. Athens	8.6	11.7	6.2	0.9	-4.6	-2.8	...
a2. Other urban areas <sup>1</sup>	13.4	13.0	3.8	2.6	-2.9	-6.0	...
1.3 Price index of rents	4.2	4.4	4.5	3.9	3.6	-2.4	1.6 (2 months)
1.4 Price-to-rent ratio (2007=100) <sup>2</sup>	90.9	98.7	100.0	97.9	91.0	85.2	...
<b>2. Indices of residential property transactions</b>							
2.1 Indices of residential property transactions with MFI intermediation (BoG) <sup>3</sup>							
a. Number of transactions	-	-	36.8	-21.7	-35.7	-1.0	...
b. Volume of transactions (in square metres)	-	-	36.6	-23.5	-38.9	-0.8	...
c. Value of transactions	-	-	41.1	-20.0	-40.0	-6.9	...
2.2 Indices of contracts of real estate transactions with representation of lawyer: Athens (DSA)							
a. Number of contracts	-	-22.3	1.4	-10.0	-18.0	-16.3	...
b. Value of contracts	-	-2.9	12.5	-2.3	-28.3	-20.8	...
2.3 Indices of deed of real estate <sup>4</sup> transactions (ELSTAT)							
a. Greece, total	29.6	-19.6	-3.0	-5.8	-13.9	...	...
b. Athens	49.5	-22.0	-8.2	-9.2	-14.0	...	...
2.4 Number of real estate <sup>4</sup> transactions (Hellenic National Cadastre)							
a. Greece, total	-	-	-	-	-16.3	-9.8	...
b. Athens	-	-	-	-	-15.2	-12.5	...
2.5 Number of real estate <sup>4</sup> transfers (Hellenic National Cadastre)							
a. Greece, total	-	-	-	-	-14.0	-13.0	...
b. Athens	-	-	-	-	-8.0	-19.2	...
<b>3. Construction costs indices of (new) residential buildings (ELSTAT)</b>							
3.1 Total cost	3.4	4.3	4.6	5.1	-0.3	1.8	...
3.2 Price index of work categories or producer's	2.6	2.9	2.8	4.2	-0.2	0.3	...
3.3 Labour cost	3.1	2.6	2.4	3.3	0.3	0.0	...
3.4 Materials cost	3.6	5.6	6.3	6.4	-0.7	3.0	4.0 (2 months)

Sources: BoG: Bank of Greece, ELSTAT: Hellenic Statistical Authority, DSA: Athens Bar Association, TEE-TCG: Technical Chamber of Greece, IOBE: Foundation for Economic and Industrial Research, Ktimatologio SA: Hellenic Cadastre, Athens Land Registry.

1 Data collected by the branches of BoG, mainly from real estate agencies.

2 In absolute terms.

3 The indices of residential property transactions are based on appraisal reports by banks' engineers regarding the value and qualitative characteristics of the residential properties underlying loan agreements. It cannot be excluded that part of such appraisals are not connected with transactions in residential property, but concern a renegotiation of existing loans, registration of a mortgage to back non-housing loans, debt transfers from one bank to another, etc.

4 Including all real estate categories of residential and commercial properties (dwellings, general stores, offices, building plots, rural plots, etc.)





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**Table V.7 Summary table of key-short indicators for the real estate market (continued)**

INDICATORS	Average annual percentage changes							2011
	2005	2006	2007	2008	2009	2010		
<b>4. Private construction activity (ELSTAT)</b>								
4.1 Greece, total								
a. Number of building permits	22.0	-14.9	-7.2	-17.6	-16.1	-10.9		...
b. Floor Space (in square metres)	43.0	-23.9	-7.8	-19.0	-24.4	-19.8		...
c. Volume (in cubic metres)	36.9	-19.2	-5.8	-17.3	-26.5	-23.7		...
4.2 Athens								
a. Number of building permits	35.9	-15.3	-13.8	-28.7	-15.3	-13.8		...
b. Floor Space (in square metres)	58.2	-24.6	-14.0	-26.1	-18.6	-33.6		...
c. Volume (in cubic metres)	51.9	-20.6	-13.3	-25.2	-19.4	-35.5		...
<b>5. Construction activity</b>								
5.1 Cement production (volume, ELSTAT)	2.4	3.1	-9.2	-3.1	-21.4	-14.3	-8.1	(Jan./Jan.)
5.2 Public investment programme disbursements (BoG)	-21.0	8.9	7.6	9.3	-2.8	-11.3	-41.4	(3 months)
5.3 Production indices in construction (ELSTAT)								
a. General Index	-38.8	3.7	14.3	7.8	-17.5	-31.6		...
b. Construction of buildings	-15.3	-9.9	6.7	-0.5	-24.1	-38.1		...
c. Civil engineering projects	-49.9	18.3	20.5	13.8	-13.4	-28.0		...
5.4 Civil engineer fees (TEE-TCG)								
a. Total	-	-5.3	23.5	6.2	-16.2	-2.1	4.7	(2 months)
b. Construction plan fees	-	-8.4	19.0	11.0	-14.5	1.6	31.0	(2 months)
c. Construction supervision fees	-	1.5	32.5	-2.4	-19.6	-10.0	-47.6	(2 months)
<b>6. Business Expectations (IOBE)</b>								
6.1 Index of business expectations in construction (private activity)	-22.7	44.6	1.5	3.0	-31.4	-27.4	-40.9	(3 months)
a. Total private construction	-11.7	12.8	1.9	-8.4	-43.2	9.3	-28.7	(3 months)
b. Dwellings	-3.2	-9.0	27.6	-14.0	-28.4	-32.4	-47.2	(3 months)
c. Other buildings	-12.5	2.9	13.4	0.9	-46.8	20.2	-25.2	(3 months)
d. Public works	-30.2	68.4	0.8	9.5	-24.6	-41.0	-47.4	(3 months)
6.2 Months of assured production in construction <sup>2</sup>								
a. Total construction	13.9	15.7	16.8	17.3	15.9	12.9	13.9	(Mar.)
b. Dwellings	11.3	14.7	15.4	11.7	11.0	8.3	5.2	(Mar.)
c. Other buildings	8.7	9.3	10.1	9.8	8.4	7.8	5.8	(Mar.)
d. Public works	15.9	18.4	19.5	21.1	19.8	15.2	17.7	(Mar.)
6.3 Activity relative to previous quarter <sup>5</sup>								
a. Total construction	-27.3	11.8	10.2	10.0	-16.1	-39.0	-69.1	(Mar.)
b. Dwellings	-2.0	24.0	-11.0	-22.0	-30.7	-58.1	-74.2	(Mar.)
c. Other buildings	-13.5	13.2	16.4	25.6	-28.8	-27.9	-64.1	(Mar.)
d. Public works	-35.9	9.0	11.3	8.1	-8.2	-41.0	-70.4	(Mar.)
6.4 Planned future activity <sup>5</sup>								
a. Total construction	-57.8	-44.9	-33.2	-28.8	-42.8	-63.2	-82.9	(Mar.)
b. Dwellings	-40.6	-22.3	-22.1	-38.9	-52.3	-84.6	-94.7	(Mar.)
c. Other buildings	-41.9	-45.6	-30.3	-22.7	-56.3	-45.5	-62.7	(Mar.)
d. Public works	-65.9	-49.9	-36.5	-30.0	-36.5	-67.6	-88.9	(Mar.)
6.5 Prospects of employment over the next 3-4 months <sup>5</sup>								
a. Total construction	-22.1	18.7	9.6	10.4	-32.1	-46.4	-67.0	(Mar.)
b. Dwellings	4.3	31.0	1.5	-32.6	-60.9	-60.3	-73.4	(Mar.)
c. Other buildings	-1.7	6.6	12.8	6.9	-45.8	-36.7	-32.5	(Mar.)
d. Public works	-32.4	21.0	9.0	18.8	-21.2	-48.3	-78.6	(Mar.)

Sources: BoG: Bank of Greece, ELSTAT: Hellenic Statistical Authority, DSA: Athens Bar Association, TEE-TCG: Technical Chamber of Greece, IOBE: Foundation for Economic and Industrial Research, Ktimatologio SA: Hellenic Cadastre, Athens Land Registry.

<sup>2</sup> In absolute terms.

<sup>5</sup> Difference between weighted percentages of positive and negative replies.







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**Table V.7 Summary table of key-short indicators for the real estate market (continued)**

INDICATORS	Average annual percentage changes						
	2005	2006	2007	2008	2009	2010	2011
<b>7. Investment in construction (ELSTAT) and capital inflows (BoG)</b>							
7.1 Investment in construction <sup>6</sup>							
a. Total construction	-7.8	16.4	-4.1	-18.9	-12.3	-12.5	...
b. Dwellings	-0.5	29.8	-8.6	-29.1	-21.7	-18.6	...
7.2 Investment in construction as a percentage of GDP <sup>2,6</sup>							
a. Total construction	11.8	13.0	12.0	9.6	8.6	7.9	...
b. Dwellings	7.4	9.2	8.1	5.7	4.5	3.8	...
7.3 Net capital inflows from abroad for property purchasing in Greece	48.0	55.4	66.5	-58.2	-24.4	-35.4	-64.2 (Jan./Jan.)
<b>8. Outstanding balances of loans from domestic MFIs to households (BoG)<sup>7</sup></b>							
8.1 Total	31.0	25.7	22.4	12.8	3.1	-1.3	-1.6 (Feb.)
8.2 Housing loans	33.0	26.3	21.9	11.5	3.7	-0.4	-1.1 (Feb.)
<b>9. Housing loan interest rates (BoG)<sup>2</sup></b>							
9.1 On new housing loans <sup>8</sup>	4.3	4.7	4.9	5.3	4.1	3.8	4.5 (Feb.)
9.2 On outstanding housing loans with initial maturity over 5 years	4.8	4.9	5.1	5.1	4.3	3.7	3.7 (Feb.)
<b>10. Indicators of financing stress (BoG)<sup>2</sup></b>							
10.1 Percentage of non-performing loans							
a. Total loans	6.3	5.4	4.5	5.0	7.7	10.4	...
b. Housing loans	3.6	3.4	3.6	5.3	7.4	10.0	...
c. Corporate loans	7.1	6.0	4.6	4.3	6.7	8.7	...
d. Consumer loans	7.8	6.9	6.0	8.2	13.4	20.5	...
10.2 Loans to households as a percentage of GDP <sup>7</sup>							
a. Total loans	35.4	40.6	45.9	49.5	50.9	51.3	...
b. Housing loans	23.3	27.0	30.5	32.8	34.3	34.9	...

Sources: BoG: Bank of Greece, ELSTAT: Hellenic Statistical Authority, DSA: Athens Bar Association, TEE-TCG: Technical Chamber of Greece, IOBE: Foundation for Economic and Industrial Research, Ktimatologio SA: Hellenic Cadastre, Athens Land Registry.

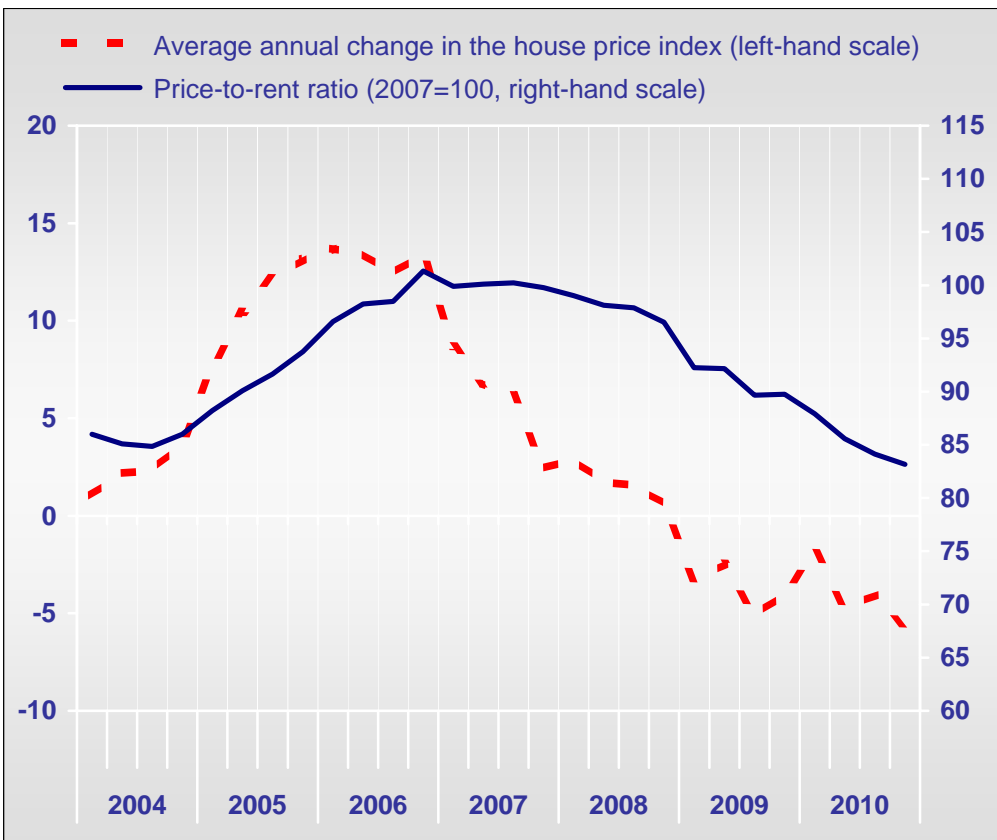
2 In absolute terms.

6 Constant prices.

7 End of period amounts, including loans and securitised loans.

8 Including charges other than interest (handling fees, mortgage registration fees, etc.).

Chart V.5 Price-to-rent ratio



Source: Bank of Greece

**Chart V.6 Private Construction Activity: Volume (in cubic metres)  
(January 2007 - December 2010)**

**Annual percentage change**

