WIFO
A-1103 WIEN, POSTFACH 91
TEL. 798 26 01 • FAX 798 93 86

ÖSTERREICHISCHES INSTITUT FÜR WIRTSCHAFTSFORSCHUNG

Housing Construction and Renovation as a Tool of Economic Prosperity

Margarete Czerny, Michael Weingärtler

Research assistance: Monika Dusek

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Internal review: Gunther Tichy
Research assistance: Monika Dusek

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E-mail addresses: Margarete.Czerny@wifo.ac.at, Michael.Weingaertler@wifo.ac.at, Monika.Dusek@wifo.ac.at
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Contents **Page**

1. Current Situation and Future Goals

In the past, a characteristic attribute of housing construction has been its role as a driving economic force. Country-to country differences in economic growth within the European Union have, to a considerable extent, been ascribed to the influence of housing construction. The effects of a contraction in housing construction reverberate throughout the entire construction sector, and subsequently through private consumption as well, ultimately influencing the overall course economic growth. Due to its strong domestic effects, the housing sector plays a key role in growth and employment policy, also with respect to the goals set forth by the Lisbon Strategy.

Housing construction not only guarantees a sufficient supply of dwellings, it is also an essential factor in securing public welfare. The Federal Government Programme 2007 to 2010 (*Bundeskanzleramt/Federal Chancellery,* 2007) explicitly calls attention to the fact that housing, just like jobs and health care, is a basic human need and must therefore not only be affordable and available, but also conform to high quality standards. These principles can be realised through the continuation of housing subsidisation, by striving to make housing environmentally friendly and providing affordable dwellings to younger segments of the population.

The situation in housing also effects the supply side of the economy, particularly the mobility of the work force within the European Union. Shortages in the housing market, as well as high transaction costs, hinder mobility (*European Central Bank,* 2003).

Aside from its economic significance, housing construction also has lasting social effects and exerts long term influence not only on the environment, but also on social conditions and culture.

The focus of this paper is to analyse the short and long-term development of housing construction in the context of the economy as a whole. The cyclical effects of housing construction on the economy, as well as the most important factors presently influencing housing construction will be presented. Special attention will be directed toward demographic developments and the significance of instruments of subsidisation in Austria.

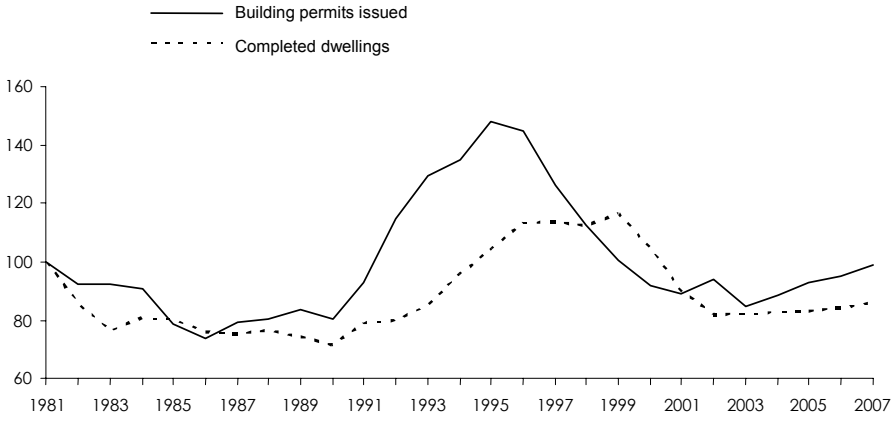
In addition, housing policy measures in the member countries of the EU 25 will be summarised in light of the goals set forth by the Lisbon Strategy, which were presented during the Austrian Presidency of the European Union in June 2006. Finally, new chances for the Austrian housing sector arising from growing housing markets in the CEECs will also be examined.

1.1 The development of housing construction in Austria

Housing construction in Austria experienced a lasting boom from 1991 to 1997. The demand for housing grew as a result of significant migration following the opening of Eastern Europe and the simultaneous rise in demand through the coming of age of the babyboom generation of the 1960s. From 1998 onwards, activity in housing construction declined continually, and housing construction lost its significance as a growth factor. The number of dwellings completed annually had reached a high level and demand in certain segments of the housing market was saturated. Output in new residential construction declined and stagnated from the end of the 1990s until the middle of the following decade. It was not until 2006 that investment picked up strongly; this positive trend will continue into the second half of the decade.

In the early 1990s, output in residential construction amounted to approximately 36,000 dwellings annually, while during the second half of the decade the figure rose to nearly 60,000. From the year 2000 onwards, annual output diminished to approximately 43,000 units.

Figure 1:Building permits issued and completed residential units in Austria



Source: Statistics Austria, WIFO. 2003 to 2007: preliminary figures.

A comparison of investment in residential construction with the most important demand components over a ten year period reveals significant differences in growth. Investment in housing construction increased during the 1990s – following a period of stagnation during the 1980s – nearly twice as much as GDP, and in contrast declined during the last ten years by approximately 3 percent annually. Growth in real GDP weakened during the ten year period 1996/2006, amounting to +2.2 percent annually in comparison to the previous ten year period (1986/1996 +2.7 percent p.a.). Beginning in 2005, the most recent overall economic upturn was initially supported by exports, while housing output has contributed strongly since 2006.

Table 1: The development of housing investment compared with the most important demand aggregates

	GDP	Housing investment	Construction investment	Private consumption	Exports
	Average annual change in percent				
1976/1986	+ 2,1	+ 0,0	– 0,1	+ 2,2	+ 5,4
1986/1996	+ 2,7	+ 4,4	+ 3,6	+ 2,7	+ 5,5
1996/2006	+ 2,2	– 3,0	+ 0,5	+ 1,5	+ 8,0
2006/2011	+ 2,5	+ 3,2	+ 2,8	+ 2,0	+ 6,5

Source: Statistics Austria, WIFO calculations, *Baumgartner – Kaniovski – Walterskirchen* (2007).

The latest medium-term WIFO forecast predicts that through 2011, growth will be significantly stronger than during the first half of the decade (2001-2006). Overall economic growth will be supported primarily by investment in the construction sector, specifically in housing construction, as well as by the export sector. For the first time in ten years, output in housing is expected to grow more strongly (+3.2 percent annually from 2006 to 2011) than GDP (+2.5 percent p.a.).

The following factors will be decisive to the increased demand for housing during this five year period:

- Demographic changes as a result of migration
- Low rates of interest over the entire period
- Stronger demand for energy-efficient buildings (compliance with the goals of the Kyoto Protocol necessitates the use of modern technologies for heating and cooling systems)
- Greater mobility
- Increased demand for housing suitable for single persons and the elderly
- Greater demand for housing in centrally located urban areas
- New trends in architecture and innovative design
- The redevelopment of entire urban areas
- Increased demand for housing for migrants and the socially disadvantaged

1.2 The effects of residential construction on employment

Of all closely related economic sectors, residential construction is one of the most important sources of employment in the national economy. Of the 240,000 dependent employees in the construction industry, approximately 40 percent work in residential construction (approximately 100,000 persons, according to WIFO estimates). Recent WIFO calculations carried out by means of the WIFO PROMETEUS Model show that the direct and indirect employment effects are greatest in residential construction. In building-related trades, which to a great extent can be classified under residential construction, and particularly in housing renovation, approximately 1,200 jobs will be created through new investments amounting to as much as € 100 million. In residential construction as a whole, the direct and indirect employment effects are approximately +1,100 (Table 2).

Table 2: Direct and indirect employment effects in construction and housing

	Number of persons per investment of € 100 million
Total residential construction	+ 1.090
Residential buildings and settlements	+ 990
Adaptations, multistory buildings	+ 1.075
Building-related trades	+ 1.150
Other multistory structures	+ 900
Total civil engineering	+ 780
Transport infrastructure	+ 730
Other civil engineering	+ 850

Source: WIFO Calculations (2007).

These employment effects are considerably higher in residential construction than in other economic sectors – nearly 50 percent higher than in the export sector and 25 percent higher than in private consumption.

On the basis of various model calculations in the EU, an average long-term view reveals that employment effects of up to +24,000 are possible (EU Focal Point on Housing 2006). The research at hand determines the additional employment effects (marginal effects), which arise when investment in residential construction is also implemented as an economic instrument.

2. The Influence of Residential Construction on the Overall Economy

Residential construction is an important sector in construction and is one of the most significant domestically oriented economic sectors in Austria. Aside from consumption, investment in construction and residential construction are among the most significant factors influencing domestic demand. In 2006, the National Account declared nominal investment in residential construction at a level of approximately € 11.5 billion. This figure corresponds to approximately 4.5 percent of GDP.

In the past, residential construction has been considered to be a driving economic force. Nevertheless, with the exception of the year 1988 and the mid 1990s, its contribution to GDP has, since the 1960s and 1970s, been continually declining.

There is a close connection between the development of investment in residential construction and GDP, as has already been attested by simple regression analyses carried out by WIFO (1964/2005 $R^2 = 0.74$). A more exact cyclical analysis of the overall economy, of residential construction and of non-residential construction (construction investment minus investment in residential construction) was made on the basis of quarterly data on GDP and real investment in residential construction for the period 1988/2006[1]. According to this analysis, there are two reasons why, during the last ten years, real investment in residential construction had a stabilising effect on overall economic development.

- On the one hand, there are only very slight deviations in the cyclical trends for residential construction
- On the other hand, investments in residential construction have, to a certain extent, an anti-cyclical effect on other investments. Thus, residential construction can counter-balance the relative volatility of non-residential construction, thereby stabilising cyclical activity in the construction sector as a whole.

Figure 2 compares the cycles of the overall economy, which have been filtered according to the Baxter-King model, with those of various construction aggregates. The amplitudes on the y-axis indicate the degree of cyclical fluctuation. Residential construction fluctuates less than the construction sector as a whole and above all, less than GDP. Over the last ten years, upward and downward tendencies in the overall economy were subdued by investment in residential construction. The overall economic upswing in the year 2000 was not entirely reproduced by construction investment. On the other hand, activity in residential construction rose in 2003, during a period of unfavourable economic development

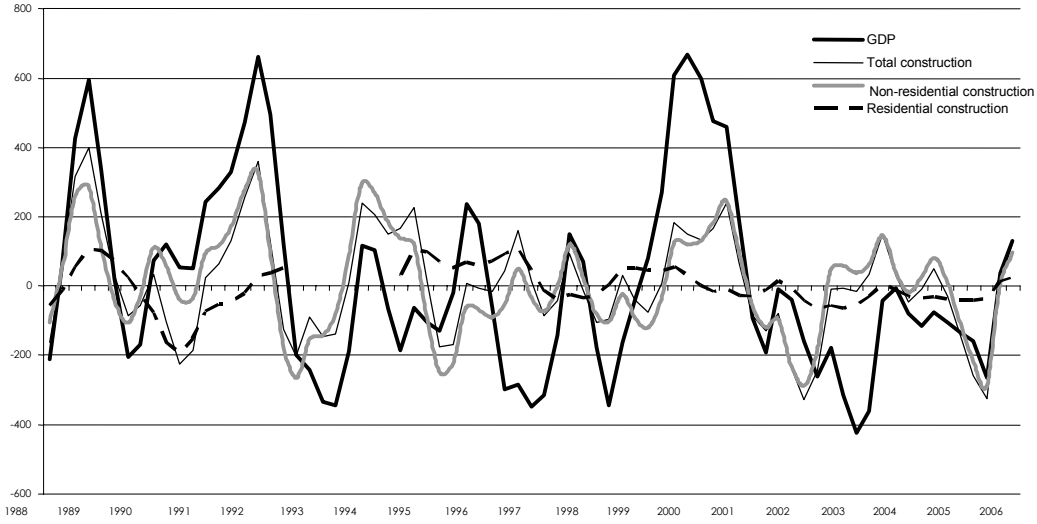
[1] For this investigation of cyclical deviations in individual economic sectors, *Scheiblecker* (2007) used a filter (Baxter-King Filter), with which the cyclical effects could be precisely identified. The individual time series are adjusted with respect to trend, seasonal and irregular components (such as disturbances due to differing numbers of workdays) in order to isolate the true cyclical effects.

(2001/2003). During 2003 output in residential construction expanded markedly, thereby supporting the economy as a whole. In addition, there was the exceptional situation that some construction activity was undertaken earlier than planned, due to fears that there would be a cutback in housing subsidisation in connection with pending negotiations regarding fiscal equalisation for the period 2004 to 2008 (which did not materialise). The slight decline in investment in residential construction as appears in the National Account for the year 2003 seems to be attributable to statistical adjustments. In 2004, activity in residential construction declined along with the generally weaker economy, while towards the end of 2005 an upturn in residential construction became noticeable. During the course of 2006, activity increased significantly, with real investment in residential construction expanding by over 7 percent.

In contrast to residential construction, non-residential construction exhibits comparatively strong cyclical fluctuations. To a certain extent, residential construction can counter-balance this trend. A contingency table test was used to investigate the closeness of the relationship between the development of residential and non-residential construction. The test confirmed that there is no statistical relationship between the cycles of the two aggregates. The corrected contingency coefficient K.KK* amounts to 0.248, which means that in only approximately twenty-five percent of all cases, both values expanded or contracted simultaneously. The fact that investments in non-residential construction follow the same pattern as the general economic cycle attests to the stabilising function of residential construction in the Austrian economy.

Figure 2: Cyclical activity in residential construction, in the construction sector and in the overall economy.

Baxter-King filtered quarterly series; deviation from long term average in million €



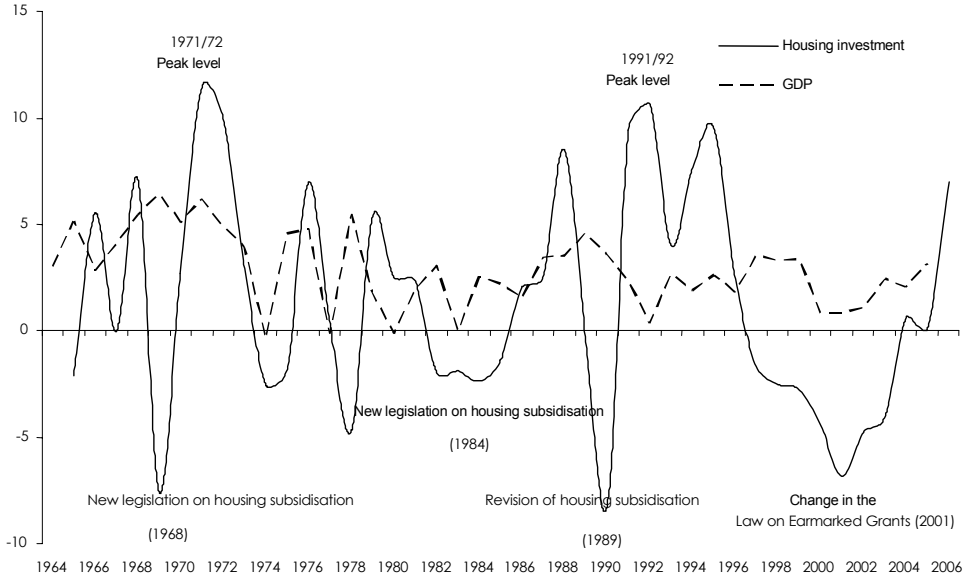
Source: WIFO Calculations (2007).

Long-term observations of cyclical activity in Austria since 1964 reveal that, when measured according to GDP, the entire economic cycle lasts 7 to 10 years. Recessions occurred in 1967, 1975, 1982, 1991 and 2001, recurring on average every 8 years. Recessions are followed by an upturn of 3 to 4 years' duration, which precedes a slight decline in growth, persisting for another 3 to 4 years. The upturn is initially carried by exports, then by investments in machinery and equipment, as well as in construction and residential construction. The upturn is generally accompanied by an acceleration in inflation. Monetary policy subsequently reacts with a rise in the key interest rate. As a result, there is little further investment following the upturn, investment decreases considerably, which ultimately leads to recession.

Depending on the general economic cycle, the effects of the cycle in residential construction can be either simultaneous or delayed, and can subdue or amplify. According to long-term observations, the cycles in residential construction can be approximately twice as long as the overall economic cycle or they can run independently (*Krugmann,* 1994).

In Austria, the cycle in residential construction lasts 20 years, according to the long-term observation, interrupted by exceptional factors related to changes in subsidisation. Negative outliers occur primarily in connection with changes in housing subsidisation legislation (housing subsidisation legislation of 1968 and 1984, revision of housing subsidisation in 1989, changes in the Federal Law on Earmarked Grants in 2001). The course of long-term cyclical development could be an indication that residential construction will pick up through the year 2010.

Figure 3: Development of investment in residential construction and GDP, real change with respect to the previous year, in percent.



Source: Statistics Austria, National Account, WIFO calculations.

3. Factors most influential to the Austrian Housing Market

In the Austrian housing market, the development of demand is primarily shaped by demographic factors. As the population ages, there is, on the one hand, growing demand for housing that specifically meets the needs of the elderly. On the other hand, new developments, such as the trend towards single households and improved living standards, are causing the demand for more living space per inhabitant to rise. Population growth, which to an increasing extent, is attributable to migration, is one of the greatest challenges to housing policy.

3.1 Demographic factors

3.1.1 Migration

In Austria, the demand for housing and the subsequent demand for new residential construction are predominantly determined by demography in general, and household trends specifically. The short- and medium-term effects of the number of births and deaths on the size of the population is extremely slight. These are very closely related to social and economic conditions and change only very slowly. In contrast, great fluctuations are evident in transborder migration; each wave of immigration has a direct effect on the housing market. Aside from the direct effect (in the first generation), immigration can lead to a chain reaction (for example, once one family member has immigrated, additional family members follow) which results in a steady influx of immigrants. It was in this fashion that following World War II, immigration to Austria characteristically took place in waves (*Biffl,* 2006).

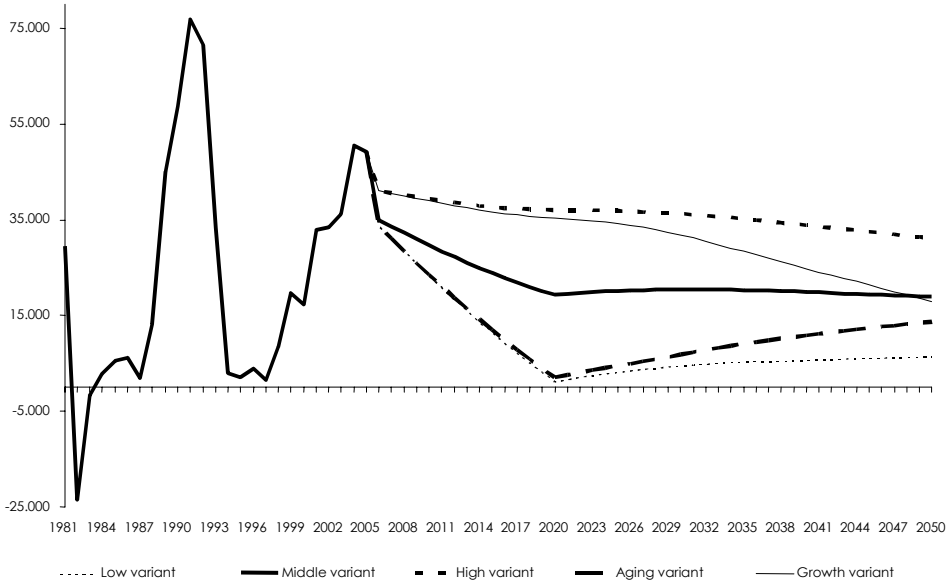
Streams of migration are prompted by social, economic, political, and other occurrences. The point in time and the magnitude are therefore difficult to foresee. The complexity of the mechanisms leading to these events contributes to the great uncertainty regarding future streams of migration. Statistics Austria revises its long-term forecasts more or less annually[2].

The current housing forecasts by ÖROK (The Austrian Conference on Spatial Planning) are based on the mid-term ÖROK Population and Household Forecast, whereby the true increase in migration to Austria (see Table 3) is apparently markedly underestimated. Following the strongest years of immigration between 1989 and 1993 (opening of Eastern Europe), when net migration amounted to approximately +80,000 persons per year, the situation relaxed somewhat and touched bottom in 1997. Since then, net migration has again grown stronger, averaging some 50,000 persons annually. The middle immigration variant assumes an

[2] These frequent revisions are, however, not only an answer to the changes in the dynamics of migration towards the end of the 1990s, but are also due to new methods of compiling data on population development.

average annual increase of 30,000 between 2005 and 2015, and thus tends to underestimate actual population development.

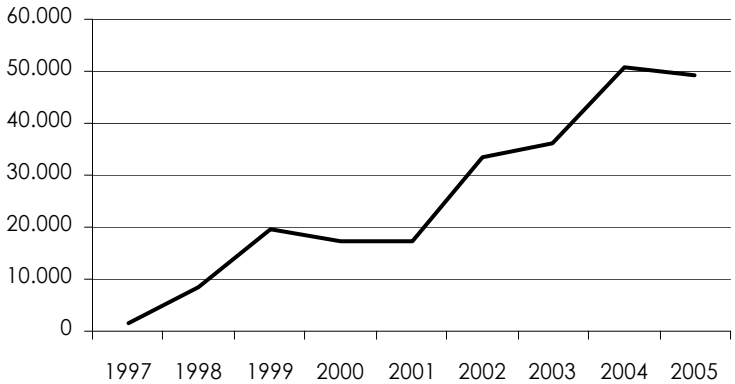
Figure 4: The evolution of migration
Persons



Source: Statistics Austria, WIFO.

Table 3: The evolution of net migration to Austria

	Net migration to Austria Persons
1997	+ 1.537
1998	+ 8.451
1999	+ 19.787
2000	+ 17.272
2001	+ 17.274
2002	+ 33.507
2003	+ 36.297
2004	+ 50.582
2005	+ 49.172



Source: Statistics Austria, Demographic Yearbook 2005.

In light of the most recent developments in migration, the growth scenario suggested by the population forecast (moderate fertility and mortality; high immigration) is more plausible.

Population growth was underestimated by the main scenario of the ÖROK forecast for the period 2006 to 2011 by approximately 130,000 persons. With the average size of migrant households at 2.65 persons (*Statistics Austria*, 2002), approximately 50,000 additional dwellings are likely to be needed during this period, or approximately 10,000 dwellings annually. WIFO therefore estimates that the demand for new residential construction will amount to 56,000 units, which is approximately 10,000 more than is foreseen in the ÖROK (2005) housing forecast. Taking the ÖROK growth scenario into consideration, the strongest growth as compared to the main scenario would be +3 percent p.a. in the federal provinces of Tyrol (+965 residential units) and Vorarlberg (+478 residential units), as well as +2.2 percent in Vienna (+2,157 residential units) and in Salzburg (+672 residential units). In Burgenland and Carinthia, the additional demand for dwellings in comparison to the main scenario presented in the ÖROK population forecast is expected to be very slight (Table 4). The outlook at hand retains the structure of the ÖROK forecast, listing demand for new residential construction according to federal province, although population growth, above all in eastern Austria, is underestimated, thus increasing the likelihood of housing shortages.

Table 4: Population scenarios and additional demand for residential construction

	ÖROK Population Forecast				Housing needs
	Main scenario	Growth scenario	Deviation of the growth scenario from the main scenario		Deviation of the growth scenario from the main scenario
	2006/2011	2006/2011	2006/2011	Per year	Per year
	Persons				Residential units
Vienna	+ 34.703	+ 63.285	+ 28.582	+ 5.716	+ 2.157
Lower Austria	+ 26.058	+ 48.949	+ 22.891	+ 4.578	+ 1.728
Burgenland	+ 957	+ 5.125	+ 4.168	+ 834	+ 315
Styria	– 506	+ 16.204	+ 16.710	+ 3.342	+ 1.261
Carinthia	– 3.116	+ 4.803	+ 7.919	+ 1.584	+ 598
Upper Austria	+ 18.510	+ 39.587	+ 21.077	+ 4.215	+ 1.591
Salzburg	+ 11.101	+ 20.009	+ 8.908	+ 1.782	+ 672
Tyrol	+ 21.031	+ 33.813	+ 12.782	+ 2.556	+ 965
Vorarlberg	+ 10.778	+ 17.110	+ 6.332	+ 1.266	+ 478
Austria	+119.516	+248.885	+129.369	+ 25.874	+ 9.764

Source: ÖROK, Statistics Austria, Population Forecast 2004; WIFO calculations.

The significant rise in net migration has short as well as long-range effects on the housing market. Short-term housing must be found for newly arrived immigrants. Differences in income between domestic and immigrant households, which above all arise from varying qualifications and educational backgrounds, as well as from the influx of further family members to immigrant households, result in differences in household size.

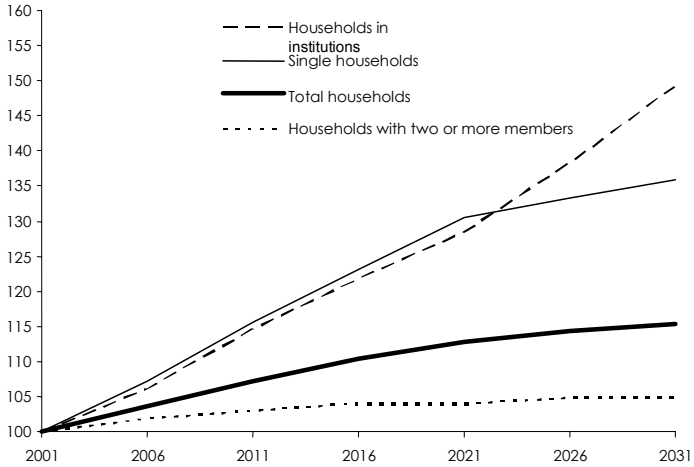
According to the census of 2001 (*Statistics Austria,* 2002), 2.36 persons live in an average Austrian household, while the average size of an immigrant household (non-EU) is

approximately 2.65 persons. Immigrants of Turkish (3.64 persons) and Macedonian (3.25 persons) origin live in the largest households. With the increasing integration of immigrants and rising incomes, household size gradually declines to the Austrian average. Over the long run, some 300,000 additional residential units will be necessary. Increasing the incomes of migrants is a very slow process: according to a survey by *Statistics Austria* (2006) within the framework of the EU-SILC, the median income of naturalised migrants is 84 percent of the average income of the total population and is only slightly higher than that of non-naturalised migrants (78 percent). It is above all migrants (as well as the long-term unemployed, and persons receiving other forms of social benefits), who live in substandard housing. Only 3 percent of the average population occupies dwellings with no shower or toilet, while the figure amounts to 13 percent for immigrants; there is no other segment of the population for which the figure is similarly high (according to Statistics Austria). With respect to housing conditions, assimilation is taking place extremely slowly. Furthermore, due primarily to the ongoing immigration of extended family members, a decline in housing demand is not expected. Nevertheless, there are presently enough reserves in housing stock to equalise this development.

3.1.2 Changes in living standards

From a demographic point of view, aside from migration, changes in lifestyle have the most significant effects on the future demand for housing. During the last several years, the trend towards households with more than one person has increased only slightly, while the number of single households is projected to grow considerably (2001/2021 +30 percent). A similarly sharp rise is also expected for the number of households in living in institutions (2001/2021 +28 percent), starting, however, from a much lower level.

Figure 5: The development of the number of households according to size and type
Index 2001 = 100



Source: ÖROK, Statistics Austria, Population Forecast 2004; WIFO calculations.

In addition to changes in lifestyle and the ensuing trend towards single-family households, above all in big cities (the divorce rate in Vienna for 2005 was 63 percent as opposed to the Austrian average of 46 percent), the rising standard of living is also leading to changes in the demand for housing. The useful floor area is increasing continually and is presently at 103 m² (2002; 1998 – 94 m²).

3.1.3 The ageing population

How the population ages has considerably less influence on activity in new residential construction than migration. Flat-sharing communities for the elderly, old-age homes, as well as "assisted living" will continue to gain significance. Nevertheless, approximately 95 percent of all senior citizens presently live in their own homes (cf. *Rischanek,* 2005) and wish to continue doing so as long as possible (*OECD,* 2005).

Table 5: The development of the population aged 65 years and over until 2031, according to the ÖROK main scenario.

	65 years and older										
	In 1,000				2001 = 100			Percentage share of population			
	2001	2011	2021	2031	2011	2021	2031	2001	2011	2021	2031
Austria	1.241,8	1.472,5	1.710,9	2.113,5	119	138	170	15,5	17,8	20,3	25,1
Vienna	248,1	285,1	319,3	376,9	115	129	152	16,0	17,7	19,3	22,6
Lower Austria	248,6	299,6	346,9	429,8	121	140	173	16,1	18,7	21,2	26,0
Burgenland	50,1	55,0	64,7	80,6	110	129	161	18,1	19,7	23,2	28,9
Styria	195,9	225,1	255,7	315,6	115	131	161	16,6	19,0	21,8	27,5
Carinthia	91,2	105,2	121,8	150,0	115	134	164	16,3	19,0	22,4	28,3
Upper Austria	204,4	240,7	281,7	357,1	118	138	175	14,8	17,0	19,6	24,9
Salzburg	69,6	88,1	108,2	135,5	127	155	195	13,5	16,4	19,6	24,5
Tyrol	90,3	116,9	142,7	181,0	129	158	200	13,4	16,3	19,1	23,8
Vorarlberg	43,6	56,9	69,9	86,9	131	160	199	12,4	15,2	18,1	22,2

Source: *ÖROK* (2004).

According to the most recent ÖROK population forecast (*ÖROK,* 2004), the segment of the population aged 65 and older will increase greatly between 2001 and 2010 (+20 percent). By 2031, one in four persons living in Austria will, on average, be older than 65. The share of persons in this age group will be highest in the federal provinces of Burgenland (28.9 percent) and Carinthia (28.3 percent) and lowest in Vienna (22.6 percent) and in Vorarlberg (22.2 percent) (Table 5).

As the population ages, housing policy, as well as the housing sector (builders, public housing associations, house and property management agencies, building companies, architects etc.) will be challenged to respond to the changing needs, taking them into account at the beginning of each planning phase.

Above all, the demand for housing-related services is expected to rise. According to a survey by the SRZ (an independent, urban and regional research institution) on the state of new services in the housing sector, approximately 53 percent of building associations offer services geared specifically towards the elderly; however measured with respect to the total number of dwellings, market penetration is extremely slight (less than 10 percent of total stock). The period over which the needs of the elderly were observed comprised only the current generation, so that accurate implications regarding relevant needs and requirements in twenty years are difficult. The *OECD* (2005) specifically points out this problem and recommends extreme caution in connection with forecasts, since the adaptation of settlement areas and the needs of the elderly will be subject to substantial economic, cultural and social changes.

3.2 Housing subsidisation as an important instrument of Austrian housing policy

Austrian housing policy regards housing as a basic human need, the fulfilment of which can not be left solely to free market mechanisms. Low income households are also entitled to a sufficient supply of suitable, modern housing. An adequate supply of housing is to be ensured through housing subsidisation as well as through the Landlord-Tenant Law and the Non-Profit Housing Law.

Each federal province is responsible for the configuration and allocation of housing subsidisation. The federal government transfers grants earmarked for housing construction (according to the Federal Law on Earmarked Grants) to the provinces, and also allocates project-related funds, which serve to balance the budgets of each province (according to the Federal Law on Financial Compensation). Eighty percent of these funds are comprised of tax revenue, while 20 percent consists of housing subsidisation payments. The tax component consists of shares from assessed income tax, the tax on wages, the capital gains tax I and the corporate tax. Since 2003, the provinces have been receiving an 8.346 percent share of each. The tax on wages accounts for the greatest financial contribution. In addition, the provinces receive 80.55 percent of the employer and employee contributions levied for housing subsidisation.

Since 1996, the earmarked grants from the federal government have remained at a constant volume of approximately € 1.78 billion annually. In 2001, a change in the Federal Law on Earmarked Grants (according to the WBF-ZZG 2001) eased the general requirements on earmarking, while the earmarking of income from matured investments was completely lifted. In addition, the provinces also have access to funds which have accrued from the repayment of loans (2005: € 781 million) and interest on investments (€ 10 million), as well as to a slight share of funding from the province itself (€ 194 million for expenditures on housing subsidisation). The provinces are free to appropriate the funds not only to housing, but also to investments in infrastructure, in the residential environment, as well as for measures to help achieve the targets of the Kyoto Protocol. Only a few federal provinces take advantage of

these additional sources of funding. In 2005, a total of € 135 billion was spent on infrastructure and on efforts to fulfil the Kyoto goals, which amounts to only 6 percent of total expenditures.

3.2.1 The significance and development of housing subsidisation

In contrast to the situation in other countries, Austrian housing policy has, in the form of housing subsidisation, a powerful instrument at its disposal, with which it can influence the development of housing not only from the standpoint of economics, but also in the sense of social aspects, regional planning and ecology.

From an economic perspective, housing subsidisation makes an important contribution to housing financing. During the year 2002, 35,142 grants were authorised for new residential construction. This figure corresponds to a more than 80 percent share of all construction permits. Consequently, housing subsidisation exerts considerable influence on housing output as a whole. The cost of financing housing subsidisation amounts to approximately 1 percent of GDP.

The actual magnitude of the individual forms of subsidisation (direct loans, grants for interest and annuity payments, etc) for housing financing varies. The subsidisation of new residential construction is based to a great extent on loans (€ 1.3 billion); here, subsidisation is the difference relative to the interest on commercial loans. At € 0.25 billion, the volume of non-repayable grants is comparatively low. The share of grants influencing the bottom line of the budget, as relevant to the stipulations of Maastricht, amounts to only about 16 percent (Table 6).

Table 6: Expenditures on housing subsidisation 2005

	Repayable	Non-repayable	total
New residential construction			
Loans	1.010		1.010
Annuity grants	292	208	500
Other lost grants		40	40
Total	1.302	248	1.550
Renovation			
Loans	126		126
Annuity grants	8	304	312
Other lost grants		95	95
Total	135	399	533
Housing allowances			
New residential construction		193	193
Renovation		557	557
Total		750	750
Total	**1.436**	**1.396**	**2.300**

Source: *Federal Ministry of Finance* (2006).

During the last several years, the ecological aspects of housing subsidisation have come to the fore, taking their place alongside economical and social considerations. All federal provinces have restructured their systems of subsidisation and strengthened their ecological criteria for the awarding of grants. In most provinces, the low-energy house standard is one of the minimum requirements for grant applications. Furthermore, housing subsidisation is very incentive-oriented. In Lower Austria, for example, fulfilling the standards for passive house technology in combination with the implementation of an alternative source of energy, is rewarded by loans twice as large as those for housing which fulfils only minimum standards.

The significance of housing subsidisation in Austria is also reflected in light of total housing financing, even despite the sharp decrease of the past several years: While during the 1980s, the existing obligations for housing subsidisation loans amounted to approximately 40 percent of all existing obligations for housing loans, the share had declined by 2005 to 20 percent.

Table 7: The financing of residential construction

	Outstanding loans					
	Low interest "Bauspar"-loans	Other commercial banks	Total bank loans	Subsidised housing loans	Total (including insurance)	Share of subsidised loans
			Million €			Percent
1985	7.021	8.310	15.331	10.696	26.363	41
1990	9.783	11.505	21.288	16.065	37.694	43
1995	12.053	16.523	28.576	19.444	48.407	40
2000	13.272	27.448	40.720	21.950	63.093	35
2005	13.467	53.898	67.365	14.945	82.613	18

Source: Austrian National Bank, WIFO.

In 2005, the expenditures of the provinces on the subsidisation of residential construction and housing renovation (federal funds including income from matured investments, as well as provincial funds) were, at € 2.3 billion, somewhat in decline when compared with the previous year (–4.1 percent). However, when measured in light of total expenditures, they corresponded to the average of the last ten years. During this period, the expenditure structure underwent a significant transformation. Due to the high demand for new residential construction during the mid 1990s, the emphasis shifted from subsidised loans to annuity grants, leading to a sudden decrease in the financial expenditures of the provinces. This development in turn enabled the authorisation of a greater amount of subsidisation. Between 1994 and 1997, the number of annuity grants increased at a rate of nearly 30 percent annually. In 2000, the volume of subsidised loans in new residential construction fell to a record low of € 621 million, or half the amount of the early 1990s.

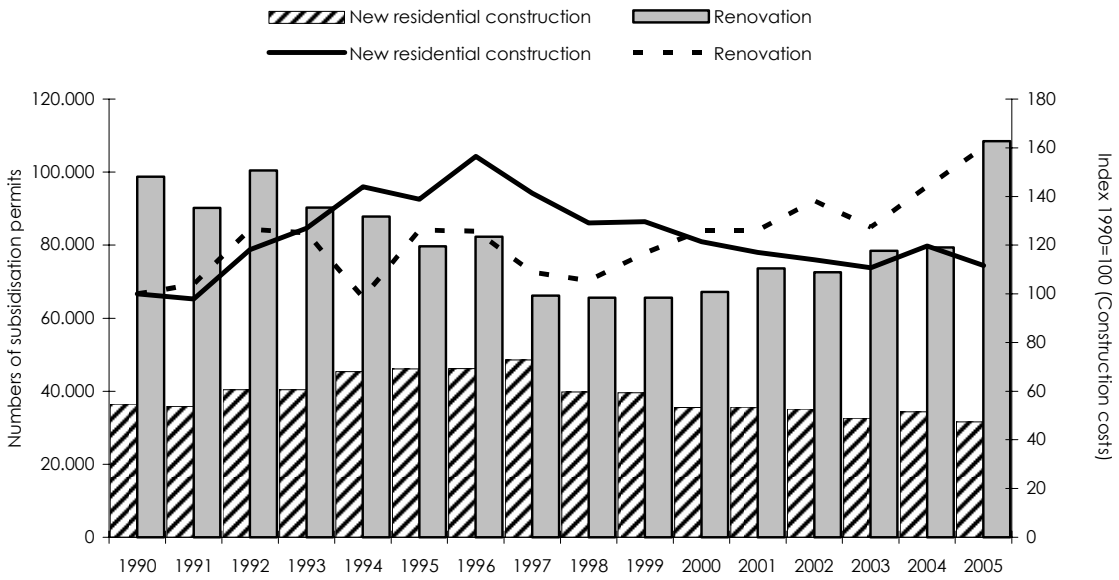
Subsidised housing loans conform to the Maastricht criteria because the income from mature investments is at the disposal of the public budget; they therefore do not contribute to any long term increase in budgetary deficits. However, to the extent that they are not repayable,

annuity grants are not rated as Maastricht conform because they burden provincial budgets. In an effort to prevent the budget deficit from growing, loan subsidisation and repayable annuity grants have, since the year 2000, been implemented more regularly. The number of residential units for which subsidisation was authorised declined between 1998 and 2005 by approximately 5 percent annually (with the exception of 2001 and 2004).

During the last several years it has been possible to observe a reorientation away from annuity grants towards subsidised loans (for example in Vienna and Salzburg). Over the short term, loan subsidisation ties up more funding per residential unit than annuity grants.

Expenditures on the subsidisation of renovation and modernisation increased during 2005 by more than 4 percent; similar to the situation in new residential construction, this level corresponded to the long term average. The increase was primarily attributable to the construction of multistory buildings. This fulfils policy guidelines to direct housing subsidisation into the renovation sector, above all with the goal of supporting investment in measures to save energy. In the non-profit housing sector, as well as in public housing, nearly two-thirds of the dwellings have undergone thermal renovation, reducing energy consumption in these buildings by approximately one half (*Bauer*, 2006).

Figure 6: Subsidisation in new residential construction and in housing renovation, as well as related construction costs



Source: *Federal Ministry of Finance* (2006), WIFO. Related construction costs: line graph, level of subsidisation: bar graph.

3.2.2 Housing banks as an additional instrument of housing policy

Supplementary to public housing subsidisation (as stipulated by the legislation on housing subsidisation), multistory housing construction is supported by the housing bank system. Housing banks are special banks that finance housing construction in Austria. Funds are raised by means of special, long term housing construction convertible bonds. Today, housing banks have taken their place as another important instrument of Austrian housing policy.

The legal basis of the housing banks is the "Federal law on special tax measures for the promotion of housing construction" (ratified in 1993 by the Austrian National Assembly). The funds generated through the emission of bonds by the housing banks are used for the construction of affordable housing. In order to make this form of investment attractive, the housing bonds are endowed with two forms of tax advantages: First, exemption from the capital gains tax is granted for the first 4 percent of returns. Secondly, the purchase of the bonds is classified as a special expense which can be deducted from income tax. These two forms of preferential tax treatment are valid only for private persons. Exemption from the capital gains tax is effective through maturity, regardless of the duration. Assuming a fixed minimum rate of return, housing bonds are considered to be a very secure form of investment, particularly during times of instability in the stock market.

Capital raised through the issuance of the bonds can be used only for the financing of new housing within a period of three years. The housing banks generally make the funds available to non-profit building associations in the form of fixed-rate long term loans. Housing banks often have their own building contractors, specialised in the construction of multistory housing. In Austria there are presently six housing construction banks.

Housing banks are presently able to assist the financing of new housing and refurbishment, in a magnitude of approximately € 1.5 billion annually. According to financial experts, approximately € 5 billion or 45 percent of total construction costs are covered. The balance of the financing is met by housing subsidisation and own funding.

Since the year 2000, housing banks have registered a sharp rise in demand for tax free bonds. By the end of 2006, the total volume of bonds had reached approximately € 11 billion, of which € 9 to 10 billion has been directed toward the financing of housing construction. During the last three years, financing amounted to an average annual volume of € 1.5 billion.

4. A Comparison of Housing Construction Development in Europe

4.1 European housing policy against the background of the Lisbon Strategy

In March 2000, at the meeting of the Heads of State and Government in Lisbon, the European Council formally expressed the goal of making the European Union the most competitive and dynamic economic area in the world. The objective was the creation of an economic area capable of achieving steady economic growth, with more and better jobs and greater social cohesion. Furthermore, in addition to the economic and social goals, the European Union also acknowledged the challenges set forth by environmental problems and the need to create a means of sustainable ecological development.

Within the framework of the Lisbon Strategy, housing construction is of particular importance, as it has the potential to make a wide range of contributions to the realisation of the goals set in Lisbon. On the one hand, the housing construction sector is one of Europe's most significant employers, accounting for the direct creation of approximately 16 million jobs, and nearly 45 million additional jobs in related economic sectors. Housing construction is decisive to the achievement of goals related to the economy and to employment. On the other hand, as one of the greatest generators of greenhouse emissions (aside from industry, transportation and energy production) housing construction also bears great responsibility with respect to ecology and the environment.

Each member country has recognised the importance of housing construction to the overall economy. The EU Focal Point Meeting on Housing, which convened during the Austrian presidency of the EU in 2006, confirmed this point. The majority of countries (84 percent) already have economic policy programmes to promote housing construction and renovation. Throughout the EU, the emphasis in new residential construction is on improving quality, complemented by ecological construction techniques. In addition, "housing for the aged" is a topic of growing significance in Western Europe. There is a lack of long run data and analyses describing housing conditions in general, and particularly regarding the needs of the elderly, which tend to change from generation to generation (*OECD,* 2005). In turn, there are also very few policies and goals directed specifically towards this segment of the population.

Housing policy in Eastern Europe concentrates even more than in Western Europe on new residential construction. Special attention is paid to maintaining a fair social balance. The Czech Republic, for example, provides special forms of subsidisation to minorities and the disadvantaged. In Lithuania, the value-added tax on the construction of social housing has been reduced by one half.

On a whole, there is a strong trend in housing construction towards renovation, which is also reflected in housing policy. In the future, there will be a greater amount of more complex

subsidisation policies throughout the EU. In Finland, for instance, expenditures on craftsmen are now tax deductible.

Germany has introduced subsidisation in the form of tax benefits on housing renovation that reduces energy consumption and the emission of CO_2. The "Subsidisation Programme for Tax Deduction" is intended to reduce illicit work in the private sector and create additional jobs. Within the framework of the "Programme to Strengthen Innovation, Investment, Growth and Employment", housing renovation is promoted through low interest loans issued by the "*Kreditanstalt für Wiederaufbau*" (*KfW* – Bank for Reconstruction). As part of the reform of federalism, the state governments (*Länder*) will be receiving financial compensation payments from the federal authorities, which will be earmarked until 2013 for the subsidisation of social housing. (The supplementary allowance for private homes – *Eigenheimzulage* – which supported the acquisition of private property, expired at the end of 2005, and was replaced by a number of other subsidisation programmes offered by the KfW).

Nearly all EU member countries have made provisions for programmes which promote renovation that improves energy efficiency and are ecologically safe. The CEECs have also developed similar programmes, whereby the emphasis here is above all on the modernisation of prefabricated structures constructed of concrete slabs (particularly in Hungary).

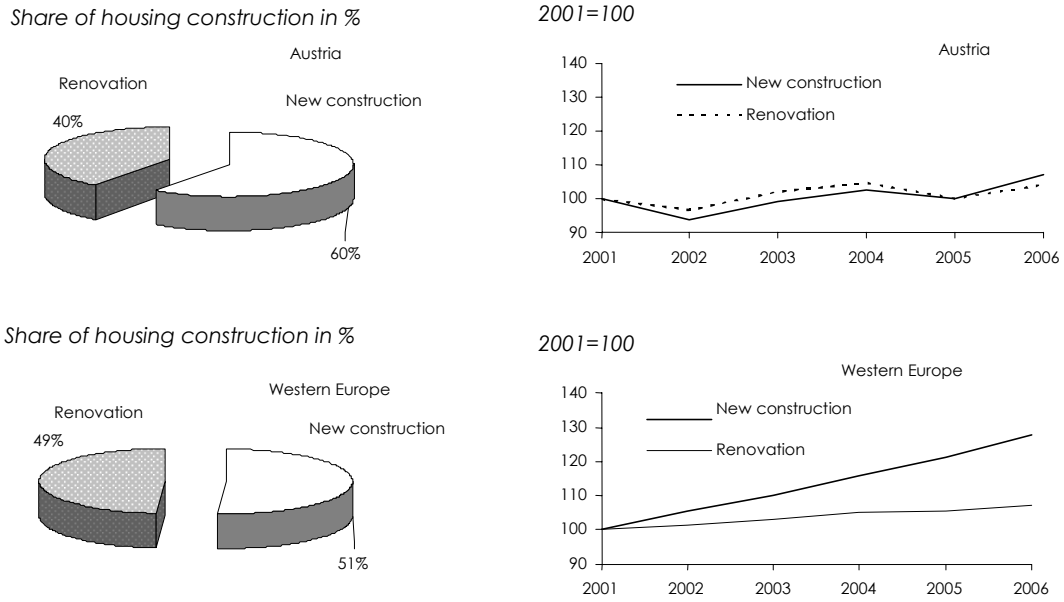
From the aspect of energy conservation and the reduction of emissions (Kyoto goals), the availability, since 2007, of financial resources from the EU Structural Fund for housing construction in new member states will also make an important contribution to growth in the housing sector during the next several years, assuming the finalisation of the corresponding programmes. A transfer of know-how in the field of ecologically innovative forms of construction from the EU 15 would accelerate growth to an even greater extent.

The goals set in Lisbon are ambitious and the US continues to increase its lead (it is against the level of this lead, respectively the size of the gap, that the EU measures its progress). In light of these circumstances, the EU member states are challenged to develop "national reform programmes for employment and growth", whereby special attention should be directed towards education and innovation. According to current growth-accounting models, these are the most important and effective drivers of productivity, and thereby of growth and employment. These two areas therefore count as key concepts of the Lisbon Strategy. In housing construction, ecological construction and renovation have great inherent capacities for innovation. Furthermore, ecology holds a tremendous amount of export potential. These areas should be more strongly promoted in national reform programmes for employment and growth.

4.2 The significance and development of housing construction in Europe

Housing construction plays a central role in the European housing sector. In the year 2005, construction volume in the 19 Euroconstruct countries totalled € 1,300 billion, whereby the share of housing construction amounted to € 624 billion (approximately 48 percent; in Western Europe the corresponding share was 51 percent). Somewhat more than half of housing construction volume can be ascribed to new residential construction, somewhat less than half to the renovation and modernisation sector. In Austria, housing construction (new residential construction, refurbishment and renovation) accounts for 40 percent of total construction volume, which is somewhat less than the European average (*Euroconstruct,* 2006).

Figure 7: Real volume of housing construction and renovation



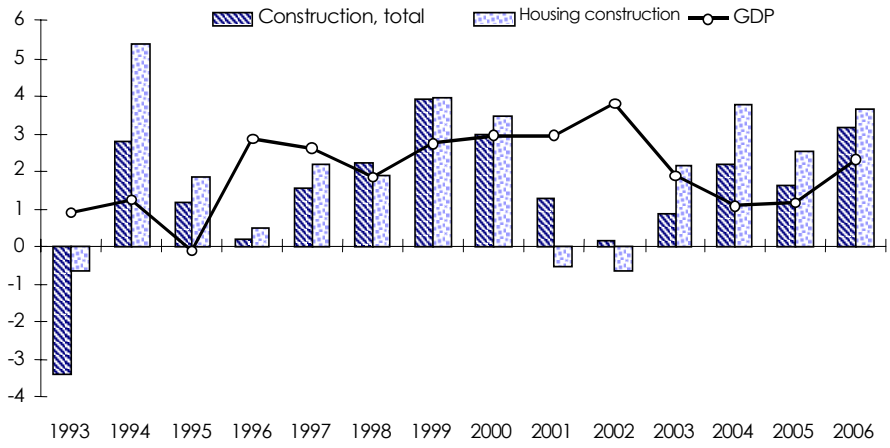
Source: *Euroconstruct* (2006).

As has been reflected by the cyclical activity in housing construction in the Euroconstruct countries since 1990, upturns in housing construction have lasted approximately twice as long as downturns. An approximately two year long recession in housing construction was followed by a four to five year long upswing, which was interrupted only by a slight break in the trend. During the period of declining activity, European construction volume contracted by up to ½ percent; throughout the entire four to five years of upswing, average annual growth amounted to just under 3 percent. At the height of the cycle, average growth rates in Europe reached 4 percent to 5½ percent.

In the mid 1990s, a housing boom emerged in the countries associated with the Euroconstruct research network. Real construction volume expanded in 1994 by more than 5 percent, at

which time the cycle peaked. Germany was the greatest contributor to growth, where activity in housing construction was stimulated by re-unification and grew rapidly as a result of subsidisation in the form of favourable tax policies on housing investment in East Germany. In 1995, growth in the European housing sector weakened somewhat, ultimately stagnating in 1996 (+0.5 percent). As interest rates declined and the economy as whole developed more advantageously, a cyclical upturn set in during 1997, lasting 4 years. Contrary to the favourable developments in most countries, housing construction in Germany contracted sharply during the second half of the 1990s, and weakened in Austria and Switzerland, as well. Most seriously affected was the construction of multistory housing.

Figure 8: The development of housing construction and construction volume in Europe
19 members of Euroconstruct, change with respect to the previous year in percent



Source: *Euroconstruct* (2006).

Parallel to the overall economic downturn throughout all of Europe during 2001 and 2002, activity in housing construction fell into a phase of decline (–½ percent), which was intensified by a slump in the stock market. In addition, there was growing uncertainty as to the future course of population growth, and the already saturated housing market called for caution. The ongoing crisis in housing construction in Germany subdued activity in Europe as a whole. It was not until 2003/2004 that demand in the European housing market began to pick up, stimulated by low rates of interest and rapidly rising real estate prices in several European countries (above all in Great Britain, Spain, Ireland and the Nordic countries. Economic growth in these countries was boosted by investments in housing construction, as well as by the rising real estate prices. In 2005, growth in real construction volume slackened somewhat (+2½ percent), later accelerating with the overall economic upswing in 2006 (+3.7 percent).

In 2007, the 19 members of Euroconstruct expect expansion in housing construction to abate somewhat (+1.9 percent), while the forecasts for 2008 and 2009 predict only +0.5 percent annually, due to stagnating demand in Germany and waning growth dynamics in the Nordic

countries. In addition, the boom in housing construction in Spain and Ireland has come to an end. Stimulation from the renovation and modernisation sector could compensate for the decline in new residential construction during the next several years.

4.3 Diverse developments in housing construction, the overall economy and housing prices in individual countries

During the last ten years (1995/2005), a marked divergence between individual countries could be observed in the development of real construction volume and GDP. In the countries with the highest average economic growth, output in housing construction grew at an above average rate (economic growth in Ireland was +9.7 percent p.a., real housing construction volume +7.9 percent p.a.; the corresponding figures for Spain are: +3.6 percent p.a. and +6.1 percent p.a.; the situation is similar in the Nordic countries). Those countries which experienced a sharp decline in housing construction output also achieved only slight economic growth. Housing construction volume above all in Germany contracted massively (–1.6 percent) during the period 1995/2005, following the boom in the wake of unification, while real growth in GDP amounted to only1.4 percent. Housing construction also developed unfavourably in Austria: real volume barely increased (+0.9 percent), investments in housing construction declined (–2.6 percent), and GDP grew by only 2.2 percent.

Table 8: Housing construction volume, real GDP and housing prices in an international comparison

1995/2005: Countries with the highest growth rates, respectively the most distinct decline in housing investment

	Housing construction investments according to the national account	Construction volume according to Euroconstruct	GDP	Housing prices
	Real, average annual change in percent			
Ireland	.	+ 9,7	+ 7,9	.
Spain	+ 8,1	+ 6,1	+ 3,6	+ 7,1
Nordic countries				
Finland	+ 5,8	+ 5,4	+ 3,5	+ 5,0
Sweden	+ 6,9	+ 3,4	+ 2,7	+ 5,5
Great Britain	+ 2,5	+ 1,7	+ 2,8	+ 7,8
Germany	– 1,8	– 1,6	+ 1,4	– 1,6
Austria	– 2,6	+ 0,9	+ 2,2	+ 2,0

Source: OECD, Euroconstruct, *Aiginger – Tichy – Walterskirchen* (2006), WIFO calculations.

A housing boom has been underway during the last ten years in Ireland and Spain. In Spain the trend is expected to continue; a sharp rise in housing prices is expected to result. In Scandinavia, activity in housing construction achieved above average growth, following a

great setback in the early 1990s, which had resulted from massive cutbacks in subsidisation. In these countries, high growth in housing construction has inspired growth throughout the economy.

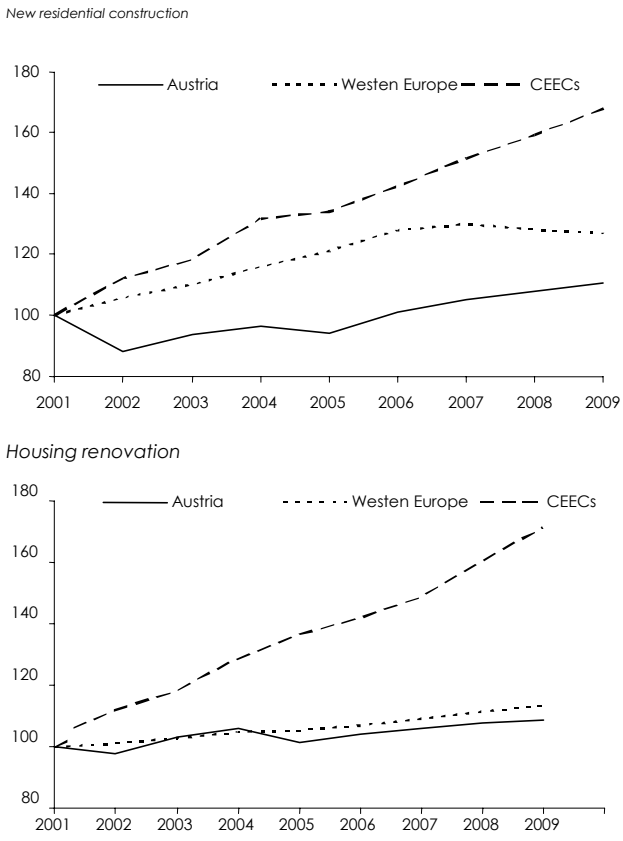
A WIFO study (*Marterbauer – Walterskirchen*, 2005) revealed that in countries with lively demand for housing, housing prices have significant influence on overall economic growth. In countries with high rates of economic growth and rising housing prices, investments in housing vary to a much greater extent than in countries with stable housing prices. Above all in Great Britain, Ireland and Spain, as well as in Scandinavia, a rise in housing prices results in strong growth in construction activity and GDP. Rising prices leads to stronger investment in housing, due to the likelihood of realising greater profits through speculation. Market-oriented systems of financing are dominant in these countries; financial markets are the determinants of the housing and real estate sectors, and the course taken by the interest rate has tremendous influence on activity in housing construction. A sharp rise in housing prices holds the danger of a speculative bubble. In order to check rising prices and inflation tendencies, national banks often react by raising short-term interest rates. In turn, investment declines, and the entire economy falls into recession. In economies with market-dominated financial market systems in their housing and real estate sectors, there is a high risk of financial crises caused by speculative bubbles in real estate.

Economic development is considerably more stable in countries where housing sector related financing is based to a greater extent on banking models; Austria is one of these countries. Housing prices rise and fall to a much lesser degree than in countries with market-oriented financial structures. Speculation does not stand in the forefront (*Marterbauer – Walterskirchen*, 2005). Furthermore, the Austrian system of housing promotion and subsidisation has a stabilising effect. As described above, in contrast to countries relying primarily on market mechanisms, housing construction in Austria has a positive cyclical effect, much of which is attributable to Austria's system of housing subsidisation.

5. The Great Potential for Growth in Housing Construction in the CEECs

From 2007 to 2009, real construction volume in the CEECs is forecast to grow by 5 percent to 6 percent annually (according to the Euroconstruct forecast of December, 2006), which is twice as rapidly as in Austria. Austria's eastern neighbours exhibit considerable potential in new residential construction, as well as in renovation and refurbishment. With the gradual improvement of the economic situation, investment in housing construction is finally picking up, after having been greatly neglected during the last 15 years which followed reunification. In the early 1990s, in the CEEC 4 (Poland, the Czech Republic, Slovakia and Hungary), only 1.5 to 2 residential units per 1,000 inhabitants were completed annually; in 2005 the figure rose to 3 per 1,000 and by 2009 could reach a level of 4 residential units per 1,000 inhabitants (*Euroconstruct,* 2006).

Figure 9: The development of housing construction volume in Austria, in the CEECs and in Western Europe
2001 = 100



Source: *Euroconstruct* (2006), WIFO.

Austria also stands to profit considerably from this growth potential. The traditionally good relationship between Austria and its neighbours has led to such positive developments as the "Twin-City" project, which links Vienna and Bratislava. Austria has acquired a considerable amount of Know-how in the areas of energy-efficient construction technology, as well as in housing refurbishment and in the renovation and revitalisation of entire city districts. The thermal renovation of multistory buildings and the applied use of innovative systems in the construction of single family homes have enabled a reduction in energy consumption. In the public-housing sector, thermal renovation has reduced energy consumption by one half. An export offensive aimed at promoting construction techniques which further improve the efficiency of energy consumption could strengthen co-operation with the CEECs, opening the door for Austria to participate in the CEEC housing boom.

6. Summary of the Results and Recommendations for Future Action

This paper explores the contribution of the housing sector to overall economic development in Austria and examines which factors most greatly influence housing construction output. Individual attention is directed towards such major influential factors as demography and subsidisation. The social, economic and ecological aspects of the housing sector are also discussed.

In the past, housing construction has often been characterised as a "driving economic force", as construction investment is among the most significant domestic demand aggregates. Due to its strong domestic effects, housing construction plays an important role in the overall economy. Ensuing from the high degree of interdependence with other closely related branches, construction investments have the highest multipliers effects in terms of overall economic production and employment. It is for this reason that investments in the housing sector stimulate not only demand, but ultimately growth and employment, as well. The EU has emphasised the employment effects of housing construction and renovation with respect to the realisation of the goals set forth by the Lisbon Strategy.

6.1 Rising medium-term demand for housing due to immigration: an additional 10,000 dwellings annually

The most recent figures on population development in Austria identify a steady stream of immigration. Forecasts therefore predict an increase in population during the next twenty years. In turn, there will be a significant, medium term rise in housing demand, only a portion of which can be covered by housing stock reserves. Approximately 43,000 residential units are presently being completed annually. In five to ten years' time, production should be increased to approximately 55,000 units annually. Housing subsidisation will play an important role as a major policy instrument.

6.2 High employment effects: additional housing investment of € 1 billion can create up to 12,000 jobs

Of all production-oriented economic sectors, investments in housing construction trigger the greatest direct and indirect employment effects. Investments in housing construction of € 1 billion can generate up to 12,000 jobs throughout the economy. The employment effects of private consumption are 25 percent less, while exports are only half as effective.

The research at hand also identifies other employment effects. These are lower than the average effects, because additional investment in housing construction – made, for example, with the intent of steering cyclical activity – initially increases only utilisation (through

overtime). Although productivity rises quickly, the creation of new jobs does not set in until later.

On the basis of various model calculations in the EU, an average long-term view reveals that employment effects of up to +24,000 are possible (EU Focal Point on Housing 2006). The research at hand determines the additional employment effects (marginal effects), which arise when investment in residential construction is also implemented as an economic instrument.

6.3 Increasing the implementation of housing subsidisation as an instrument of economic policy

As is illustrated by a comparison of the development of housing subsidisation in Austria with overall economic growth, housing construction has had a stabilising effect over the course of the last ten years. Particularly during the last recession of 2001/02, and above all during the phase of weak cyclical activity in 2003, stronger activity in construction alleviated the general economic downturn. At this time, the federal government passed legislation for two policy packages for economic stabilisation, one of the goals of which was to stimulate construction investment. Aside from measures to strengthen infrastructure expansion, investment in general measures for energy conservation in housing, as well as specifically for thermal renovation, were promoted. Housing construction volume increased markedly in 2003, supporting the generally weak economy. Thanks to lively demand in construction, Austria's last recession was less pronounced than in Europe as a whole. During the most recent upturn in 2006, output in housing picked up strongly – in new residential construction, as well as in renovation and refurbishment.

When measured in terms of GDP, housing investments tend, over the long run, to lose some of their significance, they do however lessen cyclical fluctuations. Furthermore, the Austrian system of housing subsidisation has a direct impact on demand. Directly targeted housing policy measures can decelerate downward trends in the overall economy. During periods of weak cyclical activity, housing subsidisation could increasingly be used as an instrument of economic policy. A supportive measure would be the planning of innovative construction projects – for example, in urban development – which, during periods of economic downturn could be quickly and unbureaucratically "pulled out of the drawer" and set into action.

6.4 International experience: The stabilising effect of subsidisation programmes on the development of prices and the housing construction sector

In countries in which housing construction is financed primarily through market mechanisms, the levels of interest rates and housing prices exert significant influence on activity in housing construction. Speculation can lead to a house price bubble, with the high risk of a financial crisis (for example in Great Britain and in Spain). The development of housing construction

and housing prices is considerably more stable in countries where the housing sector is primarily supported by financial models and subsidisation programmes affiliated by and large with banks. Emphasis is not so much on the profits achieved through speculation, but rather on social and ecological considerations, as well as on supply. Austria's system of housing subsidisation has a stabilising effect on prices, as well as on activity in housing construction.

6.5 Austria: Housing subsidisation as an instrument of social and ecological housing policy

As is not the case in many other European countries, the Austrian system of subsidising housing construction is an effective instrument not only from an economic standpoint, but also with respect to social and above all ecological aspects and regional planning.

Austrian housing policy recognises housing to be a basic human need. Housing must be affordable and fulfil high quality standards. A major consideration of the so-called "Austrian-Convent" for the constitutional reform of basic rights will be social rights, including the right to housing. Against the background of massive protests in France, the EU has also placed particular significance on this basic right in its draft for a "European Constitution".

In Austria, housing policy follows the principle of not leaving the housing sector entirely to the disposal of free market mechanisms. Housing subsidisation should help to assure a sufficient supply of housing for everyone, including younger households and the disadvantaged. The Federal Government Programme 2007-2010 refers in its subchapter on housing rights to the duties and responsibilities of the federal provinces with respect to housing subsidisation policies, for example in the availability of "affordable housing for young persons". Beyond the commitment to housing subsidisation, support should be directed towards the efficient provision of non-profit housing.

Aside from housing subsidisation and the Limited-profit Housing Law, the Landlord-Tenant Law also plays an important role in Austrian housing policy. Particularly in light of rising running costs, more attention should be directed towards the role civil rights and their relationship to housing. Above all, the "Catalogue of Running Costs" should be reviewed and, has already been foreseen by the most recent federal government plans, adapted to current conditions.

Under the heading of housing subsidisation, the federal government has, since 1996, been transferring approximately € 1.78 billion of earmarked grants to the provinces. Over the last ten years, the expenditures of the federal provinces on housing subsidisation have amounted to approximately € 2.3 billion annually. Aside from the federal earmarked grants, income from matured investments, as well as a slight amount of provincial funding is also available for the financing of expenditures on housing subsidisation. In 2001, the earmarking of gains on matured investments was lifted and since then, the provinces have been able to implement subsidisation funding for investments in infrastructure, the residential environment and measures to fulfil the goals set in Kyoto.

At approximately 1 percent of GDP, the total cost of financing housing subsidisation in Austria is relatively low. In countries which subsidise for the most part indirectly or through taxes, public expenditures on housing construction are higher than in Austria, whose system of housing subsidisation is, to a great extent, conceived as a mixed system of object subsidisation.

The Austrian system of subsidisation is quite diverse. During the last several years, every province has revised its system of subsidisation and raised their ecological criteria (low-energy house standard). Furthermore, housing subsidisation is very incentive-oriented. Lower Austria rewards the fulfilment of standards for passive house technology in combination with the implementation of an alternative energy source with loans twice the size of those available for projects meeting only minimum requirements.

In the future, housing policy will be more directly linked to social criteria. Immigrants need more and more housing, the population is ageing and changes in the housing environment call for new policy measures directed at these changing conditions. Against the background of increasing immigration, the creation of programmes to prevent the emergence of ghettos will be of great importance.

Further priorities will be the widespread realisation of low-energy and passive house standards in new residential construction, as well as housing renovation and refurbishment. The instrument of housing subsidisation can also make a meaningful contribution to the fulfilment of the goals set in Kyoto.

6.6 Targeted use of subsidisation programmes

New subsidisation programmes will be used as policy instruments aimed at covering demand over the medium term. Attention must be increasingly directed towards the adequate provision of social housing. Furthermore, it will also be important to strive for new and better innovation in housing infrastructure and housing related services. Finding appropriate answers to the ageing of our society, for example with respect to adapting housing subsidisation programmes to the needs of the elderly or promoting the construction of barrier-free buildings (as has been called for by the government), will play a central role.

Accommodations for persons employed in health care services

In the course of developing new forms of care for the elderly, one possibility could be the creation of accommodations for health care providers in the same buildings as which the elderly live. The concept could prove particularly successful in social housing structures, and also in private residences. It would enable the elderly to stay in their own homes for as long as possible, while still receiving the professional care they need, as often as necessary. This would considerably improve their quality of life, while from an overall economic standpoint the costs of medical attendance and care would sink.

Construction of ecological housing: Accelerating the spread of low-energy and passive house technology standards – increasing the rate of renovation from 2 percent to 5 percent

Through targeted, incentive-based financing, a new standard for low-energy and passive homes should be set throughout Austria. At the same time, the rate of thermal renovation should be raised from 2 percent to 5 percent. A comprehensive plan for the thermal renovation of one and two-family homes would also be of great potential. Here we recommend taking into consideration further subsidisation in the form of tax benefits, which would complement the financial support provided by the provinces. This measure would stimulate private activity in renovation, while at the same time improving the quality of Austrian housing stock, and in addition to the ecological advantages, would also have a positive effect on employment and growth.

The creation of a legal basis for "energy contracting" for the renovation of private housing

Energy contracting, or the refinancing of investments in energy conservation measures to reduce running costs is not yet anchored in the Landlord-Tenant Law, although it is now part of the Non-profit Housing Law. An according change in the Landlord-Tenant Law would considerably increase the willingness of the private sector to invest in housing construction and renovation. The realisation of a comprehensive programme for private housing construction would further improve the quality and standard of Austrian housing stock, and as described in the point above, also have a positive effect on employment, growth and the environment.

Increased utilisation of energy contracting and reconstructing in non-profit housing

In the future, the non-profit housing sector will make more widespread use of energy contracting and reconstructing (reaching an agreement with tenants to tear down old structures and re-build, rather than embarking on an uneconomical renovation).

Privately-owned housing: Creating a legal foundation for a minimum reserve of funds earmarked for thermal renovation

There is also great potential for the ecologically-oriented renovation of privately owned housing stock (condominiums). Presently, there is no legal framework that would stimulate such investment. A pre-requisite for renovation is the agreement of all owners within a respective building. Legislation demanding a minimum reserve of funding earmarked for investment in energy conservation could prove helpful and create significant incentive (eventually in the form of tax advantages) for private investment in ecological forms of renovation.

6.7 An export offensive for know-how

Another emphasis of housing policy should be the support of an export offensive for know-how. The high growth potential in the CEECs and the possibility of receiving support from the EU Structural Fund for energy efficient investment in new EU member states should lead to increased co-operation above all with those Austrian building contractors and developers, architectural firms and construction companies, which are already experienced in the planning, realisation and management of low-energy and passive house technologies. Aside from the advantages for the domestic economy, this would also contribute to the achievement of the goals set in Kyoto.

Growth potential for housing in the CEECs is twice as high as in Austria. Presently only approximately 3 residential units per 1,000 inhabitants are being completed annually. During the next ten years this rate will double. As incomes improve, there will also be more willingness to invest in housing renovation and refurbishment, as well as in innovative, energy efficient forms of housing. These developments should be supported, in order to improve the chances of the domestic economy by means of a targeted export offensive. The current government programme refers explicitly in the chapter "Austria – Partner in Europe and around the World" to the development of a policy directed specifically towards co-operation between Austria and its neighbours in Eastern Europe, which could also include the transfer of knowledge in the realm of housing policy.

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