

# Developments in Financial Systems and Challenges for the Housing Sector: A Comparison between trends in the European Union and the USA

*Final Report for the Marshallplan-foundation: Vienna-Berkeley Cooperation 2005/2006*

*Dr. Elisabeth Springler \**

Vienna University of Economics and Business Administration,

[elisabeth.springler@wu-wien.ac.at](mailto:elisabeth.springler@wu-wien.ac.at)

## *Abstract:*

In the past decades national financial systems faced heavy changes due to financial deregulation measures and global financial acting. Additionally they are said to converge towards a more market based financial system, which involves a redirection and reduction of state responsibilities in various areas including the housing sector. Nevertheless so called bank-based financial countries, which rely heavily on the banking sector as means for external financing of investment projects, and market-based economies, which are characterized by deeper financial markets, can be distinguished. Simultaneously to these developments on national financial markets general trends to reduce state responsibility for social security can be observed. In this respect especially trends in national housing markets involve major challenges and show strong interrelations with various economic markets and socio-economic questions of the society (like construction sector, zoning, questions of social peace).

To grasp the impact of economic policy and to pay attention to the empirical evidence of increasing housing prices, two research questions derive from the research focus: On the one hand, it is questioned whether the structure of national financial systems has an immediate impact on the national housing finance system. On the other hand, the impact for state intervention and responsibility is investigated by analyzing whether price increases in the real estate sector lead to a mis-performance of public housing subsidies schemes by not fulfilling the proclaimed social aim.

---

\* I want to thank the *Marshallplan foundation* which enabled with their financial support and exchange programme my stay as Visiting Scholar at the University of California, Berkeley. For their remarks and recommendations regarding the US housing market I want to thank Prof. Quigley and Prof. Rosen of Haas School of Business at Berkeley University, California. Furthermore many researchers of city, state and federal HUD offices helped my research, thanks to them as well.

## Contents

Introduction	3
1. Stylized Facts on Housing Markets Developments	4
<i>1.1. Changes in Housing Prices and developments in housing finance</i>	4
<i>1.2. What is meant by housing affordability?</i>	8
2. National financial systems and housing finance systems	9
<i>2.1. Defining housing finance systems</i>	10
<i>2.2. Classification according to quantitative indicators</i>	13
<i>2.3. Structure of housing subsidy programs</i>	15
3. Affordability: structural mis-performance versus effectiveness	17
4. Comparing the San Francisco Bay Area and Austria	23
<i>4.1. The US as a role model for changes in Europe?</i>	23
<i>4.1.1. Historical developments in housing policies</i>	24
<i>4.1.2. Affordability in the USA</i>	27
<i>4.1.3. California's housing market structure and the characteristics of the San-Francisco Bay</i>	28
<i>4.1.4. Administration of federal and state funds in California</i>	30
<i>4.2. Housing Policies and Financial Structure of Funding in Austria</i>	32
<i>4.3. Affordability in the San-Francisco metropolitan area and Austria</i>	35
5. Conclusion	38
Bibliography	41
Appendix	47

## Introduction

In the course of numerous financial crises especially banking crises and increasing economic disparities between countries, the financial sector as well as national financial systems emerged as a vivid area of research. Using quantitative databases of the World Bank, it turns out that market based financial systems tend to overbalance in highly developed economies. Simultaneously, financial fragility seems to increase in market based financial systems. When analyzing developments of national financial systems with bank-based origins, transformation towards a more market based financial cannot be observed – although this is assumed by many economists (see for example the extensive analysis of Schaberg, 1999), basing on quantitative measurement of financial flows. Since quantitative assessments do not cover the full pictures of financial systems' evolution, qualitative criteria are introduced; mainly by corporate governance structures (Zingales, 1997; Shleifer / Vishney, 1997). This paper aims at introducing qualitative indicators on a macroeconomic level, by discussing the involved redirection and reduction of state responsibilities in housing sector policies, when financial system transformation occurs. When referring to state responsibilities for social security, the argument does not derive from potential shifts of financing which Eichengreen (1997) opposes when outlining evidence of decreasing individual tax burdens in OECD economies, but doubts the capability of citizens to deal with increased personal social responsibility.

Therefore the research question in this paper is two-folded: First, changes in housing sector – which means residential housing through out the paper - policies of bank based financial systems are investigated, where special attention will be drawn to a comparison between EU15 member states and the USA. Apart from this macroeconomic point of view focus is laid on a comparison between Austria and the San Francisco Bay area in terms of housing affordability. The following research questions can be derived: Can shifts in social housing policies be detected and can they be used as qualitative indicators for a transformation towards a

market-based financial system? Secondly, this enables the discussion of effects for financial stability and social security. Since increases in housing prices could clearly be observed in the USA and house-ownership becomes more affordable while rentals are less affordable (Quigley/Raphael, 2004), a fact which leads to potential social deficits, the following second research question can be derived for this paper: Do price increases in the real estate sector lead to a *mis-performance* of public housing subsidies schemes by not fulfilling the proclaimed social aim? From this analysis, policy recommendation for financial sector stability and social housing policies in the European Union are derived in the final part of the paper.

The paper proceeds as follows: After introducing some stylized facts on international housing market developments, linkages between national financial systems and housing finance systems are investigated. Cases for housing financial markets with a stronger market and stronger state approach are compared with housing price developments. In part three and four the relation between social aims – in terms of affordability housing and economic wealth of households – is investigated.

## **I. Stylized Facts on Housing Markets Developments**

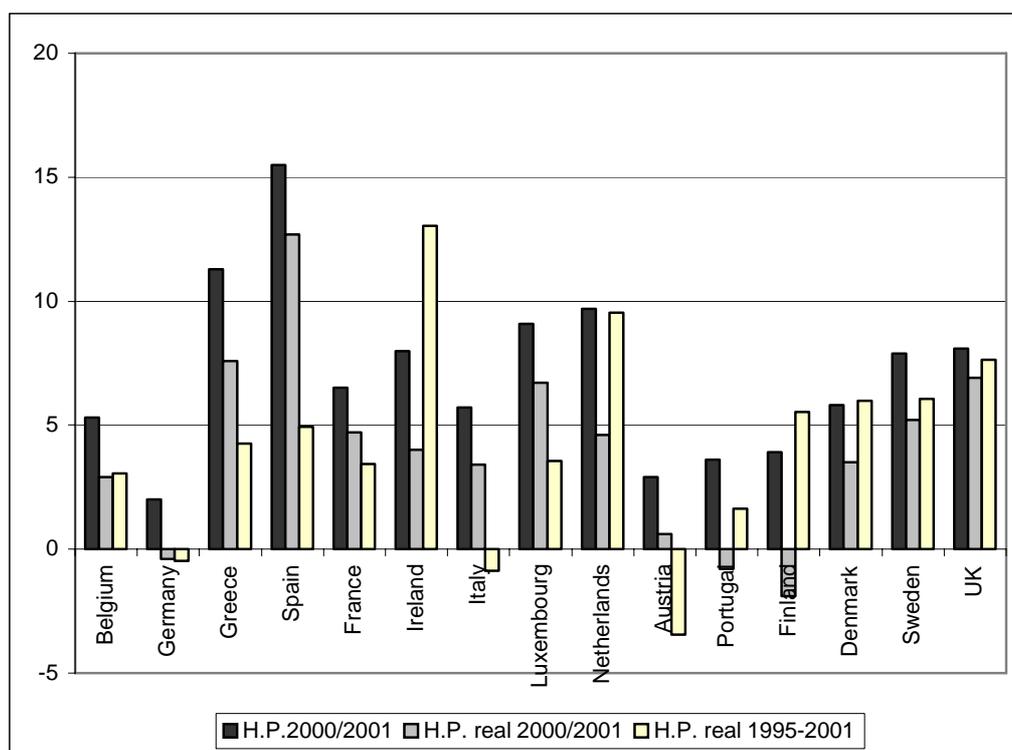
While in the past, especially from the 1950s to the early 1970s, housing economics discussed mainly the need for an increase in dwelling stock and the need to higher quality dwelling stock in all developed economies the focus of discussion shifted recently towards the explanation of increases in housing prices and the fear of a rise of “*un-affordability*” in residential housing.

### ***1.1. Changes in Housing Prices and developments in housing finance***

In the last years housing markets were characterized by substantial price increases. As graph I shows housing price increases vary substantially across countries and time. Spain shows the strongest price increase of 12.7% when looking at the real numbers 2000/2001, whereas in Finland real prices even decreased by

1.9% in the same period. When looking at the real price increases from 1995-2001 similar spreads across countries can be observed. In this case Ireland has the highest rise of 13.05% and Austria the highest decrease of 3.44%. When taking the whole boom phases in housing prices of various European Countries into account increases of up to 243% (Ireland between 1992-2005) can be observed. This number is followed by the developments in the Netherlands (1985-2005), the UK (1995-2005) and Spain (1996-2005), which noticed an increase of 183%, 137% and 114%. (RICS, 2006:9)

Graph I: Developments in Housing prices in EU15



Source: ECB, 2003; Czerny / Wagner, 2003

Despite of different slightly changes results when looking at different time horizons distinctive blocs of countries can be distinguished. Germany, Austria, Portugal and Finland can be classified as economies stable housing prices, whereas the UK, Ireland, the Netherlands, Greece and Spain show strong increases in

housing prices; although the price performance varies with the observed time horizon. The UK, Netherlands and Ireland show high increases from the 1995 onwards, whereas housing prices faced a strong increase in Greece and Spain only in the 2000/2001.

Simultaneously to these developments in housing prices also major changes in housing market could be observed. These trends were partly promoted by changes in European demographic structures, socio-economic changes – which in turn had an influence on housing market demand especially the decreasing number of household members – and overall macroeconomic indicators, like the need to reduce public debt and deficit ratio to fulfil the Maastricht criteria, which required in turn a decrease in public spending and lower volumes of housing subsidy programs to fulfil social aims (see among others Czerny, 2001; Springler 2005). Additionally the liberalization of credit markets also had an important influence on housing finance structure, which followed the model of the US housing finance structure and focused on strengthening secondary mortgage markets and the implementation of innovative housing finance products.

In the US, the development of secondary markets in the housing finance sector emerged already in the 80s and reached a remarkable volume in the mid 90s. As Colton (2002:8) describes, seeds for innovative products on the housing sector were inserted in the late 60s with the division of the Federal National Mortgage Association into two entities, Fannie Mae and Ginnie Mae; the purpose of the latter was to guarantee *mortgage backed securities*<sup>1</sup> insured by the Federal Housing Administration and the Veterans Association and issued by Fannie Mae. Nowadays the US housing finance system has experienced further diversification in mortgage backed securities, which include the increasing importance of issues by so called

---

<sup>1</sup> Using this instrument of securitisation a bank or other finance company sells loans to an independent company for cash payment. The company in turn issues bonds to investors and uses the proceeds from the sale to purchase the loan from the original creditor. Repayment of the loan is used to redeem the bond. Several forms of mortgage backed securities exist, like residential mortgage backed securities or commercial mortgage backed securities (see Committee on the Global Financial System 2006: Box 3 p.15). Mortgage backed securities differ from Mortgage bonds (Pfandbriefe), which have been extensively used in many European Economies also before the recent boom in secondary housing finance markets (see for more detail Suarez / Vassallo 2004: 44)

Non-Agencies, which in contrast to the government-sponsored enterprises Freddie Mac and Fannie Mae do not only give, concentrate to give mortgages to not-prime debtors (households) (Colton 2002:18; Florida 1986:xiii; Frankel 2006:76). The total volume of mortgage backed securities increased constantly in the 90s and reached 2005 2.9 billion US dollar. The ratio of Non-Agencies increased even stronger in the last years and accounts 2005 for more than 75% of total volume; in 2001 their ratio was below 50% of total mortgage backed securities issued (Frankel 2006:77). Despite of the increasing possibilities of lower income households to become house owner – which was of course one main argument in the US to promote innovative housing finance products<sup>2</sup> - these developments are connected to increasing risk of default for lower income households (Debelle 2004:59) as can be see when looking at the increasing household debt to asset ratio.

Compared to these developments the situation in Europe is far not that elaborated. Out of the Member States of the European Union the secondary housing finance market in the UK is by far most developed and accounts for 47% of total residential mortgage backed securities in Europe - this amounts 18.4 billion Euro issuance in the first quarter 2006. (ESF 2006:2) Although with lower volume, similar trends towards secondary mortgages and sub-prime mortgage lending can be observed here (Miles 1994:38; Committee on the Global Financial System 2006: 16). Comparing developments of increasing housing prices in European Economies from graph I with the share of European securitization Markets as described in table I it becomes evident that most countries with extensive use of securitization housing finance products also experienced a strong increase in house prices. Nevertheless there is no full correlation observable. Despite of the fact that securitization products were introduced, also institutional and structural features of the housing finance system seem to be important to promote or hamper strong housing price increases. Based

---

<sup>2</sup> Another major argument was the improvement of possibilities to withdraw housing equity.

on these empirical evidences, structural features of national finance systems and housing finance systems are elaborated.

Table I: Share of European Securitization Market in %, 2003

Country	Share of European Securitization Market 2003 in %
UK	35
Spain	17
Italy	16
Netherlands	10
Portugal	5
France	3
Sweden	2.5
Other countries	11.5

Source: Suarez / Vassallo 2004:48

### ***1.2. What is meant by housing affordability?***

As the states significantly reduce their social responsibilities and shift social risks into the sphere of individuals, also the definition of formerly “social housing” was transformed into housing “affordability”(Stone 2006). The major difference between these terms regards the degree of state influence. By “*social housing*” primarily the provision of *low rents* due to state intervention, by rent ceilings or the construction of new dwellings with state subsidies is meant. Housing affordability covers not only this social aim, but aims simultaneously to ease access to financial means for housing to low income classes. As housing finance systems become the crucial factor for fulfilling the social aim, this paper distinguishes different housing finance systems. It is assumed that housing finance systems, with a strong emphasis on market finance – via secondary markets – also aim to improve financial assistance to all income classes and

therefore promote the social aim of increasing homeownership as affordability measure. Conversely, housing finance systems with a focus on a bank based national financial systems have no social goal in easing financial access to lower income classes. Therefore housing affordability is promoted in these systems via a stronger emphasis on state intervention by supply side housing subsidies, which aim to decrease rents by producing cheaper – subsidised - dwelling stock.

A combination of housing finance systems that are characterized by similar features – which are discussed in section 2 of this report - as bank based national financial systems and a focus on demand side state subsidies, which aim to promote the poorest income classes but do not aim to provide cheaper housing by subsidize dwelling stock, can be regarded as “*mis-performing*” regardless the definition of “*social aim*” in the respective country – neither focus on homeownership increase nor in social housing via low rents. On the other hand does a combination of financial systems following a market approach and therefore promoting homeownership and a focus of state authorities on supply side subsidies not necessarily lead to a mis-performance of the social aim of affordability, as in this case poorer income classes have both easier access to the financial market and can benefit from lower rents provided by state subsidies dwellings.

To see whether an economy fulfils its proclaimed aim is it necessary to define the structure of housing finance first.

## **2. National financial systems and housing finance systems**

Based on the discussion of different national housing finance systems which are affecting the type of housing affordability a nation aims for, similarities between national financial systems and housing finance systems are discussed in the following and will help to derive quantitative indicators to classify EU15 member states and the USA into a more market based – homeownership society - or a more bank based – renters society.

### *2.1. Defining housing finance systems*

When trying to classify national financial systems, flow of funds for investment and firms' financing used to be the starting point for economists (OECD, 1995:15; Allen and Gale, 2000). Although it turned out that this functional finance approach has its limits due to the minor importance for firms' financing, since the main source of finance are retained earnings (see among others Schaberg, 1999:20; Huffschnid, 1999: 18) it remained the main starting point for analysis. To different paths to deal with the consequences of the analysis of Schaberg and Huffschnid were drawn. On the one side economists like Corbett and Jenkinson, 1994:74 or Mayer, 1988 concluded that the classification has to be enriched by qualitative factors which aim at investigating the *relationship between creditor and debtor* in a national financial system. On the other side economists, especially those of the World Bank (Levine, Demirgüç-Kunt, Beck and others) developed a more sophisticated *data base* (Demirgüç-Kunt and Levine, 1999) as to measure not only flow of funds but also depth and efficiency by comparing volume and turnover of the banking sector and the stock exchange. Although the method introduced by economists of the World Bank suffers from strong sample dependency it can serve as a first step to grasp the financial flow of funds interrelations between banks based and market based economies. When additionally looking for example at the methods of banking regulation to account for the qualitative factors a better overview over different national financial systems can be given. It can be shown (Springler 2006) that in developed economies qualitative and quantitative characteristics of financial systems (market based or bank based) simultaneously aim to promote higher short term / or long term growth and enable more / less innovation by less / more rigid institutional frameworks, which in turn promote a lower or higher degree of stability.

Table 2: National financial systems and housing finance

	Bank Based		Market-Based	
	Financial System	Housing System	Financial System	Housing System
Financing	Credit	Mortgage	Stock Exchange	securitization products
Relation creditor /debtor	tight	tight	loose	loose
Time horizon	Long term	Long term / housing	Short term / shareholder value	Short term / liquidity
Regulatory regime	Protective banking reg.	Primary social goal / strong state interference	Preventive banking reg.	Ownership society / strong market mech.

Basing on this analysis this paper states that similar to the distinction into national financial systems for financing investment projects of firms, different financing systems for durable consumption goods of households – housing – can be distinguished. Similar to the findings of analysis in national financial systems table 2 distinguishes between bank-based and market-based housing finance systems by introducing quantitative and qualitative indicators.

The primary source of financing investment projects serves as starting point for quantitative measurement. The criteria *financing* will be a dummy variable for a so called “structure index”, which will be explained in more detail when analyzing the different housing systems and follows the methodical approaches of the world bank in conducting a more sophisticated data base on roots of financing by distinguishing between size, volume and efficiency of the banking sector compared to the stock exchange in a respective country. Similarly the indicator financing resembles the focus of housing finance systems on mortgages or secondary market instruments like asset backed securities. Although the main actor in this case, the household, does not actively aim to use securitization instruments limited or excessively, this shows the importance of the

stock exchange. The quantitative criterion of financing is amended by several qualitative criteria which represent the institutional and structural framework of the housing finance sector. The *relation between creditor and debtor*, that can be rather tight or loose helps to understand how the individual household is seen in the system. In case of a tight relation, which is the case in a bank based national finance system or housing finance system changes in the loan contract might be added in case of illiquidity of the household or changes in the overall wealth position. In case of a loose relationship, there might be less intention to discuss alterations in the contract. The existence of tight or loose creditor / debtor relations emerges immediately out of the quantitative analysis of the volume, size and efficiency of the housing finance system. Another qualitative criteria is the *time horizon* of the system, similar to the respective characteristic of bank based and market based financial systems also the housing finance system might be settled in a long term or short term institutional framework (see table 2). A quantitative measurement to grasp this qualitative factor might be the amount of equity withdrawals in a system, which are not used to housing purposes. The *regulatory regime* is a further important qualitative indicator for a rather bank based or market based financial system. This criterion emerges from banking theory to explain differences in regulatory methods between bank based and market based financial systems and aims to show the strength and directness of state intervention on the national financial system (Bernet, 2003). Preventive and protective measures can be distinguished by looking at different regulatory frameworks. Protective measures would imply a stronger and more direct interference of the state with the financial structure, whereas preventive measures would focus on self-regulatory market mechanisms for regulation and therefore resemble a market based financial system. In terms of housing systems schemes, the volume and structure of state subsidy programmes, which either aim at promoting an ownership society or promoting affordable housing, seem to be the crucial factors for distinguishing between bank based and market based housing finance systems. A method to quantify these qualitative measures is shown section 3.

## *2.2. Classification according to quantitative indicators*

The Evaluation of quantitative indicators follows the approach of the World Bank (Demirgüç-Kunt/Levine 2001) for the Definition of National Financial Systems, which constructs a “*structure index*” basing on three indicators that resemble the relation between national credit markets and the stock markets. Indicators for size, activity and efficiency show the importance of one or the other form of financing for firms and the underlying financial structure. *Size* refers to domestic assets of deposit money banks relative to domestic stock market capitalization. *Activity* refers to the ratio of private credit by deposit money banks relative to the total value of stock transactions on domestic exchanges. The higher the ratio the stronger is the bank sector compared to the stock exchange. The third indicator discusses the *efficiency* of the banking sector compared to the stock exchange by computing two relations: Trading – the total value traded divided by GDP – related to overhead costs of the banking sector and trading in the same definition as above related to the interest margin. The higher the outcome of each indicator the more bank based an economy is. This means that the outcome can just cluster a specific number of countries into more or less bank or market based, but lacks an absolute valuation for classification. Therefore the measurement is strong sample dependent. Additionally these variables help distinguishing financial systems according to the *financing motive* presented in table 2 but fail to give a full picture by not referring to any qualitative or institutional features of the respective national financial system. See Appendix Table I.0 for the classification into bank-based and market-based financial systems for European Economies, which were selected according to data availability.

Despite of the disadvantages of this approach a similar definition is used as a first step for a classification of different housing finance systems, as it enables an international comparison on a macroeconomic level. Table 3 shows the results for the housing finance system, using the average from the ratios (size and activity) resulting from annual data from 2002 to 2005. The indicator *activity* resembles the relationship between *lending for house purchases divided by GDP* and the *volume of issuance of mortgage backed*

*securities divided by GDP* as variable for stock market importance. The higher this ratio the more important are bank lending for housing finance and the more bank based is an economy. Similarly the indicator *size* presented in table 3 discusses the relationship between *lending for house purchases divided by GDP* and the *volume of outstanding covered bonds by GDP*. Due to a lack of more differentiated data covered bonds, which includes as well mortgage bonds, have to be used here. Although mortgage bonds are not a tool of stock exchanges but are issued by banks, this variable is used as a measurement for stock market size as it is assumed that the stock of mortgage back securities, which are another major part of covered bonds, counts for the differences in the volume of outstanding covered bonds and therefore enable the international comparison. As data for overhead costs was not available for the countries presented in table 3 the indicator *efficiency* is not used for the quantitative classification of housing finance systems.

Table 3: Classification of Housing Finance Systems – Quantitative indicators

	<b>Activity</b>	<b>Size</b>	<b>Structure Index</b>	<b>Housing Finance System</b>
BE	58,10	0,00	58,10	b
DE	82,95	0,00	82,95	<b>b</b>
GR	38,79	0,00	38,79	b
ES	9,87	0,00	9,88	m
FR	48,16	0,00	48,16	b
IE	23,75	0,23	23,98	m
IT	5,23	0,00	5,23	m
LU	25,70	0,00	25,70	m
NL	15,09	0,06	15,14	<b>m</b>
AT	117,11	0,06	117,17	<b>b</b>
PT	9,79	0,00	9,79	m
FI	0,00	0,00	0,00	m
UK	0,37	0,00	0,37	<b>m</b>
			Mean	33,4806344

Datasource: Statistik Austria; ESF- Securitization; Hypostat; own calculations

As table 3 shows, most European Economies have similar classifications in national finance systems and housing finance systems – bold letters indicate a difference between those two classifications using quantitative indicators (see Appendix Table I.0 for a detailed comparison). From this mismatch it cannot be concluded that housing finance is not fulfilling its social goals. As it is a gradual measurement not an absolute one, it is simply possible that one market shows a stronger emphasis on a specific form of financing. To grasp the underlying institutional features it is therefore important to analyze the qualitative factors as well.

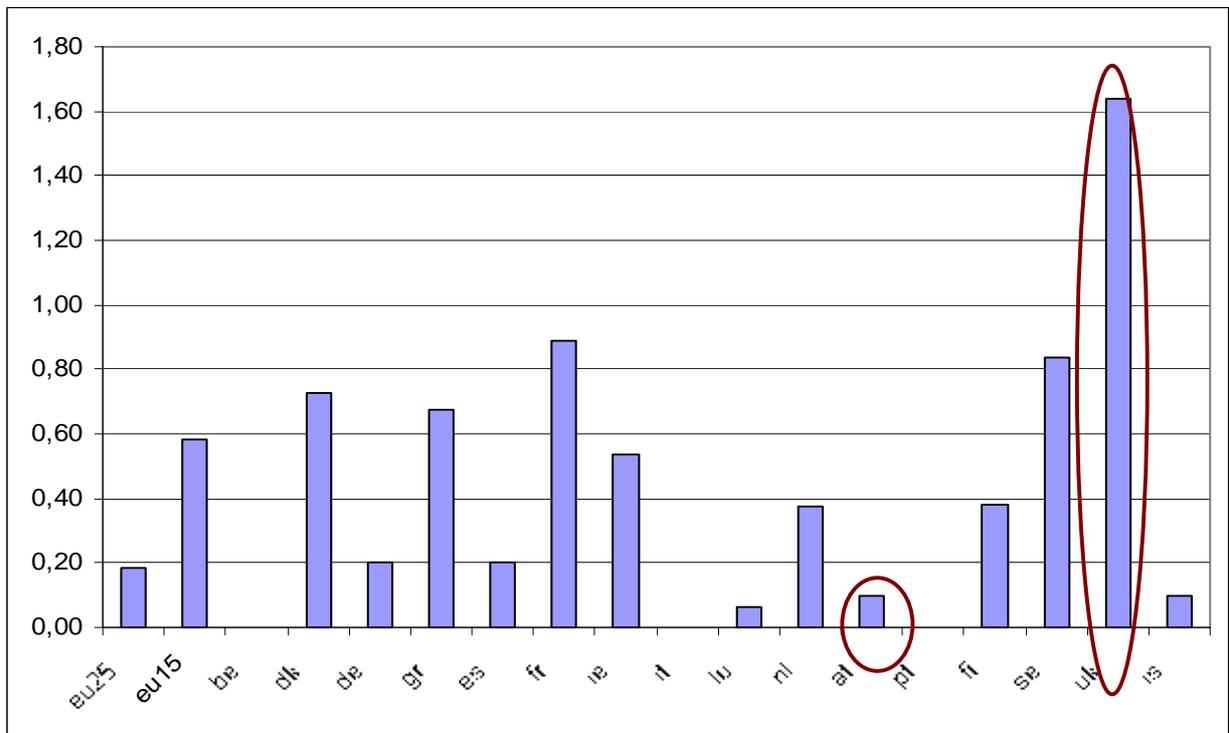
### *2.3. Structure of housing subsidy programs*

The influence of the state influence can be measured in quantitative terms by introducing two ratios, first of all the general volume of housing subsidy programs measured by the GDP shows the degree of interference of the state with market mechanisms. Furthermore the question arises whether an ownership society or affordable housing is the primary goal of state intervention. Therefore the volume of subsidy programs spend on so called supply side programs or objective / direct methods<sup>3</sup> is distinguished from demand side programs or subjective / indirect methods.

---

<sup>3</sup> Objective-measures of housing subsidy programs are used to construct new dwellings or renovate existing housing units at lower costs, which enable the sell or renting of these housing units at lower prices. Subjective measures are conversely given to a household, which has to meet certain income requirements or additionally requirements of family status to enable primary homeownership.

Graph 2: Housing expenditure in % of GDP



Datasource: Eurostat

A first hypothesis, which unfortunately does not help to see how effectively a system works, would be to measure the volume of housing expenditure in percentage of GDP. One might conclude that – as the state aims to reduce its responsibility and intervention in a more market based housing system, which would be in line with a market based housing finance system and a focus on demand side housing subsidy programs – housing expenditure is much lower in these economies. Housing programs have shown in the past that demand side subsidies are more expensive than supply side programs – which can easily shown by comparing the data for Austria, a countries focusing on supply side, and the UK, which focuses on demand side subsidies (see Graph 2).

Table 4: Classification of State Subsidy Programs

	Structure	State Subsidy Programs
BE	0,85	b
DE	0,20	m
GR	--	--
ES	--	--
FR	0,21	m
IE	0,81	b
IT	--	--
LU	0,08	m
NL	0,08	m
AT	0,76	b
PT	0,26	m
FI	0,07	m
UK	0,12	m

Datasource: Stigel, 2004, Eurostat; own calculations

To find out whether an economy focuses on a homeownership or a renters-society therefore an indicator is conducted as volume of supply side measures to GDP to the volume of demand side measures to GDP. The bigger the result, the stronger are objective measures – supply side programs - and therefore the aim to create affordable housing in the sense of a renter’s society. Similarly to table 3 renters societies are classified in table 4 as bank based (b) and homeownership societies as market based (m).

### 3. Affordability: structural mis-performance versus effectiveness

As a first step the potential structural mismatch, which refers to differences in the social aim according to housing finance system and state subsidy programs, is detected. Additionally the performance of EU15

economies is measured by the risk of poverty rate of households after social cash transfers and the average changes in percentages of households with financial burden due to housing costs from 1996-2001.

Table 5: Structural harmonization and mismatch

	<b>Financial Structure</b>	<b>State subsidy programs</b>	<b>Homeownership-rates</b>
BE	b	b	--
DE	<b>b</b>	<b>m</b>	41
GR	b	--	--
ES	m	--	85,26
FR	<b>b</b>	<b>m</b>	64,6
IE	<b>m</b>	<b>b</b>	77,4
IT	m	--	67
LU	m	m	--
NL	m	m	52
AT	b	b	49,1
PT	m	m	64
FI	m	m	64,6
UK	m	m	67

Table 5 shows the results comparing the structural evaluations of national housing finance systems and state subsidy programs. Most EU15 member countries - with the exception of France, Germany and Ireland - show a homogenous outcome comparing financial structure and state intervention. In the case of France and Germany this mismatch can be quote as structural mis-performance as both countries have a more rigid housing finance system which does not promote housing finance for lower income classes and a state subsidy program which does not focus on lower rents but provides only the lowest income classes with state subsidies. Housing policy programs to fulfil a redistributive aim, but lower middle income households do neither have the opportunity to create homeownership nor can they profit from lower rents. In the case if

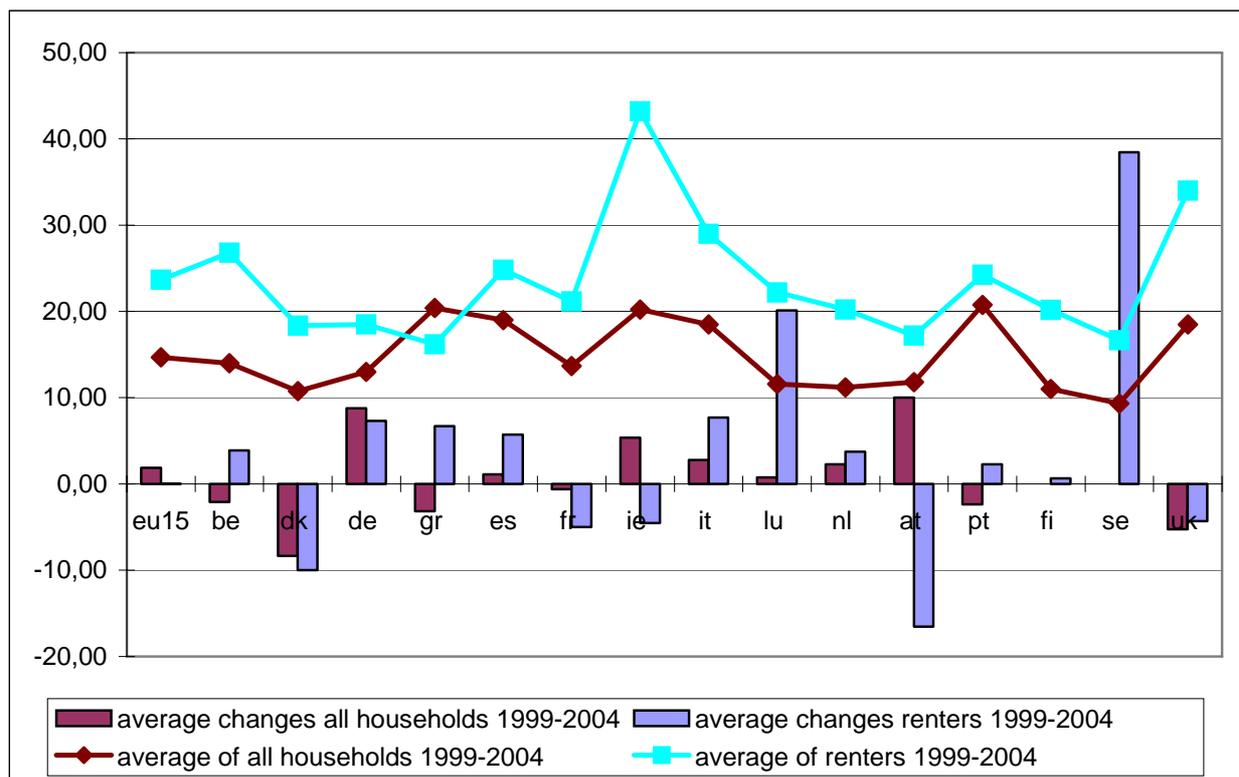
Ireland structural mismatch does not seem to lead to a structural mis-performance of housing policies immediately, as lower income classes and lower middle income households are on the one hand promoted by cheaper rents due to supply side state intervention and on the other hand have easier access to the financial market to finance homeownership than bank based housing finance systems. Are the theoretical arguments supported by empirical evidences of the last years?

In general two different levels of at risk of poverty rates after social cash transfer according to housing can be distinguished in Europe. On the one hand, countries like Italy, Ireland, Great Britain, Spain and Greece are constantly well above EU15 average using data from 1999 to 2004. On the other hand countries like Austria, Sweden, Finland and Luxemburg are constantly below EU15 average and show a similar trend as EU15 average – see graph 3.0 in Appendix. Germany, France and Belgium fluctuate across EU15 average. Comparing this empirical evidence with data plotting from a continuum of financial structure and subsidy structure in European Countries (see Appendix Graph 3.1.), it becomes evident that economies with market based structures have a higher level of risk of poverty. Secondly it can be seen that the more bank based the financial and subsidy structure is the more stable and at a lower level is the risk of poverty rate.

Besides of different levels of risk of poverty rates between European Countries, also different developments in the years 1999 to 2004 can be observed. Although starting from a higher level of risk of poverty rate, Great Britain faces a decrease in the years 1999 to 2004 for all households and renters. Apart from Great Britain, a similar trend for renters can only be observed in Denmark, Austria, Ireland and France. Especially for the case of France it has to be kept in mind that graph 3 shows the average development from 1999 to 2004, and does not show the severe annual fluctuations that occurred (see Appendix graph 3.0). For all other economies in the sample of graph 3 the situation of renters worsened compared to the average of all households. Again this is especially worrying for those economies – bank based ones – that aim to promote

affordable housing for renters. For those economies only in the case of Austria a clear decrease in the risk of poverty rate for renters can be observed. As graph 3 shows, data is missing for Finland; Belgium and Germany show a strong increase in the risk of poverty rate and the data for France is characterized by strong fluctuations. Similar results can be obtained when taking into account the developments of financial burden between 1996 and 2001. Basing on Eurostat data graph 4 a) and b) show the developments of households with financial burden and households with heavy financial burden.

Graph 3: At risk of poverty rate after social cash transfer according to housing - cut-off point: 60% of median equivalised income after social transfers



Datasource: Eurostat

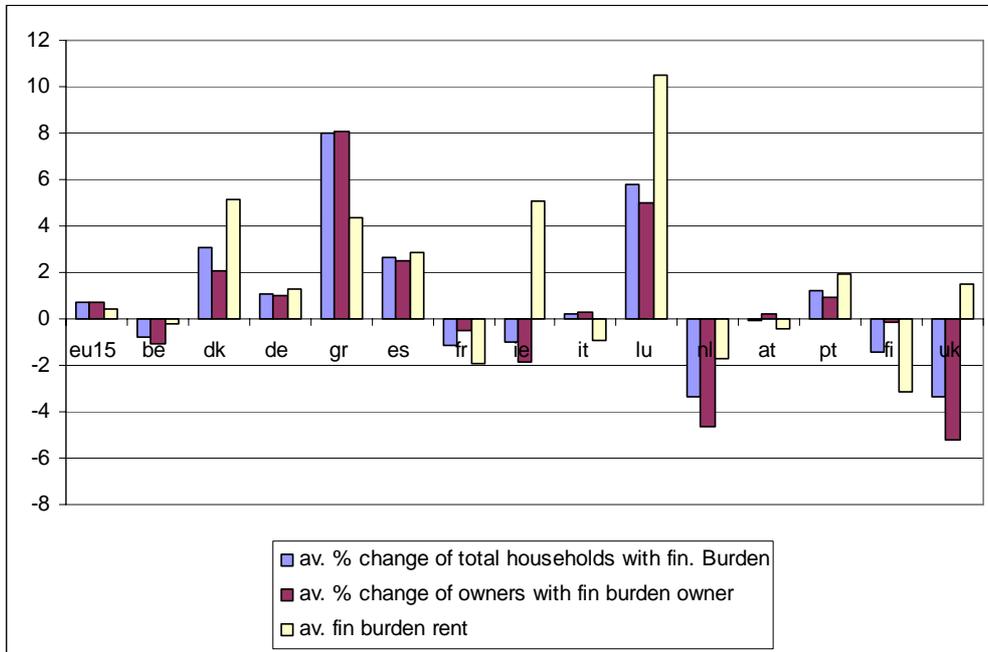
The overall decrease of the percentage amount of households facing a heavy financial burden that is also shared by renters households can similarly not be observed for households with financial burden. This strengthens the hypothesis that housing subsidy schemes aim especially to reduce financial burden for the

lowest income classes but do not promote lower middle income classes which in an increasing number face a financial burden due to raising housing costs. As the promotion of purely the lowest income classes is in line with a wider definition of affordability as it is used by so called “market based” economies. Regarding the two strong “bank based” economies in the sample – Austria and Belgium, both show a decrease in the percentage of renters’ households under financial burden in average of the period 1996-2001.

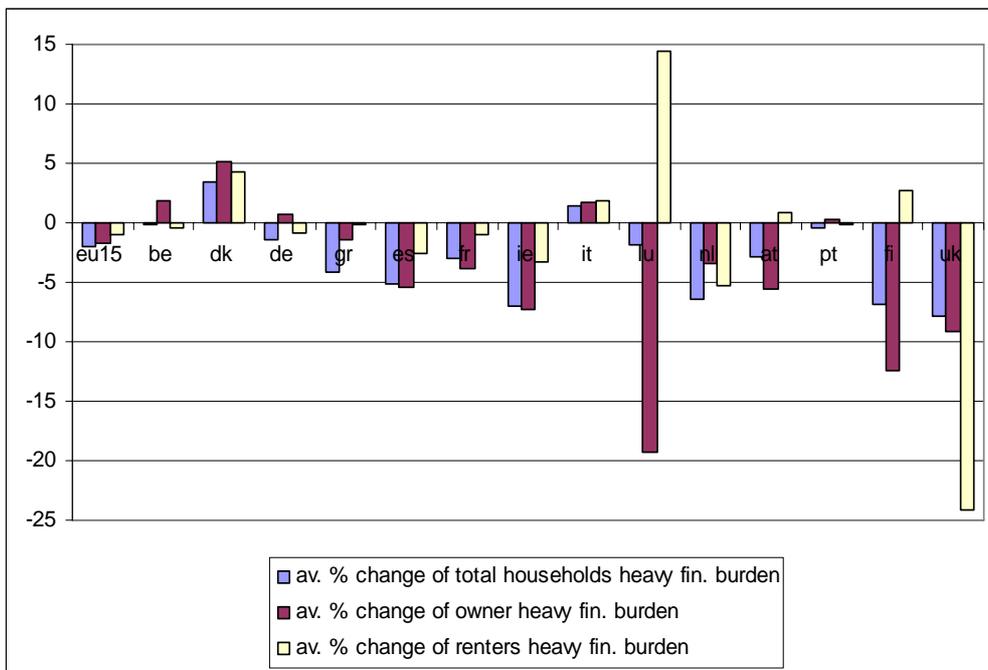
Regarding economies with “*structural mismatch*” according to the structure of housing finance and subsidy programs, the empirical data are mostly in line with theoretical assumptions: In Germany an increase of the general percentage of households with financial burden on average of 1996-2001 could be detected, which implies an increase of ownership’ and renters’ households. In Ireland a strong average increase of renters’ households with financial distress occurred, which was offset by a sharp decrease in ownership households. The data for France, which is not in line with the theoretical assumption of “*structural mismatch*”, can be explained by the strong fluctuations in data, which can be observed as well in graph 3.0 in Appendix. Countries with “market based” background like Great Britain, Portugal, Luxemburg or the Netherlands all show a better development for ownership households than for renters’ households.

Graph 4: Measuring financial burden 1996-2001

a Households with financial burden due to the housing costs



b. Households with heavy financial burden due to the housing costs



Datasource: Eurostat; own calculations

Therefore it can be concluded that although focusing on a wide definition of affordability in most European Economies the potential of “*new poverty*”, which affects mostly lower middle class income households, increased substantially. Countries aiming to promote homeownership could not prevent major cost increases during the last years. Although, in general, the situation for renters was even worse than for homeowners, economies focussing on a more narrow definition of affordability by focusing on lower rents managed to keep housing costs at a lower level and faced on average a lower percentage increase in households with financial burden due to housing costs. Nevertheless implies the analysis above weaknesses as macroeconomic data is not always fully comparable and housing structures differ often within regions and can therefore only be measured by a continuum. Therefore this paper will focus in the following on two areas, which show a comparable size and differ substantially in their structural approach towards housing finance and housing subsidy programs: the San-Francisco Bay Area as representative of the market based housing finance approach and Austria as representative of the opposite.

#### **4. Comparing the San Francisco Bay Area and Austria**

From the point of view of financial structure, Great Britain serves as a model for market based financial systems in Europe and as seen above similarly for housing finance structures. Within Europe, Great Britain has a long tradition in promoting market based financial structures, but also Great Britain follows a model economy: the USA.

##### ***4.1. The US as a role model for changes in Europe?***

*“In its preamble to the 1949 Housing Act, Congress declared its goal of “a decent home in a suitable living environment for every American family”. In the more than 50 years since this legislation was passed, the federal government has helped fund the construction and rehabilitation of more than 5 million housing units*

*for low-income households and provided rental vouchers to nearly 2 million additional families. Yet, the nation's housing problems remain acute. In 2003, 46 million households lived in physically deficient housing, spent 30% or more of their income on housing, or were homeless (National Low Income Housing Coalition 2005a; Harkness 2005).“*

(Schwartz 2006:1)

As Schwartz clearly points out (see above), the USA focuses on a “wider” definition of affordability, focusing on the increase of homeownership. Unfortunately, as the data above shows, the methods seemed not to have helped to provide a decent home and suitable living for each American family; housing costs and the financial burden was increasing substantially, in the last decades. Therefore this paper will discuss in the following housing policies from a historical point of view to highlight the structural changes that formed the housing policy program that is in force today.

#### *4.1.1. Historical developments in housing policies*

Apart from tax advantages, which are indirectly the major support for households, three lines of programs are in force (see for more detail among others Schwartz 2006, 2ff; Green/Malpezzi 2003): supporting construction, helping renters paying their privately owned housing units and the provision of states and local entities with financial means, is called *block grants*. Although the oldest of these programs cover supply side programs (introduced 1937) – basing on section 8 programs of Renovation of HUD (U.S. Department of Housing and Urban Development) assistance programs – are only a minor part of subsidies. The focus of direct expenditure lies within the low income housing assistance program. Vouchers<sup>4</sup> are given to renters of privately

---

<sup>4</sup> Vouchers replace the so called Section 8 “Existing program”, which worked similar and allowed low income households to obtain a certificate that enabled them to rent a housing unit which met certain criteria established by HUD at fair market rent or below. The formula started with support between market rent and 25% of income and was enlarged later to 30% of household income (Goetz 2003, 51). In general this Section 8 “Existing program” is not to confuse with the other two Section 8 programs “New Construction” and “Substantial Rehabilitation”, which were in force after the 1974 Housing and Community Development Act and emphasized on supply side subsidies.

owned entities, should cover the differences between 30% of their income and the maximum allowed rent, which is a fair market rent that is computed by the HUD basing on census statistics and local statistics (Peterson 2000, 144; HUD 2005, 21). This measurement shows indirectly which amount of housing expenditure is meant to be affordable: 30% of housing income. The system of vouchers gains importance, as privately constructed housing units with government support from the mid 70s and 80s of the 20<sup>th</sup> century start to phase out their obligation to rent housing units to lower income classes at reasonable prices and can be re-rented at the market-rent now. These section 8 programs of New Construction were replaced continuously by voucher systems and the remaining small volume of this support was dedicated to renovation programs. The structure of housing subsidies moved clearly towards demand policies and aims to promote directly only the poorest income classes, where it is evident, that these income classes depend on privately constructed housing units and do not have any possibility to own their house. The potential of these measures to increase rent pressures for the private sector and diminish the effectiveness of housing vouchers on the one hand and raise on the other hand the housing expenditure needs of the state are not discussed in this paper, but taken as given. Similarly arguments for a decrease in segregation as vouchers to freely choose housing within a metropolitan area (see Peterson 2000, 142; Priemus 2000, 191) are given and are not discussed in detail, but are seen in combination with the former argument<sup>5</sup> of additional boosts of rent prices as weak attempts to promote social integration of ethnically or economically stigmatized American households. In this respect this paper contradicts the studies of among others Goetz (2003, 57pp), that assigns highest desegregation potential to voucher programs as mobility is reduced and households are again forced to stay within certain metropolitan areas when rent prices are increasing.

Comparing this with the fact that housing expenditures were cut in the past especially in times of economic crises, like during the Reagan administration from 1978 to 1983 from 8% to 2% of GDP – despite of this

major cut housing expenditures in the USA were still much higher than in Europe (see also Graph 2). Although the consequences was not to reduce the volume of subsidy programs, poor households received less economic help due to the reduction of the duration of subsidies for each household (Schwartz 2006, 40pp).

Another important feature of the American System of housing policies is the high amount of housing related tax expenditures, which cover all kinds of *tax breaks* to homeowners and investors in rental housing. Schwartz (2006) gives an overview of these models (p.71pp) and it becomes evident that this system of tax alleviation tries to cover different forms of tenure as well as different methods of housing finance. Nevertheless, the higher income levels which are exposed to any kind of housing expenditure benefit from these models. When focusing on the housing finance structure from a historical perspective also the role model of the US for market based structured European Economies becomes evident. The Years of Great Depression were not only characterized by a macroeconomic collapse but also by a severe housing crisis. Mortgages, which were rare in supply and due after 2 to 11 years, could not be paid back anymore (Schwartz 2006, 47p). The consequence of this housing finance crisis was three folded and aimed to increase loan supply: First the role of savings and loans banks was strengthened by the Federal Home Loan Bank Act of 1932. Secondly a Home Owners Loan Corporate (HOLC) was founded by the Home Owners' Loans Act of 1933, which aimed to refinance loans in default by acquired mortgages in default and rewriting them at much more affordable terms. The foundation of the Federal Housing Administration (FHA) finally stabilized the newly created systems with state guarantees and increased simultaneously the potential amount of loans. As the secondary market facility of mortgages insured under the Federal Housing Administration the Federal National Mortgage Federation was founded in 1938, which is also

known as Fannie Mae.<sup>6</sup> In 1986 Fannie Mae was reorganized, split into two parts, a government- sponsored private cooperation, which kept the name Fannie Mae, and a government corporation, Ginnie Mae (Government National Mortgage Association, which aimed to provide a government guarantee for mortgage backed securities insured by the Federal Housing Administration. Fannie Mae on the other hand was the enterprise with the authorization to issue such mortgage backed securities. A further step towards the improvement of secondary market facilities to housing finance was laid 1970 with the foundation of Freddie Mac, which was the tool for the savings and loans industry to sell conventional residential mortgages. From this time onward the secondary mortgage markets developed sharply till now (Williams 1986 41pp, Villani 1986) and created numerous innovative housing finance products, like Reverse Mortgages as method of withdraw equity for elderly (Kaufman / Paulsen 1986, 400pp). For European housing finance systems especially the importance of mortgage backed securities serves as role model for market based housing finance systems, as can especially be seen by the development of Great Britain<sup>7</sup>.

From a structural point of view there is not doubt on a homogenous aim to enable homeownership for all income classes; as a next step the effectiveness of housing policy measures is analyzed.

#### *4.1.2. Affordability in the USA*

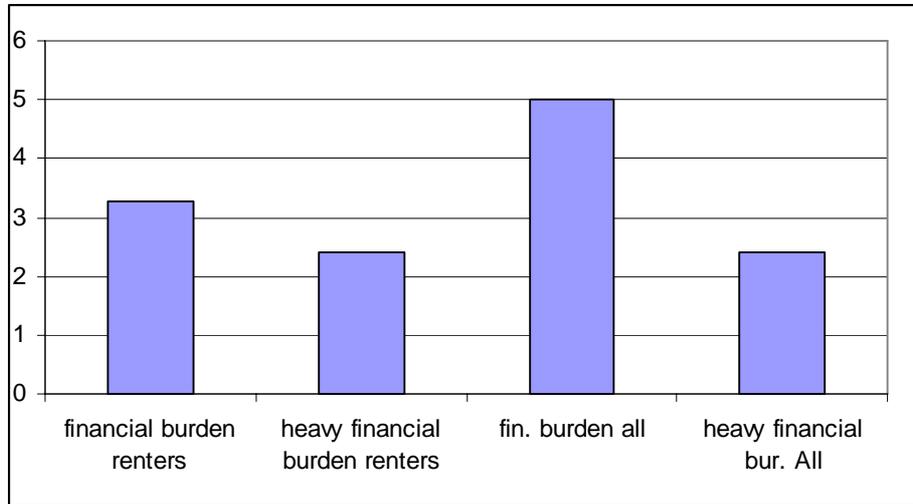
Graph 5 presents the average annual percentage change in financial (30%-50% of household income) and heavy financial burden (more than 50% of household income) of total households and renters according to the Housing Affordability Data System of the U.S. Housing and Urban Development 1999-2003.

---

<sup>6</sup> See among others Colton 2003, 170pp; Pozdena 1988, 116pp; Schwartz 2006, 44pp; Miles 1986, 6pp for more details on the evolution of the housing finance system in the USA.

<sup>7</sup> As Miles, 1994 (49pp) shows increased also the equity withdrawals during the 1980s dramatically hand in hand with the introduction of innovative housing finance products.

Graph 5: Average annual % changes in (heavy) financial burden of total households and renters 1999-2003.



Datasource: HUD, HADS Data base; own calculation

#### 4.1.3. California's housing market structure and the characteristics of the San-Francisco Bay

The goals of the Department of Housing and Community Development targeted in the current (1997-2020) state wide Housing Plan are very ambitious and cover a wide range of necessary changes in housing policies.

Developments in the housing market differ partly from what can be observed in European Countries like Austria. In the past a major point for cutting nation state housing subsidies has focused on the fact of a stagnated population growth, which in turn decreases the future need for new housing stock. Despite of that, socio-economic shifts in family (patchwork families) and household structure (increase in single households) will increase housing demand also in the future, as shown for European Economies. In California increases in housing demand stock occur primarily because of the rise in population, which will account for 5 million new households till 2020 (Landis et. al. 2000: 3). Additionally low housing production in the past (see Smith-Heimer et. al. 1998: 38pp) – especially till the late 1980s widened the

shortage of housing in California (Landis et. al 2000: 3). The San Francisco Bay Area follows the trend of the state and will face an increase in population – although a disproportional low one in comparison to the whole state – with a rise of 1,1 million inhabitants till 2010, which will account for an increase of households by 460.000. Nevertheless is the size of the population with a projection of 7.7 million in 2010 and 8.29 million inhabitants in 2020 (Landis 2000: 17p) in the Metropolitan area of the San Francisco Bay Area comparable with the number of inhabitants in Austria. Apart from this general increase in population similar trends like in Europe of an “aging” population can be observed in this Area, which will lead to special requirement for the housing stock in the future.

In terms for ownership rates the Bay Area was in the past below the state wide average for metropolitan areas; these data in turn was constantly below the nation state wide data for the US. (see data Landis et al. 2000: 166, Exhibit 46). Accompanied with low ownership rates increasing and high rents could be observed in the past. Between 1995 and 1997 the average rents asked by 14.4% on average of all nine counties in the Bay Area. Within these counties strong differences in rent increased could be observed. In the urban centre, San Francisco’s rent increases peaked at 35% whereas no increase in rents could be observed in the county of Napa.

Out of these basic developments of the housing market in California the state-wide housing plan summarizes the needs of the housing market the following:

*“California will need more suburban housing, more infill housing, more ownership housing, more rental housing, more affordable housing, more senior housing and more family housing.”*

(Landis et al. 2000: 9)

Which measures are undertaken to reach these goals and where does the money come from in California and for the San Francisco Bay Area?

#### *4.1.4. Administration of federal and state funds in California*

In the United States the distribution of federal and state funds follows an administratively complicated multi-level procedure.

On the federal level the U.S. Department of Housing and Urban Development (short HUD) funds numerous programs to support homeownership, affordable housing, housing assistance, fair housing as major parts of their goals. The Department of Housing and Urban Development consists basically of three major areas:

- *Community Planning*, which administers state and local block money,
- the *HUD's office of housing*, which oversees the Federal Housing Administration, Mortgage Insurance, with the aim to offer mortgages with interest rates well below the market rates and
- the *Public and Indian Housing Program*, which concentrates on low income programs and housing assistance programs, like the Section 8: housing voucher program.

A fourth division is the civil right compliance department, which oversees the individual programs only indirectly.

A major part of the funding for the different states of the United States is channelled through the division of *Community Planning*. Via the congress tax funds are allocated into grants for states and local authorities. The grants are divided into formal grants and competitive grants. For most programs within the Community Planning, section states and local authorities are eligible; depending on the percentage of population and the percentage of population with low income. Competitive grants of the other hand are given basing on a score principle of emergence and additional needed assistance, like emergency shelters. The grants received by the individual states are then distributed on to the counties and cities of the state; which in turn discuss the plans of housing assistance in the city council; as public participation is very common many projects are heavily discussed and sometimes rejected in the city council. Nevertheless to be

able to recognise the needs of the cities and counties, states formulate a consolidated plan, which reflects these needs and is used as a basis for the distribution of funds from the federal department and is accompanied by an annual plan of estimated funds and distribution. A ex post annual evaluation report and additional monitoring is introduced to ensure the proper distribution of funding by the state.

Similar to the organization of the US Department of Housing and Urban Development also the California Department of Housing and Community Development (HCD) is divided into three agencies.

- The *department of housing policy* and the division of community affairs are responsible for the distribution of subsidies and allocation of grants from the community development department of HUD; as mentioned above small cities, with less than 50.000 inhabitants and counties with less than 500.000 inhabitants are not entitled to receive formal grants but have to compete for these funds.
- And important instrument of housing policy in California is located in the division of *treasury offices* within the Housing Community Development Department of the State: the *Tax Credit Allocation Committee*. As mentioned in detail in section 4.I.I. of this paper.
- The *California Housing Finance Agency* provides lending of low-cost financing for affordable ownership-housing. These mortgage loans are eligible for low and moderate-income households, wishing to buy a house as first time homebuyers.<sup>8</sup>

For the metropolitan Bay Area of San Francisco the received fundings from federal state programs are shown in Table 6. It becomes evident that funding varies substantially between periods, programs and the share the San Francisco Bay Area receives compared to funding from HUD to the State California. These fluctuations can be explained by the possibility to shift awarded funding within fiscal periods. Parts of the

---

<sup>8</sup> For a detailed structure on the California Housing Agency, see Institute for Community Economics, no year.

funding the county is eligible are paid in for example the fiscal period 2003/2004 and a larger fraction is transferred in the next period. Therefore parts of the awarded funds are visible in the evaluation report of 2003/2004 and a substantial fraction is added up to the awarded funds in 2004/2005 for example.

Table 6: Received federal funds in US Dollar: San Francisco 2002-2006

San Francisco	CDBG	ESG	HOME	HOPEWA	Total	Total California
2002/2003	0	1.628.863	1.600.000	388.594	3.61.7457	116.328.341
2003/2004	70.000	1.256.412	4.840.000	475.907	6.642.319	66.064.983
2004/2005	25.257.000	924.509	8.804425	8.562.000	43.547.934	No data
2005/2006	1.105.000	1.626.194	0	1.081.658	3.812.852	105.449.148

Sources: HCD, CAPER Reports, various issues; City and County of San Francisco, Caper Report, various issues

#### *4.2. Housing Policies and Financial Structure of Funding in Austria*

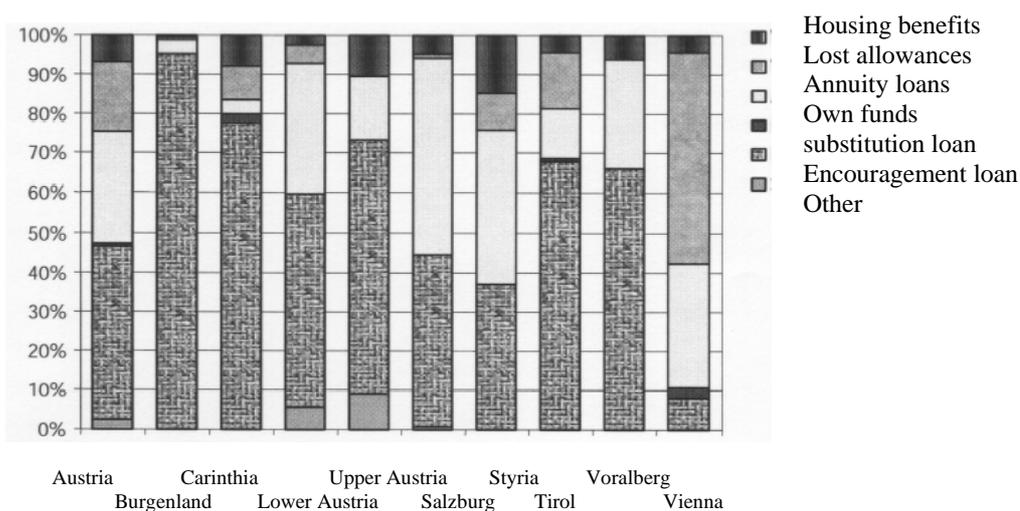
Comparing this structure of fund distribution with the situation in Austria the system in the latter seems to be much flatter and less bureaucratic although also here funds are distributed from the federal level to the nine counties. As visible in Graph 6, financial support for housing varies substantially across the nine Austrian Counties. The main 6 measures are:

- *Encouragement loan*: This is the most important measure to capture short term supply functions on the housing sector. The promotion incorporates a long term contract and the repayment of the loan. Since the money has to be repaid there is no relevance for the fiscal Maastricht criteria. Since the target is housing policy is shifted from a supply function towards a stronger redistribution function, this measure loses its importance.
- *Annuity loan*: This measure serves as addition for encouragement loans and aims to reduce unacceptably high repayments. The combination of annuity loans and encouragement loans is therefore a possibility to integrate “object-based” and “subject-based” granting schemes. (Amann, 2000:3)

- *Lost allowances:* Depending on the administrative structure of this measure it can be counted as “subject-based” or “object-based” method. In case the allowance is given to the individual it is “subject-based”. Due to differences in administrative structure the ratio of “subject-based” subsidies cannot be clearly defined. In Vienna almost 50% of all grants given count for lost allowances. Since allowances are transferred to the property developer this measure can be regarded as “object-based” (or direct measurement). The around 12% of lost allowances in Tirol on the other hand have to be quoted as “subject-based” methods, since they are given to the individual household seeking a domicile. (Amann 2000:3)
- *Housing benefits:* The administrative structure is similar to annuity loans and can be clearly defined as “subject-based” measure. In some Austrian counties the allocation of housing benefits is restricted to flats which were constructed with encouragement loans. In this case it might be possible that the owner increases rents and receives the housing benefits in the end. The application for housing benefits depends on the income of the household and income limits vary substantially between the different counties.
- *Tax promotion:* Tax promotions are of minor importance in the Austrian system of housing subsidies. According to this minor importance this measure is represented jointly with society savings promotion in the category “other” in graph 6. This measure is basically restricted to tax reduction implications for payments of interest rates of encouragement loans or the restoration of domiciles. As it regards the effects for the Maastricht fiscal criteria, there is no direct affection. Indirectly tax revenues are reduced and therefore public deficit affected negatively.
- *Society savings promotion:* On the one hand the premium according to the savings potential of the individual is patronized by the public sector. On the other hand the

interest rate is not primarily connected to the developments on the capital markets but is stabilized by state law. Since this measure offers a long term possibility to save securely and at high interest rates, many single-family houses are financed largely with society savings promotion, which is not the aim of the system of housing subsidies. According to the systems aim especially lower income classed and cheaper flats have to be promoted. Apart from this disadvantage, this measure can be clearly classified as “subject-based” approach and is similarly like the method of tax promotion affecting public deficit according to Maastricht indirectly.

Graph 6: Housing policies in Austrian: Ratio in Counties 1998



Source: Amann, 2000, p 26

Despite of regional differences one can conclude that in comparison to the U.S the Austrian system has a much stronger focus in supply side subsidies.

Also in terms of funding the two systems differ substantially. As mentioned already above, the Austrian system seems to be less bureaucratic compared to the multilevel funding system of the U.S. Table 7 shows in this respect the flow of funds into Austrian counties, which have the duty to carry out housing policy.

State grants are stable due to the fiscal equalization scheme between the Austrian federal state and the nine counties. Additionally to these federal grants the counties support their individual housing policy schemes with additional funds. As mostly loans are given, a major source for future funding can also be derived from the repayments of loans. Nevertheless has to be noted that not all repayment funds are used again for housing construction or demand side measures as earmarking of funds was weakened and also other infrastructural projects can be supported with these repayments. Expenditure in housing subsidy programs was increasing constantly – with the exemption of the year 2005 - in the last years. When comparing the differences between expenditure and state grants over the years it has to be noted that repayments and funding from county grants becomes more important.

Table 7: Revenues and expenditure of housing subsidy schemes: Austria 2001-2006 in Euro

	state grants	county grants	repayments	expenditure
2001	1,784,483,692	226,147,108	1,291,963,506	2,170,314,833
2002	1,780,951,653	489,039,695	2,184,121,869	2,430,259,005
2003	1,780,500,000	No data	No data	2,570,693,000
2004	1,780,500,000	No data	No data	2,575,156,000
2005	1,780,500,000	No data	No data	2,591,017,000
2006	1,780,500,000	No data	No data	2,579,055,000

Data source: 2003-2006 data from Verbindungsstelle der Bundesländer (2004); 2001-2002 data from Verbindungsstelle der Bundesländer, 2004a, 2002; own calculations.

Comparing the data for these two regions it becomes evident that in the San Francisco Bay area the amount of housing subsidies per capita is much higher than in Austria. But does the system show a better performance in housing affordability?

#### *4.3. Affordability in the San-Francisco metropolitan area and Austria*

With the exception of the recession of the early 2000s the San Francisco housing market was characterized also in the past a seller's market (Rosen / Bishop 2002) and faced strong price increases. Therefore it was

also in the past decades regarded as one of the most expensive housing markets in the U.S. Especially in the rented sector, affordability ratios showed that already in the 1980s about 55% of renters in the San Francisco area spend more than 25% of their income on rent and 1/3 even more than 35% of their income (Hird / Quigley / Wiseman 1987; Rosen 1984). In terms for direct federal and state funding of housing subsidies, these are small from the state California and rely basically on the lowest income levels on federal level (Hird / Quigley / Wiseman 1987, pp.30) – as presented above. This general difference between housing subsidies schemes in the U.S. and Europe – especially Austria – has not changed in the last decades.

Although homeownership is promoted in the U.S., the fraction of renter's households in California, according to the Household Survey of the year 2000 at is around 43%. This fraction is with 51% even higher in the San Francisco Metropolitan Area and increases to 65% when looking at the San Francisco County Data (see National Low Income Coalition). Within California, the estimated annual incomes of renters have been much higher in San Francisco compared to state data (see Table 8) but this gap decreases constantly between 2003 and 2006. Basing on the estimation on annual renters income and the development of the fair market rent, column 2 in table 8 shows the development of income needed to afford a 2 bedroom apartment. The ratios for California as well as for the San Francisco Metropolitan Area are above 100%, which indicates that an average renter's income is not enough to rent a two bedroom apartment. To find out about the distribution of renters households column 3 shows the percentage of renters unable to afford a 2 bedroom apartment. These numbers were decreasing after 2003 and remain not constant at around 53% in the San Francisco Bay Area and 57% for state wide data. As affordability ratios change between 2003 and 2004 without an increase in the renters' annual income in the Bay Area it can be assumed that fair market rents were decreasing in this time period and develop after than decrease constant to incomes.

Table 8: Renter Annual Income and Affordability in California and the San Francisco Metropolitan Area:

	Renter Annual Income in US. Dollar		Income needed to afford 2BR FMR as % of renter median income		% of renters unable to afford 2 BR FMR	
	California	S. F. Met.Area	California	S. F. Met.Area	California	S. F. Met.Area
2003	36.895	57.532	119%	123%	58%	60%
2004	37.651	57.152*	117%	108%*	--	--
2005	38.804	55.685	118%	110%	57%	54%
2006	40.065	57.417	119%	108%	57%	53%

\* Data given only for San Francisco county

Source: National Low Income Housing Coalition, Out of Reach Dataset, various years.

Compared to this the following situation in Austria could be observed in the last years. To observe similar data like in the U.S. the starting point is the amount of renters in specific income categories. In Austria approximately 33.4% of renters are public servants or dependent employees, another 16.5% are blue collar workers and 31.3% are pensioners (Statistik Austria, 2003: Tab. 25). For this comparison it is assumed that these ratios were stable for the last years. Therefore a median renter's annual net income net is estimated, which is conducted out of median incomes of the different income groups weighted with their respective share in renters' households. The needed income to afford a 2 bedroom apartment is conducted. As data for the average m<sup>2</sup> prices for a 2 bedroom apartment is not available for all years between 2000 and 2004, additionally the affordability of a 75m<sup>2</sup> flat based on average m<sup>2</sup> prices is conducted. The data for Austria is based on a micro-census, asking for the expenditures for housing, without distinguishing different types of rental housing, such as municipality housing or dwellings for non-profit organizations. Therefore the result per m<sup>2</sup> will be lower as the pure market rent. Nevertheless the average of all possible housing types are used here, as this symbolizes the average costs for a renter.

In the case of California, municipality housing or non-profit organizations are of such minor importance, that it is not really an option for an average renter. When looking at the results of table 9 it becomes

evident that in all years and independently which systems of expenditure are used (column 2 or 3), with an average renter's income, it is affordable to rent a 2 bedroom apartment in all years of the sample.

Table 9: Renter Annual Income and Affordability in Austria

	Renters annual income in EURO	Income needed to afford 2BR as % of renter median income	to afford 75m <sup>2</sup> according average m <sup>2</sup> prices as % of renter median income
2000	15689.5	--	83.90%
2001	16071.4	--	83.60%
2002	16619.4	--	83.00%
2003	17515	90.40%	79.40%
2004	17866	73.60%	--

Source: Statistik Austria, 2004, 2005; Statistik Austria 2007, Chapter 9; Arbeiterkammer Österreich 2006; own calculations

It can be concluded that in Austria housing is much more affordable than in the San Francisco Bay Area. Surprisingly the homeownership rates differ not very much. In Austria the ratio of renters is between 45% and 51% (depending whether the fraction of official residences and other residences are counted as rented homes or not), according to the housing survey of Statistik Austria in 2001. This data is comparable to the renter's ratio in California and the San Francisco Area.

## 5. Conclusion

After analyzing different national financial system and clustering housing finance systems accordingly, the conclusion was derived in this paper that bank-based and market-based housing finance systems follow different aims. Housing finance systems operating in a bank based financial tradition would favour long term relations and cheaper rental housing, where as housing finance system with a close relation to market based financial systems, would prefer the increase of homeownership. As this are two different normative economic goals, the support of one or the other cannot be regarded as less valuable ex ante.

When taking a closer look at ex post data of homeownership rates and affordability ratios on a macroeconomic level for European Countries and the U.S. it could be observed that besides the differences in national housing finance systems, a lack in coordination between measures of housing subsidy systems and housing finance standards lead to a less effective housing policy, no matter which goal – homeownership or rents affordability – was to be achieved.

To be able to evaluate the overall effectiveness of housing policy schemes two regions had to be compared, which were both coordinated – and therefore best practise examples – achieving homeownership or renters affordability as their normative goal. Austria was selected as a best practise example for a bank-based housing finance system and therefore aiming at low rents, whereas U.S. stands for a coordinated housing policy system to increase homeownership rates. As those two economies differ substantially in terms of size and structure, two regions were selected which are more homogenous – the San Francisco Bay Area and Austria.

The results of this comparison are that renters' affordability is higher in Austria, which is not surprising. Rather more surprising is the fact that also homeownership rates are not higher in the region of the San Francisco Bay Area and are also not substantially increasing in the observed time period. When it comes to compare the costs of the system of direct subsidies the surprising conclusion can be derived that the Austrian System is less costly than the American one, although only a minor role is given to the part of direct financing in the housing subsidy schemes and the major expenses of tax alleviations are not included in the data presented above.

Therefore it can be concluded, that even when comparing to very well between housing finance structure and policy schemes coordinated economies, the economy following a more bank based approach with the

normative goal to keep rents affordable is *more effective* in achieving that goal than economies aiming at higher homeownership rates.

## Bibliography

*Allen / Gale 2000*, Comparing Financial Systems, MIT Press.

*Amann, 2000*, Schwerpunkt Subjektförderung. Auswirkungen und Optionen einer substantiellen Mittelverlagerung. Endbericht, FGW.

*Arbeiterkammer Österreich 2006*, Wirtschafts- und Sozialstatistisches Taschenbuch 2006.

*Bernet 2003*, Institutionelle Grundlagen der Finanzintermediation, Oldenbourg Verlag.

*California Department of Housing and Community Development, various years*, Building Stronger California Communities, Consolidated Annual Performance and Evaluation report, (CAPER), various issues.

*City and County of San Francisco, various years*, Consolidated Annual Performance and Evaluation Report (CAPER), various issues.

*Colton 2002*, Housing Finance in the United States: The Transformation of the US Housing Finance System, Joint Centre for Housing Studies Harvard University W02-5.

*Colton 2003*, Housing in the 21<sup>st</sup> Century Achieving Common Ground, Wertheim publications in Industrial Relations.

*Committee on the Global Financial System 2006*, Housing finance in the global financial market, in: BIS-CGFS Papers, No.26.

*Corbett / Jenkinson 1997*, How is investment financed? A study of Germany, Japan and the United Kingdom and the United States; The Manchester School Supplement.

*Czerny / Wagner 2003*, Strukturelle Einflussfaktoren auf dem österreichischen Wohnungs- und Immobilienmarkt, in: OeNB, Berichte und Studien 3/2003.

*Czerny 2001*, Wohnungswirtschaft vor neuen Herausforderungen, WIFO, Vienna.

*Debelle 2004*, Household debt and the Macroeconomy, in BIS Quarterly Review, March 2004.

*Demirgüç-Kunt / Levine 1999*, Database Financial Structures, downloadable: [www.worldbank.org](http://www.worldbank.org).

*Demirgüç-Kunt / Levine 2001*, Bank based and Market based Financial Systems, in: Demirgüç-Kunt / Levine (ed.), *Financial Structure and Economic Growth*, MIT Press.

*ECB 2003*, Structural Factors in the EU housing Markets, March 2003.

*Eichengreen 1997*, The Tyranny of the Financial Markets, in: *Current History*, pp.377-382.

*ESF 2006*, ESF Securitisation Data Report, Spring 2006.

*Eurostat*, Database: Population and social conditions,  
[http://epp.eurostat.ec.europa.eu/portal/page?\\_pageid=0,1136184,0\\_45572595&\\_dad=portal&\\_schema=PORTAL](http://epp.eurostat.ec.europa.eu/portal/page?_pageid=0,1136184,0_45572595&_dad=portal&_schema=PORTAL), downloaded: October 15<sup>th</sup>, 2006.

*Florida 1986*, Overview, in: Florida (eds.), *Housing and the New Financial Markets*, Centre for Urban Policy, State University of New Jersey.

*Frankel 2006*, Erstklassig oder auch nicht: Finanzierung von Wohneigentum in den USA im neuen Jahrhundert, in: *BIZ-Quartalsbericht*, März 2006.

*Goetz 2003*, Clearing the Way, Deconcentrating the Poor in Urban America, The Urban Institute Press.

*Green / Malpezzi 2003*, A Primer on U.S. Housing Markets and Housing Policy, Urban Institute Press.

*Hird / Quigley / Wiseman 1987*, Housing in San Francisco: Shelter in the Market economy, Center for Real Estate and Urban Economics, Working Paper Series, No. 87-132.

*HUD 2005*, Programs of HUD.

*HUD*, HADS database, <http://www.huduser.org/datasets/hads/hads.html>, access: nov. 15<sup>th</sup> 2006.

*Huffschmid 1999*, Politische Ökonomie der Finanzmärkte, VSA.

*Institute for Community Economics*, no year, CLT Financing in California, Working Paper No. 1.

*Kaufman / Paulsen 1986*, Home Equity Conversion: Increasing the Private Incomes of the Elderly, in: Florida (eds.), *Housing and the New Financial Markets*, Centre for Urban Policy, State University of New Jersey.

- Landis John D. et. al 2000.* Raising the Roof, California Housing Developments Projections and Constraints 1997-2020, State wide Housing Plan, Editor: Department of Housing and Community Development.
- Mayer 1988,* New Issues in Corporate Finance, in: European Economic Review, Vol.32, 1167-89.
- Miles 1986,* Housing Finance: Development and Evolution in Mortgage Markets, in: Florida (eds.), Housing and the New Financial Markets, Centre for Urban Policy, State University of New Jersey.
- Miles 1994,* Housing, Financial Market and the Wider Economy, John Wiley & Sons Series in Financial Economics and Quantitative Analysis, Chichester.
- National Board of Housing, Building and Planning / Ministry for Regional Development of the Czech Republic 2005,* Housing Statistics on the European Union 2004, Boverket.
- National Low Income Coalition (various years)* Out of Reach – Database:  
<http://www.nlihc.org/oor/oor2006/?CFID=10098457&CFTOKEN=27623920>
- OECD 1995,* Financial Market Trends, No. 62.
- Peterson 2000,* Housing Vouchers: The U.S. Experience, in: Steuerle, Ooms, Peterson, Reischauer (eds.): Vouchers and the Provision of Public Services, Brooking, CED Urban Institute, pp.139-175.
- Pozdena 1988,* The Modern Economics of Housing, a Guide to Theory and Policy of finance and Real Estate Professionals, Quorum Books.
- Priemus 2000,* Housing Vouchers: A Contribution from Abroad, in: Steuerle, Ooms, Peterson, Reischauer (eds.): Vouchers and the Provision of Public Services, Brooking, CED Urban Institute, pp.176-194.
- Quigley / Raphael 2004.* Is Housing Unaffordable? Why isn't It More Affordable?, in: Journal of Economic Perspectives, Vol. 18, No.1, pp.191-214.
- RICS 2006,* European housing review 2006, downloadable [www.rics.org](http://www.rics.org).
- Rosen / Bishop 2002,* The San Francisco Bay Area Housing Market: A Buyers Market, Fisher Center for real estate and urban economics, Working Paper Series, No.02-279.

- Rosen 1984*, California Housing Markets in the 1980s, Oelgeschlager, Gunn & Hain, Publishers, Cambridge Massachusetts.
- Schaberg 1999*, Globalization and the Erosion of National Financial Systems, Is Declining Autonomy Inevitable?
- Schwartz 2006*, Housing Policy in the United States (An Introduction), Routledge.
- Shleifer / Vishny 1997*, A Survey of Corporate Governance, in: Journal of Finance, Vol.52, No.2, p. 737-783.
- Sivesind 1986*, Mortgage-Backed Securities: The Revolution in Real Estate Finance, in: Florida (eds.), Housing and the New Financial Markets, Centre for Urban Policy, State University of New Jersey
- Smith- Heimer et. al 1998*. The State of California's Housing Markets 1990-1997, State wide Housing Plan Update Phase II, Editor: Department of Housing and Community Development.
- Springler 2005*, Housing Subsidies between Maastricht fiscal requirements and social aims: Can the Austrian System be a model for the New Member States?, in: Business and Economics Society Anthology pp. 62-73.
- Springler 2006*, The evolution of financial systems: the development of the new member states in the European Union, in: Wray, R. / Forstater M. (eds.) Money, Financial Instability and Stabilization Policy, Edward Elgar, Cheltenham / Northampton, pp.231-256.
- Statistik Austria 2003, 2004*, Wohnungen, Ergebnisse der Wohnungserhebung im Mikrozensus.
- Statistik Austria 2007*, Statistisches Jahrbuch, Österreich.
- Stone 2006*, What is Housing Affordability? The Case of the Residual Income Approach, in: Housing Policy Debate, Vol. 17, Issue 1, pp.151-184.
- Suarez / Vassallo 2004*, European Mortgage Market, An Overview 1992-2003, in: IESE Universidad da Navarra WP No 562.
- Verbindungsstelle der Bundesländer, 2002*, Wohnbaustatistik 2001.

*Verbindungsstelle der Bundesländer, 2004, Ländermemorandum zum Finanzausgleich 2005.*

*Verbindungsstelle der Bundesländer, 2004a, Wohnbaustatistik, 2002.*

*Villani 1986, The Secondary Mortgage Markets, in: Florida (eds.), Housing and the New Financial Markets, Centre for Urban Policy, State University of New Jersey.*

*Williams 1986, The Secondary Mortgage Market, in: Florida (eds.), Housing and the New Financial Markets, Centre for Urban Policy, State University of New Jersey.*

*Zingales 1997, Corporate Governance. NBER Working Paper 6309.*

#### Interviews and Meetings:

Angel, Mario G	Housing and Community Development Representative, HCD Office, Sacramento, California
Barr, Ken	Housing Office, Berkeley, California
Creswell, Cathy E	Deputy Director, HCD Office, Sacramento, California
Jackson, Jeff	Chief, Program Operations Branch, U.S. Department of Housing and Urban Development (HUD Office) San Francisco, California
Nichols, Linda	Housing Policy Manager, HCD Office, Sacramento, California
Peters-Kaiser, Sandra L	Senior Community Planning and Development representative, U.S. Department of Housing and Urban Development (HUD Office) San Francisco, California
Rainey, Richard K.	Regional Director, U.S. Department of Housing and Urban Development (HUD Office) San Francisco, California
Remigio, Jennie C.	Operations Analyst, U.S. Department of Housing and Urban Development (HUD Office) San Francisco, California

Wong, Karna

Consolidated Planning Specialist, U.S. Department of Housing and Urban  
Development (HUD Office) San Francisco, California

## Appendix

Table I.0

Country Name	Banks vs.	Bank Credit vs.	Trading vs.		Financial System
	Capitalization	Trading	Overhead	Index	
Austria	3,86	8,53	-16,33	-3,93	bank
Belgium	-0,12	1,18	-13,23	-12,17	bank
Denmark	-0,41	-1,93	-10,78	-13,12	bank
Finland	-1,16	-2,50	8,06	4,41	market
France	-0,56	-1,81	-8,20	-10,57	bank
Germany	1,48	-0,61	-7,62	-6,76	bank
Greece	-0,21	-2,61	-8,33	-11,15	bank
Ireland	0,43	-0,28	20,97	21,12	market
Italy	0,18	-1,32	-11,85	-12,99	bank
Luxembourg	-1,52	12,70	-15,09	-3,91	bank
Netherlands	-0,98	-2,88	58,50	54,64	market
Norway	0,45	-1,03	-8,06	-8,64	bank
Portugal	0,80	0,56	-9,82	-8,46	bank
Spain	-0,05	-2,54	5,64	3,04	market
Sweden	-1,24	-3,19	14,52	10,09	market
United Kingdom	-0,93	-2,24	9,16	5,99	market
			<b>Mean</b>	<b>0,47</b>	

Datasource: World Bank Data Set, own calculations

Table I.I.

Country	Introduction of Securitization (MBS, RMBS)	Use of Securitization
Austria	--	no
Belgium	yes	limited
Denmark		
Germany		Yes??
Greece		
Spain	1992	limited
France	1999	limited
Ireland	Second half 1990s	
Italy	yes	extensive
Luxembourg	yes	yes
Netherlands	yes	extensive
Portugal	yes	limited
Finland	1989	
Sweden	yes	limited
UK	1987	extensive

Source: ECB 2006; Suarez / Vassallo 2004.

Table 3.0.

	% of household consumption housing consumption, 2003	Actual rents of housing % of total consumption	% change of rent index 2000-2003
BE	23,60	4,90	6,79
DE	25,10	8,30	3,58
GR	15,70	2,20	15,06
ES	31,40	1,60	13,13
FR	24,10	4,70	5,98
IE	21,60	2,60	19,26
IT	20,30	2,40	7,49
LU	21,60	3,00	7,69
NL	21,40	5,50	8,76
AT	19,10	2,80	9,04
PT	10,50	1,10	8,49
FI	25,90	6,90	9,75
UK	18,20	9,40	7,69

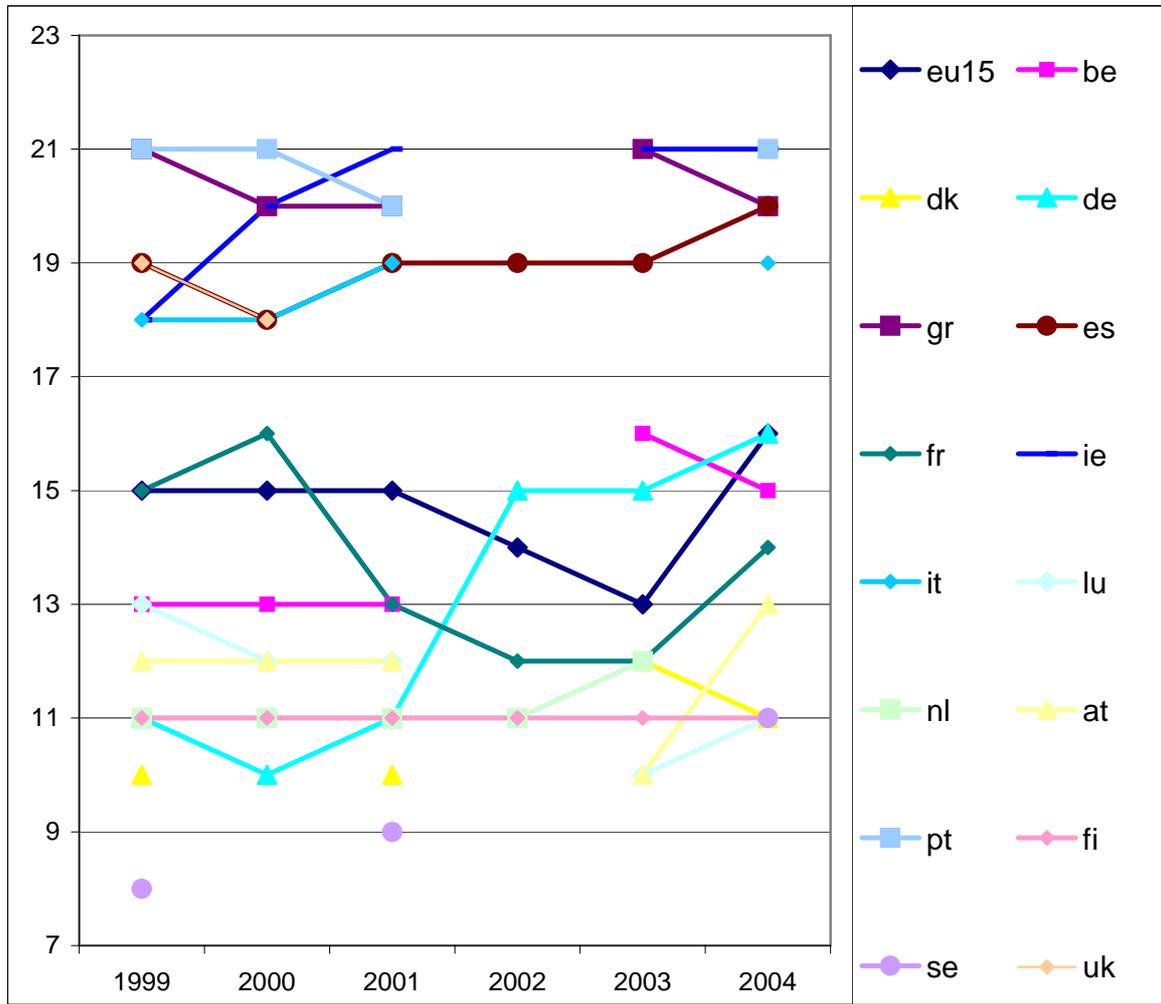
Source: National Board of Housing, Building and Planning / Ministry for Regional Development of the  
Czech Rep.

Table 3.1.

	% of persons in low income households	% of owners of low income	% of rent of low income	Homeownership general
BE	13	10	28	--
DE	11	7	16	41
GR	20	21	15	--
ES	18	18	23	85,26
FR	15	12	25	64,6
IE	21	17	44	77,4
IT	19	17	30	67
LU	12	8	24	--
NL	11	7	20	52
AT	12	12	12	49,1
PT	20	19	25	64
FI	11	8	23	64,6
UK	17	12	32	67

Source: *National Board of Housing, Building and Planning / Ministry for Regional Development of the Czech Rep.*

Graph 3.0. Trends in at risk of poverty rate after social cash transfer according to housing - cut-off point: 60% of median equivalised income after social transfers 1999-2004



Datasource: Eurostat

Graph 3.1. Dataplotting: Subsidy structure and Financial Structure

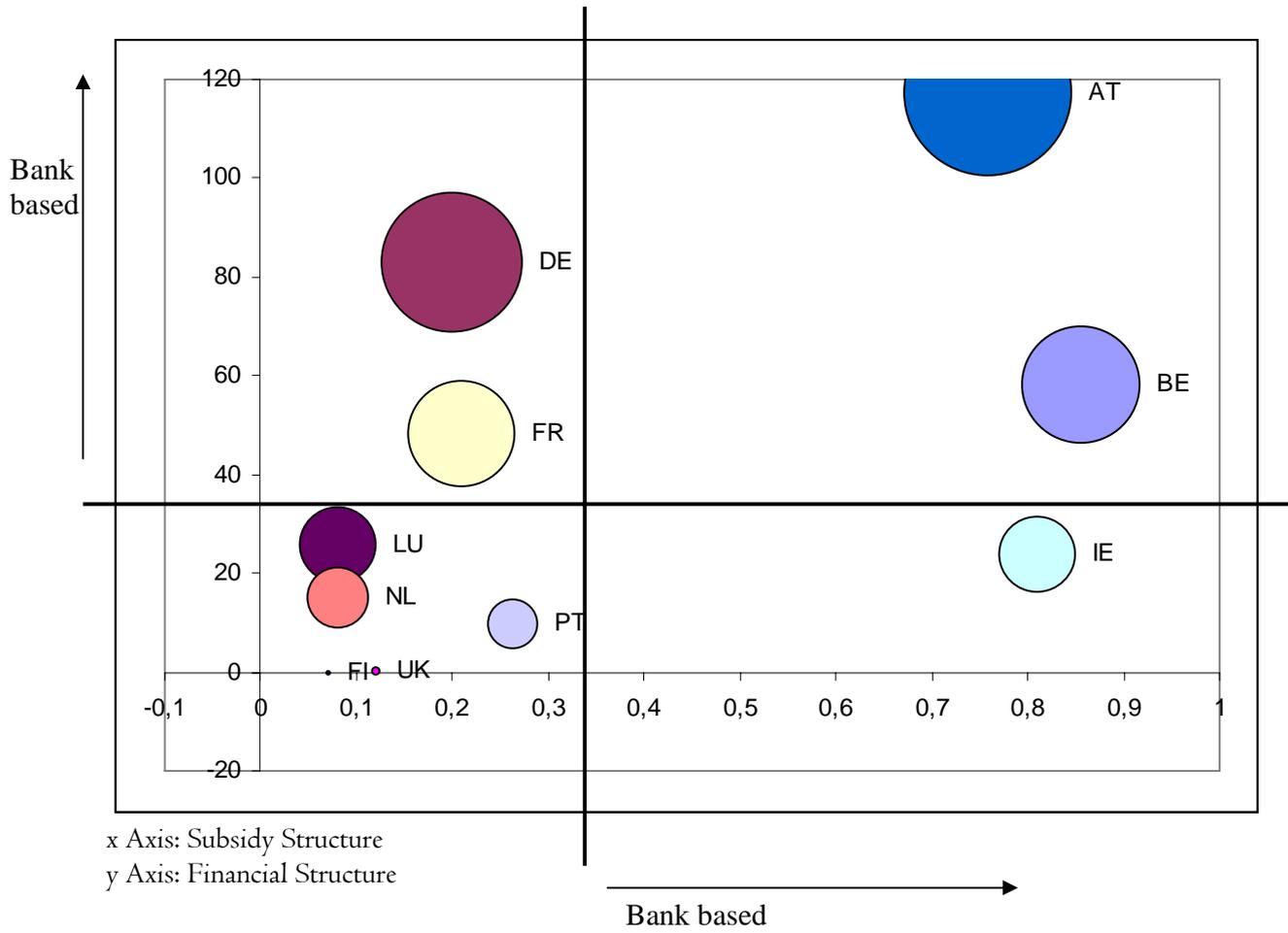


Table 3.2.

**1996-2001 Households with financial burden due to the housing costs**

	av. % change of total households with fin. Burden	av. % change of owners with fin burden owner	av. fin burden rent
eu15	0,73	0,74	0,41
be	-0,80	-1,08	-0,23
dk	3,09	2,06	5,12
de	1,06	0,98	1,31
gr	7,97	8,07	4,35
es	2,61	2,53	2,88
fr	-1,11	-0,47	-1,94
ie	-0,99	-1,88	5,07
it	0,18	0,28	-0,94
lu	5,80	5,00	10,50
nl	-3,33	-4,62	-1,68
at	-0,10	0,21	-0,40
pt	1,25	0,94	1,92
fi	-1,42	-0,12	-3,12
uk	-3,38	-5,23	1,50

**1996-2001 Households with heavy financial burden due to the housing costs**

	av. % change of total households heavy fin. burden	av. % change of owner heavy fin. burden	av. % change of renters heavy fin. burden
eu15	-2,02	-1,70	-0,99
be	-0,17	1,89	-0,41
dk	3,38	5,16	4,27
de	-1,41	0,77	-0,87
gr	-4,13	-1,42	-0,19
es	-5,21	-5,48	-2,53
fr	-3,04	-3,93	-0,97
ie	-7,04	-7,32	-3,23
it	1,42	1,66	1,86
lu	-1,89	-19,35	14,42
nl	-6,39	-3,46	-5,33
at	-2,84	-5,56	0,88
pt	-0,44	0,26	-0,08
fi	-6,93	-12,47	2,76
uk	-7,89	-9,10	-24,12

Datasource: Eurostat