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The Swedish Housing
Market: Better Allocation via
Less Regulation

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Jens Lundsgaard**

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By
Felix Hüfner and Jens Lundgaard

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Abstract

The Swedish housing market – better allocation via less regulation

While several sectors in the economy have been deregulated, the Swedish housing market remains distorted, hindering an optimal matching of supply and demand. In the rental market the rent setting framework with its focus on cost-based rents in the public sector prevents a price response, leading to long queues in some regions and vacancies in others. Many Swedes that would have preferred otherwise are driven into the owner-occupied segment, where prices are increasing strongly, and rising above an estimated fundamental value. The supply of new dwellings is made more difficult by an uncompetitive construction industry, coupled with cumbersome planning regulations and few incentives for municipalities to issue more land. On the fiscal side, real estate taxes are below neutral levels, implying an indirect subsidy to housing. This paper presents a review of the recent steps to abolish real estate taxes and also proposes comprehensive reform of regulations in the rental housing sector.

This paper relates to the *OECD Economic Survey of Sweden 2007* (www.oecd.org/eco/surveys/sweden).

JEL classification: D12; D61; H11; H21; H31

Key words: House prices, housing taxation, rent regulation, rental housing, housing supply.

Résumé

Le marché du logement suédois – Moins réglementer pour obtenir une meilleure allocation des ressources

Alors que plusieurs secteurs de l'économie ont été déréglementés, le marché suédois du logement reste soumis à de fortes distorsions qui entravent un rapprochement optimal de l'offre et de la demande. Sur le marché locatif, les loyers sont essentiellement fonction de ceux que pratique le secteur public dans l'optique des coûts, ce qui empêche une réaction normale des prix et crée de longues files d'attente dans certaines régions, tandis que des logements restent vacants dans d'autres. Un grand nombre de Suédois sont contraints malgré eux d'accéder à la propriété, avec des prix en forte hausse, et augmentant au dessus d'une valeur fondamentale estimée. L'offre de logements neufs subit les effets négatifs d'un manque de concurrence dans le secteur de la construction, se doublant de très strictes règles d'urbanisme et d'une faible incitation des communes à classer de nouveaux terrains en zone constructible. Sur le plan fiscal, l'impôt foncier est déjà inférieur au niveau de neutralité, ce qui veut dire que le logement est indirectement subventionné. Ce document passe en revue de manière critique les récentes étapes pour supprimer les taxes foncières et propose également une réforme compréhensive des réglementations du secteur locatif.

Ce document de travail se rapporte à *l'Étude économique de l'OCDE de la Suède 2007* (www.oecd.org/eco/etudes/suede).

Classification JEL: D12 ; D61 ; H11 ; H21 ; H31

Mots clés: prix des logements, impôt foncier, réglementation du secteur locatif, marché locatif, offre de logements

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THE SWEDISH HOUSING MARKET – BETTER ALLOCATION VIA LESS REGULATION

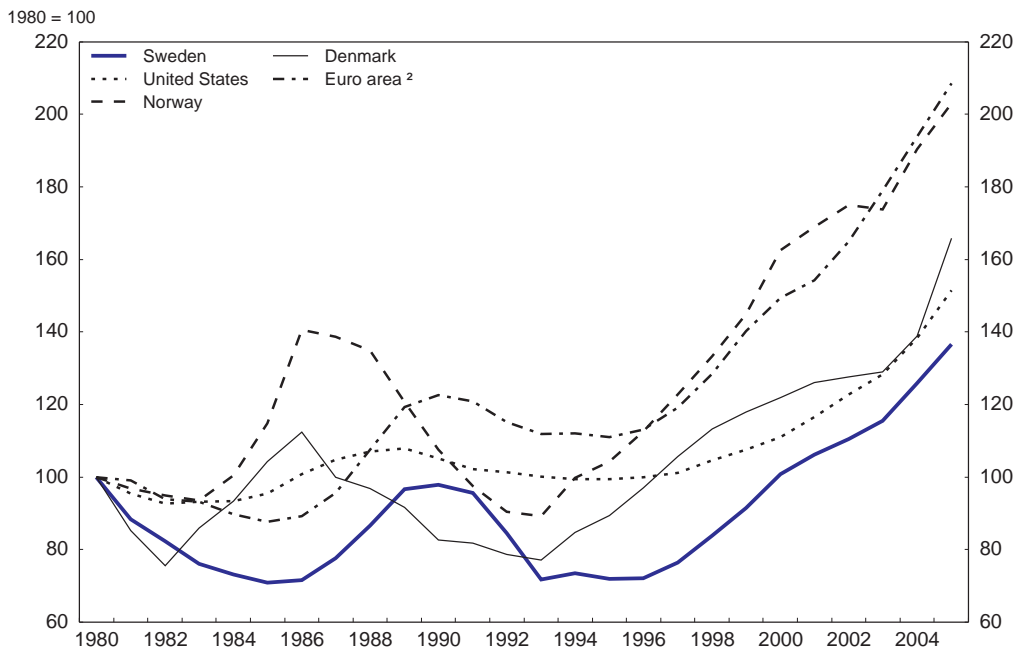
by Felix Hüfner and Jens Lundsgaard¹

After rebounding from the serious crisis in the early 1990s (when real prices fell by 30%), house prices in Sweden rose continuously over the past decade, enjoying the longest unbroken upturn in recent history as in several other industrial countries (Figure 1). This benign development, however, masks structural problems in the housing market, as is visible foremost in the rental market, where rents are effectively regulated and long waiting queues for new tenants in the metropolitan areas coexist with vacancies in other regions. As has been summarized recently: “If one were to design a legal framework for the [Swedish] housing market, it is inconceivable that one would end up with the system we see today.” (Ellingsen and Englund, 2003, p. 3). Making the housing market function better would help overall economic performance by facilitating labour market mobility, encouraging economic activity and giving citizens more freedom to choose a place to live and the type of tenure most suitable to their individual needs.

The main challenge going forward is to better match demand and supply, which is hampered by regulations as well as a lack of adequate incentives in several areas. The rent regulation framework is one of the strictest among OECD countries, effectively preventing people from making a free choice of tenure, and the lack of substitutability between owner-occupation and renting drives many to become owner-occupiers who would have had other preferences. It benefits those tenants inside the market at the expense of those outsiders waiting in queues. In addition, an adequate supply response to growing demand is hindered by a planning system that lacks incentives and a construction sector with one of the highest costs in Europe due to weak competition. These factors show up in residential construction activity, which historically has been – and still is despite recent rapid growth – markedly lower than in the average OECD country and in particular when compared with other Nordic countries (Figure 2). And the investment that takes place does not seem to occur where it is most needed. On the demand side, the tax and subsidisation system – despite extensive previous reforms – is distorting consumer choice towards more housing consumption. Government plans now envisage that housing taxation should be reduced and eventually abolished, which would stimulate demand further.

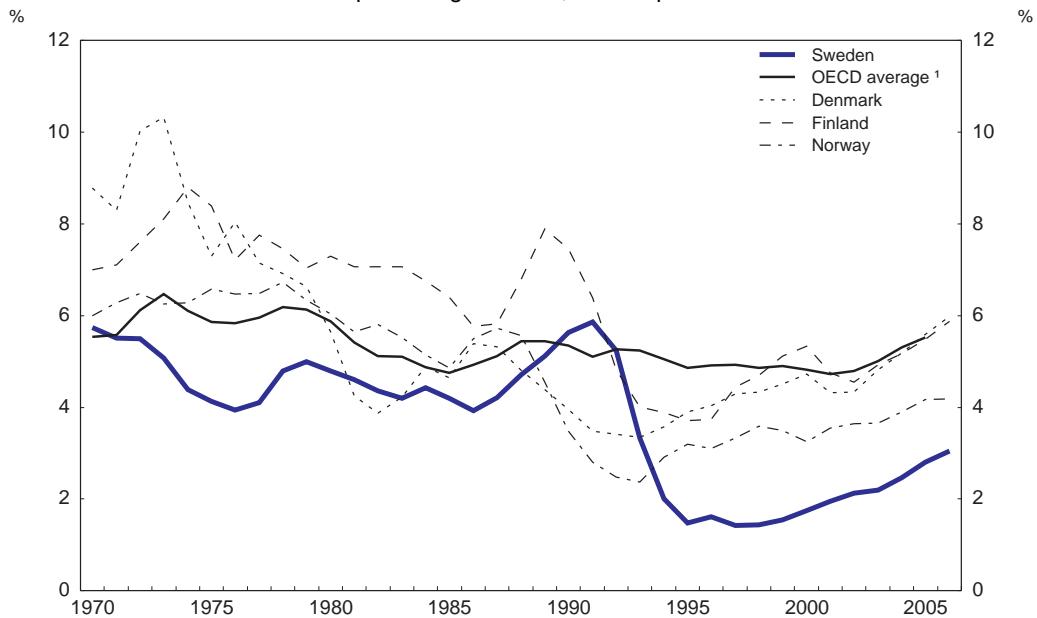
1. The authors are economists in the OECD Economics Department. This paper was originally prepared for the *OECD Economic Survey of Sweden 2007* published in February 2007 on the responsibility of the Economic and Development Review Committee. The authors are grateful to OECD colleagues, in particular Andrew Dean, Jorgen Elmeskov, Espen Erlandsen, Val Koromzay and Andreas Wörgötter for helpful comments as well as to the numerous Swedish officials who discussed housing issues with the *Survey* team. Béatrice Guerard provided excellent research assistance.

Figure 1. Real house prices in an international perspective¹



1. Nominal house price indices deflated by CPI.
 2. Average index of Finland, France, Germany, Ireland, Italy, the Netherlands and Spain.
- Source: OECD Analytical database and OECD calculations.

Figure 1. Figure 2. Residential Investment
As percentage of GDP, current prices



1. Excluding Luxembourg, Hungary, Portugal and Slovak Republic. Including Switzerland as from 1990, Poland as from 1991, and Czech Republic as from 1992.

Source: OECD Economic Outlook database.

House prices and household indebtedness

Apart from the *welfare* aspect of better allocation, the current situation of the housing market also raises *cyclical* and *financial stability* aspects, related to the continuous increase in house prices and rising household indebtedness. Both have an impact on Sweden's growth perspective and are present in contemporary discussions in Sweden.

Box 1. Determinants of real house prices

House prices tend to follow long cyclical patterns which can be related to underlying fundamental factors. One way to model long-run or equilibrium prices is to relate real house prices to real after-tax user costs, real disposable per-capita income and the dwelling stock in relation to demographic developments (OECD, 2006a; Hort, 1998):

$$p_t = \alpha + \beta y_t + \gamma r_t + \theta (hs_t - pop_t^{25-44}) + \varepsilon_t$$

p is the price index for one-/two-dwelling buildings for permanent living (quality-adjusted) deflated by the consumer price index, y is real per capita income, r is a measure of the real user costs, hs is the stock (number) of dwellings and pop^{25-44} is the population being 25 to 44 years old (as a proxy for the share of first-time buyers).¹ In addition, a supply equation was estimated, relating residential investment (ihv) to construction costs (cc), house prices and the same demographic variable as in the price equation.

All variables, except user costs, are in logarithms and standard unit root tests indicate non-stationarity for all of them. Both long-run relationships are estimated jointly (using the seemingly unrelated regression (SUR) estimator) with annual data from 1975 onwards and stationarity tests of the residuals suggest the existence of a cointegration relationship. Results for this relationship show that actual developments can be explained fairly well with those variables (t-values in brackets).²

$$p_t = -18.6 + 1.9 y_t - 2.3 r_t - 4.0 (hs_t - pop_t^{25-44})$$

(-3.9) (4.6) (-3.5) (-3.2)

$$ihv_t = -340.1 - 1.5 cc_t + 1.4 p_t + 24.3 pop_t^{25-44}$$

(-4.8) (-6.8) (4.3) (5.2)

The adjustment of deviations of actual house prices from their long-run fundamental level can be explained by a short-run relationship of the following form (t-values in brackets)³:

$$\Delta p_t = 0.79 \Delta p_{t-1} - 0.40 ECM_{t-1} - 0.09 dum^{1992/93}$$

(6.6) (-3.5) (-2.8)

$$Adj.R^2 = 0.75; s.e. = 0.04; LMtestpvalue = 0.96$$

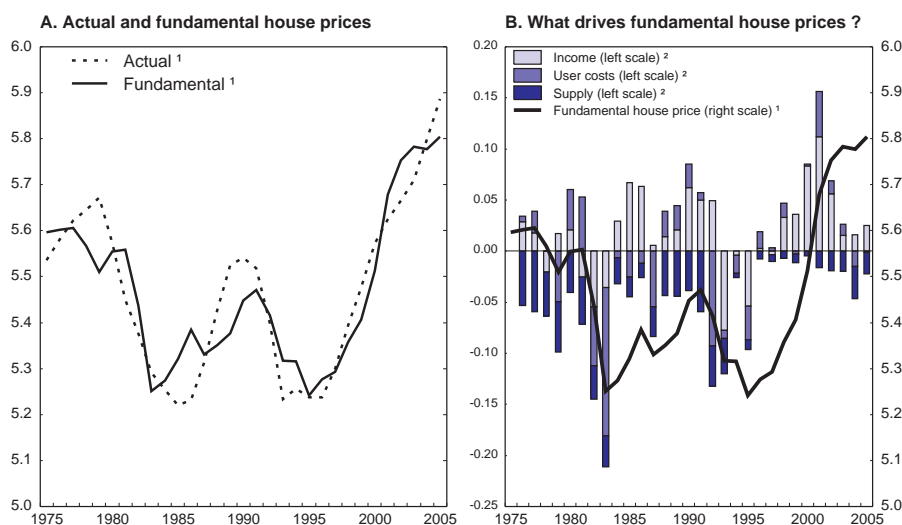
$$\Delta ihv_t = 0.50 \Delta ihv_{t-1} + 0.52 \Delta p_t - 0.22 ECM_{t-1}$$

(4.0) (2.2) (-3.1)

$$Adj.R^2 = 0.66; s.e. = 0.1; LMtestpvalue = 0.42$$

Both error correction terms (ECM) enter negatively, showing that differences between actual and fundamental levels are corrected over time (over a third of the over-/undervaluation is corrected within one year in the price equation). The estimated coefficients for the long-run price equation, in particular the strong income elasticity and the moderate elasticity regarding user costs are similar to other studies. The response of house prices to changes in supply is fairly high (Ireland: -1.7 vs. -4.0 for Sweden). At the end of 2005, actual house prices were estimated from this relationship to be about 8% above their fundamental value (Figure 3) and updating with preliminary annual data for 2006 shows that this overvaluation has increased to around 15%.⁴ Residential investment in the supply equation is positively related to house prices and demographic developments and developments in construction costs are found to dampen the growth of investment. Since the mid-1990s actual construction has been significantly below the estimated fundamental level, but strong growth in residential investment over the most recent period has led to a closing of the gap.

Figure 3. Actual and fundamental house prices
1975 - 2005



1. Log of actual and estimated house price index.
2. Graph shows each component's contributions to changes in the estimated fundamental house price over time in log differences.

Sources: Statistics Sweden, OECD Analytical database, OECD Labour force statistics database and OECD calculations .

It is important to keep in mind that econometric models of house prices are surrounded by considerable uncertainty, but comparing different approaches can serve as a robustness check. In OECD (2006b) valuation of house prices is analyzed by comparing the house price to rent ratio across countries. While these results might be of limited explanatory power for Sweden as rents cannot adjust to market conditions, it is nevertheless interesting to note that this approach yields a similar overvaluation of 2% and 17% at the end of 2005 and the second quarter of 2006, respectively. However, the user cost elasticity is higher: a 1 percentage point increase in user costs leads to a 10% decline in house prices (compared with 2.3% in the above equation).

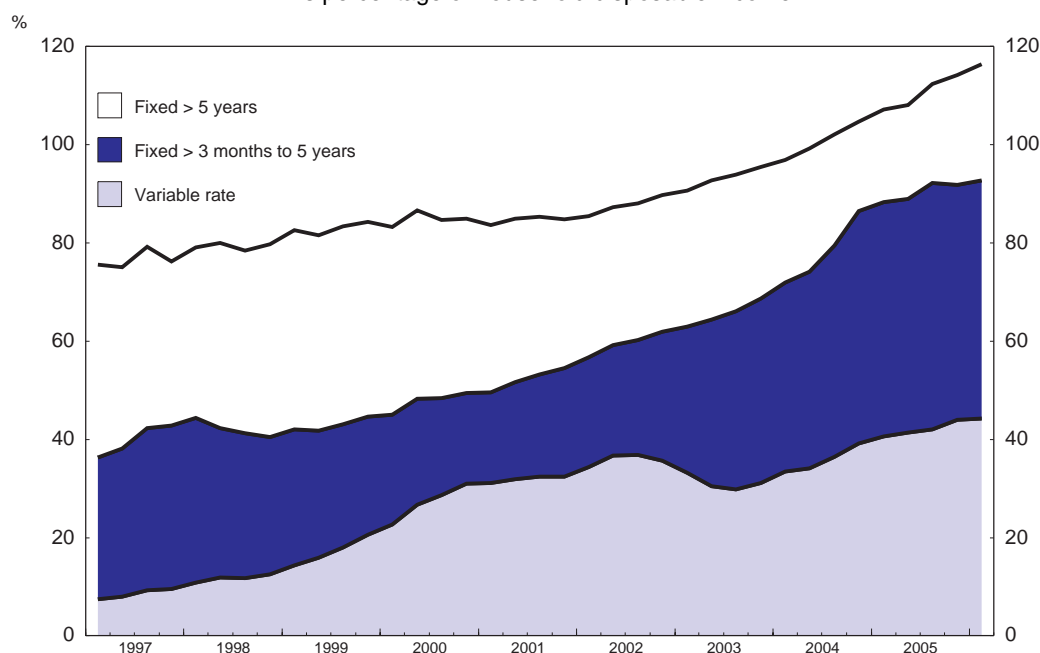
1. The real estate price index is calculated by Statistics Sweden using information from tax assessments as well as sold property and refers to the value of the house (not the square metre size). User costs are a broad measure which take into account that housing costs for households encompass more than the monthly nominal interest payment. They are computed for this analysis using 5-yr mortgage bond yields after tax (*i.e.* taking into account the value of interest deductibility), deflated by the average of the current and past inflation rate and adding the real estate tax rate $r_t = [(1 - t)i - \pi^e + \tau_h]$ (Hort, 1998).
2. The house price equation also includes a time-trend.
3. A dummy variable that takes the value of 1 in 1992 and 1993 was included to account for the real estate crisis.
4. This calculation assumes supply growth in 2006 at average historical rates.

Econometric evidence (Box 1) suggests that Swedish house prices can be explained over the long run by developments in disposable income, interest rates adjusted for taxes, construction of new housing and population trends. Rising household income, falling mortgage costs and a low level of construction have contributed to the large upswing over the last ten years. This has been supported by an increase in mortgage lending and the increased use of more flexible mortgage loan products (Box 2; Nyberg, 2006).² Mortgage credit is usually granted against pledging property for up to 70-80% of its value as collateral (no legal limit for the loan-to-value ratio exists). Additional credit is often provided by the bank that owns the

2. In addition, mortgage banks' lending rates have declined in anticipation of the new Basel II capital adequacy rules in 2007 that will entail a lower capital requirement for house mortgage loans, thereby reducing refinancing costs for mortgage institutes.

mortgage institution. Outstanding household mortgage debt in 2005 was at around 53% of GDP, somewhat higher than the EU-15 average of 46%.³ Similar to developments in neighbouring Denmark, the share of variable rate loans has increased significantly over the last decade (Figure 4). Variable rate loans (duration <3 months) now account for more than a third of the total stock (up from around 10% in 1997) and more fixed rate loans (duration >3 months to 5 years) around 40% (up from around 30%).⁴ Ten years ago, more than half of outstanding loans had a duration of over 5 years; now they account for only around 20%.

Figure 4. **Stock of household mortgage loans by duration of fixed interest periods** ¹
As percentage of household disposable income



1. Excluding loans to non profit institutions serving households.

Source: Riksbank and OECD Analytical database.

Due to this change in the structure of mortgage loans, households today are likely to be more exposed to fluctuations in short-term interest rates.⁵ As in other countries with comparable developments in mortgage markets, monetary policy thus has a more direct influence on household consumption expenditures and the lags of transmission are probably shorter today than previously (OECD, 2006c).

3. Source: European Mortgage Federation, www.hypo.org.

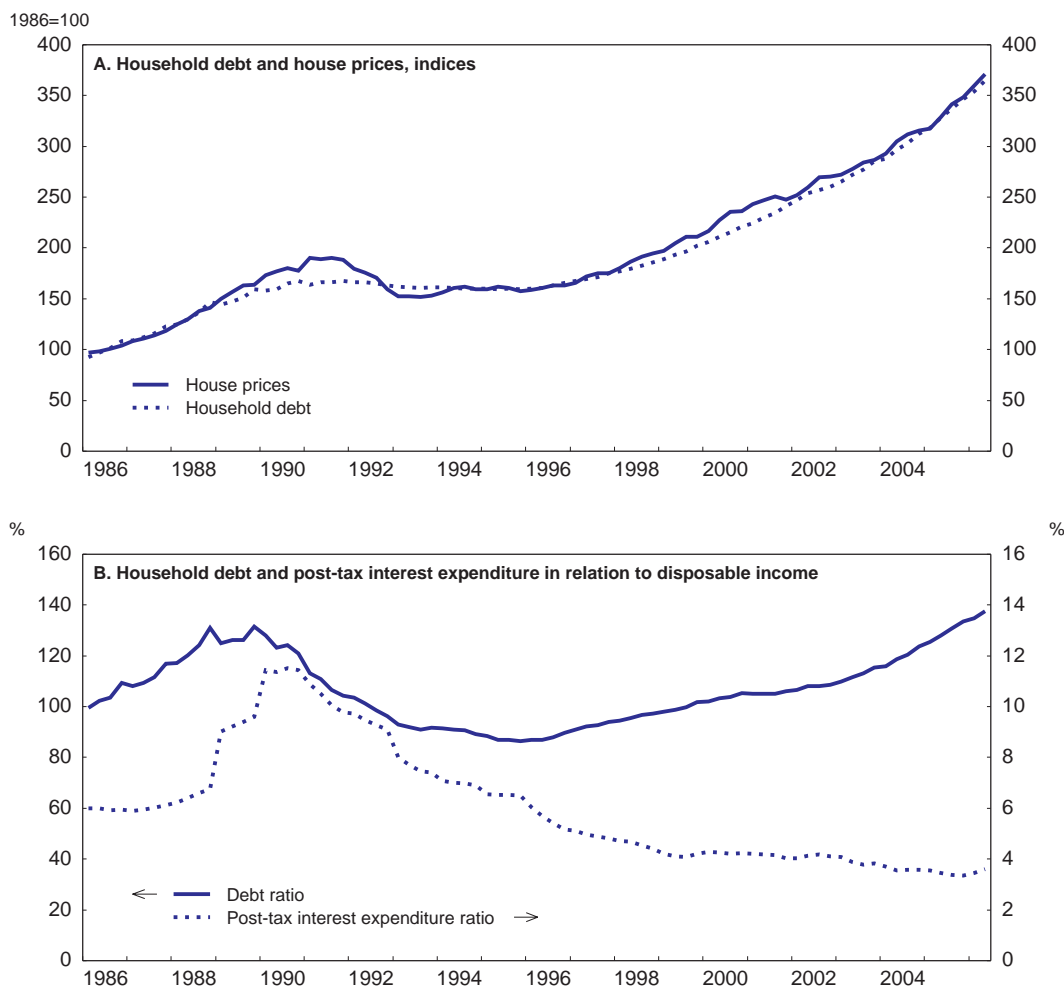
4. The statistics refers to the duration of loans at the time when they were taken up, *i.e.* a loan with a 10 year fixed duration that becomes due in a few weeks is still classified as being a 10 year fixed rate loan. With regard to new loans, more than half were on variable rate terms in 2006 (Riksbank, 2006a). No official data exist for the use of loans with deferred amortisation (interest-only loans), but news reports suggest that their share can be up to 60% of outstanding loans (depending on mortgage institute).

5. Variable rate loans that switch into a fixed rate loan once the short-term interest rate rises above a certain threshold (capped loans) are not very common in Sweden (unlike in neighbouring Denmark).

Box 2. Financial position of the household sector

Along with the increase in house prices, household mortgage debt has increased strongly in recent years (Figure 5). For the sector as a whole, the overall debt burden in relation to disposable income has reached over 130% – the highest ratio since the beginning of the 1990s. At the same time, the interest burden has declined to historical lows – a development akin to other countries that have seen their interest rate levels coming down since the 1990s (and also supported by the increasing share of variable rate loans). Notwithstanding the debt dynamics, an even bigger increase in assets has actually led to an improvement in the overall net financial position of the household sector (from 105% of disposable income in 1995 to 180% in 2005). This is mainly due to increases in the value of their holdings of shares and other equity as well as in their pension fund assets. Apart from financial assets, the housing assets of households have significantly gained in value, amounting to approximately SEK 3 300 billion (250% of disposable income) in 2005.

Figure 5. Household debt



Source: Statistics Sweden and the Riksbank.

At the micro-level, analyses by the Riksbank suggest that households with a high debt burden are typically those in the higher income brackets.¹ Nevertheless, more than a third of borrowers in the lowest income brackets are below a financial margin that would allow them to cope with negative shocks (such as high interest rates).² Looking at indebted households only, the debt burden differs not only across income groups but also on a regional basis, with the debt ratio being highest in Stockholm (average debt burden of indebted households 210% of disposable income vs. national average of 169%). This is supported by the housing affordability indicator (*Boindex*) published by Swedbank which measures the purchasing power of households after housing expenditures. While for the country as a whole, households on average spend less than 15% of their gross income on housing, households in Stockholm, Gothenburg and Malmö spend significantly more.

-
1. The analysis is based on the annual cross-sectional survey of the economy of 20 000 households (HEK survey) by Statistics Sweden. See Riksbank (2006b).
 2. The financial margin calculated by the Riksbank equals household's disposable income after interest expenditure, other housing expenditure and expenditure for a reasonable standard of living (Riksbank, 2006b).

At their current level house prices are estimated to be somewhat higher than warranted by fundamental factors. Compared internationally, this is not particularly worrisome. However, it has to be kept in mind that interest rates are still at very low levels and incomes have grown significantly due to the favourable cyclical position. Going forward, both factors are likely to return to more normal levels with a slowing effect on house price growth with potential effects on the economy (Box 3). Prices in the past have also shown a high elasticity to changes in supply and higher house prices have thus also reflected restrained construction activity.

Box 3. House prices and wealth effects could give surprises

House prices have grown strongly and persistently in many OECD countries during the last 10 years. In several markets, notably in some of the English-speaking and Nordic countries, real house prices may have grown out of line with financial fundamentals, as analysed in the *OECD Economic Outlook* (OECD, 2005). Rapid price increases and a subsequent downward correction, can affect macroeconomic dynamics substantially via private consumption and construction activity. For Sweden, Chen (2006) estimates an elasticity of total consumption with respect to net housing wealth of 0.11. It may also pose risks in terms of household indebtedness. The analysis in Box 1 indicates that Swedish house prices are growing overvalued relative to what fundamentals can explain. It is therefore worthwhile to consider alternative scenarios, especially as the plans in the 2007 Budget to abolish imputed rent for apartments, freeze real-estate value assessments and cap taxes on land – worth almost ¼ per cent of GDP – risk adding to housing market overheating. Three scenarios could be considered:

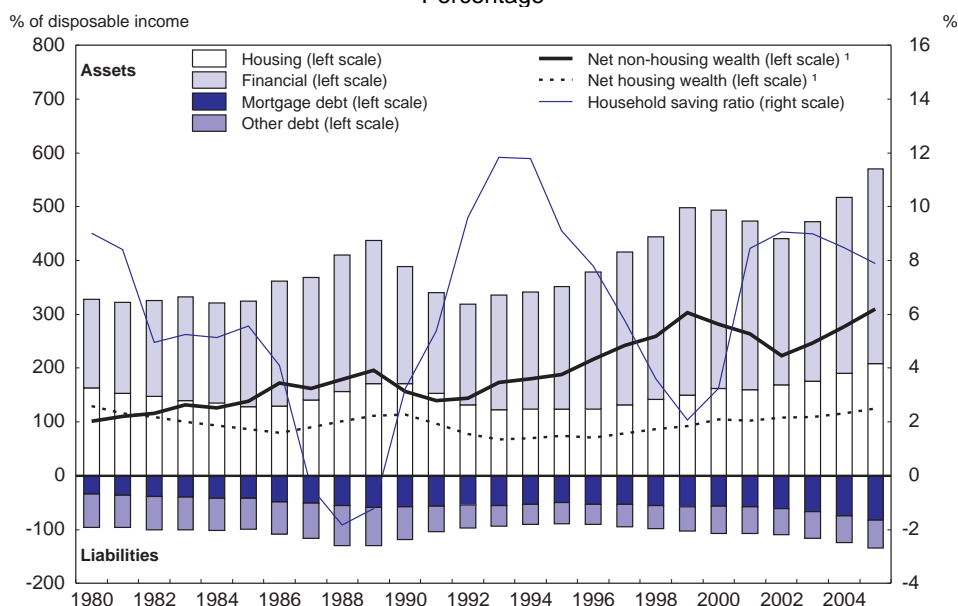
- **House prices slow down.** Monthly data indicate that annual house price increases decelerated to around 10% in late 2006, and this could reflect a sound reaction to higher short-term interest rates. If this slowing continued, rising income could then work off the current light overvaluation over time.
- **House prices continue to accelerate and grow out of line with fundamentals.** After a full decade of solid gains, the average homebuyer now has little experience with the historic fact that house prices tend to not only rise but also fall. In this context, property tax cuts, still low interest rates, improving employment and income prospects and clear supply constraints could be a cocktail that leads to speculative market behaviour. In Denmark, to everybody's surprise, house prices seemed to have reached a plateau, but then suddenly accelerated during 2005 to annual increases of 25%, possibly fuelled by new mortgage products, including interest-only loans (OECD, 2006c). It may not seem likely *ex ante*, but irrational or speculative reactions cannot be excluded. The subsequent downward price correction would then be harder.
- **House prices fall triggered by higher interest rates.** It would seem highly unlikely in the short term but, looking a bit ahead, the picture could quickly change. If house prices continue to grow at their current annual rate for another year, while long-term interest rates go up by 2 percentage points – possibly caused by the unwinding of global current account imbalances – then there could be a 50% probability of a decline in Swedish real house prices (OECD, 2006b).

From a macroeconomic perspective, house price cooling would be welcome now, in particular because it would help ease demand pressures and labour shortages in construction. But more likely, house prices will continue increasing faster than CPI for still some time. In combination with an improving labour market, home-owners might begin spending more of their housing capital gains. Already for some time, mortgage borrowing has exceeded residential investment, but the connection between borrowing and consumption has weakened since 2000, indicating that some of the housing equity withdrawal has been channelled into financial investments (Riksbank, 2005). Consequently, the savings ratio has declined only slightly over the last five years and at around 8% it is well above the 2% low of the late 1990s. This may reflect a combination of labour-market weakness and precautionary savings following the stock market decline at the beginning of the decade. The *OECD Economic Outlook* projections are based on the assumption that the savings rate will continue its gradual decline, but a steeper fall, as in the mid-to-late 1990s, cannot be excluded and, if it materializes, the consumption-driven economic boom would intensify.

As the increase in mortgage indebtedness has been outpaced by house price increases, net housing wealth is unusually high, exceeding one year's disposable income. Net non-housing wealth is also high, exceeding two years' disposable income (Figure 6). Both of these wealth measures are based on current asset valuations but, given the strong financial position of households, it would require dramatic weakening of housing and financial markets to create a scenario of serious balance-sheet stress.

In the event that the housing market overheats with continued strong house price growth leading to a subsequent downward correction, policy may have to deal with the opposite situation with wealth effects slowing consumption demand, and a construction sector moving towards excess capacity. How a house price correction would affect the economy depends very much on when it might occur. The worst scenario would be if house prices continue to gather momentum, leading to a more abrupt correction at some point. Sweden would then benefit from having an autonomous monetary policy, unless inflationary pressures prevent an expansionary policy. Interest rates could quickly be eased, in contrast to discretionary fiscal policy which suffers from time lags in both decision and implementation.

Figure 6. Household savings and wealth
Percentage



1. Net housing wealth is defined as the value of the housing stock less outstanding mortgage debt. Net non-housing wealth is defined as the value of financial assets less outstanding non-mortgage debt.

Source: Statistics Sweden, Riksbank and OECD calculations.

Structure of the housing market

The Swedish housing market has a particular structure somewhat different from comparable countries with owner-occupied housing (mostly single family houses) representing only 38% of the total stock – at first glance considerably less than in other countries (Table 1). However, tenant-owner dwellings (housing cooperatives or *bostadsrätter*), which basically represent the segment of owner-occupied apartments, cover another 17% of the stock, thereby putting Sweden’s effective owner-occupation rate at 55% – closer but still somewhat below the average of Nordic and other European countries of just under 70%.

Table 1. **Structure of the housing market by tenure)**

(% of total)

Year	Private Rental	Public Rental	Tenant-owner / Cooperative ¹	Owner- Occupation
1945	52	6	4	38
1960	43	14	9	34
1970	30	23	13	34
1980	21	24	14	41
1990	20	25	15	40
2000	24	23	15	38
2005	23	22	17	38
Denmark	17	20	11	52
Finland	15	17	10	58
Norway	18	5	16	61
Other Europeans	19	13	8	60

1. Includes employer-provided housing for countries other than Sweden.

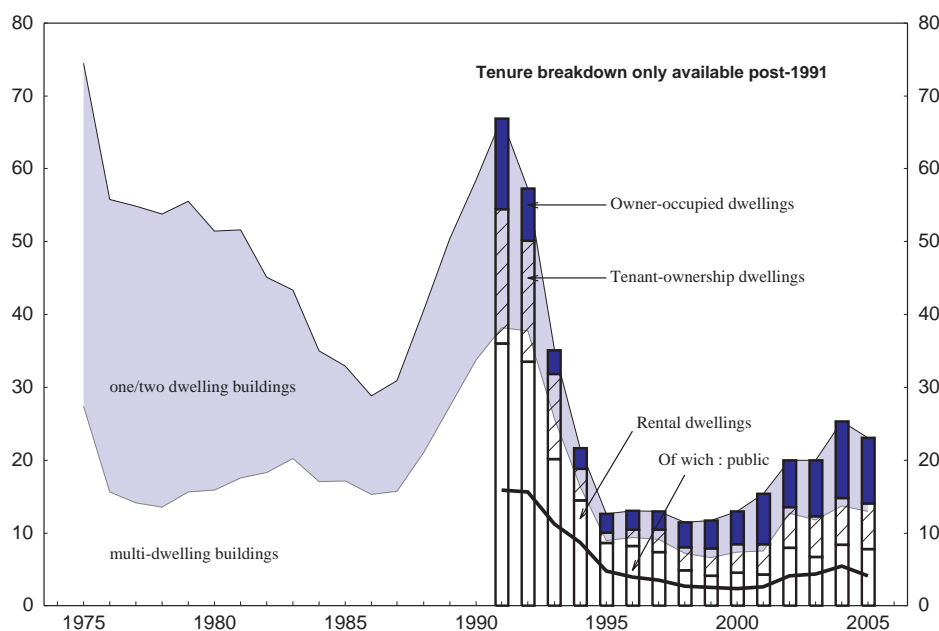
Note: The last census in Sweden was done in 1990. Data for 2005 represent unpublished calculations by Statistics Sweden. Data are 2004 for the other Nordic countries and 2001 for the other Europeans average.

Source: Englund *et al.* (1995), Ministry of Finance, OECD (2006c).

Tenant-owners are members in a cooperative association that owns a multi-dwelling building. They do not own their apartment but can trade the ‘right to live’ in it relatively freely (Box 4). Tenant-owner dwellings are currently the fastest growing tenure (partly due to conversion from rental flats but also encouraged by the tax system – see below). The importance of tenant-owner dwellings is partly explained by the fact that Swedish law does not allow outright ownership of an apartment.⁶ The reasons for this regulation are unclear and the government should consider abolishing it so as also to allow the establishment of a buy-to-let market as in other countries which would help individuals to better spread the risk of their capital investments.

6. Until 2004 it was impossible under Swedish law to own an individual apartment outright. Legislation was introduced in 2003 allowing buildings to be divided into more than one estate (“three-dimensional property registration”), but it is still not possible to get legal title for individual flats.

Figure 7. **New construction of dwellings by tenure**
Thousand units



Source: Statistics Sweden.

The rental sector is somewhat larger than in many other European countries, and is characterized in particular by a high share of public housing of 22% (of the total housing stock). This is high even among Nordic countries and in Europe only surpassed by the Netherlands. Its importance has been increasing significantly in the post-war decades at the expense of the share of the private rental sector. Public housing companies are owned by municipalities and, in contrast to social housing in most other countries (except for Denmark), they are open to all (no means-testing). The specific tenure of municipally owned housing was intended to play an important role in achieving the goals of housing policy after the war, namely to raise the average housing standard, to equalise the distribution of housing consumption, to restrict wealth transfers to private property owners and to counter housing segregation. Of these goals, only the first was clearly achieved: the stock of dwellings per inhabitant as well as their size is one of the highest among European countries.⁷ The housing stock is also comparably young and has been mostly built in the post-war decades. This is clearly an effect of the substantial production subsidies that were given to new construction as well as public efforts to increase construction activity such as the “Million dwellings programme” started in the 1960s.⁸

Thus, Sweden does not have a shortage of housing supply – quite the contrary. However, supply is not located where it is most needed in terms of demand: rents differ very little across the country, thereby not reflecting different demand situations (unlike house price developments which significantly diverge across regions). Queues for new tenants in the rental sector coexist with vacancy rates for apartments, which still are about twice as high as in the end of the 1980s.

7. There were 483 dwellings per 1 000 inhabitants in 2002, a number only surpassed in Europe by Finland, Spain and Greece (European average 422); see Regular National Report on Housing Developments in European countries 2004, Synthesis Report.

8. A growing shortage of rental dwellings led the government to initiate the ‘Million Dwellings Programme’, designed to build 100 000 dwellings per year from 1965-74.

Box 4. Tenant-owner (Co-operative) housing

Tenant-owner housing provides an alternative to both renting and owning and is closest to cooperative housing as it exists in other countries. This vehicle constitutes an indirect form of ownership which is essentially the only possibility in Sweden to “own” an apartment outright. It differs from direct ownership in that the building is collectively owned by a legal entity – the cooperative association – of which the tenants are members. Usually there exists a separate association for each apartment building. The tenant acquires a share of the entity that represents his right to live in the apartment. This share can be used as a security for mortgage loans and can also be freely traded (although the association may reserve the right to be asked for permission). However, the ownership right is limited in the sense that it cannot be used purely as a capital investment by renting the apartment to someone else (mostly this can be done, however, for shorter time periods after permission from the cooperative). Tenants pay a monthly fee to the association to cover running costs including the financing costs for mortgage loans taken up by the association as well as real estate taxes. Another variation of the co-operative form of ownership is so-called “cooperative rental housing” where members rent the apartment from the association of which they are a member. The shares in such entities cannot be sold on the free market and trading always takes place with the association.

Having a sufficiently large rental market is important as it provides the public with an alternative tenure choice that is more flexible than owner-occupation. Mobility is facilitated by renting and financial flexibility is enhanced as citizens can make a free choice whether to invest their money in a home or in other assets. However, in order to fulfil its important role, the rental market must be able to match demand and supply for this tenure form. The Swedish rental market model fails to do so, not least due to its unique rent setting system.

The rent regulation system

Historically, rent regulation was introduced in Sweden during the 1940s as a control framework to avoid unjust rent increases. Discussion about reforms started in the 1960s, but changes were enacted only in the 1970s, gradually moving to a softer form of rent regulation. However, rent setting still remains *de facto* highly regulated.⁹ Today’s system is a collective bargaining system (analogous to the labour market, see Lind, 2005) with a price determining role being played by non-profit municipal housing companies which in effect establish a ceiling for rents for the whole rental market. The yearly rent setting process starts in September with negotiations between local tenants’ unions and the respective municipal housing companies. The basis for the rent determination is a historical cost approach, reflecting the age composition of the housing stock of each individual housing company. The latter can set rents differently among its dwellings with the overall aim that rents more or less reflect the total costs of the company (Box 4). However, as each municipality has its own housing company, such rent differentiation is restricted to the region the company is responsible for.

Following an agreement in the public housing sector, rents in the private rental sector are set through negotiations between local tenants’ unions and local landlord associations and are based on the use value principle (which specifies that rents should be the same for similar apartments in the same area with equal general value to the occupant). In practice this means that private rents can be agreed individually, but tenants have the right to let the appropriateness of their rent be determined by a public rent tribunal (rent committee). The committee decides on the basis of comparable rent levels in public housing (within

9. On a scale from A (weakest regulation) to E (strongest regulation), Lind (2003) describes Swedish rent regulation as being of type E as it intends to also keep new rental contracts below the market level in certain areas. Recent legislation has softened this somewhat by allowing market rents in newly constructed dwellings.

the same municipality) and usually slight deviations (up to 6%) are deemed acceptable. Thus, although there are no normative rules for setting the rent level, the result of the system is that private rents are essentially tied to the rents in the public sector (which thereby set a ceiling for the national rent level).¹⁰ It is becoming increasingly difficult to find comparable public housing dwellings within the same municipality that can serve as a comparison group for private dwellings. As public rental construction on average accounts for more than half of total rental construction, this reflects that new construction is distributed fairly equal across regions rather than taking the regionally diverging demand situation into account. Also for this reason, the regulations concerning comparison of public and private rents have been applied somewhat more flexibly in recent years.¹¹

Due to the cost-based rent determination in public housing, rents in attractive city locations are significantly below a market-clearing level. Rents in the Greater Stockholm region, for example, were about 10% higher than the national average in 2005. By contrast, prices of owner-occupied houses in Stockholm county as well as of tenant-owner flats in central parts of Stockholm were more than twice as expensive as the national average suggesting a significant underpricing of rental housing.

The main theoretical argument put forward in favour of some form of rent control is that landlords have more bargaining power than sitting tenants, who face costs of moving as well as search costs for a new place and thus are more willing to accept a landlord's demands.¹² Conclusive empirical evidence on the efficiency of rent control to deal with this asymmetry is, however, scarce (Turner and Malpezzi, 2003). The major negative effects of rent regulation are seen as low private housing construction, black market activities, inefficient use of the dwelling stock and segregation effects; many of these apply to the Swedish case (Lind, 2005, Ellingsen and Englund, 2003). However, they are all more or less symptoms of the general failure to match demand and supply at the level of individuals, which is visible in increasing regional house price variation in combination with little rent differentiation, long queues for new tenants as well as illegal side payments for rental contracts. In addition, the rent setting framework benefits insiders already in the market but makes it increasingly difficult for an outsider to enter it. It is a common practice to accept a rental apartment which may not serve your purposes right now, since, once in the rental market, it becomes easier to move around.

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10. Lind (2005) argues that the advantage of orienting private market rents at the municipal housing rent level as seen at that time was that the government was no longer directly responsible for the rent setting, yet rents would be set in a "socially responsible way".
 11. A court ruling in 1998 determined that rent levels in municipal housing companies can not be used if they reflected an explicit subsidy element. The background was the case of a public housing project in the St Erik area of Stockholm for which the housing board apparently decided to lower the appropriate rent level in order to make it affordable for lower income households (see Lind, 2003). According to Lind (2003), this reduced the role of municipal housing rents for comparison and moved more towards rents being determined at 'reasonable costs'.
 12. Rent control is just one method of dealing with this a potential asymmetry; most countries protect the tenant through the legal system without interfering with the pricing mechanism (apart from regulating the allowed annual rent increases).

Box 5. Municipal Housing Companies

In the post-war period Sweden decided against the creation of a “poor-housing” sector and instead established public not-for-profit competitors on the rental market providing housing to a wide range of households. These public institutions were expected to make up for any construction shortfalls by private competitors and eventually were aimed at competing on the open market. While in the 1970s and 80s, public construction was responsible for more than 75% of new rental dwellings, its importance has declined somewhat but still remains at around one half. The public rental housing sector today consists of around 300 municipal housing companies (MHCs) which are owned by their respective municipalities. The rent level they aim to set is used to cover direct costs, but they are not managed on a strict non-profit-making objective as they provide a return for the capital invested by the municipalities (the share of the initial municipal equity capital, though, has declined significantly over time since many MHCs were created in the 1960s and have grown since then). There is a cap on what dividends a MHC should pay to the owner and the government decides what an appropriate rate of dividend is.¹ Until further notice this has been defined as the average interest on government bonds during the preceding year, plus one per cent, calculated on the part of the owner’s equity. MHCs aim for cost-covering for the company as a whole and thus they can set varying rents in different dwellings within their municipality. If a MHC has a rental income in excess of costs and dividends, these funds are reinvested in new construction. In addition, mortgage loans are taken up for which the municipality may provide a guarantee (against a fee).

The extent to which the state is subsidizing MHCs and whether this constitutes a case of state aid is currently the content of a complaint filed by the European Property Federation (on behalf of the Swedish Property Federation – an interest organization for property owners and tenant-owner associations) to the European Commission. It is argued that apart from some direct payments of the state, the guarantees were not given at normal conditions and that the return the municipalities receive for their equity stakes is lower than a comparable market return. The estimated amount of state support (and whether it constitutes a breach of European state aid rules) is controversial, however.² Also, the government argues that there is an important social element involved in the provision of public housing. While the outcome of the complaint is still uncertain, its existence might lead to a general rethinking of the role of MHCs in the housing market and generate some reform momentum.

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1. See SFS 2002:102, Public Utility Housing Companies Act, and SFS 2003:348, Ordinance on reasonable dividends from Public Utility Housing Companies.
 2. In the complaint it is estimated that state support given to municipalities amounted to around SEK 12 billion in 2002 (0.5% of GDP), most of this related to an allegedly too low return on capital requirement for the municipalities’ equity stake in MHCs. The government (apart from questioning the assumptions for the calculations) in response argued that the prime cost principle for rent determination in MHCs effectively limits their earnings capacity in comparison with private housing companies. Overall, therefore, they deem Swedish housing policy to be neutral and non-discriminatory.

Rent regulation lowers construction activity...

While construction of owner-occupied dwellings has increased over the past decade, in line with increasing house prices, the number of newly built rental dwellings remains muted and below the levels seen in the early 1990s. This holds in particular for the construction activity of private rental dwellings. Rent regulation is often mentioned as a damping factor for construction (Lind, 2003) as owners cannot charge a market-clearing rent and face the risk that regulations might change over time. In addition, the property owner carries the risk of being asymmetrically hit in case of a recession as demand for housing might fall in particular in newly constructed private rentals (which have higher cost-based rents than older apartments) rather than spread over the whole housing stock. Hence attention should be paid as to whether the recent step towards liberalisation of rents for newly constructed dwellings leads to major construction activity as long as rents are kept down in other parts of the rental sector. One way to circumvent this problem is to allow flexible rent setting for apartments that become vacant when the previous tenant moves out (Finansdepartement, 2003). This would still protect sitting tenants, but would reduce the risk of constructing new rental dwellings. On the other hand, lock-in effects would almost certainly be aggravated.

One way to capitalize the difference between market and regulated rents is to convert a rental building into a tenant-owner dwelling whose price is not regulated and can be sold on the free market (Figure 7). If a majority of tenants can agree to form an association they can buy the property and convert it. They have to agree on a purchase price with the owner which allows both sides to retain some of the gain. As tenant-owner dwellings are the fastest growing form of tenure, such incentives clearly seem to work. In particular, conversions into tenant-owner housing are so far mostly a phenomenon of metropolitan areas where the difference between market and regulated rents is large. Since 1990 around 6% (90 000 dwellings) of the stock of rental apartments has been converted into tenant-owner dwellings and 80% of those took place in the Stockholm region. Over time, therefore, the share of rental flats has decreased, making the visible shortages even more acute – particularly when taking into account the low rate of construction of rental dwellings. Meanwhile, in Stockholm, due to legislation making the selling of MHC property more difficult and to political considerations, the conversion of public rental housing into tenant-owner dwellings has been heavily restricted in the last years by the local government, making private rental conversions more frequent (they account for around 75% of all conversions since 1990). However, the new local government in Stockholm is advocating conversion of municipal rental housing to tenant-ownership and the national government has announced that the legal restrictions against conversions will be removed.

...creates inefficiencies in the use of existing housing stock,...

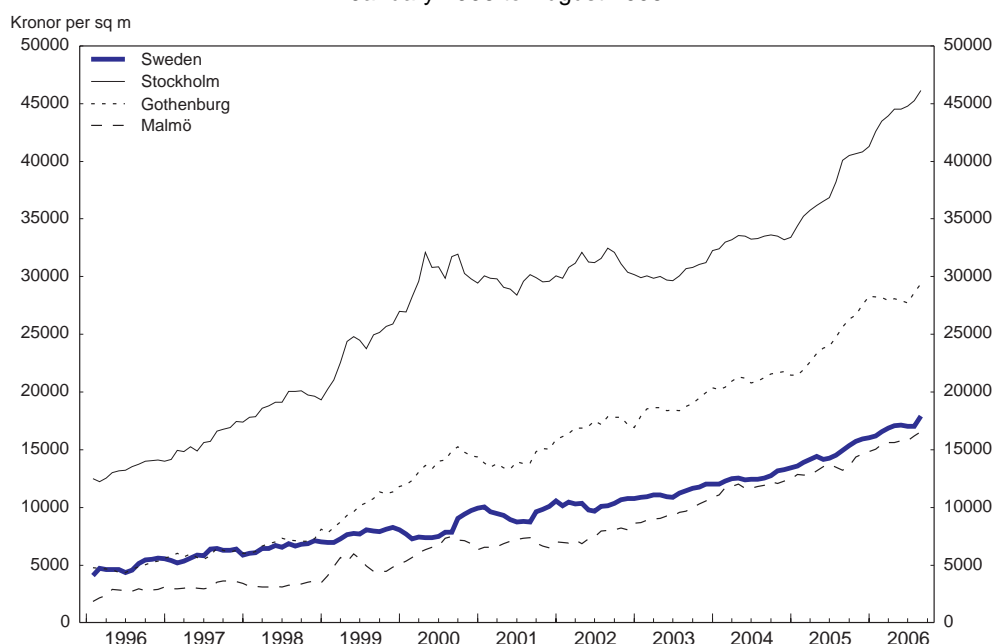
Inefficiencies in the use of the housing stock can take several forms, such as tenants being locked into cheap apartments that do not fit their preferences anymore or, on the contrary, tenants renting much larger places than they actually need (or could afford at market rents). The most striking example of the inefficient allocation of the housing stock is the existence of queues for the allocation of apartments. In the Greater Stockholm region 8% of the population was registered with the Municipal Housing Allocation Agency in 2005.¹³ 70% of those had a permanent dwelling but were obviously willing to switch to another form of tenure. Due to the cost-based rent determination, which does not take location into account, attractively located city dwellings might rent for a similar or even lower price than apartments located in more remote areas, and therefore become much more sought-after. In order to be allocated an apartment in the inner city of Stockholm the waiting time is more than 10 years. Even for a place in the outer suburbs and neighbouring municipalities one has to wait around 4 years. This should have negative effects on tenancy and labour mobility, as empirical evidence for other countries suggests (Munch and Svarer, 2002 and Svarer *et al.*, 2005).

...leads to black market activity ,...

Lind (2005) reports that around 50% of apartment exchanges in Stockholm involve some kind of side-payment with prices of around 150 000 SEK (€ 16 300) per room for a rental contract. This can take the form of direct payments or can be hidden, *e.g.* the new tenant takes over the old furniture from the old tenant at a high price. While it can be argued that such payments introduce a market element into the rental market ‘through the back door’, this is clearly not a preferred way of making the housing sector more efficient.

13. This is already a major improvement compared to the past: Nesslein (2003) reports that in 1963 about 40% of Stockholm’s population was registered in the queue.

Figure 8. Prices of tenant-owner dwellings across Sweden
January 1996 to August 2006



Source: Maklarstatistik.se.

...and might even increase segregation

Magnusson and Turner (2005) find that vulnerable households are overrepresented in public housing and moreover that they are more concentrated within this sector in areas where there is a smaller share of public housing.¹⁴ Such households clearly have more problems getting a foothold in the private rental market. This is somewhat ironic, as one of the pillars of Swedish housing policy was to not create a public housing sector for the poor but rather to attenuate housing segregation (Nesslein, 2003). However, in 2002, half of all people living in areas with employment levels below 50% had an immigrant background, an indication that this policy has not been successful in preventing spatial segregation between households with different cultural and socio-economic background. There are many causes behind housing segregation. One structural factor is that municipal housing companies have a relatively large share of rental dwellings in the outer suburbs, while private rental dwellings are more frequent in the cities and inner suburbs. Also, municipalities are responsible for providing housing to asylum seekers, who to a large part have been housed in public housing dwellings. However, segregation can also occur or be reinforced, for example, because black market activity underlying the rental market has the effect of pricing poorer people out of the attractive locations (and into the public housing sector). Also, better off households can afford to wait in the queue for attractive apartments for many years as they probably have good housing already. For these reasons it is not necessarily to be expected that segregation will increase if rent regulation is phased out. In Malmö, where rents were gradually being adjusted closer to market levels, no significant change in the segregation situation took place relative to cities where no adjustment took place, such as Stockholm (Lind and Hellström, 2006). Furthermore, evidence for Denmark suggests that the gains from rent regulation are poorly targeted, with those in the higher income deciles benefiting most (in contrast to the intended effect) (OECD, 2006c).

14. Vulnerable household groups in their study include poor families, single parents, elderly families and immigrants. All of these groups, except elderly families, were found to be overrepresented in public housing, in particular in the metropolitan cities.

Gradually let rents reflect market demand

The above mentioned distortions that the current system creates call for a gradual phasing out of rent regulation. However, the system can be improved without a major overhaul, as the example of Malmö shows.¹⁵ Since the beginning of the 1990s, rents in Malmö have moved to more market-oriented levels – with the agreement of the local tenants’ union. The process was carried out gradually, but by now, rents differ by around 25% between the most and least attractive areas (Lind and Hellström, 2006) and the length of queues has been reduced.¹⁶ In Stockholm, by contrast, there are no visible differences between locations. What would happen if rent regulation were to be lifted? Berger, Jonsson, and Turner (1994) estimated that the ‘undervaluation’ of rent levels was around 40% in the metropolitan areas of Stockholm and Gothenburg, but not so in other regions. Anecdotal evidence suggests that this is still a reasonable measure.

A small step towards more liberal rent setting came into force in July 2006. Since then the rule is that if rents for new dwellings have been negotiated and accepted by a local, established Tenant’s Association these rents shall be presumed to be reasonable and not liable to be contested in a Rent Tribunal or to be compared with other, similar dwellings for a period of ten years. After that time rents shall be determined according to the ordinary utility value rules (comparison with similar flats in the public housing sector). But reforms could be more far-reaching, in particular as a gradual process of change risks significantly increasing lock-in effects of existing tenants.

Increase flexibility of public housing companies

The setup rather than the existence of the public housing companies is part of the problem: rents can be adjusted within a housing company (which, according to the Municipal Act, only can operate within the municipality or municipalities owning the MHC) to better reflect the demand situation, but not between companies. In other words, cross-subsidisation is possible within a company but not within regions made up of several municipalities. The example of reforms in Malmö shows that problems can be solved within the current system by introducing more rent differentiation through increased cooperation among municipalities. Stockholm should seek inspiration from this example. One part of a possible reform could thus be to allow MHCs to operate out of the limits of their own municipality, thereby putting them on a more equal footing with private investors. This would at the same time allow them more differentiation within their stock of dwellings.

Fiscal issues

In previous decades, fiscal support for housing consumption was abundant. Including interest subsidies for rental housing, housing allowances and favourable tax treatment of owner-occupied housing etc., expenditures increased from around 1.7% of GDP in 1970 to close to 4% of GDP in 1990 (Englund *et al.*, 1995). These direct and indirect subsidies were drastically reduced with the 1990/91 tax reform, which cut interest subsidies, increased the real estate tax rate to 1.5% and reduced the tax value of interest deductibility to 30% from previously up to 50% for persons in the highest income tax brackets. Finally, value added tax rates for building material, heating and other housing services were almost doubled to match the standard VAT rate. Since the 1990/91 tax reform, the real estate tax rate has been altered quite frequently: it was raised to 1.7% in 1996, between 1997 and 2000 the assessment values were frozen, and when un-frozen in 2001, the rate was lowered to 1.0% for owner-occupied houses and 0.5% for apartments.

15. A government commission on modernizing rent legislation was initiated in mid-2006 and proposals should be expected in 2008. However, a chairperson as well as other officials of this commission have yet to be appointed.

16. The attractiveness was determined by the housing company based on consumer demand.

Housing taxation as of 2006 is below neutrality

As of 2006, housing taxation is based on a wide set of instruments: a real estate tax, imputed rent taxation, interest deductibility as well as capital gains and wealth taxes (Table 2). The effective taxes, however, are weakened by several factors. First, the property value assessment set by the tax authorities is required to be 75% of the actual market value. Second, no tax is paid for the first 5 years after a new house is built, and only half is paid for the next five years. Third, a limitation rule prevents real estate taxes from rising above 4% of disposable household income.¹⁷ Around 200 000 individuals are affected by this rule. Consequently, the effective real estate tax rate for owner-occupier homes amounts to around 0.94%, or 0.71% when taking the below-market value assessment into account.

For tenant-owned apartments, the combination of real estate tax and imputed rent taxation is comparable to a 1.34% real estate tax rate, and at first glance, it could therefore seem as if tenant-owned apartments were taxed more than owner-occupied houses. However, tenant-owned apartments benefit from a somewhat artificial value assessment. As the real estate tax and imputed rent tax is paid by the cooperative rather than the tenant-owners, the property value assessment used as tax base is derived from the market value of the apartment block if used for private rentals. In the metropolitan areas where the negotiated rents are well below what tenants would be willing to pay, the sum of market values of the shares in a tenant-owned cooperative may be several times higher than the market value of the apartment block sold as a whole. On a national average, probably the effective real estate and imputed rent taxes of tenant-owned cooperatives are comparable to that of owner-occupied housing.¹⁸ Consequently, the arguments made for owner-occupied housing below could be made with similar conclusions for tenant-owned apartments.

The ideal housing tax system would be to give deductibility for interest expenses while mirroring it by imputed rent taxation, thereby taxing the benefit associated with living in the house. Such imputed rent taxation would come in addition to VAT paid on building materials etc. when constructing the house. In principle, the VAT ought not be paid before housing services are consumed, but charging it up-front at the time of construction is a reasonable practical arrangement which does not disadvantage the average home owner (Box 6). In principle, the imputed rent could vary with the interest level in capital markets, thereby mirroring the fact that a higher (lower) interest rate leads to higher (lower) tax reductions when borrowing costs are deducted. However, if abstracting from this by applying a constant imputed rent factor to the assessed house value, then an imputed rent tax becomes mathematically identical to a real estate tax as they are applied to the same tax base.

17. The limitation rule was introduced in 2001 with the background that house prices in attractive coastal areas have been rising fast and thus causing an increasing tax burden for permanent residents in those areas (whose average income is below that of second-home owners). Originally the limit was 5% of disposable income, but from 2006 it was reduced to 4%.

18. In principle, the separation of the cooperative's interest deductibility, imputed rent taxation and real estate taxes on the one side, and the tenant-owner's interest deductibility on the other side, could be a disadvantage if cooperative interest expenses exceed imputed rent, as there would then only be partial interest deductibility. But as shares in tenant-owned cooperatives can be used as collateral for mortgage finance, this tax disadvantage can be circumvented by shifting debt to the tenant-owners. This is effectively what happens when over time cooperative debt is being repaid.

Table 2. **Housing Taxation in Sweden, 2006**

	Owner-occupied houses	Tenant-owned cooperative apartments	Rental housing
Real estate tax (<i>fastighetsskat</i>)	1% of assessment value ¹	0.5% of assessment value ^{1,2}	0.5% of assessment value ¹
Imputed rent tax (<i>schablonintäkt</i>)	none	The corporate tax rate of 28% is paid exclusively on imputed rent income being 3% of assessment value (this corresponds to a 0.84% tax of assessment value) ²	none
Interest deductibility	Interest expenditures of any kind are deductible at a rate of 30%. If this leads to net capital income being negative and exceeding SEK 100 000 annually (SEK 200 000 for couples), then a lower rate of 21% is applied for the part of negative net capital income exceeding this ceiling. ³	Interest expenditures paid within the cooperative are deductible against imputed rent income. Interest expenditures paid individually for debt taken up to finance purchase of a share in a tenant-owned cooperative are deductible as described for owner-occupied housing.	For rental apartments owned by a corporation: As for other expenditure, interest can be deducted from rental income before paying corporate taxes of 28%.
Capital gains tax (<i>kapitalvinstskat</i>)	2/3 of capital gains are counted as capital income and taxed at 30%, but this can be deferred ⁴		
Wealth tax (<i>förmögenhetsskat</i>)	1.5% of wealth above SEK 1.5 million (3 million for couples) ²		

1. New housing is exempted for 5 years, afterwards only half of it is paid for another 5 years. Full tax is paid after 10 years. For owner-occupied housing, a limitation rule prevents real estate tax payments to amount to more than 4% of disposable household income.
2. For tenant-owned cooperatives, the property assessment value is based on the comparable market value of the apartment block if used for private rentals. Due to rent regulation, this may be only a small fraction of the sum of individual apartments' market value. This lowers effective real estate tax, imputed rent tax and wealth tax.
3. If net capital income is negative, tax deductibility of interest expenses only matters if the person has sufficient earned income against which to deduct. As all pensions, sickness and unemployment benefits etc. are taxed as earned income, this is usually the case. Only social assistance, child benefits and housing benefits are not taxed as earned income.
4. For housing capital gains, taxation can be deferred indefinitely as long as the gain is re-invested in another owner-occupied house or tenant-owned apartment. Deferral can even extend across generations when a person dies and a house is transferred to the heirs.

Source: Taxes in Sweden, www.skatteverket.se.

Box 6. The relation between value-added taxation and imputed-rent/real-estate taxation

When an owner-occupied house is constructed, value-added tax (VAT) is paid on building materials as well as construction services etc. With consumption taxes paid up front in this way, it could be asked whether imputed rent (or alternatively real estate) taxation implies unwarranted double taxation. This is not the case, though, because imputed rent is not supposed to mimic consumption taxes, but rather capital income taxes. When living in her house, the owner-occupier both receives a return on investment and consumes this return. It is instructive to draw a parallel to what happens if, instead of buying a home, the capital is invested in bonds with the interest income being spent on consumption. In that case, the person would first pay capital income tax on the interest receipts and then VAT when the money is spent. For neutrality, housing taxation must therefore include both imputed rent and value added taxation.

Another issue relates to the timing of the VAT payment. Considering an owner-occupied house as an investment good, it could be argued that VAT on construction materials and services should be refunded when the house is being built. Thereafter VAT should be charged when the consumption of housing services takes place. In a system with imputed rent taxation, the net present value of tax payments would then be as follows, where A is the initial house price, π is annual house price inflation, i is the imputation factor, $t_{capital}$ is the capital income tax rate, t_{VAT} is the valued added tax rate and δ is the discount rate:

$$NPV \text{ tax payments} = \sum_{t=1}^{\infty} \frac{1}{(1+\delta)^t} \left[A(1+\pi)^t i t_{capital} + A(1+\pi)^t i (1-t_{capital}) t_{VAT} \right] \quad (1)$$

In practice, however, VAT is charged on the physical transactions occurring when the house is constructed, implying an initial house price $B=(1+t_{VAT})A$. The net present value of tax payments is as follows:

$$NPV \text{ tax payments} = \frac{B}{1+t_{VAT}} t_{VAT} + \sum_{t=1}^{\infty} \frac{1}{(1+\delta)^t} B(1+\pi)^t i t_{capital} \quad (2)$$

One difference between the two regimes is that a larger investment is needed when constructing a house when VAT has to be paid up front. In equilibrium, however, house prices will be higher, so VAT related to the remaining value of a house is recuperated when selling. An intuitive argument then goes as follows: If keeping the house fully maintained, so that it can be sold for the same price as it was constructed, the VAT on construction will in some sense not be paid by the owner, because it will forever remain as a constant markup on the house price. Effectively, VAT is only paid on the maintenance work, and thereby the time profile of the owner's VAT payments is not much different between the two regimes (1) and (2).

Nevertheless, paying VAT up front entails a financing cost which tends to make the net present value of tax payments larger in (2). On the other hand, if house prices increase substantially, then up-front VAT is advantageous for the owner. If, for example, urban development makes the location of an existing house more attractive, then only imputed rent taxation would rise, while no VAT would be paid on the additional consumption associated with the rising location value. The opposite applies if the value of a particular house falls. For assets that can be reproduced (buildings), prices should be expected to grow in line with general inflation, albeit slow productivity growth in the construction sector would imply that the real price of newly constructed housing (with given characteristics) should trend upwards. For assets that cannot be reproduced (land), prices should grow faster than general inflation – at the rate of the nominal interest rate in a world with a constant population and Cobb-Douglas preferences. In dynamic general equilibrium, prices are in each period determined by an adjustment of the housing stock to the point where marginal utility equals the resource cost (shadow price) of newly constructed housing. Rational agents foresee this price development, and via the user-cost of housing capital, it will have a level effect on the housing stock, but no effect on the house price trend. Considering 1976-2005, for which data are available, national average house price inflation exceeded CPI inflation by 1.5%. Looking ahead, with this real house price increase coming on top of CPI targeted at 2%, nominal house price increases could be $\pi=3.5\%$. Assuming a (nominal) discount rate equal to the net-of-tax (nominal) interest rate, $\delta = \text{interest rate} (1-t_{capital})$, and applying a benchmark interest rate of 5% together with the Swedish $t_{capital}=30\%$, it appears that $\delta = \pi$. Thereby the discount and price increase terms cancel each other out, making (1) and (2) identical. So for the average house there is no difference between the two tax regimes if indeed nominal house price increases continue at a 3.5% long-run average.

Strictly speaking, the relevant price trend would not be the one for a house having given characteristics, because repair is needed to maintain the house's characteristics. The equations could therefore be solved under the alternative assumption that house prices – net of repair – remain flat $\pi=0\%$. If full imputed rent taxes (with i equal to the capital markets' nominal interest rate) had been applied in Sweden, then the up-front application of VAT would entail over-taxation with net present value of 8.6% of the price of the house, given $t_{VAT}=25\%$. In conclusion, the up-front application of VAT may in practice imply a bit of over-taxation of net present value, somewhere in the range of 0 - 8% of the price of the house. However, this is offset by the discount implied by value assessments being set at only 75% of the market value.

To assess whether the system of housing taxation is appropriate, the first question is, therefore, whether the real estate tax as of 2006 is neutral *vis-à-vis* the taxation of other assets. It appears that the real estate taxes applied to owner-occupied as well as tenant-owned housing are too low, but the answer is

complicated by two factors. First, it depends on the level of interest rates. Second, it depends on what is the relevant alternative when the person considers investing in owner-occupied housing or financial assets. Someone who owns a debt-free house with a SEK 1 million market value, would under 2006 rules pay real estate tax equal to 1% of the property assessment value of SEK 750 000, *i.e.* SEK 7 500 a year. If the person sold the house, moved into rental housing and invested the money in bonds with a 5% nominal yield, she/he would pay capital income tax equal to 30% of 5% of SEK 1 million, *i.e.* SEK 15 000 a year. For the investment return that remains after tax, *i.e.* SEK 35 000 a year, the person would not be able to rent a house similar to the one sold. In fact, the real estate tax rate should be twice as high as in 2006 in order to avoid that different tax treatment skews the choice between owner-occupied and rental housing. A similar non-neutrality is created for a first-time buyer borrowing all the money needed to buy the house. She/he would save SEK 15 000 a year in income tax payments when deducting mortgage interest expenses. Effectively, the difference of SEK 7 500 *vis-à-vis* the real estate tax is an indirect tax subsidy. It has a fiscal cost, and it encourages people to buy bigger houses than they would have preferred to do in the absence of the indirect tax subsidy. Consequently, with a benchmark nominal interest rate of 5% (2% inflation and 3% real interest rate), a neutral real estate tax rate for owner-occupied housing would be 1.5% of the market value, or in fact 2.0% to compensate for the property assessment values being systematically below market values (Table 3). A parallel argument can be made for tenant-owned apartments.

Some caveats apply for first-time buyers in very expensive areas and those contributing to voluntary pension savings plans. For people with very large interest expenditure and negative net capital income (typically first-time buyers), the value of interest rate deductibility decreases to 21%, implying that the neutral real estate tax rate would be lower. But at a mortgage interest rate around 5%, this applies only to the part of household debt exceeding SEK 2 million (4 million for a couple) and thus concerns only a small minority of urban households.¹⁹ More importantly, it should be noted that if the alternative to buying a house is to invest via a pension saving scheme, then the current 1% real estate tax rate is exactly neutral, as investment returns are taxed by only 15% while they accrue inside pension saving schemes.²⁰ About 40% of the 25-64 year olds make contributions to voluntary private pension schemes. The maximum annual contribution is SEK 20 000 for most, but rising to SEK 39 700 for high-income individuals. On average the 25-64 year olds contribute SEK 6 000 a year, meaning that most have remaining flexibility to increase their contributions if they wish.²¹

Under the current personal capital tax system, the real estate tax rate for owner-occupied housing would need to be raised to 1.3% to be neutral *vis-à-vis* how other capital assets are taxed (Table 3). This holds if considering the marginal capital tax rate, which is relevant when individuals and families decide where to place savings surpluses: building up mortgage equity by repaying debt, or placing it in financial assets. It also holds for the average capital tax rate which matters for assessing whether there is an implicit housing subsidy via the tax system. If adjusting for low assessment values, in fact, the neutral real estate tax rate would be 1.7%.

19. The average purchase price of houses in 2005 was SEK 1 066 428 for the country as a whole. Only in 12% of municipalities the average purchase price was above SEK 2 000 000 (SEK 3 218 000 for Stockholm, SEK 2 689 000 for Gothenburg and SEK 2 611 000 for Malmö).

20. Unlike most OECD-countries, but like Denmark and Italy, Sweden allows for income-tax deductibility of voluntary contributions to pension savings schemes. Subsequently, when pensions are paid out from the scheme, they are taxed as income (Yoo and de Serres, 2004). Aside from any differences in the marginal income tax rate faced by the person while contributing versus receiving pensions, this means that capital income is taxed at 15%, being only half of the tax rate for capital income earned outside a pension scheme. In practice, the tax on pension fund earnings is paid by insurance companies as 15% of an estimated yield of the fund capital calculated by multiplying the fund capital by the so-called state lending rate.

21. See "Privat pensionssparande 2004" at www.scb.se.

Independent of the level of real estate taxes, a tension is evolving between tax-favoured pension savings and interest deductibility. It is closely entangled with the issue of housing taxation, because of the still-easier access to flexible mortgage equity withdrawal and deferred amortisation, whereby the house is used as collateral to obtain cheap borrowing. The gap between the low 15% tax on investment returns in voluntary pension savings and the 30% tax value of interest deductibility invites tax planning by giving incentives for homeowners to shift to interest-only loans while increasing pension savings. With house prices now being far above what anybody had imagined when the 1990/91 tax reform was made, the net-present value of the tax revenue loss from such an arrangement may easily exceed SEK 100 000 in a typical example, part of which accrues to financial intermediaries (Box 7). Financial market development and flexible mortgage are beneficial, but may require renewed attention to skewed tax incentives. The only effective way to address this is to raise the very low tax rate on investment returns in voluntary pension savings or reduce the tax value of interest deductibility.

Table 3. The real estate tax rate for owner-occupied housing that would be neutral *vis-à-vis* alternative financial investment

Per cent

Capital tax considered for neutrality	Nominal tax rate	Real tax rate ¹	Nominal interest rate ²					
			1990-99 average 9.2		Benchmark 5.0		2000-06 average 4.6	
Tax on positive capital income from investment held outside pension funds	30	50	2.8	(3.7)	1.5	(2.0)	1.4	(1.8)
Tax deductibility of interest expenses								
Tax deductibility of interest expenses if negative net capital income exceeds SEK 100 000	21	35	1.9	(2.6)	1.1	(1.4)	1.0	(1.3)
Pension saving schemes	15	25	1.4	(1.8)	0.8	(1.0)	0.7	(0.9)
Average across all current home owners								
Marginal capital tax rate ³	25.1	41.9			1.3	(1.7)		
Average capital tax rate ⁴	26.2	43.6			1.3	(1.7)		

Note: Numbers in brackets indicate what the real estate tax rate needs to be in order to imply full neutrality when taking into account that property assessment values are systematically 25% below market values.

1. Because part of the return on an investment is simply compensation for inflation, a capital tax applied to the nominal return implies heavier taxation than what appears at first glance. The real tax rate is what can meaningfully be compared to tax rates for earned income. It measures the effective tax on real investment returns as $(1 + \text{nominal return}) / (1 + \text{inflation})$, here using the benchmark nominal interest rate being 5% and inflation being 2%.
2. Based on quarterly averages of 5-year mortgage bonds.
3. Based on the following stylised characteristics and assumptions: For the 40% 25-64 year olds contributing to private pension saving schemes, this is, at the margin, the relevant alternative investment for three quarters, while debt repayment or assets held outside pension schemes is the relevant alternative for the remaining quarter. When moving into retirement, the speed of pension payments from private schemes can be adjusted thereby giving the recipient roughly the same flexibility to choose net saving flows on the favourable tax conditions as for those in working age contributing. Presumably, one in twenty has interest expenditure exceeding the SEK 100 000 threshold. Consequently, 30% face a *marginal* capital tax rate of 15%, 4% face a marginal rate of 21% and 66% face a marginal rate of 30%.
4. Based on the following stylised characteristics and assumptions: Half of the housing stock value is financed by debt. Presumably only a fiftieth of this debt mass is subject to the lower 21% interest deductibility. Had savings not been placed in mortgage equity, those contributing to private pension saving schemes might have placed half of the mortgage equity in their pension scheme. All other mortgage equity would have been placed in assets outside pension schemes. Consequently, the relevant *average* capital tax rate is 30% with a weight of 0.49, 21% with a weight of 0.01, 15% with a weight of 0.25 and 30% with a weight of 0.25.

Source: OECD calculations.

Box 7. Low taxes on pension investments invite tax planning to benefit from interest deductibility

Consider a couple aged 45 buying a house worth SEK 2½ million. They use their liquid savings and need mortgage finance for the remaining SEK 1½ million. One option is to take a loan with linear repayment over 30 years, meaning SEK 50 000 annually. Their income is sufficient to pay such a mortgage, and following common practice, the mortgage credit institute is therefore willing to offer them an interest-only loan as an alternative. Using this loan, they can channel the SEK 50 000 into their individual pension schemes. If (for simplicity of illustration) they buy the very same bond in the pension scheme as is issued for their mortgage loans, they will earn the same interest rate as they pay, say 5%. With interest expenditure of $5\% * 50\,000 = 2\,500$, their income tax payments will be reduced by $30\% * 2\,500 = 750$, whereas the pension savings tax on the interest income is only $15\% * 2\,500 = 375$. The net result is a tax subsidy of SEK 375 in the first year, and with another SEK 50 000 being moved into pension savings every year, the tax subsidy grows above SEK 15 000 in the year they are 65. From thereon it gradually declines when they retire and start repaying the mortgage with the extra pension income. In net-present-value terms, the couple saves tax payments in the order of magnitude of SEK 100 000 - 200 000, depending *inter alia* on how they liquidate the pension savings and the mortgage in old age. It is close to the equivalent of one year's earnings net of social contributions, income and consumption taxes for one average worker. Fees from financial institutions will absorb some but not all of the taxes saved: if additional mortgage borrowing costs are 0.5% of the increase in outstanding debt, then it is about half of the taxes saved at nominal interest rates of 5%; holding the bond in the pension savings plan is not expensive. For simplicity, this calculation abstracts from the fact that pension contributions are deductible from income taxes when made while pension receipts are taxed as income, since this is neutral as long as the person faces the same marginal tax rate when working and when on pension. In practice, many face a lower marginal rate when retired, in which case the reduction in tax payments from the described arrangement is larger.

Capital gains on housing are generally liable for taxation in Sweden unlike in most other countries where gains on an individual's principal residence are exempt in order to avoid lock-in effects and thus potential obstacles to mobility it could create (OECD, 2006d).²² However, in the Swedish framework both owner-occupied housing and tenant-owned cooperative housing have preferential treatment via a discount on the tax base. When such a dwelling (which has been the owner's primary residence) is sold, two-thirds of the capital gain is counted as taxable income and taxed at the standard capital income tax rate of 30% (thus, the effective tax rate is 20% of the nominal gain). Moreover, taxation can be deferred for the part of the sale proceeds that is reinvested in another house or apartment and deferred taxes can be transferred at death to heirs who inherit a house.²³ Deferral of capital gains taxes amounts to a quite sizeable interest-free credit granted and the total stock of deferrals outstanding in 2005 was equal to 4.7% of GDP. Deferral reduces lock-in effects and thereby facilitates mobility, but by allowing a deferral of capital gains taxes only when buying another house or an apartment, people who sell their house to move into a rental flat have to pay the tax. Thereby, the incentives given by deferral favour tenant-owned and owner-occupied housing and distort the choice of tenure (Finansdepartement, 2003) - notably so when real estate prices have risen significantly as in the recent past. A general disadvantage of a capital gains tax is that it may increase house price volatility (Fuest *et al.*, 2004). The argument goes as follows: when house prices are above their equilibrium value, home buyers are less cautious, because the

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22. Most countries exempt capital gains on a primary residence if it has been owned for a certain minimum period (mostly 2 years) and if it is not used for business purposes. In Spain, an exemption exists for persons above 65 years of age. Hungary provides tax exemption if the proceeds from selling the property are reinvested within a certain period and Portugal (like Sweden) grants a rollover in case of reinvestment. Only Japan and the United States tax capital gains on principal residence. However, tax rates in Japan decrease with the holding period and the US system grants exempt amounts (USD 250 000/USD 500 000 for couples) as well as lower tax rates than for other capital gains (OECD, 2006d).
23. Previously, capital gains tax had to be paid if the proceeds were reinvested outside of the country. But this regulation has been abolished as it was out of line with the non-discrimination principle in the EU.

tax deductibility for capital losses softens the consequence if having to sell some day at a lower price. *Vice versa*, prices may go further below equilibrium because potential buyers will value houses less when knowing that they would be taxed of any capital gain. Consequently, prices may become more volatile, but how large a role this has played in Sweden is hard to quantify.

For the wealth tax there is no explicit preferential treatment of housing assets, but effectively there is, as the property assessment value is below market value, thereby implying lighter taxation than for financial assets. For those in tenant-owned housing, this is magnified by the fact that their share of cooperative equity, which is the basis for personal wealth taxation, is calculated based on the property assessment value of the apartment block if used for private rental housing, as described above.

In sum, there are good arguments for increasing housing taxation, for example by increasing the real estate tax. In addition to the concern for neutrality underlying the discussion above, it should be noted that globalisation will make it increasingly important to focus taxation on less mobile factors such as land and housing. Consequently, the optimal real estate tax rate would be higher than indicated in Table 3.

Housing taxation initiatives in the 2007 Budget and the new government's programme

In the 2007 Budget, the government declares that it will abolish the real estate tax in two steps.²⁴ In 2007, the property value assessments would be frozen at the level applied for taxation in 2006. This would apply to all housing categories, including one-family houses and holiday homes as well as multi-family houses (apartment buildings). For one-family houses and holiday-homes, the real estate tax associated with the land value would be capped at SEK 2 per square metre or SEK 5 000 per property if that is lower. For multi-dwelling houses, the real estate tax rate would be reduced from 0.5% to 0.4% and imputed rent taxation would be abolished. The wealth tax, which is paid by many homeowners following the strong house price increases of recent years, would be halved in 2007, as a prelude to later abolition, but the halving in 2007 will only apply to financial wealth, not to housing wealth.²⁵ In a second step, a commission would be established to prepare the abolition of the state real estate tax from 2008 and the introduction of a municipal real estate fee that would not be based on the property value assessment. This might be coupled with adjustments of the municipal financial equalisation scheme and other measures to address distributional effects across income groups as well as regions. The key concern stated as the reason for these changes is that the dependence on current property value assessments makes the real estate tax go up in ways that are unpredictable and felt as unfair by households. Another argument made is that the automatic adjustment of the property value assessments makes real estate taxes go up without an active political decision being made. Changes made in the second step will be fully financed within the housing sector. But currently there is no commitment to finance the cuts made with the 2007 Budget. In one step, Swedish housing taxation is being reduced by almost ¼ per cent of GDP – close to what the nominal tax freeze in neighbouring Denmark has produced over five years.

24. See 2007 Autumn Budget Bill: "Putting Sweden to work – a good deal for all", Ministry of Finance, 16 October 2006.

25. It is positive that the exemption of housing wealth from the reduction in wealth tax will limit the overall housing tax reduction, but it is symptomatic that this move will open up further for tax planning, as persons shifting out equity from housing by increasing mortgage debt and investing in financial assets will benefit from the halved wealth tax, thereby reinforcing the incentive discussed in Box 4.6.

Implementing such a strong reduction of housing taxation is most unfortunate seen from a macroeconomic perspective. It would worsen the non-neutrality described above with housing taxation already being below what would be neutral *vis-à-vis* other parts of personal capital taxation and would also risk overheating the housing market and construction sector. It is a legitimate concern that movements in real estate taxes resulting from rising house prices can create liquidity problems notably for older persons, but this can be solved in other ways than by abolishing the real estate tax (Box 8).

It is true that a number of vehicles are used for taxing immovable property in Sweden: stamp duties, real estate tax, wealth tax and capital gains tax. But the combined revenue from these taxes is not large compared to other countries (Figure 9) – even if capital gains taxes from housing are included (which in 2003 amounted to an additional 0.3% of GDP).²⁶

Box 8. New mortgage products could relieve homeowners of tax-generated liquidity problems

When house prices go up in an area, all homeowners become richer. Some realise the gain by selling the house. But also those remaining where they are become richer as the difference between the market value of their house and their remaining mortgage debt, *i.e.* their so-called mortgage equity, grows. Under the current system where real estate taxes follow updated property value assessments, they therefore get to pay more taxes. The tax increase is small, however, compared to the growth of mortgage equity: the average homeowner in Stockholm has experienced a price increase of 15% in the last year, worth around SEK 375 000 of mortgage equity.¹ At the same time, his real estate tax dues have increased by around SEK 2 800 and some households may find it difficult or simply inconvenient to find the money for paying this – in particular pensioners arguing that “my pension is small, and you cannot eat bricks and mortar”.

If the problem with real estate taxes in an environment of rising prices is actually more about financing and liquidity, instead of wealth, cutting real estate taxes is not the best solution. Instead, the stream of yearly tax payments can simply be transformed for cash-constrained tax payers by mortgage financing of the tax liability. When house prices increase 15%, mortgage credit institutions would have no worry lending an additional 0.1%. A natural solution would therefore be that payment of the real estate tax becomes part of the standard financial package offered by the mortgage credit institution or bank financing the purchase of the house. It can be made in a way so the person or family buying a home will know exactly how much they will have to pay each month. If house prices then grow, a bit of the rise in house value will be matched by additional debt to finance the increasing real estate tax, leaving the homeowner with a slightly lower increase in mortgage equity than otherwise. Conversely, if house prices fall, mortgage debt will be reduced more rapidly, as the lower real estate tax is matched by more debt repayment. In any case, the homeowner’s monthly payment is completely foreseeable. And for the lending institution the risk of loss associated with default would be smaller than today, as falling house prices are slightly less likely to lead to negative mortgage equity and thereby an inability to recover debt when repossessing the house as collateral. Both parties gain and should see an interest in developing such instruments. The current limitation rule implying that no one can pay more than 4% of their disposable income for real estate tax, could be maintained, but there would be less need for it, were the financial products describe above to develop.

Regulations may need to be adjusted to allow credit institutions to offer taking over the administrative task of automatically paying the home owner’s real estate tax bill, and to allow mortgage institutions to increase lending slightly without initiating special procedures such as re-assessment of the house value.

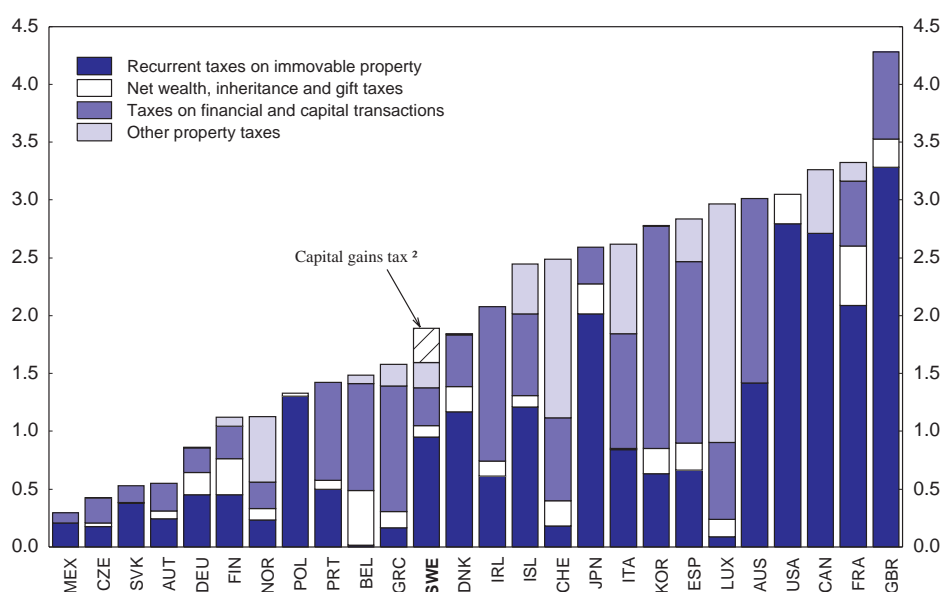
1. This calculation is based on the average house price of around 2.5 million SEK in Stockholm county and the price increase from 2005Q2 to 2006Q2.

26. It should be noted that in Sweden the relationship between the tax base and the actual market value and its development have been rather close compared to the situation in most other countries where real estate taxes sometimes are levied on bases determined far back in history. Any effect of this is, however, captured by Figure 4.8 which compares revenues rather than statutory tax rates.

The preferred policy option

The first-best solution would be to replace the 2006 housing taxes with an imputed rent tax at a rate that ensures neutrality *vis-à-vis* interest deductibility. A second-best would be to maintain the mix of real estate and imputed rent taxes applying in 2006 while raising the tax rates to neutral levels, thereby mimicking a pure imputed rent tax system. It should also be recommended to let the taxation of tenant-owned housing be based on property value assessments that reflect the value of each individual apartment.

Figure 9. **Property tax revenue**
as percentage of GDP, 2004¹



1. 2003 for Australia, Belgium, Greece, Mexico, Poland and Portugal.
2. Only available for Sweden.

Source: OECD, Revenue Statistics, 1965-2004, 2005 edition.

Alternative policy options

If, nevertheless, abolition of the state imputed rent and real estate taxes is pursued, a number of measures should be recommended:

- Introducing a local land or real estate fee, as announced by the government would have a number of positive effects including encouraging municipalities to issue more land for construction, thereby helping to meet the rising demand for housing. To fully reap these benefits, however, it is important that such a fee reflects actual valuations and that municipalities decide to set the fee at a level that is not too low. Development of mortgage instruments as described in Box 7 should handle any liquidity problems for home owners.
- Strengthen the taxation of housing capital gains. The effective tax rate could be increased by simply applying the standard 30% tax rate on the full housing capital gain rather than on merely two thirds of the gain as is the case currently. Adjustments to diminish the effective tax rebate associated with deferral should also be pursued, but without creating lock-in effects. One option is not to grant deferral when the owner dies and the house or apartment is transferred to the heirs. It would even have the appeal of reducing lock-in effects, as older persons would then not

disadvantage their heirs if selling their house or apartment to move into a rented special living facility adapted to the functional limitations older persons may have. To reduce possibilities to circumvent the tax payment, deferral should not be granted if the property is donated as a gift. Another option is to charge interest when capital gains taxation is deferred while moving to a system based on accrual rather than realised housing capital gains. If designed appropriately, such a system would generate substantial revenue without increasing lock-in effects (Box 9).

- Reduce the tax deductibility of interest expenses. One option is to move the threshold for the 21% rate, so that it applies for all negative net capital income. The 30% rate for positive capital income should be maintained in order to avoid increasing tension with respect to the already complicated rules about how entrepreneurial income should be divided up as capital income and income from work. Although reduced interest deductibility would thereby introduce an asymmetry between positive and negative net capital income, this does not invite tax planning as such, but rather reduces the scope for such tax planning via pension savings (Box 7).

When assessing these policy options it should be stressed that by far the best would be to maintain the system as it applied in 2006. Imputed rent or real estate taxes based on updated value assessments are unpopular in all OECD countries, but neither a capped local land fee as envisaged by the government, nor a higher capital gains tax or lower interest deductibility would deliver results that match the 2006 system. The experience of other countries shows that, in practice, taxation of housing capital gains can be difficult to maintain in a way that generates significant revenue. And reducing interest deductibility can only re-establish tax neutrality for those (young generations) financing the house with debt, but not for those (mid-aged and older generations) with large housing equity. By far the best solution would therefore be to maintain housing taxation as of 2006 – possibly shifting some of the revenue to municipalities – while letting mortgage products be developed to relieve home-owners of the liquidity problem, as discussed above (Box 8). If, however, reforms are undertaken, they should at a minimum be fully financed, including the 2007 cut in housing taxes.

Box 9. How can capital gains tax deferral be adjusted without lock-in effects?

Taxation of housing capital gains needs careful design to avoid lock-in effects that would hamper labour mobility and thereby economic growth, but also distort housing consumption by hindering adjustment in size, location, tenure etc. when needs and preferences change. Lock-in effects can arise if, following a house price increase, the associated capital gain is taxed more lightly if the owner remains in the house compared to moving. By deferring the taxation of housing capital gains that are re-invested in another home, the current Swedish system avoids such lock-in. However, interest-free deferral – typically lasting for several decades – weakens the effective taxation. A key question is therefore whether effective housing capital gains taxation could be strengthened by charging interest on deferral.

In the current system where capital gains are taxed when realised (*i.e.* when a house is sold), it would not work, because it would bring back lock-in effects: If moving following a house price increase, interests would start to accrue on the capital gain, but not so if remaining in the same house.

This problem is solved, however, if personal capital gains would be taxed on an accrual basis (*i.e.* when they are generated, even if not realised). In a pure form, accrual capital gains taxation would imply that housing capital gains are calculated each year based on assessed values while allowing the home owner to defer payment to when the property is sold – or even later. Capital losses would entail a tax refund. In such a system there would be no lock-in, as capital gains are taxed continuously whether moving or staying.

In practice, the most interesting might be hybrid models relying on the prices at which each property has actually been traded, thereby reducing the uncertainties associated with relying on assessed values. One possible hybrid would be as follows: When a house is sold, an implicit path is generated between the price at which it was originally bought and the final sales price, while mirroring the average price trend of the geographical area. Based on this price path, annual capital gains and cumulated interest can be calculated. Alternative price interpolations could also be used, and in some sense such hybrid models could be thought of as variation of realised capital gains taxation where the tax rate grows with the length of home ownership. The popular tractability of such arrangements would be that home owners only face a tax bill when realising their housing capital gain, thus having a cash flow to pay with.

Housing allowances and direct subsidies

Apart from different forms of real estate taxation housing allowances and direct subsidies have an influence on the tenure decisions of households. They need to be seen in the context of what changes may happen with regard to housing taxation, so as to ensure neutrality between owner-occupied, tenant-owned and rental housing. At the current juncture, although the size of the subsidies has been reduced by over two-thirds since the early 1990s (Figure 10), the design of the schemes is continuing to give incentives for more housing consumption, thereby distorting the household's choice.

Housing allowances are given as a consumption support for families with children and low incomes as well as to pensioners. Those benefits are open to households in all tenure types and are determined by the level of housing expenditures (up to a certain cap) and the size of the household (including the number of children). The actual amount paid takes the household's income level into account by subtracting a certain share of the income from the calculated benefit.²⁷

The share of the rent (or the cost of housing for owner-occupiers) paid by the housing allowance for families varies between 20% and 33% and around a fifth of total households receive them (Åhrén, 2004).²⁸ It is mostly directed towards the rental sector: 31% of all households who rent a dwelling receive housing allowances, compared with 10% of households in the tenant-owner sector and 7% in owner-occupied homes. This generous scheme benefits a large share of poorer households (82% of lone parent households and 23% of pensioner households), but arguably sets questionable incentives as it increases with the level of housing expenditures up to a cap of SEK 63 600 for a family with one child (a four-room apartment of 80 square metres in Stockholm has an annual rent of about SEK 100 000). In addition, granting housing allowances also risks creating poverty traps in so far as individuals might have low incentives to move from unemployment to full-time work or to extend the numbers of hours worked when the income-tested benefits are taken away and tax payments increase.

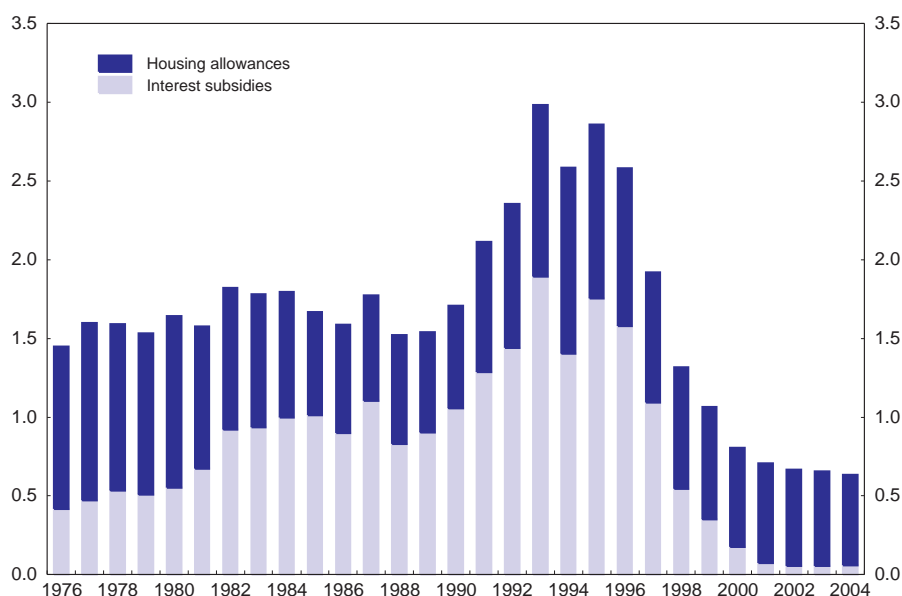
On a very general level, it may be asked what purpose a housing benefit serves at all in a system which provides for income support – which people are free to spend on housing or other goods as they wish to. Arguments for a more paternalistic approach would run along the lines that people tend to spend less on housing than would be optimal and that the state therefore needs to act in a corrective manner. Even if one subscribes to this view, however, the design of the Swedish system does even more than to ensure that a sufficient share of income is spent on housing: by linking it proportionately to housing expenditures it encourages more expensive housing. Ideally, an allowance should depend on the income, not the housing situation of the individual and give the freedom of choice regarding the level of housing expenditures. A flat-rate system as has been introduced in the UK recently (“Local Housing Allowance”) would be one alternative. This pays out a certain amount depending on the region the person lives in and the tenant has the choice whether to spend it all on housing or to pay less and retain the difference.

27. The formula for calculating allowances is (Åhrén, 2004):

Housing allowance = $a \cdot \text{housing expenditure} - b \cdot \text{income}$ with $0.5 < a < 0.75$ for families depending on their level of housing expenditure (0.91 for pensioners) and $0.2 < b < 0.33$ ($0.5 < b < 0.62$ for pensioners) for income in excess of SEK 117 000 for lone parents and SEK 58 000 per person for parents. In addition, families with children receive a flat rate supplement. The benefit amount is capped and does not increase further for yearly expenditures over SEK 63 600 (for a family with one child).

28. Housing allowances were reduced significantly from 1996 on by raising the eligibility qualifications (childless households older than 29 years were excluded and a limit to the qualifying floor space was introduced) (Chen and Enström, 2004).

Figure 10. **Direct housing subsidies**
as percentage of GDP



Source: Statistics Sweden and OECD Analytical database.

Similar to the housing allowance scheme, interest subsidies are given proportionately to the actual or implied interest cost for building new rental dwellings as well as tenant-ownership dwellings.²⁹ The benefit is calculated on standard costs and is independent of whether loans have actually been taken up or not (Box 9).³⁰ Since this right is not limited in time, interest subsidies, once granted, will be paid out for ever, or at least as long as the buildings are still there (unlike interest deductibility). Thus, interest expenditure grants grow every year for every new vintage of dwellings that are granted interest subsidies. The Spring Fiscal Bill 2006 declared that, with the approval of the Swedish parliament, housing finance would be reformed and a new system introduced from 1 July 2008. At the same time, interest grants will be abolished: no new interest subsidies will be given from this date, and interest subsidies decided on before this date will be phased out over a period of time. However, as proposed by the new government, the Riksdag has decided that all production subsidies will be abolished already from 1 January 2007 and that already granted subsidies be phased out during a five-year period. No new production subsidies are envisaged. The focus has been shifted towards the situation of the households rather than support to “brick and mortars”.

29. The present system has been in force since 1993 and when it was introduced one argument was that the system should be seen as a parallel to the right to interest deductions of owner-occupiers and tenant-owners (a view that has since been largely abandoned). Subsidies to owner-occupied homes were completely phased out in 2000.

30. Before 1993 there was a “real” interest grant that took into account actual production costs and actual interest rates, a system that step by step had been adapted to the high inflation during the 1970’s and 1980’s, and thus tended to make way for continuing cost increases. The present system, based on standard costs that have been unchanged since 1993, has been intended to make builders more cost conscious. Another difference is that the previous interest grant system (before 1993) was a time limited support for the receiver. The subsidy interest rate that the property owners had to pay was increased every year until it met the market interest rate, then the grant ceased (*i.e.* it was the difference between the subsidy interest rate and the market interest rate that was subsidised to a decreasing degree).

Box 10. Calculation of interest subsidies

Interest subsidies are granted only for a dwelling area below 120 square metres (no subsidies for exceeding areas) according to the following formula:

$$\text{Grant base} * \text{subsidy interest rate} * 30\% = \text{Interest grant.}$$

The grant base depends on the number of dwellings (for multi-dwelling buildings) as well as the size of the dwellings. The grant per square metre is decreasing with the size of the dwelling. The maximum amount per dwelling is SEK 963 000 for a 120 square metre dwelling. For a 70 square metre dwelling the grant base is SEK 684 250. The subsidy interest rate is determined by the National Board for Housing, Building and Planning on a weekly basis, depending on the interest level in general (the prevailing rate in 2006Q3 is around 4%). For each project that has been granted interest subsidies, the rate is fixed for five years, after which time the subsidy interest is changed according to the prevailing rate at that time. The last part in the formula reflects the fact that 30% of the interest on loans is tax deductible.

For a 70 square metre dwelling the interest grant thus amounts to:

$$\text{SEK } 684\,250 * 4\% * 30\% = \text{SEK } 8\,211.$$

An increase in interest rates and apartment building activity leads to increased government expenditures. Sensitivity analysis on the budget effects show that an increase in the long term interest rate (5-year mortgage bonds) of 1 percentage point compared to the present interest rate forecast for 2006-08 will lead to higher cumulative government expenditures of around SEK 700 million (0.03% of GDP) until 2008. And with the current rate of construction of dwellings at around 30 000 per year, the level of expenses due to interest subsidies will rise by approximately SEK 225 million (0.01% of GDP) each year.

Housing credit guarantees play only a small role today. The system was introduced in 1992, as the state moved from a regulated state lending system involving subsidized loans to a guarantee system administered by the National Housing Credit Guarantee Board (BKN). Now, government credit guarantees can be provided for loans advanced by financial institutions in Sweden against a fee (0.25-0.6% of the guaranteed amount).³¹ While the government is fully responsible for BKN's debt, guarantees issued after 1997 must be fully financed by fee income. Only guarantees from 1992-96 are still financed by the government budget and amounted to SEK 160 million (0.006% of GDP) in 2005.

The existence of the state-operated credit guarantee scheme has to be seen in relation to the transition from a system of state loans for housing production that existed prior to 1993 to a system with no state loans. However, from today's point of view maintaining such a scheme is questionable. It is true that asymmetric information problems can lead to market failure in financial markets.³² In this regard, a credit guarantee system can help to make the market function again. However, in practice other approaches are more common, such as taking collateral – a mortgage on the financed house for example. A guarantee

31. The guarantee covers any losses the bank incurs. When the borrower defaults, the bank sells the property and will be reimbursed by BKN for any remaining credit amount. In this case, BKN takes over the right to demand repayment of the losses from the borrower.

32. In case of a loan contract that allows for bankruptcy, the lender takes the risk that the borrower does not pay back his money. If he raises interest rates to compensate for this risk, more risk averse borrowers would chose not to take up the loan. As the downside is limited by the debt contract, the remaining borrowers simply chose to take up even more risk if the interest rate is higher. In this situation, the lender will react by rationing credit rather than increasing interest rates, leaving a share of willing borrowers without access to funds (Stiglitz and Weiss, 1981).

system provided by the state, in contrast, runs the risk that it encourages risky lending by banks, even more so as the pricing for these guarantees is probably perceived as being below what private insurance markets would charge. It is difficult to see a reason why the Swedish mortgage loan market should not function well without this scheme and hence consideration should be given to abolishing it.

Planning and construction

A key factor in dealing with changes in demand for housing is to ensure a swift and targeted supply response in regions where it is most needed. In this regard it is remarkable to see that the average Q ratio (of house prices to construction costs) for the country as a whole has been below one for the past two decades, *i.e.* construction has just not been profitable (Figure 11). At the end of 2005, the Q ratio had been above one only in a quarter of municipalities, including Stockholm.³³ One reason is the exceptionally high level of construction costs relative to other countries which has damped residential investment for the most part of the last decade (see Box 1).

Lack of competition in the construction sector

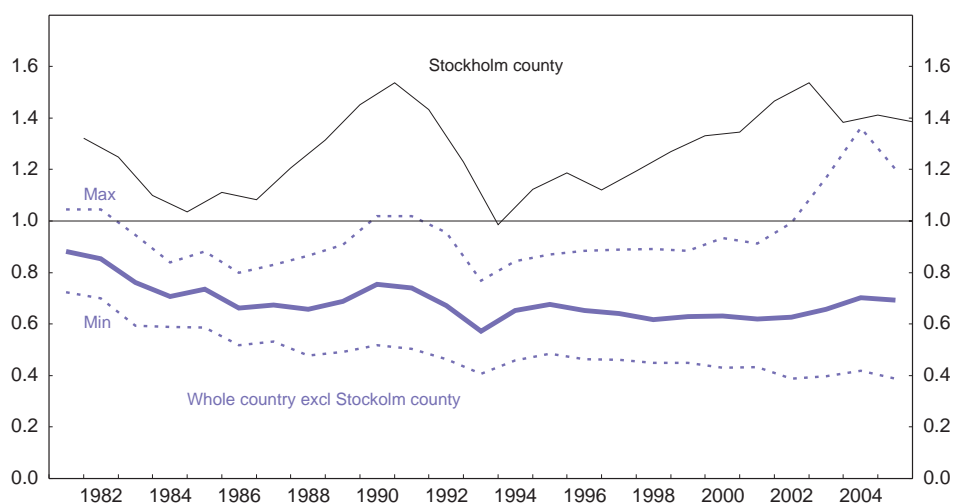
Lack of competition in the construction sector – in contrast to many other highly liberalised parts of the economy – has been repeatedly pointed out in previous *Surveys* (OECD, 1999, 2004). The high housing subsidies of the past have apparently led to market structures with informal cartels and little incentive for cost-containment. In a recent survey of 600 managers in the construction sector, 50% of respondents stated that cartels exist, with half of them saying they were quite frequent. And a recent study found that 30% of construction costs are due to a lack of efficiency.³⁴ The four largest developers, which account for a large share of the market, do not normally purchase construction services in the market as 75% of apartments are built in-house. This results in higher building costs than for smaller developers, who procure projects to a much greater extent (Konkurrensverket, 2006). The large construction companies are vertically integrated in terms of access to the requisite building material and the three biggest construction companies together have a share of two thirds of the Swedish market.³⁵ Barriers to entry for new enterprises are high and smaller companies already operating usually cannot compete on major construction projects. Also, growth in companies is inhibited by the fact that the informal sector represents up to 12% of the entire building sector (reflecting the high tax wedges on labour). Concentration is also strong in sub-sectors for building materials and prices for construction material have been rising more in Sweden than in most other comparable countries (McKinsey, 2006). Further along the supply chain, competition is particularly limited when it comes to larger projects as this segment is dominated by the existing few large companies. This overall lack of competition shows up in prices: among European countries Sweden has the highest level of construction costs (Figure 12).

33. The Q ratio data is calculated by the Institute for Housing and Urban Research at Uppsala University as the mean for every municipality using the sales prices of single-family houses and six regional construction costs.

34. Based on the following articles in the newspaper *Dagens Nyheter*: “Jakt på olagliga karteller i byggbranschen i höst” (Hunt for illegal cartels in the construction sector this autumn), 22 July 2005 and “Byggbranschen slösar bort miljarder” (The construction sector is wasting billions), 23 February 2006.

35. Measured as cumulated Swedish revenue of the three biggest companies relative to the combined Swedish revenue of the 60 largest construction companies in 2003. See Konkurrensverket (2005).

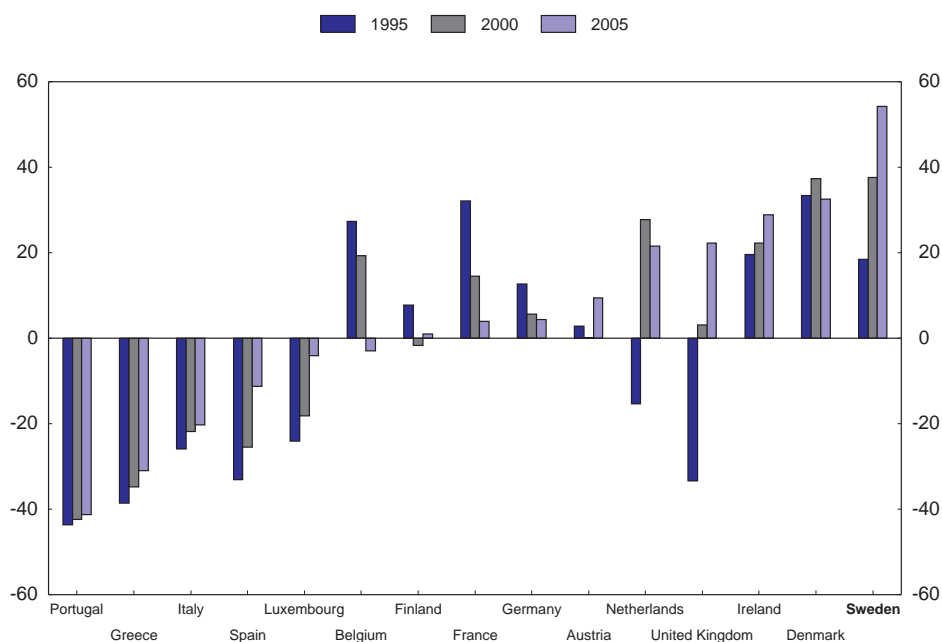
Figure 11. Tobin's Q ratio across Sweden¹
1981-2005



1. Based on sales prices of single-family houses and regional construction costs. A value above (below) one is defined as house prices being above (below) construction costs in a county. Min and Max show the lowest and highest Q-ratio among all counties (except Stockholm).

Source: Institute for Housing and Urban Research, Uppsala University.

Figure 12. Relative price levels for housing investment¹
Difference with EU 15, per cent



1. Percentage difference in relative price level indices between each country and the European Union (EU 15). Housing investment refers to gross fixed capital formation in construction (SNA 1995).

Source: Eurostat PRC_PPP_IND table, January 2007.

Regulations regarding input materials and a lack of internationally (and EU-wide) harmonized construction codes are preventing new entries into the market, in particular from abroad, although the national standards for building methods have been harmonized somewhat (the work under the EU's Construction Products Directive has been underway for over ten years and is due to be completed in 2007).³⁶ The wage setting also contributes to making construction expensive as unit labour costs in Sweden over the past decade rose significantly more than in other European countries. Growth in labour productivity in the construction sector has significantly lagged economy-wide developments (OECD, 2007). The somewhat sheltered position of the construction sector is protected by the powerful construction workers' union Byggnads (representing 85% of construction workers), as exemplified by the recent conflict surrounding a Latvian construction company trying to enter the Swedish market (Box 11). There is evidence that the union's influence affects building costs directly, as Byggnads collects charges from non-member firms (in addition to membership fees for member firms) which further increases wage costs. Examples are "inspection fees" (1.5% of the payroll) to enable the union to check whether workers get the right pay or a "measuring fee" (2% of the payroll) in case workers are paid at a piece rate (Zaremba, 2005).

Box 11. **The Vaxholm conflict**

The conflict surrounding the Latvian construction firm Laval un Partneri Ltd (L&P) provides some insight into the potential problems of the Swedish construction sector and the role of labour unions. The company was starting to build a school in Vaxholm in 2004, sending their workers to Sweden and paying them below the Swedish collective bargaining wage (but about twice their Latvian wages). When L&P turned down the demand from the Swedish building workers' union Byggnads to sign a collective agreement under Swedish terms, the trade union blockaded the construction site. At that point, L&P filed a suit against Byggnads, arguing the conflict actions were contrary to EU law. The union's point of view was that industrial action conflict rules are dealt with in national but not EU law.¹ The Swedish Labour Court decided to send the file on to the European Court of Justice for a decision of whether such hindrance of free movement of services is in line with the EU treaty. The European Court is due to decide in 2007 whether unlawful discrimination has taken place. In the meantime, however, L&P's Swedish subsidiary went bankrupt.

1. Industrial action against a company is unlawful as long as there is a collective agreement between the concerned parties in force. However, there is a specific amendment to the Swedish legislation, the so-called Lex Britannia which states that this does not apply to foreign companies not connected to the Swedish labour market. Under this law, trade unions thus have the right to take industrial action against foreign companies even if such companies are bound by collective agreements from other countries.

Looking ahead, while competitive pressures in the construction sector might change, for example in anticipation of a decision on the Vaxholm conflict and further EU harmonisation efforts for construction codes and building materials, a number of regulatory shortcomings exist and there is substantial scope at the national level for more reforms to foster competition (Konkurrensverket, 2005 and 2006; OECD, 2007). The public developers' way of purchasing contracts should take small enterprises into account by reducing costs for producing tenders and conducting the tendering process in a way that allows more companies to join the bidding. In addition, municipalities should allocate land on a competitive basis, rather than selling land through a direct transfer combined with counter-demands as is often practised today. There is also some evidence that land is allocated depending on the construction company which will build the real estate, possibly benefiting local companies for employment policy considerations and hindering competition.

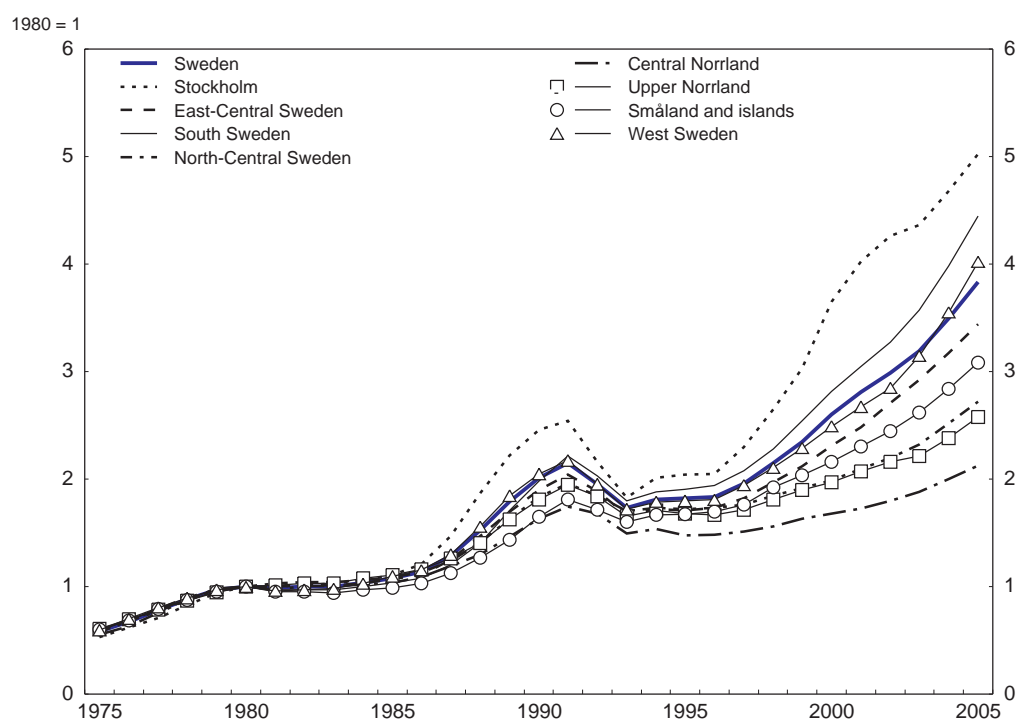
36. The old specific regulations have been replaced by more functional codes, basically allowing for more flexibility in the use of construction methods. However, if the contractor does not follow the advised building method, he must prove that it has the same lasting functionality. This is more burdensome than following just the older regulations and many companies thus want to remain on the safe side and apply the earlier strict codes.

Zoning regulations still hamper housing investment

Further hindrances for supply to react swiftly lie in the length of time of the planning process and its unpredictability as well as in a lack of incentives to issue new land for construction. As a large majority of new apartment construction requires changing the local development plan before building can commence, municipalities play an essential role in the building process (Konkurrensverket, 2006). Prior to granting the building license, the municipality must set up a general plan (designating residential, commercial and industrial areas) and a detailed plan (defining the type of building). The process of developing or changing a detailed plan can be long and tedious. In addition, appealing against detailed building plans can take up to 3½ years and thus makes a swift supply response to changes in demand quite difficult (McKinsey, 2006).

In terms of incentives to build, one potentially negative factor is the municipal tax equalisation scheme. By operating to redistribute revenue between local authorities it means that a municipality reaps little benefit from expanding its population base (OECD, 2001). At the same time, the new equalisation system introduced in 2005 also takes structural cost differences into account, such as public transport expenses. However, Sweden is unusual in not having a municipal real estate tax which could strengthen incentives to parcel out land sites, even if the tax base were integrated to some extent in the equalisation scheme (OECD, 2002).

Figure 13. Regional house prices

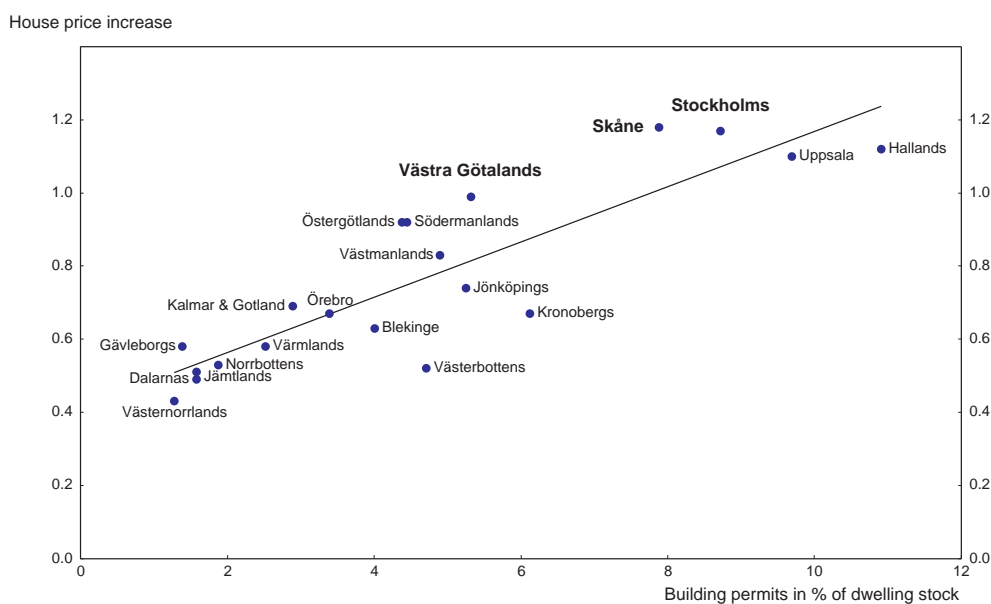


Source: Statistics Sweden.

Development and volatility of house prices and granting of building permits differs across the country. While in an ideal world supply would react flexibly to differing demand situations, in reality the response is sluggish and thus an upward sloping curve is to be expected (this could also be due to physical constraints to construction). However, Swedish housing prices are characterized by diverging developments, with the metropolitan areas registering the strongest increases and the rural areas (apart from the seaside) somewhat falling behind (Figure 13). Apparently, the supply response works better in some areas than in others, granting more building permits in relation to the house price increase than in others (Figure 14). The metropolitan areas Stockholm, Malmö and Gothenburg, have all had fewer building permits relative to the house price increases they experienced when compared to other parts of the country, though only slightly so.

One reason why some urban (and high-income) municipalities provide fewer permits might be that current residents do not have an interest in construction, as it could have a damping effect on the prices on the existing housing stock (Finansdepartement, 2003).³⁷ To avoid such a thing happening, private developers should be allowed to go to court to challenge a negative municipal decision (which is currently not possible). At the same time, availability of land is restricted and might explain low construction activity in some regions. Even so, Sweden being one of the least densely populated countries in the OECD, there is sufficiently land available. A 30 minute train drive from Stockholm to Uppsala runs mostly through scarcely populated areas.

Figure 14. **Building permits and house price increases by county¹**
1997-2005



1. Percentage increases of house prices from 1997-2005 and cumulative number of building permits 1997-2005 in % of dwelling stock in 1996.

Source: Statistics Sweden.

37. Alternatively, consideration could also be given to the protection of green areas or a preference for low population density.

In general it is essential that reforms are introduced that lead to a level playing field between those wanting to develop land and those wanting to leave it unchanged (Finansdepartement, 2003). One possibility could be to consider setting up an independent Planning Commission, as recently proposed in the United Kingdom (Barker, 2006). Some of the issues involved in reforming the planning process in Sweden have been identified and proposals have been presented by a committee (Box 12). However, it remains to be seen how much of this will find its way into legislation. In general, municipalities should increase the speed with which cases are processed and the introduction of time limits and a simplification of the process would help in this direction. Swifter planning decisions would help to dampen volatility of regional house prices and make the market work better. The introduction of a local real estate tax akin to the tax levied by local authorities in Denmark would probably help to set the right incentives. However, the design of such a tax is essential: rather than being a property-related charge as envisaged by the government's plans, it should take land size and value into account.

Box 12. Current proposals for reform of the Planning and Building Act of 1987

In order to improve various aspects of the planning system a "Committee of Inquiry regarding the Planning and Building Act (PBL-kommittén)" was set up and given a large mandate to propose improvements in the current Planning and Building Act of 1987. The final report¹, submitted to the Ministry of Sustainable Development in September 2005, contains a multitude of detailed proposals, such as:

- regulations should be clarified in order to improve the implementation of national interests in the planning procedure
- cooperation in planning between municipalities should be improved
- procedural rules should be simplified and municipalities should be given greater leverage in determining the procedure in individual cases
- regulations on building permits should be altered so that the same rules apply to everybody regardless of where the proposed construction is being considered
- joint procedures should be aimed for when it comes to the planning procedure and parallel procedures in accordance with the Environmental Code
- the right to appeal decisions should be clarified and the number of appellate levels should be reduced
- the municipalities' supervision regarding the fulfilling of building regulations needs to be improved and independent quality control should be considered.

The proposals of the Committee are currently being analyzed and considered by the Ministry of Sustainable Development.

1. "Får jag lov? Om planering och byggande", ("Am I allowed to? On Planning and Building"), Swedish Government Official Reports Series No. 2005:77.

Conclusion

To sum up, even though housing policy has been reformed significantly, particularly in the area of taxation in the 1990s, further reforms are essential (Box 13). The overall objective should be to significantly improve the mechanism to better match demand and supply. The current favourable economic environment provides a golden opportunity to put reforms in place which will enhance overall welfare over the long term.

Box 13. Recommendations regarding housing policy

Housing tenure composition

- Introduce legislation to allow owner-occupied apartments as an alternative to the current tenant-ownership.

Rents reflecting market demand

- Rent regulation should be phased out to make the market function better.
- To facilitate rent differentiation to better reflect differences in market demand across municipalities, regulation of rents in municipal housing companies should be reformed, and closer cooperation between concerned parties should be encouraged. Malmö's example of gradually introducing rent differentiation according to demand and supply should be considered as a model for Stockholm.

Taxation

Preferred policy option

- Introduce the ideal imputed-rent taxation. Alternatively, the housing taxation framework should be maintained as of 2006, but base the taxation of tenant-owned housing on property value assessments that reflect the value of each individual apartment. Raise the real-estate tax rates for owner-occupied and tenant-owned housing to levels that are neutral vis-à-vis other asset classes. Review capital market regulations to facilitate the development of mortgage products that finance increasing taxes when house prices and thereby mortgage equity grow thereby relieving owners of tax liquidity problems.

Alternative policy options if state housing taxes are abolished

- As a minimum, fully finance the 2007 cuts in housing taxation. Introduce a local property tax based on value assessments and let municipalities set the local tax rate above a minimum threshold. Strengthen capital gains taxation: an interest liability on accrued (but not realised) capital gains could be considered, or the effective tax rate on realised capital gains could be increased, e.g. by basing the tax on the full capital gain, rather than two thirds as currently. Moreover, deferral should not be granted when the owners die and the house or apartment is inherited. To prevent circumvention of this tax payment, deferral should also not be granted if real estate is donated as a gift. Reduce the value of interest deductibility, e.g. by lowering the threshold for the 21% rate so that it applies for all negative net capital income.

Subsidisation

- Make housing allowances dependent on income and other personal and family characteristics rather than the level of housing expenditures.
- Carry on with the phasing out of the interest subsidy scheme.
- Abolish the credit guarantee scheme as it might encourage risky lending by the banking sector.

Construction and land planning

- Enhance competition in the construction sector: Change the public procurement process to reduce participation costs and thereby increase the number of companies bidding. Municipalities should allocate land on a competitive basis, rather than selling land through a direct transfer combined with counter-demands.
- Make the land planning process more efficient: Municipalities should increase the speed with which cases are processed. Allow private developers to go to court to challenge a negative municipal planning decision. Introduce the proposals submitted by the "Committee of Inquiry regarding the Planning and Building Act". Consider the introduction of a local property tax that takes land value into account.

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