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## The housing market in the Netherlands

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# The Housing Market in the Netherlands

Windy Vandevyvere and Andreas Zenthöfer\*

## Abstract

The Dutch housing market has been shaped by highly interventionist public policies spanning over several decades. Direct and indirect government intervention in the housing market through spatial planning and land policy, regulation and supervision of housing associations, rent policy and financial guarantees, generous mortgage interest deductibility and other explicit or implicit subsidies have led progressively to entrenched structural problems, which have negative consequences for the economy as a whole. Given the relatively rigid supply, price developments have been determined in particular by fiscal incentives and demand factors, under which innovations in mortgage financing have played a particularly important role, so that, compared to other euro area members, the Netherlands has relatively high levels of leveraged housing wealth. We conclude with possible reforms that would increase the efficiency of the Dutch housing market by addressing distortions in a gradual fashion while still achieving social policy objectives.

**Key words:** The Netherlands, housing, spatial planning, property market, rental market, policy intervention, social housing corporation, rent regulation, rent subsidies, taxation incentives, mortgage interest deductibility, loan-to-value, amortisation, mortgage financing, guarantee scheme, house price developments, budgetary costs, household indebtedness, bank balance sheet, wealth, capital misallocation, labour market mobility

**JEL classification:** E6, G21, H2, H31, H6, R3

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## Executive Summary

This paper examines the Dutch residential housing market, which has been shaped by the mutual interaction of a wide array of policies, including substantial direct and indirect government subsidies and fiscal incentives, financial guarantees, zoning regulations and rent controls, as well as by the development of financing instruments with lower amortisation requirements and higher loan-to-value ratios. Over the last decades this had led to the gradual build-up of significant distortions in both the purchase and rental segment of the housing market, with impact on the wider economy.

Low taxation of home ownership and the very generous mortgage interest deductibility artificially raise housing prices, disproportionately favour high-income taxpayers and have ambiguous effects on housing tenure. In the rental segment, rent regulation and the extensive provision of social housing have resulted in a free rental market that represents a mere 7% of the total housing stock, thus limiting its capacity to buffer as an alternative to the regulated rent and purchase segments. Overall, explicit and implicit housing subsidies constitute a sizable burden for public finances; foregone revenues from mortgage interest deductibility alone amount to around 2% of GDP. In addition, through guarantees extended under different schemes to support home ownership, the government has accumulated very sizeable implicit liabilities.

Innovations in mortgage financing during the 1990s have played a particularly important role in driving developments in the housing market of the Netherlands, amplifying the impact of taxation policies: the availability of more diversified and lower cost instruments, with longer maturities and more flexible terms, considerably expanded the credit scope of Dutch households, enabling them to take up larger amounts of debt. The leveraging of household and bank balance sheets has increased vulnerabilities of the banking sector, although these are mitigated by a strong net asset position of households and low delinquency ratios in housing debt. In spite of the traditional bias towards housing loans with long maturities, a fair proportion of households have only short interest rate fixation periods. Hence, households could face an increased debt service burden should interest rates rise.

Although the current institutional set-up reflects past and present social preferences, the ensuing distortions weigh on the wider economy through negative wealth effects impeding the recovery, inefficient allocation of capital, undesired redistribution effects, lower-than-necessary labour mobility, unduly high household leverage and an increased vulnerability of the banking sector. The prospects for the housing market and the need for policy changes have come to the fore of public discussion, which has intensified in recent years in the wake of the decline in house prices and the even sharper drop in the number of transactions.

Against this background, comprehensive reforms, addressing distortions in all segments of the housing market, are necessary to gradually reduce distortions and improve efficiency of capital allocation thus helping to increase economic growth and job creation. This requires a gradual redirection of policies, which would also limit the non-negligible burden on public finances. After reviewing the main policy options which are being considered in the wider debate among economists and civil society, we conclude the analysis of the housing market in the Netherlands by proposing some preferred directions for reform.

# 1. Introduction

The housing market plays a pivotal role in the economy: depending on the incidence of house ownership, real estate usually forms an important part of household wealth, housing-related expenses are an important part of household consumption, rental prices are a component of consumer prices, housing taxation can have a profound impact on public finances, and the structure of the housing market can influence the supply side of the economy (for example, labour mobility). Moreover, housing wealth plays an important role in economic and financial cycles, as sharp fluctuations in house prices can threaten economic and financial stability.

Housing markets differ from other markets in many respects: they are often highly regulated, they clear at a very slow pace and the supply-elasticity is usually low. This paper looks at the residential<sup>1</sup> housing market in the Netherlands and assesses its impact on the economy. Section 2 explains how the structure of the Dutch housing market has been shaped by government policies, notably taxation, and institutional factors, such as spatial planning and the organisation of social housing. Section 3 subsequently highlights how innovations in mortgage financing have played an important role in fuelling the large uptake of household debt. In section 4 we show that many policy interventions in the Dutch housing market have led progressively to entrenched structural problems, with negative repercussions on the economy as a whole. Compared to other euro area members, the Netherlands has relatively high levels of accumulated financial assets and leveraged housing wealth, reflecting incentives in the institutional set-up to lengthen balance sheets. Wealth effects are thus likely to have a large impact on household spending. Moreover, many of the aims of policy interventions in the housing market could be achieved in a more efficient way. Accordingly, we review the main policy options which are being considered in the wider debate among economists and civil society (section 5) and conclude with possible reforms that would increase the efficiency of the Dutch housing market while still achieving ultimate policy objectives (section 6).

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<sup>1</sup> The commercial housing market is outside the scope of this paper.

## 2. Policy framework

The Netherlands has a long history of public involvement in the housing market and of highly interventionist housing policies with the aims of making good-quality (rental) housing affordable to low income households and of stimulating home ownership. Today, households in both the rental sector and the owner-occupied sector receive substantial explicit or implicit subsidies. Crucial subsidy instruments at the national level are the income-based housing allowance for renters and mortgage relief for homeowners. In addition to these subsidy instruments, the central government also influences housing directly or indirectly, for example through spatial planning and land policy, regulation and supervision of housing associations, rent policy and financial guarantees.

In response to public policies, over the past three decades the Dutch housing market has shifted towards higher owner-occupancy. Today, around 60% of the 7.4 million dwellings are owner-occupied, up from 42% in 1980 but still comparatively low on a European scale. By contrast, nowhere else in Europe does social housing dominate the housing market as it does in the Netherlands. Today, social housing represents 33% of total dwellings. The expansion of the social sector up to the mid-1990s was accompanied by a sharp fall in private renting, which currently accounts for a mere 7% of the total housing stock<sup>2</sup>. The following section, after briefly reviewing spatial planning and zoning restrictions (2.1), focuses on policies aimed at the rental market (2.2) and the property market (2.3).

### 2.1 SPATIAL PLANNING AND LAND POLICY

The foundations of the strongly regulated Dutch housing supply and planning were laid in the Housing Act (*Woningwet*) of 1901. The Housing Act responded to the often poor housing conditions prevailing at the time and obliged municipal governments to develop and enforce formal zoning plans, which would facilitate the provision of elementary facilities such as water and sewerage. Government involvement in housing supply was further boosted in the aftermath of the Second World War when the housing shortage caused by the war was magnified by rapid population growth and the move away from communal family living arrangements. In view of a major housing shortage, and initially also in order to keep wage pressures low, the government set rents substantially below the free market level and subsidised the large-scale construction of social rental housing. In the course of the 1980s, the political agenda changed, and the sense of urgency with respect to housing construction waned as outright shortages had been overcome<sup>3</sup>.

Since then, a process of decentralisation has been underway, and, today, providing social housing is seen less as a task of central government and more a responsibility of the regional and local levels, with municipalities, housing corporations and households as the main players. Municipalities are free to develop their own regulations, but these must comply with the 1965 law for spatial planning (*Wet Ruimtelijke Ordening*) the aim of which is to concentrate people in urban areas, to preserve landscapes and townscapes and to take into account the special topography of the Netherlands. Spatial plans in conformity with the law provide very detailed regulations affecting the environment, air quality and urban aesthetics, as well as detailed urban development criteria on the types of

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<sup>2</sup> CBS (2011).

<sup>3</sup> Vermeulen & Rouwendal (2007).

dwellings that can be built, often including a very restrictive maximum height of houses, limiting the possibility to increase living space on a given lot. This has led to constraints on land supply in suburban areas in a period of growing housing demand and may have been a factor causing house prices to rise. Building regulations and administrative procedures may also restrict housing supply and thus have resulted in a supply that is quite inelastic to changes in the price level of housing<sup>4</sup>. At the same time, in a densely populated country such as the Netherlands spatial planning processes have arguably helped manage competing claims on scarce land.

## 2.2 RENTAL MARKET POLICY

The rental housing market in the Netherlands is dominated by the regulated social housing segment. More than three-quarters of all tenants rent a dwelling from a social housing corporation (*woningcorporaties*), non-profit organisations that have to act on a commercial basis, but are required to use their profits for the provision of good and affordable housing (2.2.1.). Of the remaining 20% of rented housing, a small proportion is owned by pension funds and insurance companies, and the rest is owned by private individuals. Moreover, most of the privately rented dwellings are rent-regulated. The Dutch authorities also subsidize the demand for rental homes. With the exception of a small up-market sector, which represents 7% of all rental dwellings, rents are regulated, with the same legislation applying to both private and social sectors (Table 1).

*Table 1 - The composition of the Dutch rented housing stock, numbers in millions, percentages shown within brackets, 2009*

	Landlord		
	Social	Private	Total
Regulated	2.3 (79%)	0.4 (14%)	<b>2.7 (93%)</b>
Liberalized	0.1 (3%)	0.1 (4%)	<b>0.2 (7%)</b>
<b>Total</b>	<b>2.4 (82%)</b>	<b>0.5 (18%)</b>	<b>2.9 (100%)</b>

*Source: WoON, 2009.*

### 2.2.1. SOCIAL HOUSING CORPORATIONS

The large social rental sector is the outcome of continuous intervention since the 1901 Housing Act which integrated social housing corporations in the Dutch housing policy and placed them under government supervision. The Housing Act laid down the duties and responsibilities of the housing corporations and allowed subsidisation. In its wake the number of housing corporations, many of them undertakings of municipalities, multiplied. The Social Rented Sector Management Order (known by its Dutch abbreviation, BBSH), states that approved housing corporations have six duties: to house those people who are not able to find an appropriate dwelling themselves; to maintain decent-quality dwellings; to consult with their tenants; to run their financial affairs responsibly; to contribute to liveable neighbourhoods (added in 1997); to provide housing (but not care) for the elderly and handicapped (added in 2001).

A major change in the Dutch housing policy occurred in the 1990s, when most of the subsidies on housing construction were abandoned, and housing corporations became, after many years of deregulation, financially independent (Box 1), although still subject to government supervision. This

<sup>4</sup> See OECD (2011).



policy change led to a substantial decrease in the construction of social housing. While the total amount of social sector dwellings has remained constant since 1995, their share in the total housing stock has slowly decreased from a substantial peak of 39% in 1998 to 33% at present<sup>5</sup>.

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*Box 1: Financing of the social housing corporations*

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Until the end of 1994, the housing corporations benefited from subsidies that were intended to reduce costs for renters (in 1994, these subsidies reached a level of EUR 2.3 billion or 0.8% of GDP). In 1995, the government redeemed its future commitment to the housing corporations through a one-off transfer of EUR 16.7 billion or 5.5% of GDP to these corporations. The government wrote off all outstanding loans to the sector and at the same time abolished supply-side subsidies<sup>6</sup>. This is known as the 'grossing and balancing operation' (*bruteringsoperatie*).

Since then, housing corporations have to finance themselves. On top of the rents from their tenants, they raise funds through activities in the non-social housing sector (renting to people with higher income, construction and selling of homes) and can raise capital from selling dwellings which are recorded on their books at values far below market values. The government offers housing corporations various cost-reducing facilities, mainly through the Guarantee Fund for Social Housing (*Waarborgfonds Sociale Woningbouw*, or WSW). This was set up in 1983 to guarantee loans initially for housing improvement and later for all aspects of social housing. Social landlords pay a relatively low interest rate when a loan is guaranteed by the Guarantee Fund, enabling them to set rents below the market rate. It is estimated<sup>7</sup> that housing corporations benefit to the tune of EUR 300 million on a yearly basis from of lower financing costs. At the end of 2010, the total outstanding sum of these loans was EUR 85.3 billion or 14.5% of GDP. The Guarantee Fund is underwritten by the housing corporations themselves; its funds totalled EUR 472 million in 2010. In case of need, the WSW can turn to other corporations for funds (up to EUR 2.9 billion in total). Should this also prove insufficient, the WSW can turn to the government for an interest-free loan. The WSW guaranteed loan-to-WOZ-values<sup>8</sup> are 50%. Since 1 January 2011 the WSW only provides guarantees for units which are rented out to households with annual income not exceeding EUR 33614.

Social housing corporations can also obtain loans at favourable conditions from the Bank of Dutch Municipalities (*Bank Nederlandse Gemeenten*, or BNG), a special purpose public bank with an exceptionally good credit rating, which only lends to municipalities and housing corporations and the Nederlandse Waterschapsbank (NWB). Although the BNG has a limited liability, its top rating can only be sustained under the implicit assumption that the government would support the bank in case of financial problems<sup>9</sup>. At the end of 2010, loans from the BNG to housing corporations totalled over EUR 40 billion, or 6.8% of GDP<sup>10</sup>.

Housing corporations work hand in hand with local authorities to roll out policy initiatives. They are also granted an exemption from corporate tax and can buy public land at reduced prices for the purpose of building social housing. Finally, they receive support from the Central Housing Fund (*Centraal Fonds voor de Volkshuisvesting*, or CFV), which redistributes funds from financially healthier housing corporations toward weaker ones, to the extent that the need arises on the part of the latter.

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<sup>5</sup> Vermeulen and Rouwendal (2007).

<sup>6</sup> Elsinga et al. (2007).

<sup>7</sup> EC(2009)9963.

<sup>8</sup> The WOZ-value (*Wet waardering Onroerende Zaken*, or Immovable Property Tax Act) is the value of taxpayers' main residence that is estimated and reassessed by the municipality every two years on the basis of a large number of factors, including qualities of the dwelling (size of the dwelling, garden, car park, etc.), but also market research carried out by the administration, taking into account transactions and other criteria. The complexity and lack of transparency of the valuation enables the municipalities to influence the value of the housing stock.

<sup>9</sup> <http://www.bng.nl/DocsComb/Rating%20reports/2012-01-23%20Update%20Standard%20Poors%20Rating%20report.pdf>

<sup>10</sup> BNG (2010).

Transparency and accountability deficiencies have emerged in the framework regulating the housing corporations, which have not always engaged in activities that match their core tasks. Despite internal and external supervision, monitoring has proved insufficient to ensure an effective use of funds for the intended purposes<sup>11</sup>. The problems surrounding Vestia (the single largest housing corporation), emanating from poor governance and financial mismanagement, are the most recent case in point.

## 2.2.2 RENT REGULATION AND INDIVIDUAL RENT SUBSIDIES

The rent regulation is based on three key elements: a maximum rent level, annual rent adjustments, which are capped by the government, and tenant protection.

The rent ceiling is regulated by a point system<sup>12</sup>, depending on the quality of the dwelling (size and facilities) and the surrounding area (availability of shops, schools, public transport, etc.). Recently, the regulation of maximum rents was enhanced emphasise the demand for/location of rental housing. As of 1 October 2011, 25 additional "housing points" for property value (WOZ)<sup>13</sup> were awarded to rental homes in areas of particular scarcity, allowing landlords to set a higher initial rent for new contracts. Tenants also benefit from caps to the annual rent increase, which is set by the parliament and linked to inflation<sup>14</sup>.

The government provides rent subsidies (*huurtoeslag*) for both social and private tenants, who meet income criteria. In the Netherlands, 15% of the population receive cash allowances for rents, the third highest value in the OECD<sup>15</sup>. The rent subsidy increases with the size of the rent up to a ceiling of EUR 631.70 a month. Up to this ceiling, tenants have an incentive to rent more expensive housing, as up to 75% of the marginal increase in rent is paid by the government<sup>16</sup>. The imposition of a levy on housing corporations in order to make a contribution to the costs of the rent subsidy is currently under consideration.

## 2.3 PROPERTY MARKET POLICY

### 2.3.1 TAXATION INCENTIVES

Private home ownership is encouraged by allowing home owners to fully deduct interest payments on their mortgage loan from their taxable income, a policy that has been in place since 1893 (although historically promoting home ownership was not the explicit objective of mortgage interest deductibility). This is an important benefit especially for higher income households, given the relatively high marginal rates of income tax. The effect of the mortgage interest rate deductibility

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<sup>11</sup> Koning en Van Leuvensteijn (2010).

<sup>12</sup> The points system is a scoring card on which property characteristics are graded: square meters, facilities, type of heating etc. score points. Within the point system local scarcity does not play a role.

<sup>13</sup> See footnote 8.

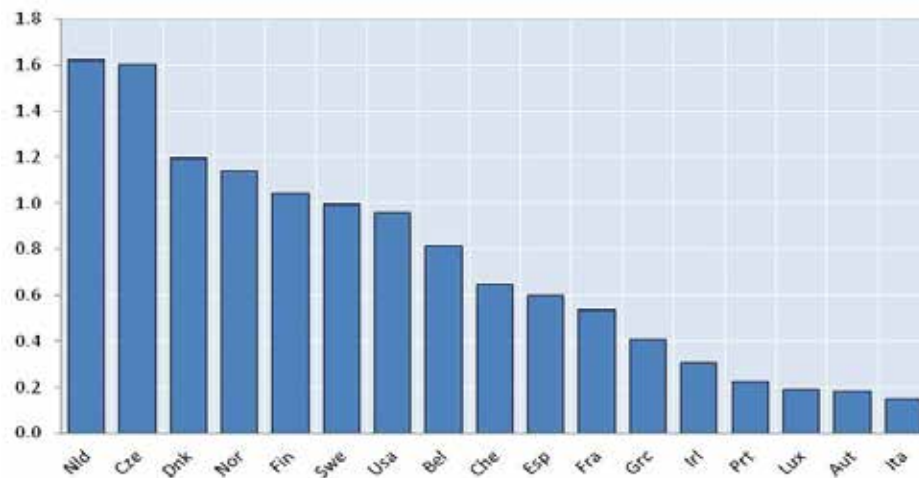
<sup>14</sup> According to a draft bill (*Wetsvoorstel Huurverhoging op grond van inkomen*) landlords would be allowed to raise rents in the regulated sector for tenants with a household income above EUR 43000 by an amount equal to inflation plus 5% per year, a measure which would affect around 20 to 25% of tenants; rents for tenants with an annual income between 33000 and 43000 euro would increase yearly by an amount equivalent to inflation plus 1%.

<sup>15</sup> Andrews et al. (2011).

<sup>16</sup> Ministry of Finance (2010), p. 30.

(MID) can be visualized as a wedge between the market interest rate and the after-tax debt financing costs of the mortgage (Figure 1). The wedge increases with the degree of tax relief.

Figure 1: Tax relief on debt financing cost of homeownership<sup>17</sup> in 2009 (% of GDP)



Source: Andrews et al. (2011).

For mortgages on primary residences, the interest payments are income-deductible for a maximum period of 30 years. Consequently, paying off mortgages is often postponed until the loan matures and a large fraction of bought homes is fully financed by borrowed capital. This latter point is evidenced by the high average loan-to-value (LTV) ratio (the amount borrowed relative to the value of the collateral) for mortgages in an international comparison (cf. *infra*, section 3). Although some steps to limit the excesses of MID have been taken<sup>18</sup> and other measures are currently under consideration, its impact on the housing market in the Netherlands remains very substantial. Apart from influencing the amount of mortgage debt taken up by households and the number of households with mortgage debt, this subsidy also has implications for the types of loans involved, like interest-only loans (see section 3).

In addition, the capital gains stemming from rising house prices on the principal owner-occupied home are not taxed. These tax exemptions are partly offset by a comparatively low tax on imputed rent (*eigenwoningforfait*), which is calculated as a percentage up to a maximum of 0.6%<sup>19</sup> of the WOZ-value of homes. For dwellings valued over EUR 1 million the imputed rent is higher (1.30% in 2012, increasing to 2.35% in 2016). Since 2005, the repayment of loans has been supported by the introduction of a new tax exemption, the surplus of the imputed return from home ownership over

<sup>17</sup> This indicator takes into account the deductibility of interest payments on mortgage debt from taxable income, any limits on the allowed period of deduction or the deductible amount, and the availability of tax credits for loans. For countries that have no tax relief on debt-financing costs, the indicator takes a value of zero.

<sup>18</sup> In 2002, interest deductibility was limited to 30 years. From January 2004 onwards, homeowners moving to more expensive homes have had to use their capital gains on their former house for down-payments and the MID is applicable only to the remainder (*bijleenregeling*).

<sup>19</sup> The imputed rent, calculated as a percentage of the economic value, represents the rental value minus the maintenance costs and amortization expenses. Although 0.6% is low, the Netherlands is one of the few countries with a tax on imputed rents. Since municipalities cannot influence the tax rate, but benefit from the taxes on imputed rents, they have an incentive to put the WOZ value at a high level.

the interest paid on a mortgage loan ("Hillen Law"<sup>20</sup>). Furthermore, the government plans to make the temporary reduction of the tax on property transactions (from 6% to 2%) permanent.

### 2.3.2 PUBLIC MORTGAGE GUARANTEE SCHEME

In 1993, the Dutch Government set up the National Mortgage Guarantee system (NMG; *Nationale Hypotheek Garantie*) to stimulate home ownership. Homebuyers may insure their risk of default as a result of unemployment, divorce and health circumstances by paying a small insurance premium (0.7% of the mortgage loan in 2012). Mortgages up to the ceiling of EUR 350000 are guaranteed<sup>21</sup>. The facility also reduces the credit risk for banks arising from mortgage loans. For mortgages not covered by this NMG, lenders have to write off the remaining debt should the debtor be unable to pay the residual debt after selling the property. Because of this implicit subsidy, banks urge homebuyers to obtain a guarantee by offering lower interest rates when taking a NMG facility. Ultimately, the Dutch Government (and municipalities) underwrites the scheme in the event that the guarantee fund<sup>22</sup> (totalling EUR 730 million at end-2011, which means a capital ratio of 0.52%)<sup>23</sup> proves inadequate. The government thus assumes the risks of households and financial institutions stemming from mortgage debt and acts as indirect guarantor for a growing proportion of the Dutch housing market. On 31 December 2011, the NMG scheme was guaranteeing mortgage loans up to a value of almost EUR 141 billion, or around 24% of GDP.

## 3. Housing financing arrangements

Banks dominate the mortgage market in the Netherlands, with a stable share of around 70%, but the share held by institutional investors is expanding. Three banks (Rabobank, ABN Amro and ING) hold around half of total outstanding mortgage credit<sup>24</sup>.

In the 1990s, a number of factors affected the supply of housing finance in the Netherlands, considerably expanding the credit scope of households. Liberalisation and increased competition between lenders contributed to the availability of more diversified and lower cost credit instruments, with longer maturities (typically extending to 30 years) and on more flexible terms, i.e. lower amortisation requirements and higher loan-to-value ratios. Moreover, since 1993, a second household income can be fully taken into account when applying for a mortgage loan in the Netherlands.

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<sup>20</sup> This law in effect favours home owners through an additional deduction. If the amount of imputed rents (adding to taxable income) is larger than mortgage interest payments (which can be deducted from taxable income), the difference is allowed as an additional deduction. This measure favours individuals with high net wealth and gives them an incentive *not* to debt-finance their home.

<sup>21</sup> The ceiling has been (possibly temporarily) increased to EUR 350000 from EUR 320000.

<sup>22</sup> The NMG is an insurance provided by the *Stichting Waarborgfonds Eigen Woning (WEW)*, a fund that receives the one-time premiums paid by home buyers and which is used to cover any future losses. However, since the liabilities of the fund are guaranteed by the government, any large increase in defaults would ultimately have to be covered by the government. If the funds of WEW are depleted, it can request an interest-free loan from the government.

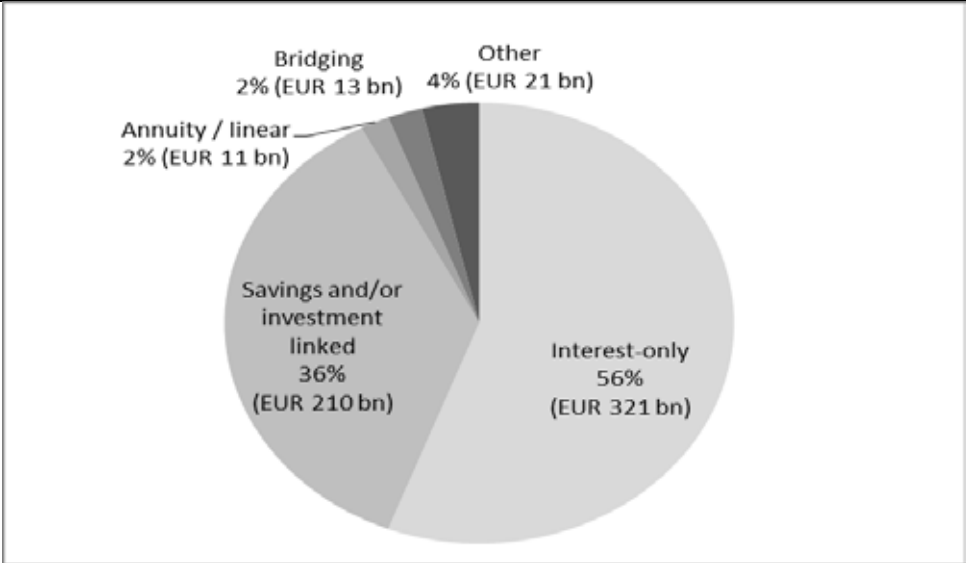
<sup>23</sup> Kwartaalcijfers Stichting Waarborgfonds Eigen Woningen, 4<sup>e</sup> Kwartaal 2011.

[http://www.nhg.nl/fileadmin/user\\_upload/Documenten/PDF/20120105 - factsheet Q4-2011\\_def\\_2\\_.pdf](http://www.nhg.nl/fileadmin/user_upload/Documenten/PDF/20120105 - factsheet Q4-2011_def_2_.pdf)

<sup>24</sup> Rabobank de facto is market leader, as the other two are restricted by EU state aid rules not to be price leaders.

Mortgage products have been designed to fully benefit from the tax deductibility of mortgage interest by deferring loan redemption until maturity. These include “interest-only” mortgages, which only involve monthly payments of interest and represent almost 60% of total mortgages in the Netherlands (Figure 2). The issue with this type of mortgages is that it is not sure that households can repay the principal at the maturity date, even though in practice interest-only mortgages can still involve some capital accumulation: households do build-up earmarked savings and/or partially repay the principal earlier. Very recently, with the Code of conduct for mortgage loans (*Gedragcode Hypothecaire Financieringen*) agreed in 2011 (which, however, is not legally-binding) banks have taken steps to reduce new issuance of this type of loans. Interest-only mortgages are now only allowed up to 50% of the market value of the home, where previously it was possible to finance the entire purchase with an interest-only mortgage. However, this does not necessarily affect gross mortgage debt, as among the class of amortisation-free mortgages there are also savings, investment and endowment mortgages, which involve capital accumulation in a separate vehicle (often through insurance companies) intended to clear the mortgage at maturity. The returns on such products depend on the type of investment selected and thus on the development of interest rates or asset prices. Given the development of interest rates and the stock markets over the past decade, however, the returns are likely to have been low. Hence, full redemption at maturity is not guaranteed.

Figure 2: Type of outstanding mortgage amounts, 2010 Q2 (in % of total)<sup>25</sup>



Source: DNB Financial Stability Overview, April 2011.

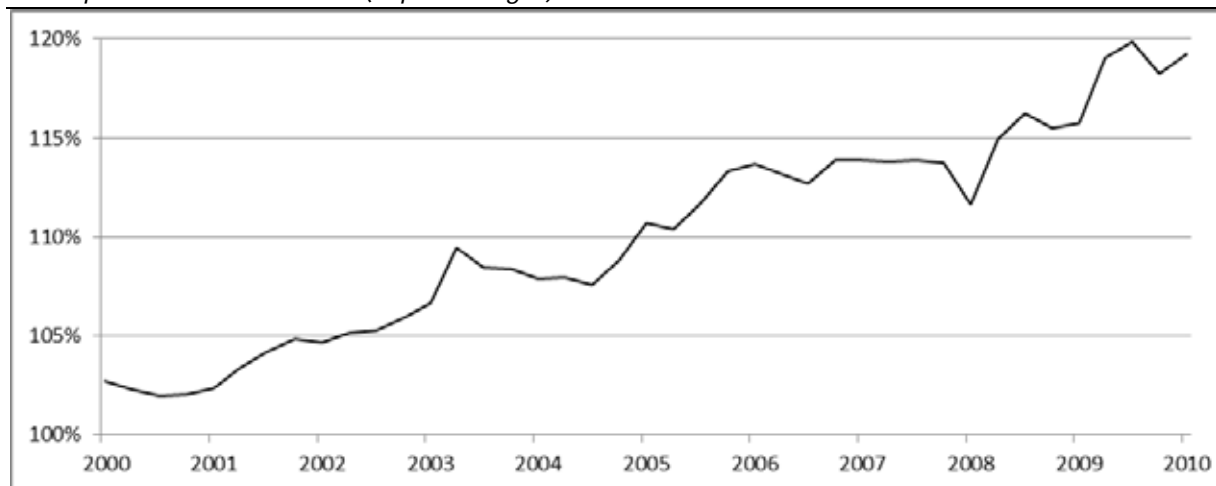
The incentive (increasing with income) to retain high tax-deductible mortgage interest payments as long as possible has induced home-owners to increase leverage against housing wealth. Hence the household balance sheets have been lengthened by pushing up mortgage debt, although this was partly compensated by a mirror-image build-up of financial assets. The risk of such a strategy derives from the maturity and liquidity mismatches and different return profiles on either side of the balance sheets which can lead to a loss in net wealth and/or financial resources readily mobilised in times of

<sup>25</sup> A borrower with an annuity/linear mortgage repays both monthly interest and a portion of the loan amount so that the loan is repaid on its maturity. Bridging mortgages are temporary loans that bridge the gap between the sales price of a new home and a home buyer's new mortgage, in the event the buyer's home has not yet been sold.

financial stress. This in turn could weigh on disposable income and consumption as well as impact on the position of banks (see section 4).

The notional average LTV-ratio (or the average value of the loan relative to the value of the property) increased from 79% in 1970 to 100% around the 2000s and even rose further to 120% at the end of 2009 (Figure 3). Survey results show that the total number of households with an LTV-ratio above 100% quadrupled between 2002 and 2008<sup>26</sup>. Under the new standards for mortgage loans in the 2011 Code of conduct, lenders also agreed on a maximum LTV-ratio of 106%.

Figure 3: Average loan-to-value ratio (average mortgage amount/average purchase price) of Dutch home purchases 2000 – 2010 (in percentages)



Source: *Het Kadaster Kwartaalbericht in: Overview of Financial Stability in the Netherlands May 2010*.

The uptrend in LTV-ratios in recent years has a number of causes. Doubtless it reflects an underlying increase in new mortgage volumes. In addition, due to the high number of amortisation-free mortgages, the LTV-ratio of an average mortgage decreases less rapidly during the life of the mortgage than it would have for example ten years ago. However, the LTV-ratio figures are taken from the cadastre (the only comprehensive national data source available) and have to be interpreted with caution. They are to some extent overestimated and probably increasingly so in recent years with the onset of the crisis. The loan amount registered in the notarial contract usually is higher than the actual loan, to allow the bank and mortgagee the opportunity of future increases without additional costs for a new notarial agreement<sup>27</sup>.

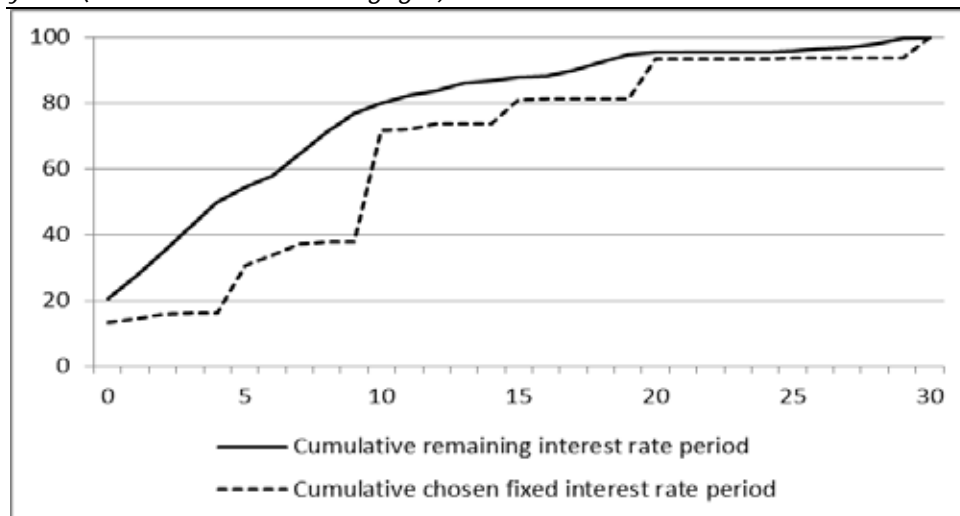
Dutch households tend to take mortgages with an interest-rate fixation period of 5 years and over. This historical bias towards long financing protects them from interest rate fluctuations until the time of renewal (cf. infra). According to the most recent data, of all outstanding mortgages only 13% have a variable interest rate, around 3% have an initial fixation period of up to five years, 56% have interest rates fixed for 5 to 10 years and 28% are fixed for more than 10 years (Figure 4). However, in recent years homeowners have become quite active in renegotiating mortgage contracts, showing a

<sup>26</sup> DNB Household Survey 2003 to 2009, in: DNB (2010).

<sup>27</sup> Anecdotal evidence suggests that the Kadaster LTV-ratios are distorted by around 10 percentage points upwardly. The current average LTV is likely to be even lower than 110% given the maximum LTV-ratio of 106% in the 2011 code of conduct and the fact that the supervision has been tightened.

preference towards shorter period of interest rate fixation, as they react to changes in yield levels and the steepness of the yield curve.<sup>28</sup> 28% of all newly contracted mortgages in 2011 were at variable interest-rate and around a third of these had an initial fixation period of up to five years<sup>29</sup>. These statistics are strongly skewed towards a high share for these mortgages due to the frequent resets in variable-interest mortgages. However, the bias towards short interest fixation periods is potentially problematic, given the entrenched vulnerabilities in the housing purchase market. Nevertheless, on a macro scale the current distribution of refinancing profiles still provides protection against the pass-through of sudden increases in interest rates.

Figure 4: Cumulative distribution of fixed interest rate period and remaining fixed interest rate term in years (% of total number mortgages)



Source: DNB Household Survey 2008, in: *Overview of Financial Stability in the Netherlands, November 2009*.

## 4. Impact on the Dutch economy

The strong regulation of the Dutch housing market together with the implicit or explicit subsidies and financial innovations reviewed in the previous sections have partially driven the house price developments (4.1) and contributed to the gradual progressive build-up of rigidities in the housing market with important repercussions for other areas of the Dutch economy in terms of, inter alia, budgetary costs (4.2), household indebtedness (4.3), redistribution of wealth (4.4) and labour force mobility and capital allocation (4.5).

### 4.1 HOUSE PRICE DEVELOPMENTS

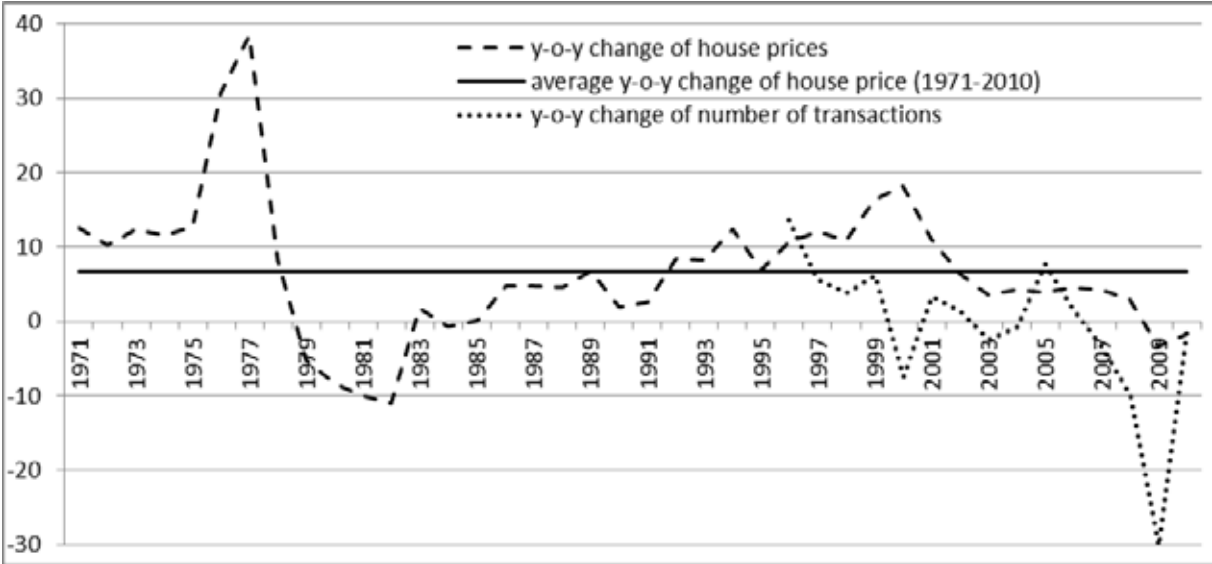
The institutional set-up of the purchase segment and the macroeconomic environment show up in the development of house prices, which surged by almost 40% year-on-year in nominal terms in the late 1970s, before falling by 35% between May 1978 and May 1982 (Figure 5). In the 1980s and 1990s, house prices rose at a fairly strong pace, exceeding the long-run average growth rate after

<sup>28</sup> In 2003 and 2004, the low level in short-term interest rates induced a marked increase in demand for short-term mortgage loans as households increasingly renegotiated their existing higher mortgage loans with longer maturity. Subsequent flattening of the yield curve and rising interest rates then checked this tendency, heightening the attractiveness of fixed-rate mortgages.

<sup>29</sup> De Nederlandsche Bank (Table 5.2.7 in Domestic MFI statistics).

1991 and culminating in the second half of the 1990s, which coincided with shortages on the labour market and strong employment gains. However, house price increases in the Netherlands during the prolonged expansion from the late 1980s onwards were not as strong as in some other EU countries which witnessed increases ahead of the financial crisis. The growing participation rate of women (aged 15-64) in the labour market, which steadily increased from around 40% of total population in 1983 to over 70% currently, led to household expectations (and realisations) of higher income over the life cycle that were reinforced by an expected rise in the value of their assets<sup>30</sup>. Other supportive factors include demographic trends, lower and less volatile inflation and depressed real interest rates, and economic growth. In addition to these macroeconomic drivers, the house price increases of the 1990s were also a consequence of, on the one hand, the country-specific policy framework, in particular the favourable tax treatment of home ownership and of the low supply elasticity of new dwellings, and on the other hand, of the more easily available financing.

Figure 5: Nominal house price developments and transactions, 1971 – 2010 (y-o-y changes)



Source: OECD statistics, CBS.

From 2001 onwards, the growth rate of house prices dropped below the average rate of increase over the period 1971 - 2010. A modest-yet-persistent slump in the housing market since the outbreak of the crisis, as evidenced by the fall in both prices even more clearly by the much sharper drop in the number of transactions, reflects clouded economic prospects amidst falls in disposable income, tighter lending standards, a moderate increase in unemployment and consumer confidence hovering around historic lows.

On average, house prices have decreased by around 3% per year since the peak at end-2008. Whereas this decline is relatively limited compared to other European countries that had experienced an (often even sharper) increase in house prices in the run up to the crisis<sup>31</sup>, the number of transactions has declined steeply (by approximately 45% since its 2006 pre-crisis peak) across all

<sup>30</sup> Higher household income expectations were also reflected in the very strong growth in housing investment; the Dutch household investment rate has been rising and was the highest of all European countries in 2009 (11.5% vs. 8.9% for the euro area and 8.2% for the EU27).

<sup>31</sup> Around 20% in Denmark, more than 30% in Ireland (own calculations, OECD Statistics, 2012).



segments of the market<sup>32</sup>, indicating that potential buyers are waiting not only for possible further declines in house prices but also for a resolution of the fundamental uncertainty about economic prospects and future policy developments in the housing market. In particular, uncertainty about the future of the tax-deductibility of mortgage interest payments is magnifying the current negative sentiment in the housing market, and thus putting further downward pressure on house prices<sup>33</sup>.

While the recent slump in house prices was triggered by the financial crisis and related fall in activity and in confidence, it is also a result of the gradual yet persistent build-up of vulnerabilities in the Dutch housing market. The slump will likely be protracted, given that, even in the presence of a targeted policy response, it takes time to unwind the rigidities in the housing market and the extension of household balance sheets that have built up over many years.

It is very difficult to assess if and to what extent prices in the Netherlands were misaligned during the period of sustained increases. Estimates of equilibrium house prices are fraught with methodological difficulties. For the Netherlands, some of the institutional and geographical factors limiting supply elasticity are important yet difficult-to-measure factors that affect an assessment of possible misalignments. Most studies which did attempt an estimate provided evidence of no or only limited overvaluation. The Netherlands' Bureau of Economic Policy Analysis (CPB, 2005) reported an overvaluation of 10 % in 2003<sup>34</sup>. Using data up to 2004, an IMF country report (2005) concluded that there was no significant deviation from fundamentals<sup>35</sup>. The OECD (2006) arrived at a similar conclusion, namely that the probability of Dutch house prices reaching a peak and starting to decline in 2006 was low<sup>36</sup>.

By contrast, the April 2008 IMF World Economic Outlook report deemed that the Netherlands was second among advanced economies in terms of house price overvaluation: based on econometric research for numerous countries, the IMF calculated that approximately 30% of the increase in house prices between 1997 and 2007 in the Netherlands could not be explained by fundamental factors<sup>37</sup>. In applying a generalised framework, however, the IMF approach did not allow for some important county-specific characteristics of the Dutch housing market, such as effective supply restrictions and the tax-treatment of owner-occupied housing, so that the coefficients estimated by the IMF were biased. These shortcomings were pointed out *inter alia* by CPB (2008) analysis<sup>38</sup>, which stated that any (over-) valuation gap that existed in 2003 had disappeared by 2007. According to this analysis, from 2004 onwards, real house price growth was lower than the growth of the long-term equilibrium price (due to smaller increases in real disposable income and financial wealth than recorded previously), resulting in a gradual reduction of the overvaluation and its fading out in 2007.

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<sup>32</sup> Rabobank (2011).

<sup>33</sup> See, for example, the CPB report by Van Ewijk et al. (2006).

<sup>34</sup> CPB (2005) Document No. 81 .

<sup>35</sup> IMF (2005) Country Recommendation No. 05/225.

<sup>36</sup> OECD (2006) Working Paper No. 488.

<sup>37</sup> IMF (2008) World Economic Outlook.

<sup>38</sup> CPB (2008) Memorandum No. 200. According to the CPB, the principal reason for the differing research results lies in the fact that the uniform specification used by the IMF for all countries examined makes no allowance for some of the country-specific factors at play in the Netherlands, such as tax arrangements and supply restrictions.

An important conclusion of CPB (2005)<sup>39</sup> is that price adjustments towards equilibrium take place more rapidly when the price is below the equilibrium value. House prices in the Netherlands tend to be downwardly sticky: in case of overvaluation, initially the period in which the property remains unsold tends to be longer, before prices decrease. Although the possibility of a substantial cumulative downward correction of house prices cannot be excluded, the fact that the robust house price appreciation in the second half of the 1990s had already decelerated by the early 2000s suggests rather strongly that the Dutch housing market is going through a more gradual adjustment period (which may be quite protracted), rather than a sudden sharp deterioration<sup>40</sup>.

## 4.2 BUDGETARY COSTS AND IMPLICIT LIABILITIES

The financing of policies in the housing market comes at a high cost for public finances in terms of foregone revenue and of expenditures in subsidies. Table 2 shows that, as regards policies aimed at the property market, the largest single factor impacting on the general government budget is mortgage interest deductibility (estimated to account for a revenue shortfall of EUR 12 billion in 2011, or 2% of GDP), followed by the exemption of net housing wealth from capital taxes (EUR 7.4 billion). Although housing wealth is also taxed, tax rates are low (largely because of the treatment of imputed rents). Receipts from the transaction tax have decreased compared to 2006-08 due to the reduction in the tax rate, compounded by the sharp fall in the number of transactions. The data reported in table 2 do not cover the impact of policies in the rental market and hence underestimate the budgetary impact of housing policies in the Netherlands. Rent subsidies alone are estimated to have amounted to some EUR 2.2 billion in 2010<sup>41</sup>.

Table 2: Budgetary costs of housing policies in the property market (EUR billion)

	2006	2007	2008	2009	2010	2011
Mortgage Interest Deduction (MID)	11,8	12,1	12,4	12,7	12,4	12,0
Exemption net housing wealth from capital tax	7,6	8,2	8,6	8,4	7,7	7,4
Tax exemption capital saving for amortization	0,7	0,7	0,7	0,7	0,7	0,7
Imputed rents (EWF)	-2,3	-2,4	-2,6	-2,7	-2,8	-2,7
Transaction Tax (dwellings and non-dwellings)	-2,6	-2,9	-2,7	-1,6	-1,6	-1,2
Local property taxes (OZB)	-2,6	-2,7	-2,8	-2,9	-3,0	-3,1
<b>Net budgetary costs</b>	<b>12,6</b>	<b>13,0</b>	<b>13,6</b>	<b>14,6</b>	<b>13,4</b>	<b>13,1</b>
<b>Net budgetary costs in % of GDP</b>	<b>2,3</b>	<b>2,3</b>	<b>2,3</b>	<b>2,6</b>	<b>2,3</b>	<b>2,2</b>

Source: Ministry of Finance, 2012; CBS.

In addition, through guarantees extended under different schemes the government has accumulated sizeable implicit liabilities that sum up to almost half of the Netherlands' GDP. Under the national mortgage guarantee scheme (NMG), the government guarantees mortgages amounting to EUR 141 billion (around 24% of GDP). The government also guarantees housing-related loans of financial institutions, for example the *Waarborgfonds Sociale Woningbouw* (WSW). The WSW provides loan guarantees summing up to EUR 85.3 billion (14.5% of GDP). Furthermore, the government (implicitly) guarantees the liabilities of the *Bank Nederlandse Gemeenten* and the *Nederlandse*

<sup>39</sup> CPB (2005) Document No. 81.

<sup>40</sup> IMF (2010) Country Report No. 10/34.

<sup>41</sup> Van den Brakel and Moonen (2012).

*Waterschapsbank* (at the end of 2010, loans from the *Bank Nederlandse Gemeenten* to housing corporations totalled over EUR 40 billion, or 6.8% of GDP<sup>42</sup>).

### 4.3 HOUSEHOLD INDEBTEDNESS

Within the euro area, the Netherlands has the highest gross household debt related to housing<sup>43</sup> in terms of GDP: outstanding residential mortgage debt was EUR 640 billion - corrected for securitization<sup>44</sup> - in 2010 (and an estimated EUR 652 billion in 2011), or 109% of GDP<sup>45</sup>. Mortgage-equity-withdrawal (MEW) is also substantial<sup>46</sup>. The country also has the highest households' interest payments relative to disposable income. The high gross debt level reflects incentives to lengthen household balance sheets and is mainly due to the tax deductibility of mortgage interest payments for primary residences (see above, section 2.3.1). Financial innovations, giving households easier access to credit, have encouraged them to take up mortgage debt (section 3).

The downward trend in interest rates in the 1990s also supported the trend towards greater household financial leverage. In recent years, limitations on interest rate deductibility and the progressive tightening of banks' mortgage lending standards through the revised Code of conduct have partly reduced the incentives to leverage against housing wealth, but the overhang of a high gross housing mortgage debt of households is still high.

Although mortgage debt has increased steeply, much of this build-up in debt is mirrored by even steeper increases in household wealth<sup>47</sup>. In particular, households have capitalised on high and rising house prices, as shown in Figure 6 (left): the total value of the owner-occupied housing stock was estimated at EUR 1173.5 billion in 2010 (199% of GDP)<sup>48</sup>. This also affected the composition of household assets: housing wealth increased at the expense of other capital assets such as savings and the share of housing wealth in total household wealth rose from 31% in 1993 to 39% in 2010, thus becoming the most important asset in households' portfolios (Figure 6, right).

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*Figure 6: Household assets (including insurance companies and pension fund savings) and liabilities (left: EUR billion – right: as a % of total assets)*

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<sup>42</sup> BNG (2010).

<sup>43</sup> Gross mortgage debt, as a percentage of total household debt, is 85%. In contrast to mortgage debt and to other countries, outstanding consumer credit is negligible in the Netherlands.

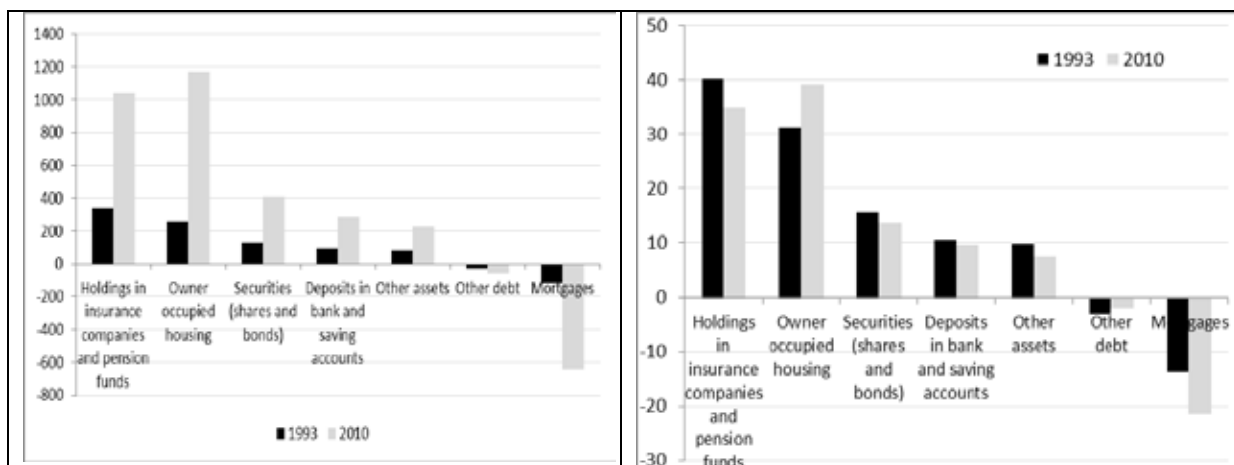
<sup>44</sup> DNB (2012).

<sup>45</sup> 40 % of GDP in 2007 for the euro area as a whole. Mortgage debt as a share of disposable income increased from 151% in 2000 to 250% in 2010, according to Eurostat, one of the highest shares recorded of any advanced economy and the highest in the euro area, which had an average ratio of 99% in 2010 .

<sup>46</sup> MEW is the decision of consumers to borrow money against the real value of their houses. The real value is the current value of the property less any accumulated liabilities (mortgages, loans, etc.). It basically means that home owners are turning some of the capital gains from their property into liquidity by taking out additional housing equity loans.

<sup>47</sup> Household wealth is defined as the value of financial assets (which include equities, bonds and bank deposits, and indirect holdings in insurance companies and pension funds) plus real assets (principally housing) after the deduction of financial liabilities (which are dominated by mortgage borrowing).

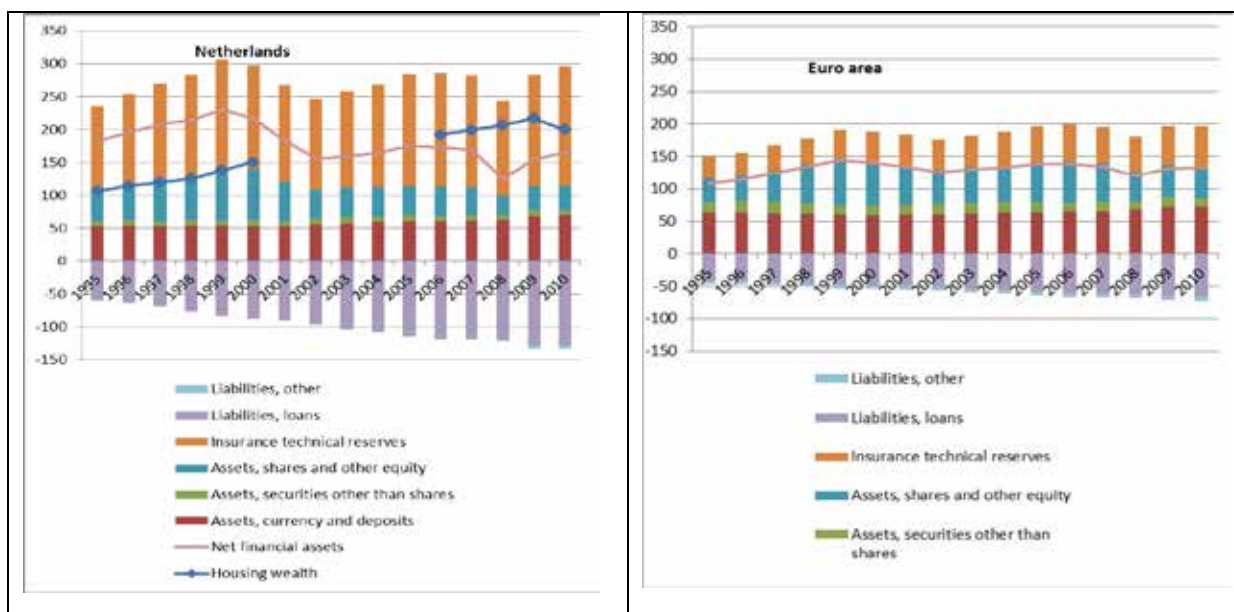
<sup>48</sup> Also important are holdings in insurance companies and retirement savings in pension funds of EUR 1044 billion in 2010. Other financial assets include deposits in banks and savings accounts (EUR 285 billion in 2010). Households also possess bonds and equities to the tune of EUR 265 billion. Total household wealth (including housing, financial and other assets, but not holdings in insurance companies and pension funds) reached EUR 1949 billion in 2010, or 331% of GDP (including pension funds: EUR 2993 billion or 509% of GDP).



Source: CBS, own calculations.

Both the liability and asset sides are large in relation to GDP and compared to the euro-area average (Figure 7). When the liability and the asset are combined, the result is a positive net financial position of EUR 680 billion in 2010, or 115.6% of GDP, excluding both the value of the owner-occupied housing stock and holdings in insurance companies and pension funds<sup>49</sup>. The net financial asset position of Dutch households, relative to GDP is also high compared to other European countries.

Figure 7: Households' financial balance sheet<sup>50</sup> (% of GDP)



Source: Eurostat.

However, the debt-to-asset ratio of Dutch households continues to rise (Figure 8) and this is a source of risk for household balance sheets. Firstly, it makes households vulnerable to interest rate and income shocks especially as a significant part of mortgage debt is on short re-pricing schedules<sup>51</sup>. If,

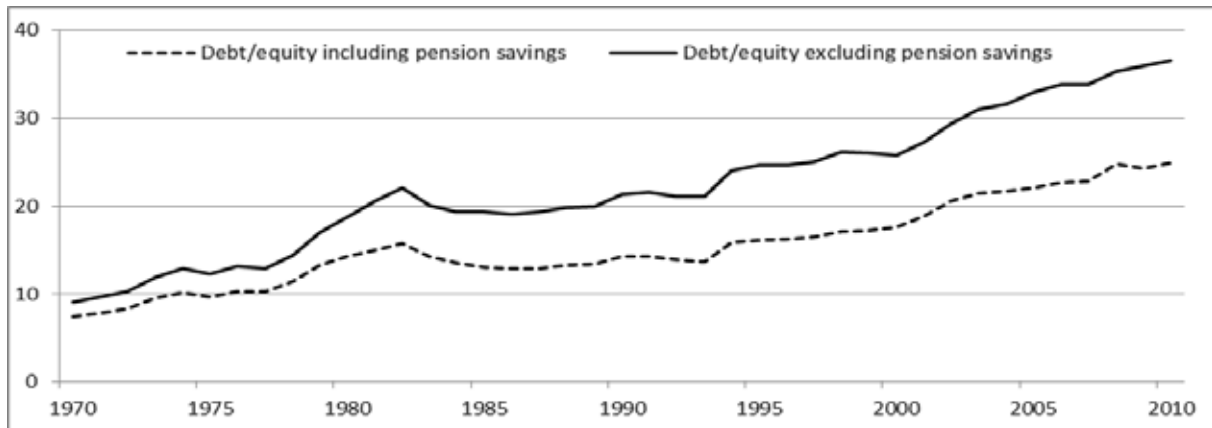
<sup>49</sup> CBS (2012).

<sup>50</sup> Households' net financial assets include pension and life insurance arrangements, shares, securities and currency and savings deposits, minus households' debt. Note that the value of own real estate property is not included in the net financial assets position of households, while mortgage debt is deducted from the financial assets.

<sup>51</sup> In 2009, about half of all mortgages had a remaining fixed interest period of 4 years or less, while one-fifth had a remaining fixed interest period of less than one year (cf. Figure 4).

upon expiry of the fixed interest period, the new rate is higher than the original rate, the risk of late payments or default for certain groups of borrowers rises. Until now the percentage of households in mortgage repayment arrears has remained low by international standards. Moreover, as real and nominal interest rates have declined, the rise in household indebtedness has in many cases been associated with a relatively limited debt service burden. Similarly, the percentage of forced sales in terms of the total housing stock in the residential property market still accounts for only 0.07% of homes<sup>52</sup>.

Figure 8: Debt-to-asset ratio of Dutch households 1970 – 2010 (in percentages)



Source: CPB.

Second, with residential and pension wealth dominating the sector's balance sheet, the wealth position of Dutch households has become increasingly sensitive to fluctuations in asset markets. Falling house prices in recent years have increased the debt-to-asset ratio. In principle, this trend affects all homeowners in the same way, but there are large differences in households' starting positions. Homeowners who bought their dwellings long ago have accumulated considerable home equity; on the other hand, given the, albeit moderate, fall in house prices since 2008, a number of first-time buyers, in the 25-35 age group, are now in negative home equity<sup>53</sup>.

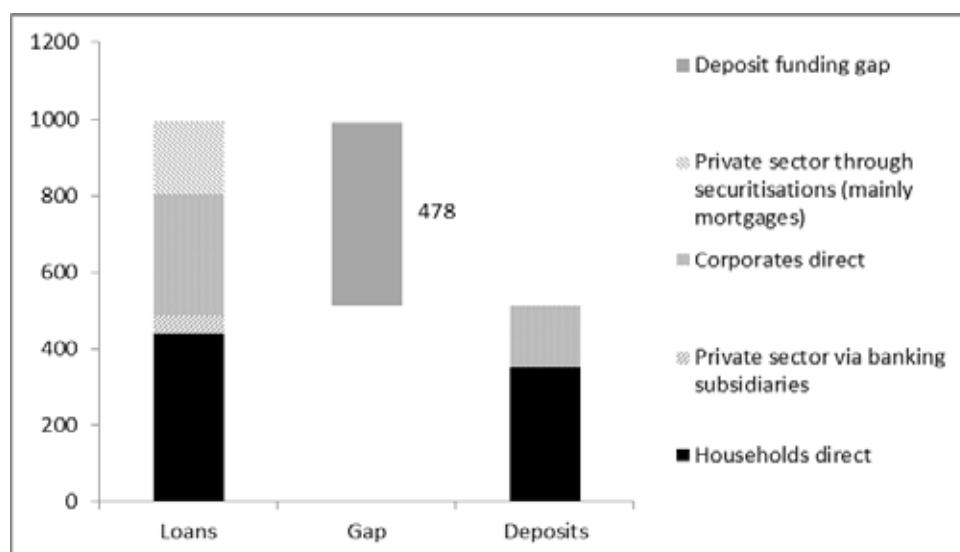
The debt-to-asset position and configuration of Dutch households in turn has increased the vulnerability of the banks that finance these mortgages because of deposit funding gaps exposing them to longer-term mismatches on their balance sheets. As illustrated in Figure 9, the total funding gap of Dutch banks amounts to some EUR 480 billion (or approximately 79% of GDP), larger than elsewhere in the EU, despite the national savings surplus. Dutch banks hold relatively large home mortgage portfolios compared to those in other EU countries. Since banks can only partly fund their large mortgage loan portfolios through savings deposits, they are dependent on market funding, which, in periods of severe market unrest or uncertainty, may dry up. Accordingly, spill-over effects from housing markets could become a source of concern, as a drop in house prices would also have an impact on mortgage-covered bonds, while significant loan losses could lead to margin calls by the

<sup>52</sup> CBS (2012).

<sup>53</sup> DNB (2011a).

holders of such bonds. In order to secure the confidence of financiers, banks would then have to either reinforce their buffers or gradually reduce their dependence on wholesale funding<sup>54</sup>.

Figure 9: Dutch banks' deposit funding gap 2011 (EUR billion)



Source: De Nederlandsche Bank

Measures have been taken to reduce the risks of private debt. The revised Code of conduct for mortgage loans addresses excessive mortgage lending and stimulates redemptions. The supervision on the financial sector has been strengthened and the capital and liquidity requirements for banks under Basel III have become stricter.

#### 4.4 REDISTRIBUTION OF WEALTH

The combination of a restrictive spatial policy, which limits the supply of land allocated to housing (resulting in a price-inelastic supply of housing), rising housing demand and the favorable tax treatment of home ownership has underpinned significant increases in house prices relative to disposable income, thus reducing living standards, and has led to a tax-financed redistribution of wealth from those buying houses to those who own houses. Reducing or abolishing this subsidy would lead to lower house prices and would benefit first-time buyers in the housing market at the expense of present owners. It would (partly) undo the intergenerational redistribution that took place as a result of the past increase in house prices (cf. supra)<sup>55</sup>.

The bias in the tax system towards home ownership also results in a substantial redistribution of wealth between income categories. One reason for this is that the MID tax relief takes the form of a deduction against the highest marginal income tax bracket. It is, thus, worth more to high-income earners, since buying is relatively attractive compared to renting for higher income groups, especially given the under-supply of rental housing for people above the threshold income level for social housing. Social landlords, on their side, keep rents well below the maximum rent level (they work

<sup>54</sup> DNB (2011b).

<sup>55</sup> For a study on the effects of changes in the fiscal treatment of home ownership, see Koning et al. (2006) and van Ewijk et al. (2006).

with so-called target rents, a percentage of the maximum rent) and substantially below market level, especially in urban areas<sup>56</sup>. The gap between the largely regulated (and therefore artificially low) rental prices in the social housing segment, on the one hand, and the unregulated sale prices, on the other hand, has driven a wedge between the rental and the property market that is hard to bridge for many households. As a result, low income earners are driven into rental housing and high-income earners are driven into ownership and there is a lack of flow between the property rental and the property purchase markets. Without such price distortions, the market would yield a more efficient allocation reflecting individual preferences and the relevant cost structures.

Finally, low rent policies affect tenant's income and distort the operation of the housing market (through demand and supply for rental units) with long-term adverse consequences. Tenants are strongly subsidized, not only indirectly through the difference between the market rent and the actual rent paid for the dwelling, but also directly (and selectively) through housing allowances. While income eligibility for social housing is checked upon entry, it is not monitored subsequently. As a result, the social rent remains unchanged even if household income subsequently exceeds the ceiling for initial entry. Existing tenants ('insiders') are thus favoured over new households ('outsiders') and movers, leading to regressive distribution effects and enhanced social segregation. This, in turn, limits mobility (cf. *infra*). Another consequence is that housing providers have less income to devote to investment and less free stock to allocate to those in greatest need. A further implication is that demand shocks result in long waiting lists and illegal subletting of dwellings. The only free-market housing option left for many households is to become a homeowner. In summary, such rent control policies lead to general welfare losses rather than gains.

#### 4.5 LABOUR MARKET MOBILITY AND CAPITAL MISALLOCATION

High transaction costs reduce flexibility of the labour market. Transaction costs of owner-occupied housing include property transaction taxes, fees for the registration of property, notary or other legal fees and real estate agency fees. Although transaction costs in the Netherlands are not very high compared to other countries, they reduce labour market flexibility. This problem is aggravated for people with negative equity, who might even not be able to sell their house and move.

Transaction costs also exist in the rental market. Rules concerning social housing make it unattractive for dwellers of social housing to move to another area for a better-paid job. Due to the regionalised waiting-list system, tenants of social housing cannot move to another area without losing their entitlement for social housing. This problem is aggravated by a private rental segment that has almost been fully crowded out by the social housing segment. Especially the lower end of the labour market is affected by this system. The same problem arises in the mobility of students who have the incentive to not only choose a university based on educational merits, but also on its location.

The labour market is also hampered by the current regime of direct rent subsidies, as people with incomes close to the minimum wage face very high marginal tax rates. They often do not have the

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<sup>56</sup> Romijn and Besseling (2008); Conijn (2011).

incentive to increase working hours or working in a better-paid job, because losing their direct rent subsidies, they would hardly be better off<sup>57</sup>.

Housing market regulations also create distortions on capital allocation. The equity invested in homes is treated favourably compared to other capital: savings and investments in financial products are taxed at a fixed rate of 30%, which is imposed on a presumed return of 4%. This effectively corresponds to a wealth tax of 1.2%, at least twice as high as the taxation of ownership of housing, which not only makes ownership fiscally attractive vis-à-vis other forms of capital, such as rental housing and financial assets, but also provides an incentive for households with financial assets to resort to mortgage financing, since - for many households - the tax rate at which the interest on mortgage debt can be deducted is higher than the tax rate levied on income from financial assets. Therefore, the tax system not only lacks neutrality between different forms of housing tenure, but also between different saving/investment vehicles<sup>58</sup>. It leads to a purely tax-induced increase in financial liabilities as well as assets in households' portfolios and thereby to a volume of financial intermediation that exceeds its efficient size, with an associated deadweight loss to society<sup>59</sup>.

Another inefficiency in capital allocation ensues from the social housing corporations, which have a considerable equity in "mortmain"<sup>60</sup>. The windfall gain of past increases in house prices has contributed substantially to these levels of equity, not always apparent in the balance sheets of the corporations, which usually value the assets at historic cost prices. A law currently under discussion would oblige housing corporations to offer a small share of rental homes annually for sale to current tenants. The sales price would be based either on the WOZ-value or a valuation of the house, for example, by a real estate agent. The housing association would have the possibility of offering a discount on the market price or another buying/selling variant<sup>61</sup>.

## 5. Future directions for Dutch housing policies

In recent years, in the Netherlands the prospects for the housing market and the need for policy changes have come to the fore of public discussion. The slump in the housing market has sparked a sharp intensification of the debate in which official policy reviews and a wide range of analyses and proposals by academics, economic analysts and stakeholders abound.

The debate covers a wide range of issues including the shortcomings in terms of housing market outcomes generated by the present institutional and fiscal context; the high and increasing government spending and foregone revenue due to housing policies, and the structure of the rental market. In the debate, questions about the efficiency of the current instruments take a central role. Recent think-pieces plead for solutions such as changes to fiscal incentives, a more active and

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<sup>57</sup> An in-depth study of how housing market regulations harm the labour market of the Netherlands is Hoj, J. (2011).

<sup>58</sup> Some progressivity is introduced through a tax exemption of 17,000 euro for single persons and 34000 euro for married couples. Adjusted for this tax exemption the average wealth tax of households is somewhat lower than 1.2%.

<sup>59</sup> ter Rele and van Steen (2001).

<sup>60</sup> In Medieval Europe, power and land (wealth) were controlled by a ruling elite through laws of "mortmain" or "manus mortua" or "inalienable ownership".

<sup>61</sup> There are several variants that aim to accelerate and expand sales so that more liquidity is generated, in order to be used in new housing developments and maintenance of the existing property.



targeted supply policy, tenure-neutral support for demand that is solely directed at lower and middle income groups, and a more market compliant rent policy. In this section we review the main trends in the debate in the different segments of the housing market:

Proposals concerning taxation policy focus essentially on the tax neutrality of home ownership. For the **mortgage interest deductibility (MID) scheme**, proposals range from gradual phasing-out or elimination to reform<sup>62</sup>. Concerning the phasing out of MID, proposals vary as to the extent of reduction and the number of years during which this would be taking place. One of the most widely flaunted ideas is gradually reducing the maximum deductible tax rate from 52% (the highest income tax bracket) to a lower value corresponding to something like the lower marginal income tax rate over a longer time span, say 20 years. In this context, some have also suggested that the phasing out of MID could take place in parallel to the elimination of the tax on imputed rents. As regards reforming the MID, one proposal is to consider home ownership as a form of equity for tax purposes instead of treating it together with income from labour and pensions, as currently is the case. Others recommend a fiscal exemption (either in absolute terms or proportional to the value of the property) in order to ensure accessibility for lower income groups, but also to mitigate the impact on house prices, possibly to be faded out in the long term (given that an exemption still entails substantial subsidising)<sup>63</sup>. Other policy proposals in the area of taxation concern the (gradual) elimination of the Hillen law (the tax exemption on the surplus of the imputed return from home ownership over the interest paid on a mortgage loan) and of the fiscal exemptions for capital insurances and other investment instruments related to home ownership. To ensure an equal treatment of purchasing and renting, any tenure neutral support for demand or housing affordability should affect all lower income groups, regardless of whether they are owners or tenants<sup>64</sup>. Therefore, many have suggested that **rent subsidies** (*huurtoeslag*) be transformed into housing subsidies (*woontoeslag*), depending on the income, not on the rent.

Securing **sustainable financing** in the housing market is another large policy challenge. The six-step process proposed by a group of academics in February 2012 is to date one of the most far-reaching contributions in the field, proposing reforms in both the purchase and the rental segment as well as innovations in mortgage financing. In particular, concerning the latter, they advance the proposal of mirroring the maturity, interest-rate fixation period and redemption scheme of mortgages to that of banks' issued mortgage covered bonds. The reform of the NMG scheme has been under discussion for a number of years. In 2008, the Commission Van Rijn<sup>65</sup> advised withdrawing backing of the NMG by municipalities. Instead, the NMG should be only ensured by the central government and opined that the premium of should slowly increase to more market based levels, however dismissing a risk-based premium. To curb household leveraging and reduce financing bottlenecks and mismatch risks to the banking system many have proposed the **elimination of amortisation-free mortgages**. However, if not coupled with policy measures addressing MID, such proposals only partially limit the fiscal incentive to debt-finance the owner-occupied dwelling and do not solve the underlying distortion of the trade-off between saving, investing and redemption.

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<sup>62</sup> Key contributions along these lines are Bartelsman et al. (2012); CPB (2010); Council for socio-economic affairs (2010).

<sup>63</sup> See inter alia Council for socio-economic affairs (2010), CPB (2010).

<sup>64</sup> Council for socio-economic affairs (2010); CPB (2010); VROM (2010).

<sup>65</sup> Adviescommissie toekomst Nationale Hypotheek Garantie (2008).

Concerning the rental market, **rent regulation** has increasingly come under discussion<sup>66</sup>. Reforming the current rent regulation system is by many considered a *condition sine qua non* for reforming the housing market<sup>67</sup>. Again, the spectrum of policy recommendations is very broad, from abolishing the points system entirely, to limiting these provisions to new contracts and foreseeing a transition for existing cases, coupling these measures with targeted compensation for lower income groups. Others favour retaining rent regulations for a part of the rental market and gradually expanding the non-regulated rental sector along with a regional differentiation of rent controls<sup>68</sup>.

Policy proposals to (partially) liberalise rents are usually coupled with a proposed **reform of the social housing corporations**. This would be all the more necessary as their equity would further increase should rents move closer to market levels. In the light of recent and repeated cases of mismanagement of social housing corporations, some have called for considering the equity in the hands of the corporations as "public money", given the fact that social housing corporations are subject to the Housing Act and that they had been substantially subsidised in the past<sup>69</sup>. Accordingly, a substantial part of (gains on) equity should be collected in a separate fund, under government supervision and to be used in the public interest. This should notably take the form of financing housing for lower income groups and to improve the quality of living. In an "integral variant" housing corporations would be subject to a high levy on their equity growth. In an alternative "splitting variant" the operational part social housing corporations would be legally separated and delegated to a private company. The financial part (equity management) would in turn be delegated to a foundation (at present the legal form of many corporations). Still others plead for a more level playing field between social housing corporations and other players on the rental market. In such an approach corporations could be given the choice between staying within a strictly regulated scheme but being subject to closer scrutiny by the government, withdrawing from it and being subject to taxation as private agents, or opting for an intermediate configuration, giving them more leeway to sell their dwellings and increase rents, subject to selective taxation of sales and rent revenues<sup>70</sup>.

Recent concrete policy initiatives have been relatively modest in scope. The April 2012 Stability programme contains a proposal to lower the maximum loan-to-value ratio and to reduce the scope for mortgage interest payments to be tax-deductible, yet limiting this possibility to amortising loans, but only for new cases. As regards the rental market, a draft law currently under discussion would impose a (national) property tax on all landlords (commercial and social). The tax would be effective from 1 January 2014 onwards. Housing associations and other landlords in the regulated segment would then start contributing an estimated EUR 760 million each year. Based on the tax base (WOZ-value of the stock of rental houses) the tax rate would be 0.16% of the WOZ-value. Small (private) landlords would be exempt from tax liability up to a threshold of ten dwellings.

These proposals constitute small steps in the right direction, but fall short of appropriately addressing the distortions given their sheer size and impact on the economy. Limiting mortgage interest deductibility to new cases places the adjustment in the purchase market on younger cohorts and only entails a very gradual positive impact on public finances. Extending such a measure to

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<sup>66</sup> CPB (2010); Council for socio-economic affairs (2010); Raad van Economische Adviseurs (2006).

<sup>67</sup> Raad van Economische Adviseurs (2006); CPB (2010).

<sup>68</sup> VROM (2010).

<sup>69</sup> Council for socio-economic affairs (2010).

<sup>70</sup> Raad van Economische Adviseurs (2006).

existing housing loans would speed up the reduction of distortions, arguably without a marked additional drag on house prices. For the rental market, bolder steps would be required to improve market functioning and increase the relative size of the non-regulated segment. In their interaction such broader-ranging should over time help rebalance the entire housing market.

## 6. Conclusions

The housing market in the Netherlands has been shaped by policy interventions and incentives originally aimed at providing affordable good quality housing to low income classes and at stimulating home ownership. The range of interventions encompasses direct and indirect government subsidies and fiscal incentives, controls of the supply of housing through zoning restrictions and rent regulations, and financial guarantees. Lending policies of credit institutions magnified some of the effects of government policies. Collectively, these interventions have become costly and inefficient in achieving their aims. Moreover, they have shaped an institutional set-up which has led to the gradual build-up of distortions in the wider economy, inter alia in terms of capital allocation and labour mobility. Taxation policy, and in particular the favourable tax treatment of home ownership through mortgage interest deductibility (MID) creates incentives for a misallocation of capital toward housing, artificially raises housing prices, disproportionately favours high-income taxpayers, has ambiguous effects on housing tenure and has encouraged high household indebtedness. The leveraging of household and bank balance sheets has increased vulnerabilities of the banking sector, although these are mitigated by a strong net asset position of households and low delinquency ratios in housing debt. In the current situation, feedbacks from the housing market to the real economy, notably through negative wealth and confidence effects, are weighing on economic growth. Addressing these structural problems requires a gradual redirection of policies, which would also limit their non-negligible burden on public finances.

A rebalancing of policies seems necessary to reduce risks for both mortgage borrowers and lenders (also through mismatches) and to structurally improve the resilience of households to shocks. This could partly take the form of capping loan-to-value ratios and of tightening eligibility criteria for housing loans partly backtracking on financial innovations of the 1990s; in fact, steps in this direction have already been taken. The authorities have limited the coverage of an interest-only mortgage up to a maximum of 50%. In addition, the tightening of loan conditions in the financial sector in the wake of the crisis is welcome. But further changes are likely to be needed, notably fully or partially phasing out mortgage interest deductibility and letting households fund a larger part of mortgages from own savings, which would also improve the funding of domestic banks. This could support the resilience of the Dutch financial system, by improving incentives to shift capital towards more productive activities. To treat housing in a similar way to other forms of capital, imputed rents should ideally be calculated at close-to-market rents and taxed as capital income.

There are also obvious implications of the current housing policies on government finances, notably in terms of foregone tax revenues. In addition, the implicit liabilities stemming from housing-related guarantees at several levels represent a non-negligible risk for public finances. The estimated direct net cost to public finances of MID is more than 2% of GDP. In the context of population ageing and pressure on government budgets in the wake of the financial crisis, a progressive phasing out the MID, also for existing mortgages, would be desirable. Yet any change to the MID will have to be

designed carefully and implemented gradually and predictably in order not to disrupt the stability of the housing market. This would also be essential for the stability of the financial system, given the level of involvement of banks in the mortgage market.

In the rental market, a reform to help improve its functioning should allow a more market-oriented pricing mechanism by reconsidering rent ceilings and rent indexation, scaling down the very large social housing segment and reviewing the operation of social housing corporations, increasing their effectiveness, efficiency and transparency. This could be achieved in various ways, such as by providing a level playing field for social housing corporations and other players. Labour mobility would also be enhanced by reforming the social housing system. Those in social housing often face substantial marginal costs when they wish to move, because of the ensuing loss of the entitlement to social housing. Furthermore, the current system lacks appropriate incentives to ensure that people who live in social housing and see their income increase move on, thus reducing the options for those who are in objective need of affordable housing. Focusing the provision of social housing on those who really need it and facilitating moving would improve human capital allocation. On balance, the current set-up crowds out the private rental market and limits its size, impeding its buffer role also with respect to the purchase segment.

Reforming the housing market would not only reduce risks to households, financial institutions and the government. It would also improve the allocation of capital, thus supporting the long-term growth potential of the Dutch economy. Long-run gains could even be larger if after successful fiscal stabilisation part of the budgetary savings were to be channelled back into the economy by tax relief aimed at reducing the costs of labour and/or investment.

## References

- Andrews, D., Caldera Sánchez, A., Johansson, Å. (2011), Housing Markets and Structural Policies in OECD Countries, *OECD Economics Department Working Papers*, No. 836, OECD Publishing. <http://dx.doi.org/10.1787/5kgk8t2k9vf3-en>
- Arnold, J., Brys, B., Heady, C., Johansson, A., Schweltnus, C. and Vartia, L., (2011), Tax Policy for Economic Recovery and Growth, *The Economic Journal*, No. 121, p. F59-F80.
- Bartelsman, E., Beetsma, R., Benink, H., Boelhouwer, P., Boot, A., Bovenberg, L., Brounen, D., Conijn, J., Eichholtz, P., Frijns, J., Garretsen, H., Goudswaard, K., Jacobs, B., Koedijk K., van der Ploeg, R., Priemus, H., Schoenmaker, D., Sterken, E., Stevens, L., de Vries, C., Wijffels, H., van Wijnbergen, S. (2012), Naar een duurzame financiering van de woningmarkt, February 2012.
- BNG (2010), Financieel Jaarverslag 2010. <http://www.bng.nl/DocsComb/Publicaties/Jaarverslag%202010/BNG%20JV2010%20NL.pdf>
- Buijink, C. (2012), Perspectief door vernieuwing, *ESB Nummer 4626*, January 2012.
- Commissie toekomst Nationale Hypotheek Garantie (Commissie Van Rijn) (2008), Advies Commissie toekomst Nationale Hypotheek Garantie, Den Haag, 29 oktober 2008.
- Conijn, J. (2011), De Vastgoedlezing 2011: Woningcorporaties op een Kruispunt, Amsterdam School of Real Estate.
- Council for Socio-economic Affairs (2010), Naar een integrale hervorming van de woningmarkt, Commissie Sociaal-Economische Deskundigen: Sociaal-Economische Raad, Centraal Planbureau.
- CPB (2012), The Macro Economic Outlook 2012, Den Haag.
- CPB (2010), Hervorming van het Nederlandse woonbeleid, Den Haag, *CPB Document*, No. 84.
- CPB (2009), Verhoging Nationale Hypotheekgarantie, Den Haag, *CPB Notitie*, No. 19.
- DNB (2011a), Dutch residential mortgage risks unevenly distributed, *DNB Bulletin*, 6 December 2011.
- DNB (2011b), Overview of Financial Stability in the Netherlands, Autumn 2011, No. 14
- DNB (2010), Overview of Financial Stability in the Netherlands, November 2010, No. 12.
- DNB (2009), Risico's op de hypotheekmarkt voor huishoudens en hypotheekverstrekkers, September 2009.
- Elsinga, M., de Jong-Tennekes, M., van der Heijden, H. (2011), Crisis en de woningmarkt, Delft: Onderzoeksinstituut OTB Technische Universiteit Delft, 15 juni 2011.
- Elsinga, M., Wassenberg, F. (2007), OTB Research Institute for Housing, Urban and Mobility Studies, in: *Whitehead, C. Scanlon, K., Social Housing in Europe*, LSE Londen, 2007.

Hakfoort, J. van Leuvensteijn, M., Renes, G. (2002), Woningcorporaties: prikkels voor effectiviteit en efficiëntie, CPB Special Publication, No. 45.

Hendershott, P., Pryce, G. and White, M. (2003), Household Leverage and the Deductibility of Home Mortgage Interest: Evidence from U.K. House Purchasers, *Journal of Housing Research*, Vol. 14(1), pp. 49-82.

Hoj, J. (2011), Improving the Flexibility of the Dutch Housing Market to Enhance Labour Mobility, *OECD Economics Department Working Papers*, No. 833.

IMF (2010), Netherlands: 2010 IMF Article IV Consultation, *Country Report*, No. 10/34.

IMF (2008), Housing and the Business Cycle, Chapter 3: The Changing Housing Cycle and the Implications for Monetary Policy, *IMF World Economic Outlook*, April 2008.

IMF (2005), Netherlands: 2005 IMF Article IV Consultation, *Country Report*, No. 05/225.

Koning, P.W.C., van Leuvensteijn, M. (2010), De woningcorporaties uit de verdwijndriehoek, Den Haag, *CPB Document*, No. 202.

Koning, P.W.C., Saitua Nistal, R., Ebregt, J. (2006), Woningmarkteffecten van aanpassing fiscale behandeling eigen woning, Den Haag, *CPB Document*, No. 128.

Kranendonk, H. & Verbruggen, J. (2008), Are houses overvalued in the Netherlands?, Den Haag, *CPB Memorandum*, No. 200.

Ministry of Finance (2010), Rapport Brede Heroverwegingen, Hoofdstuk 4: Wonen.

OECD (2006), Are house prices nearing a peak? A probit analysis for 17 OECD countries, *OECD Economics Department Working Papers*, No. 488, OECD Publishing.  
<http://dx.doi.org/10.1787/816770752416>

Rabobank (2011), Dutch Housing Market Quarterly, November 2011.

Raad van Economische Adviseurs (2006), De woningmarkt uit het slot. Over goede intenties en de harde wetten van de woningmarkt, adviesnummer 2006/1.

Romijn, G.; Besseling, P. (2008), Economische effecten van regulering en subsidiëring van de huurwoningmarkt, Den Haag, *CPB Document*, No. 165.

Schilder, F. and Conijn, J. (2012), Restschuld in Nederland: Omvang en Consequenties, *ASRE Research Paper*, January 2012.

ter Rele, H., van Steen, G. (2001), Housing subsidisation in the Netherlands: measuring its distortionary and distributional effects, Den Haag, *CPB Discussion Paper*, No. 2.

Van den Brakel, M. & Moonen, L. (2012), Huurtoeslag, wie krijgt hoeveel?, CBS, 4 April 2012.

van der Wal, D., Lub, H. (2009), Housing finance in the Netherlands – the impact of structural developments on households and banks, in: *Measuring financial innovation and its impact. Proceedings of the IFC Conference, Basel, 26-27 August 2008*, July 2009, BIS IFC Bulletin, No. 3.

Van Ewijk, C., Koning, M., Lever, M., de Mooij, R. (2006) Economische effecten van aanpassing fiscale behandeling eigen woning, Den Haag, *CPB Bijzondere Publicatie*, No. 62.

Van Leuvensteijn, M. and De Graaf, T. (2007), The Impact of Housing Market Institutions on Labour Mobility, Den Haag, *CPB Discussion Paper*, No. 82.

Verbruggen, J., Kranendonk, H., van Leuvensteijn, M., & Toet, M. (2005), Welke factoren bepalen de ontwikkeling van de huizenprijs in Nederland?, Den Haag, *CPB Document*, No. 81.

Vermeulen, W. and Rouwendal, J. (2007), Housing Supply in the Netherlands, Den Haag, *CPB Discussion Paper*, No. 87.

VROM-raad (2007), Tijd voor keuzes: Perspectief op een woningmarkt in balans, Advies 064, October 2007.

VROM-Raad (2010), Stap voor stap: Naar hervorming van het woningmarktbeleid, Advies 077, February 2010.

ZEW (2011), Housing Markets and Intra-Euro Area Macroeconomic Imbalances: Identifying Policy Instruments, Project for the European Commission Directorate General for Economic and Financial Affairs, No. ECFIN/C/2010/010.