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NOTES AND COMMUNICATIONS

WELFARE EFFECTS OF FISCAL SUBSIDIES ON HOME OWNERSHIP IN THE NETHERLANDS****

1 INTRODUCTION

The tax treatment of owner-occupied housing has been subject to considerable public debate in industrialised countries. Home ownership usually receives a tax-favoured status. For instance, governments often do not tax capital gains on houses, they tax imputed rents on houses only lightly — if they tax them at all — and mortgage interest can sometimes be deducted from the income tax. During the 1970s, there was a broad increase in the implicit subsidisation of home ownership in many countries. However, during the 1980s and 1990s, we observe a reversal in this trend in many countries, partly due to a less generous mortgage interest deduction (see e.g. Hendershott and White, 2000).

Unlike these international trends, the tax-favoured status of owner-occupied housing in the Netherlands has risen during the past decades. In particular, the tax on imputed rents has gradually declined in recent years, while the mortgage interest deduction from the income tax was maintained. Figure 1 reveals that this — together with a surge in house prices — has raised the budgetary costs associated with home ownership for the Dutch government. Indeed, between 1995 and 2005, the foregone tax revenue associated with the deductible interest in mortgage debt rose from 5 to 11 billion euro. At the same time, the total revenue from the tax on imputed rents remained constant at around 2 billion euro. The implicit subsidy on home ownership in The Netherlands today is therefore generous. This holds also in an international perspective. Figure 2 shows this on the basis of the difference between the after-tax and pre-tax interest rate on mortgage debt. The large negative tax wedge for the Netherlands suggests a relatively high subsidy rate on owner-occupied housing compared to other countries.

In light of the high and rising costs of the tax-favoured treatment of home ownership, there has been considerable debate in the Netherlands on reforming the system. This paper assesses the current Dutch system from a welfare-economic perspective and asks whether reducing fiscal subsidies on owner-occupied housing can be welfare improving. We demonstrate that there

****This paper draws on Van Ewijk et al. (2006), which provides a more detailed analysis of subsidies on owner-occupied housing in the Netherlands and presents a number of scenarios for reform, and on Jacobs (2007), which provides a model underlying the welfare-economic analysis.

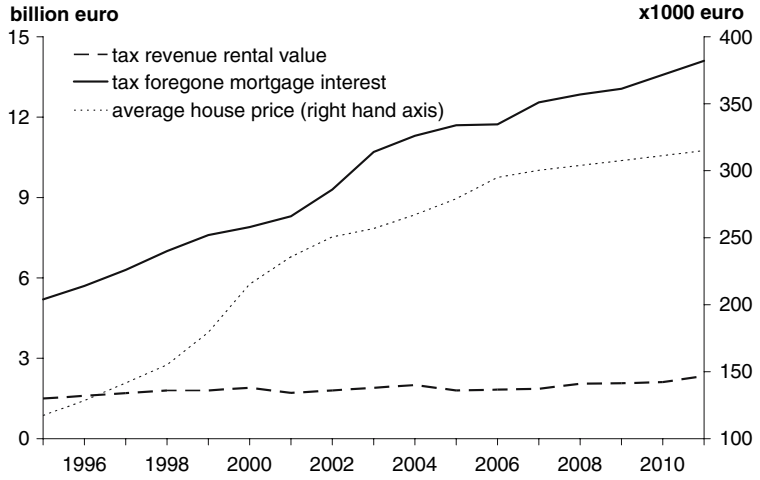

Figure 1 – Tax on rental value, mortgage interest deduction, and average house price, 1995–2011 Source: Van Ewijk et al. (2006) and projection on the basis of CPB, Economische Verkenning 2006–2011, CPB Document 129, The Hague, 2006.

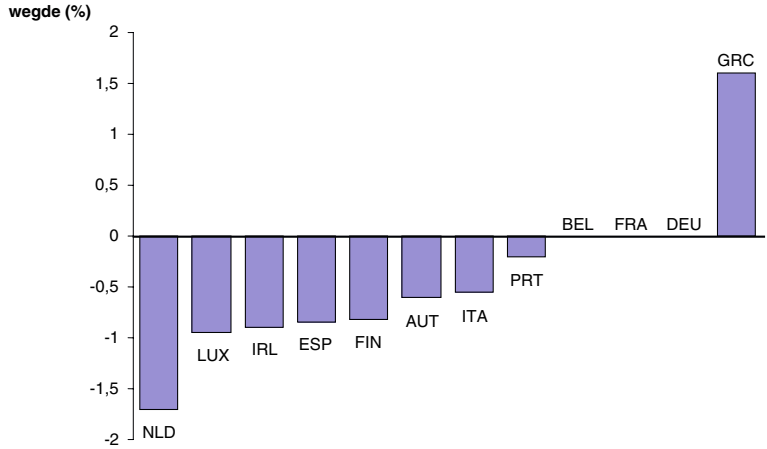

Figure 2 – Tax wedge on mortgage debt: difference between after-tax and pre-tax interest rate (Interest rates and tax rules of 1999; for The Netherlands tax rules 2001). Source: OECD, Economic survey of The Netherlands 2004, Housing Policies, Paris 2004.

are various welfare gains, or 'dividends', of moving towards a more neutral tax treatment of owner-occupied housing. In particular, overconsumption of housing can be reduced, labour market performance can be improved if the tax burden is shifted from labour to the rents associated with housing, and the pressure on land use will be reduced. Moreover, a more neutral tax treatment of owner-occupied housing avoids distortions in asset portfolios.

Our analysis starts with a description of the current tax treatment of home ownership in the Netherlands and derives the implicit subsidy on home ownership as compared to a more neutral tax treatment. Section 3 discusses possible externalities that may justify fiscal subsidies on owner-occupied housing. Section 4 analyses the optimal tax treatment of owner-occupied housing in the Netherlands. Section 5 elaborates on the welfare effects of a tax reform where the current subsidy is removed and labour taxes reduced. Section 6 discusses political economy and distributional considerations in reforming the current system. Finally, Section 7 concludes.

2 FISCAL TREATMENT OF HOME OWNERSHIP IN THE NETHERLANDS

To determine the implicit subsidy on owner-occupied housing in the current Dutch tax system, we first need to define a 'neutral' system that may serve as a bench-mark. A natural bench-mark is a system which treats housing assets in the same way as other assets. As we will discuss later, this is not necessarily the optimal system; there can be reasons to tax housing assets differently from other assets. By neutral we mean that housing assets are treated on the same footing as other assets. Indeed, for the owner of the house, the capital invested in the house yields an asset return that competes directly with other assets. If we separate the owner from the resident, the asset return is determined by the rental price for housing services that is determined on the market. For the resident, the rental price reflects the marginal utility of housing services; for the owner, it measures the asset return. If residence and ownership are in the same hands, however, there is no trade in housing services and no explicit rental price materialises. Yet, in his role as the owner of the house, an individual still faces the same arbitrage opportunities between investing in the house versus investing in other assets in the market. If the government wants to avoid distortions in the asset portfolio of households, it should treat the implicit return on housing assets as it were a return on other assets. Indeed, neutrality calls for the taxation of imputed rents from housing. And, the costs of acquiring the asset should then be deductible.

In the Netherlands, most asset returns are taxed under a presumptive system. In particular, the government presumes a 4% nominal rate of return on the net value of assets, i.e. corrected for debt, which is then taxed at a proportional rate of 30%. The presumptive return on capital income is taxed separately from labour income, which is subject to a progressive tax structure at higher rates. A neutral treatment of owner-occupied housing would apply this presumptive capital income tax to the imputed return on housing assets. Hence, the value of the house minus the mortgage loan should be added to the asset portfolio and a presumptive return of 4% should be taxed at a rate of 30%. We define this as a neutral tax treatment of owner-occupied housing.

The system in the Netherlands deviates from the neutral system in two major ways. First, owner-occupied housing is not subject to the tax on capital income but to the progressive tax on labour income. Second, the net asset return is negative on average due to the combination of a low imputed rental rate and a full deductibility of nominal interest costs on mortgages. The imputed rental rate in 2006 ranges only up to 0.6% of the housing value, with a maximum of van 8 900 euro per year. The deductible nominal interest on mortgage loans usually exceed 0.6%.[1] Hence, home ownership creates a tax deduction on balance, i.e. an implicit subsidy, instead of a tax liability. As a consequence, the current system does not raise revenue, but involves a budgetary cost to the Dutch government.

The implicit subsidy on owner-occupied housing can be measured by comparing the current system with the neutral system in which the own house is treated similarly as other household investments and savings. The current mortgage interest of 26 billion euro in 2006 is deducted against an average tax rate of 42%. This creates a budgetary cost of approximately 11 billion euro. The tax on the imputed rental value raises approximately 2 billion euro (see Figure 1). Finally, there is a foregone tax payment on the net value of housing assets under the presumptive capital income tax. For a net asset value of approximately 650 billion euro, the tax liability would be 8 billion euro. Together, the income tax is thus responsible for a net subsidy on owner-occupied housing of $11-2+8=17$ billion euro, as compared to a neutral system. Yet, the Dutch government also levies a stamp duty of 6 % on housing transactions. This tax raises about 3 billion euro in 2006. Correcting for this, we obtain a net subsidy on owner-occupied housing of 14 billion euro per year.[2]

We can express the fiscal subsidy as a fraction of the return on investments in owner-occupied housing, using the King-Fullerton methodology. The imputed rental rate on owner-occupied housing can thus be obtained from the arms-length price for explicit market transactions and reflects the asset return at which the owner is indifferent between investing in his own house or investing in other assets. Following Poterba (1984), we compute the rental rate (R) as $R=(r+p)+d+c-g$. The imputed rental rate contains four components, for which we give a back-of-the-envelope computation as in Van Ewijk et al. (2006). The first term, $r+p$, is the ordinary return on housing assets. It reflects the return on other assets with the same risk profile. Assuming a nominal interest rate (r) of 4% and a risk premium for housing assets (p) of 3%, the normal rate of return on housing assets would be

1 Households who have no interest deduction are exempt from the tax on the presumptive rental rate. In 2007, the imputed rental rate has been reduced from 0.6% to 0.55%.

2 Local property taxes on owner-occupied housing raise about 2 billion euro. As these can be seen as benefit taxes, i.e. taxes to finance public services that benefit households in proportion to their contributions, we ignore local taxes in the rest of our analysis (see also Poterba, 1992).

7%. The second term, d, reflects depreciation. It is set at 0.4% of the value of the house. The third term, c, reflects annual costs of maintenance (0.9%), insurance (0.1%) and transaction costs (0.3%). Together, these costs add up to 1.3%. Finally, we subtract the capital gains due to the rise in housing prices, g. It is set at 3%. The imputed rental rate therefore equals 5.7%. This comes close to rental rates observed in the free rental market in the Netherlands (see Van Ewijk et al. (2006)). In 2006, the gross asset value of the owner-occupied housing stock is estimated at 1150 billion euro. At an imputed rental rate of 5.7%, it leads to a total rental value of 66.5 billion euro. The implicit subsidy of 14 billion euro thus amounts to approximately 20% of the implicit price of owner-occupied housing. Put differently, the net subsidy reduces the user cost for the home owner from 5.7% of the housing value to 4.5%.

3 EXTERNALITIES FROM HOME OWNERSHIP

What can be reasons for the government to subsidise owner-occupied housing? One argument can be positive externalities. For instance, homeowners may invest more in the maintenance of their house and garden than tenants, house owners may support local schools more, and they might be better in child rearing. This generates externalities if not only the owners benefit (i.e. those who bear the cost of these activities) but also the others in the neighbourhood. If tenants do not take these positive spillovers into account, there would be underinvestment in house maintenance, school support and child rearing. The government may internalise these externalities by stimulating owner-occupied housing through subsidies.

A number of empirical studies investigate externalities of owner-occupied housing. Glaeser and Shapiro (2002) find that positive neighbourhood effects from house maintenance are statistically significant in the US, albeit small in economic terms. Hendershott and White (2000) discuss several studies for the US reporting significant positive effects of home ownership on children's cognitive and behavioural outcomes. The problem with these studies is that the estimates may suffer from selection biases and endogeneity problems. It is indeed difficult to control for other household characteristics that are correlated with home ownership and also affect child outcomes.[3]

While positive externalities may justify subsidies on owner-occupied housing, Oswald (1996) argues that home ownership also causes negative externalities. In particular, homeowners are less mobile than tenants and, therefore, less willing to move to jobs when they become unemployed. Indeed, a 10%-point increase in home ownership leads to a 2%-point increase in aggregate

3 If the government aims to stimulate home ownership as such, there is no reason to link the subsidy to interest payments on mortgage loans. Rather, a transfer conditional on home ownership would be better targeted on the goal of stimulating ownership.

unemployment. This would justify a tax, rather than a subsidy on home ownership.

Whether we should subsidise home ownership also depends on subsidies on rental housing. In the Netherlands, the social housing sector is heavily regulated through means-tested rent assistance and rent controls, which push rents below market rates. The total amount of explicit and implicit (rent controls) subsidies on publicly controlled rental housing are of similar size as the subsidies for the owner-occupied housing (Ter Rele and Van der Steen (2001)). This could explain why home ownership in the Netherlands is relatively small compared to other countries and why a free rental market is virtually absent. Higher income groups may be locked in the rental sector due to the caps on rental rates. Subsidies on owner-occupied housing may then be seen as an indirect instrument to offset distortions induced by rent assistance and rent controls. These distortions can be fought more directly, however, by removing them with reforms in social housing, rather than by introducing distortions in purchase of owner-occupied housing. Moreover, rent assistance only applies to people with low incomes, because higher incomes are usually not eligible to rent assistance.

On balance, the literature on externalities does not provide strong arguments for fiscal subsidies on owner-occupied housing. We therefore proceed in the next section by ignoring externalities.

4 OPTIMAL POSITIVE TAX ON HOUSING

A partial equilibrium analysis of the housing market is insufficient to understand the welfare implications of housing subsidies. Subsidies on housing boost the demand for housing services and raise housing prices if the elasticity of supply is less than infinite. This may affect other markets as well. For instance, housing subsidies can affect the labour market. Moreover, if they are financed by distorting income taxes, this depresses labour supply. Housing subsidies can also influence capital markets by distorting the asset portfolio between housing and other assets or by affecting saving decisions. Finally, housing subsidies put pressure on the use of land, which is scarce in the Netherlands.

To understand the full welfare impact of housing subsidies, we need a general equilibrium perspective where labour markets and saving decisions are jointly analysed with the housing market. This section discusses such a general equilibrium perspective (see Jacobs (2007), for a formalisation of some aspects). We abstract from a number of complications to keep track on the key interactions between markets. Moreover, we focus on those interactions that are relevant as they may yield first order welfare effects. We assume — otherwise — perfect housing and labour markets, and ignore externalities or non-separabilities that may justify subsidies or taxes on housing in a sec-

ond-best setting with existing labour and capital-market distortions.[4] Moreover, we assume a small open economy in which the international capital market fixes the real interest rate. Consequently, there are no general equilibrium repercussions of the fiscal treatment of housing on the real interest rate. Labour is immobile internationally.

Special to the housing market is that there can be land and location rents due to limited supply of land or location-specific factors. Hence, land and location are similar to a fixed factor in the production of housing. Rents from land and location end up in housing prices (Ricardo, 1817). The government uses distorting tax instruments to raise revenues so as to finance public goods. The government will seek the combination of labour taxes, capital income taxes, and housing taxes/subsidies to minimize the deadweight loss of meeting the government revenue requirement. How does the optimal tax treatment of housing look like in this second-best world?

To answer this question we first make an assumption regarding the desirability of capital income taxation. For reasons that are beyond the scope of this paper, we assume that the optimal capital tax is positive.[5] The optimal structure of labour and capital taxes strikes a balance between labour market distortions and saving distortions. The more capital (labour) responds to higher taxes, the higher (lower) will be labour taxes relative to capital income taxes. Under normal conditions, positive labour and capital income taxes are optimal.

The optimal tax/subsidy on housing will depend on land or location rents in housing. Under a perfectly elastic housing supply, these land or location rents are zero. In that case, the optimal housing subsidies are zero as long as we assume that externalities are absent and housing is equally complementary to leisure as ordinary consumption goods. In that case, there are no efficiency reasons to differentiate between housing and other consumption. A uniform consumption tax (or equivalent: a labour income tax) would minimise distortions in labour supply. Housing subsidies (taxes) would only create distortions by causing suboptimally high (low) consumption of housing.[6]

If housing supply is less than perfectly elastic, e.g. due to limited availability of land or locations, there are pure rents associated with housing. It will

4 More specifically, household preferences are required to be weakly separable between housing consumption and leisure demand. If housing consumption is more complementary to leisure than other consumption, the government wishes to tax housing so as to reduce to tax burden on labour effort (and vice versa), see e.g. Corlett and Hague (1953).

5 See e.g. Gordon (2000) for a review of arguments for capital income taxation. Portfolio distortions with human capital accumulation due to the presence of labour income taxes also render a positive capital tax optimal (Jacobs and Bovenberg (2007)).

6 Newly constructed houses are subject to value-added taxes. These are a one-off tax on the flow of services provided by housing assets. The value-added tax is therefore neutral between housing and other consumption, which is also subject to tax.

then be optimal to tax housing services so as to implicitly tax the rents from land and location. This policy helps to reduce the distortions associated with taxes on labour and capital. With a completely inelastic supply of housing, the housing tax will not distort the allocation between housing and other consumption as the consumer price of housing is unaffected by the tax. Housing taxes are therefore lump-sum taxes that create no distortions. However, as long as the elasticity of housing supply is positive, the housing tax will distort the consumption package of goods and housing services by raising the price of housing consumption. In that case, the government will optimally strike a balance between, on the one hand, impose a tax on location-specific rents and, on the other hand, minimize distortions in the mix between housing and other consumption. Irrespective of the magnitude of the housing supply elasticity, however, it is optimal to impose a tax on housing, not a subsidy.

Ideally, the government taxes land rents directly through appropriate targeted instruments. Then, the government does not need to introduce second-best instruments, which distort the allocation of consumption. Indeed, if the government has sufficient information to implement taxes on land or location rents directly, the case for a housing tax is lost. Unfortunately, capturing the rents by specific taxes is not an easy task. For instance, rents vary across locations, e.g. being high in urban areas and low in the periphery. If direct instruments are not available to tax location-specific rents, taxes on housing are second-best instruments to indirectly tax land and location rents.

There is another distortion that requires attention: investment in housing. Housing supply may be particularly inelastic in the short run when house owners have made irreversible investments. The housing tax thus not only imposes a tax on land rents, but also involves a one-off levy on the existing capital stock. This is non-distortionary only if it does affect the credibility of government policy. If not, it will lead to the familiar time-inconsistency problem of capital taxation and distort investment in housing. With respect to new investment in housing, the tax system should optimally avoid distortions in asset allocation. From a buyer's perspective, a house represents an investment with a long time horizon. Indeed, houses make up a considerable part of household's asset portfolios. In principle, the returns to these investments should be taxed at the same rate as ordinary assets to avoid asset substitution in household portfolios. Large asset substitution would erode the tax base of the capital income tax.[7] Moreover, the tax on housing capital will avoid distortions in saving decisions as long as a positive tax on capital income is part of the optimal tax structure. Hence, the optimal tax treatment of new housing capital is identical to that of ordinary savings.

7 Mandatory pension saving, liquidity constraints, and investments in human capital will cause less than perfect asset substitution in actual household portfolios.

5 REFORM TOWARDS A NEUTRAL TAXATION OF HOUSING

In the current situation in the Netherlands, housing is subsidized, not taxed. Reducing this subsidy and recycling the revenue in the form of lower labour taxes may yield a double dividend by reducing allocation distortions in consumption and mitigating labour market distortions. This section discusses a shift towards a neutral system whereby the subsidy on housing is abolished.

To understand the welfare effects of the reform, first consider the case in which there are no land rents associated with housing supply. This occurs if the elasticity of housing supply is infinite. Overconsumption of housing is eliminated by the reform, which yields a direct welfare gain, i.e. a housing dividend. With a perfectly elastic supply of housing, the reform does not yield a second dividend, i.e. on the labour market. The reason is that a housing subsidy and a lower income tax yield equivalent effects on labour supply. We therefore concentrate on the housing dividend.[8] Following Poterba (1992), we compute the welfare costs of the housing subsidy by means of the deadweight loss (DWL), expressed in terms of the subsidy: DWL = 1/2 ε t, where ε reflects the compensated demand elasticity for housing and t stands for the subsidy in terms of the consumer price of housing services. Poterba (1992) adopts an elasticity of -0.8 based on estimates for the United States. The elasticity is conditional on home ownership, i.e. it does not capture the distortion between home ownership and renting. Using a subsidy rate of 0.2 and an elasticity of -0.75, we arrive at a deadweight loss of 7.5% of the subsidy. Given a total subsidy of 14 billion euro, this boils down to a welfare cost of around 1 billion euro due to overconsumption of housing.

As a second case, consider inelastic supply of housing. Now, housing creates land and location rents that are capitalized in housing prices. These can efficiently be taxed away. Eliminating the subsidy on the location rents will therefore enhance the efficiency of the tax mix. Indeed, as the revenues from lower housing subsidies are used for lower tax rates on labour, this stimulates employment as households substitute consumption for leisure. The impact depends on the compensated elasticity of labour supply (since there is no income effect as long as the reform is budgetary neutral). A meta-analysis of the empirical literature by Evers et al. (2005) suggests that the uncompensated elasticity of labour supply is approximately 0.1 on average for men and 0.5 on average for women. Income effects are usually small, so that the compensated elasticities only slightly exceed these values. We take an average value for the compensated labour supply elasticity of 1/3. With a housing subsidy in the Netherlands of 14 billion euro, Dutch income tax rates can be cut by 6%-points, thereby leaving the public budget balanced. It would raise labour

8 We assume that land is properly priced (reflecting the cost of alternative uses), so that there is no first order welfare effect in the land market.

supply by $1/3 \times 6 = 2\%$. The extra employment will raise GDP in the Netherlands by a similar amount.[9] To determine the welfare effects of this rise in output, we should correct for the decline in leisure. The welfare gain from an extra hour of work can be measured by the tax wedge, i.e. the difference between labour costs for employers (measuring the value of extra production) and the after-tax real wage for the employee (measuring the value of foregone leisure). Assuming a tax wedge of direct and indirect taxes of 60% in the Netherlands (a direct tax of 40% and an indirect tax of 20%), the welfare gain would be $0.6 \times 2\% = 1.2\%$ of GDP. Thus, assuming perfectly inelastic housing supply, eliminating the fiscal subsidy on housing and using the receipts to lower labour income taxes, increases welfare by 6 billion euro in 2006.

The elasticity of housing supply plays a crucial role for the welfare effects of lower housing subsidies. The first welfare dividend in housing consumption rises in the elasticity of housing supply and is zero if the elasticity is zero; the second welfare dividend in the labour market falls in the elasticity of housing supply and is zero if the elasticity is infinite. For a housing supply elasticity between zero and infinity, there will always be a double dividend, i.e. welfare improves on account of smaller distortions in the housing market and smaller distortions in the labour market. Empirical studies that directly estimate housing supply elasticities report a rather large spread. For instance, Harter-Dreiman (2004) finds an elasticity in urban areas between 1 and 2, but a value between 2½ and 4½ in rural areas in the US. For the UK, Meen (2001) argues that elasticities are typically smaller, usually below 1. Swank et al. (2002) find that the elasticity of housing supply in the Netherlands is also relatively small, probably due to a strict policy regarding the use of land for construction purposes. Berger et al. (2000) and Capozza et al. (1999) find that subsidies on owner-occupied housing get fully capitalised in land prices, at least in urban areas, which also suggests that housing supply is inelastic. If this is true, the second dividend associated with the labour market will primarily determine the welfare benefit from smaller housing subsidies.

The labour market may also be affected by the transaction tax on houses. Indeed, the negative externalities emphasised by Oswald (1996) are due to the reduced mobility of homeowners. The transaction tax reinforces these effects on unemployment by further reducing household mobility. Moreover, there is a direct deadweight loss associated with reduced residential mobility. Van Ommeren and Van Leuvenstein (2005), for instance, report negative effects of the transaction tax on the number of transactions by existing homeowners. The transaction tax thus causes a deadweight loss: using the elasticity of 8

9 In a small open economy, the capital stock will immediately start to increase in response to the larger supply of labour so as to prevent the real return on capital falling below world levels. With constant returns to scale in production, output therefore expands at the same rate as labour supply.

reported by Van Ommeren and Van Leuvenstein and a tax rate of 6%, the deadweight loss equals $1/2 \times 8 \times 6\% = 24\%$ of the revenue of the transaction tax. This is approximately 0.7 billion euro.[10]

Besides potential dividends in housing and labour markets, a third dividend occurs when distortions in asset portfolios are reduced. This holds irrespective of the supply elasticity in the housing market. A distorted asset allocation with too high levels of debt will lead to a higher than optimal risk exposure for households, which involves a welfare cost. A quantitative analysis of this distortion would require the modelling of the risk-return trade-off, which is beyond the scope of this paper.

6 THE POLITICAL ECONOMY OF REFORM

Although a reform of the tax-favoured treatment of home ownership in the Netherlands towards a neutral system is expected to deliver aggregate welfare gains, it may be hard to implement such a reform due to political constraints. The effective fiscal subsidy for every household depends on the amount of debt as a share of the housing value, the type of mortgage loan, the interest rate, and the marginal tax against which the mortgage interest is deducted. Due the large dispersion in home ownership, mortgage debt and income levels across households, there will be many winners and losers from any type of reform. Reform packages should address these issues. Although compensation in the case of subsidy reform might in principle be possible, the multidimensional character of the dispersion of the income effects makes it generally impossible to avoid groups of households suffering losses.

A gradual introduction might help to mitigate large income effects. However, also future reforms will be immediately capitalised in current house prices because people will anticipate future policy changes in the housing market. Only a very gradual introduction may avoid a significant reduction in prices. For instance, the UK has gradually phased out its housing subsidies between 1974 and 1999. In 1974, it introduced a fixed nominal ceiling for tax deductible mortgage debts. The value of the ceiling was gradually reduced by inflation and in 1999 the mortgage interest tax relief was abolished.

Another option to smooth the distributional effects is by making a distinction between 'old' and 'new' cases. It avoids the double hit of the abolishment of housing subsidies for current owners, i.e. the direct loss of subsidies in their income and the indirect loss through the fall in the value of their property. If only entrants would fall under the new regime, the direct effect is reduced for existing home owners.

10 O'sullivan et al. (1995) report that the welfare costs of a tax on housing transactions is always larger than a tax on home ownership.

Alternatively, a new fiscal regime could be made contingent on the amount of residual debt, i.e. the (new) housing value minus the (old) mortgage debt. This would insulate homeowners with large debts and no assets. Falling house prices can be absorbed more easy by homeowners with small debts and large capital gains on their homes. Indeed, an exemption based on residual debt will accomplish this.

Yet another way to confine the distributional effects is to reform at the same time the social housing sector. Such a comprehensive reform of housing policies would raise the opportunities for compensation and introduces options for feasible package deals. Simultaneous reform in all segments of the housing market would also magnify the welfare effects as it would also eliminate distortions caused by social rental policies.

7 CONCLUSIONS

This paper assesses the welfare effects of the current tax-favoured treatment of home ownership in the Netherlands. We compare the current system with a neutral system of owner-occupied housing and estimate the current average subsidy at 20% of the imputed rental value of the house. The literature does not offer strong support for subsidies on the basis of positive external effects from home ownership and some studies even point to negative externalities. On the contrary, the theory of optimal taxation suggests a tax rather than a subsidy on housing. The welfare costs of the subsidy associated with distortions in housing consumption and employment are estimated between 1.7 and 6.7 billion euro, depending on the elasticity of housing supply. As this elasticity is probably small in the Netherlands due to strict spatial constraints, the effects is probably closer to 6.7 billion euro. While this welfare gain is substantial, political constraints tend to prevent the government from reaping these benefits within a short time horizon.

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