e-mail:

web: www.donner.at/christian

Abstract Research Project

FORMS OF SUPPLY-SIDE SUBSIDIES IN THE RENTAL HOUSING SECTOR

Aim

The aim of the present research project was the description and analysis of various forms of supply-side subsidies for rental housing, provided in Austria and in other EU countries. In particular, operation and effects of these supply-side subsidies were to be studied.

Contents / approach

Essentially, the following forms of supply-side subsidies were studied:

- Provision of land
- Construction cost grants
- Interest subsidies
- Annuity subsidies
- Repayable grants
- Preferential loans
- Tax allowances
- Operation subsidies

Implementation models were devised for all supply-side subsidies where this seemed feasible. On the background of varying capital market interest and inflation rates the outcome of these models was presented both in spreadsheets and graphs. Over 150 different variants were thus analysed.

In each case, nominal and real expenditure of subsidy provider and of subsidy recipient were established. Also, the capital cost and effort rate in relation to average household incomes were presented for a time span of 25 years. In addition, the real subsidy content of provided public funds and the real savings to the beneficiary compared to full capital market financing were computed.

The study concludes with a brief presentation of actually applied supply-side subsidies for rental housing in EU member states. It comprises twelve western European (AT, BE, DE, DK, FI, FR, IE, IT, NL, PT, SE, UK) and five central east European countries (CZ, HU, PL, SI, SK).

Essential findings

The most important forms of interest subsidies are the following:

- Constant percentage points (ZZ 1)
- Constant share of capital market interest (ZZ 2)
- Difference to pre-determined net interest rate (ZZ 3)
- Degressive percentage points (ZZ 4)
- Degressive share of capital market interest (ZZ 5)
- Difference to pre-determined progressive net interest rate (ZZ 6)

Models ZZ 1 and ZZ 4 are fully independent of the current capital market interest rate and inflation rate. Depending on their actual development, periods of excessive subsidisation or of excessive effort rates may result. Application of such interest subsidy models seems to be unwarranted both on economic and on housing policy grounds.

Pre-determination of a fixed net interest rate of eg 4.0% (model ZZ 3) does also not take into account macro-economic factors such as inflation and capital market interest rates and may lead to wildly fluctuating subsidy expenditure volumes.

Even model ZZ 6 does not realistically reflect capital market interest rates and may progressively cause an excessive effort by the borrower. On the other hand, model ZZ 5 seems rather arbitrary and does not facilitate a clear evaluation of its effectiveness.

The relatively effective model ZZ 2 defines the subsidy as a constant share and of capital market interest but even in this case, higher interest rates may lead to excessive effort rates.

Similarly to interest subsidies, annuity subsidies may be defined in various forms:

- Fixed percentage share of loan capital (AZ 1)
- Fixed percentage share of capital market annuity (AZ 2)
- Difference to a pre-determined net annuity (AZ 3)
- Degressive percentage share of loan capital (AZ 4)
- Degressive percentage share of capital market annuity (AZ 5)
- Difference to pre-determined progressive net annuity (AZ 6)

The first group (AZ 1 to AZ 3) is based on formulas, which establish the amount of the subsidies and which do not change over time. The second group (AZ 4 to AZ 6) determines different mechanisms to ensure progressive net expenditure.

On a background of medium and constant capital market interest, the first group of subsidy models provides fairly similar results. Also, public subsidy expenditure is almost equal and the effort rate declines in all three cases from the initial maximum of 25 per cent to a very low final figure, which indicates progressively excessive subsidisation.

However, faced with low or high capital market interest rates, the first three annuity subsidy models differ substantially. Public expenditure of model AZ 1 heavily depends on the market interest, while model AZ 2 remains largely unaffected.

At the same time, with higher market interest, models AZ 1 and AZ 2 lead to an excessive initial burden, while model AZ 3 avoids this phenomenon. Therefore, it might be called more balanced.

Annuity subsidy models AZ 4 to AZ 6 cause similar public expenditure at intermediary capital market interest. However, with low or high interest rates, only model AZ 5 remains stable, whereas model AZ 4 and particularly model AZ 6 fluctuates strongly with market interest rates. All three models in this group cause the initial effort rate to diminish over time.

Particularly remarkable seems the strong variation of real subsidy expenditure in models AZ 1 and AZ 6, depending on capital market interest. With higher rates, expenditure in model AZ 1 varies contrary to, while that of model AZ 6 moves parallel to the level of interest and inflation rates. Generally speaking, real subsidy expenditure of models AZ 1 to AZ 3 is higher than that of group AZ 4 to AZ 6.

A fundamentally different approach to housing finance subsidisation would be to combine capital market loans with annuity subsidies in such a manner, that the net effort rate remains at constant 25 per cent of household income.

In this case, required subsidy expenditure turns out relatively low and tends towards zero. With intermediary and higher interest rates, higher subsidies would be required during the early years, but they would decrease fast during the latter years of the loan period and might even become negative towards its end. Subsidy expenditure is much lower but fluctuates slightly with varying market interest and inflation rates.

Finally, in view of the tilt effect of traditional mortgage loans, one might introduce constant annuities in real terms. With this, subsidy expenditure remains also constant in real terms for their entire lifetime of the loan and amounts to only about two-thirds of real financing cost.