Comment on Jonas Agell, Lennart Berg and Per-Anders Edin: The Swedish Boom to Bust Cycle: Tax Reform, Consumption and Asset Structure

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This is a very readable and useful investigation into the development of Swedish consumption and the role of the tax reform as a determinant of consumption.

1. Intertemporal substitution

The authors use the Euler equation approach to investigate the interest rate sensitivity of consumption and find small effects. I have little to add to this except to note that there was considerable non-price rationing in the Swedish credit market during the period under study. Interest rates were regulated in a large part of the period and quantitative regulations (liquidity ratios and loan ceilings) were used to force banks to hold government and housing bonds. The authors allow for a fraction of credit-constrained consumers, who simply consume what they earn, but they do not take changes in the availability of credit into account. Given the extensive regulations, one may be looking for the needle in the wrong hay-stack when trying to estimate an intertemporal elacticity of substitution

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¹ For description and analysis of regulations and deregulation, see e. g. Gottfries et al. (1989), Englund (1990), Gottfries et al. (1992)) and Werin (1993).

² Credit variables have explanatory power in the consumption functions estimated by Palmer (1981) and Bentzel and Berg (1983). Simultaneity problems make the causal interpretation difficult, however.

on this dataset. But the result is in line with those obtained for other countries, where credit markets have been less regulated, so we should probably accept the conclusion.

2. House prices and consumption

The authors find an interesting positive relation between capital gains on houses and consumption, and this is the basis for their argument that a capitalisation effect in the housing market is the most plausible mechanism through which the tax reform affected consumption. The argument is interesting, but I have some reservations.

First, I prefer empirical specifications that stay closer to theory. The simplest model of consumption tells us that the main determinant of consumption is consumer wealth, defined as the present value of current and future income from real, financial and human capital. Hence, incomes which are perceived as permanent should be consumed to a much greater extent than temporary incomes. Since labor income would typically be perceived as permanent, the propensity to consume out of labor income should be close to unity. Capital gains, on the other hand, are temporary almost by definition, and hence the consumer should only consume a small fraction of them.³ In the simplest model, the consumer would consume the real return on the assets.

Thus, to stay closer to theory, *total* wealth should be included in the equation and hence the propensity to consume out of capital gains on houses should be the same as the propensity to consume out of previously existing housing wealth. But equation 1 in Table 5 says that the short-run propensity to consume out of financial wealth is 3 percent and the propensity to consume out of unexpected capital gains on houses is 3.5 percent⁴, while the propensity to consume out of previously existing housing wealth is zero by assumption. From an economic point of view it is hard

³ If an individual makes a capital gain one year, the individual would typically not expect to make a similar capital gain the next year. The prediction that capital gains are saved to a larger extent than other incomes explains much of the difference between the Haig-Simons and more conventional savings ratios plotted in Figure 1 in the paper. We should expect these measures of saving to differ widely.

⁴ These figures refer to the aggregate consumption function. They are calculated using the coefficients in Table 5, the ratio of housing wealth to consumption in 1980 (3.9) and assuming a savings ratio of 5 percent.

to understand why the propensity to consume out of various forms of wealth should differ in this way.

Alternatively, if this is what the data say, how can we understand it? One possibility is that a substantial fraction of households were credit rationed and consistently borrowed as much as they could with houses as collateral. More careful theoretical and empirical analysis is needed to support this argument, however.

Second, there is a simultaneity problem with respect to the house price variable: an increase in consumption will typically be associated with an increased demand for housing services, and since supply is sluggish this leads to increasing house prices. This problem is acknowledged by the authors. I think that it is a serious one, and that much of the causality probably goes the other way. I cannot think of a good way to deal with the problem, however.

A third reservation is that state revenue from increased effective taxation of houses was used to finance cuts in other taxes, particularly income taxes. Hence, for the average individual, the fall in the value of the house due to higher future taxes on the house corresponded to an increase in future disposable labor income due to lower income taxes. The average individual should not feel worse off because of this, so falling house prices due to the tax reform cannot explain why consumption decreased in absolute terms – although they can explain a decrease in consumption relative to disposable income.

3. Portfolio shifts versus changes in saving

One of the most interesting aspects of the paper is the documentation that much of what is conventionally described as variations in "saving" is really portfolio shifts between financial assets, durables, pension schemes etc. Further, the shifts around the time of the tax reform appear to be general rather than specific to certain income groups, and there is evidence that they have to do with changes in relative returns. I agree with the authors' conclusion that this is probably the area where the tax reform mattered most.

References

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