

Macroprudential Measures and Taxation in the Housing Markets

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Macroprudential measures and taxation in the housing markets

Essi Eerola¹

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Abstract: The recent financial crisis and subsequent global recession have been followed by a wave of macroprudential measures in the housing market. At the same time, governments have a long tradition of conducting tax policies which encourage households to acquire owner-housing. These tax advantages may be at least partly responsible for the need to regulate borrowing. In terms of policy, the goal should be to identify instruments that reduce the negative effects of household leverage while minimizing the welfare costs to households. Therefore, it seems important to look into the joint effects of the tax system and credit regulation.

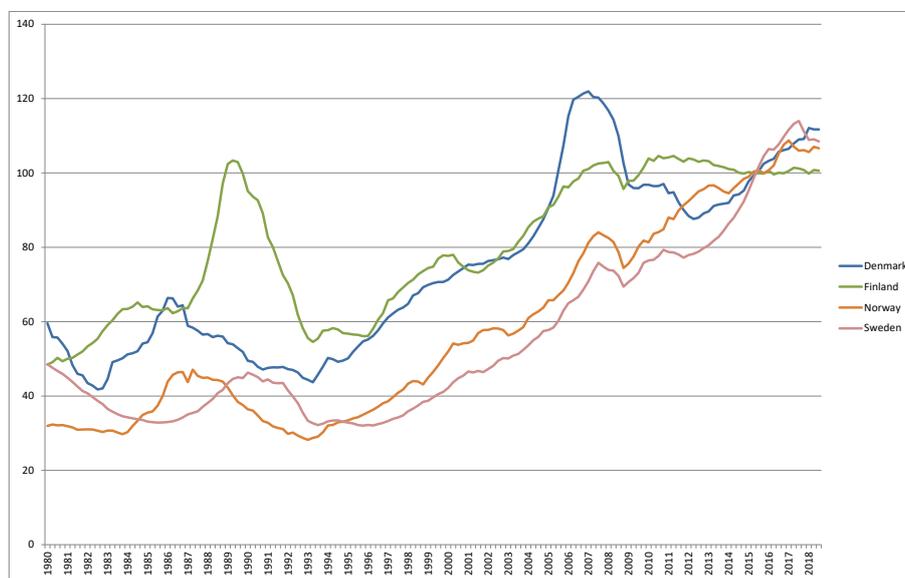
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Introduction

It is widely acknowledged that high mortgage leverage is dangerous for macroeconomic stability. This is because in most countries a large share of household wealth is in the form of housing and house prices are very volatile. As an example, the figure below shows price development in four Nordic countries where ownership rate varies between 60% in Denmark and roughly 80% in Norway.

Figure 1: Real house price index in Nordic countries (2015=100). Source: OECD House price indicators.



Since the recent financial crisis and subsequent global recession, macroprudential measures aiming at reducing excessive household leverage and mitigating house price cycles have become common.² For instance, 14 EU countries adopted some type of loan-to-value (LTV) limit between 2010 and 2016.³ The rationales are related to the existence of externalities, spillovers and contagion effects between different markets, in particular from the housing market to aggregate consumption.

Financial stability need not be the only motivation for housing market macroprudential measures. Excessive household leverage may have adverse aggregate effects even if it does not threaten financial stability. When households are highly leveraged and most

² See Crowe et al. (2013) for a discussion of the relationship between house price boom-bust periods and financial crises in various countries and the policy options, including monetary policy, fiscal policy and macroprudential policy.

³ ESRB (2018) gives a detailed description of residential real estate instruments in Europe. BIS (2018) discusses the conceptual and practical issues related to implementation of macroprudential policies.

of their wealth is in the form of housing, a negative house price shock causes a large decline in household net wealth. This may induce highly leveraged households to reduce consumption and result in increased unemployment and recession or prolonged sluggish growth. This mechanism can be expected to be strong precisely when households do not default on their loans.⁴

At the same time, governments have a long tradition in tax policies which encourage households to borrow in order to acquire owner-housing. These tax advantages have direct effects on the housing market. By creating incentives for acquiring owner-housing even with large mortgages, the tax advantages may be partly responsible for the need to regulate borrowing.

One possible reason for the sharp distinction between macroprudential measures and tax measures is institutional. Macroprudential policies are being conducted by financial supervisory bodies whose aim is to safeguard financial stability. Tax policies in turn are subject to approval by the parliaments where, among other things, the distributional effects of the tax reform proposals are subject to thorough discussion. This note argues that from the aggregate welfare perspective a more integrated approach would be useful.

What do we know about the demand-side credit measures?

Housing market specific macroprudential measures can be divided into supply-side policies aimed at banks and demand-side policies aimed at households. The demand side measures include different types of loan-to-value (LTV), debt-service-to-income (DSTI) and debt-to-income (DTI) rules, sometimes also maturity caps and amortization requirements. The effects of these types of measures operate through two different channels: First, they have a direct impact on borrowing and thereby housing demand of constrained households. Second, they shape house price expectations and thereby influence the demand for housing also for households that are not directly affected by the measures.

Researchers studying the effects of these measures face several challenges. First, as the measures are typically implemented because of alarming housing market conditions, it is difficult to evaluate how the market would have evolved in the absence of the measures. Constructing such counterfactual is, nonetheless, necessary when assessing the effects of the measures. Second, the measures are often implemented in conjunction

⁴ For a general discussion of the recent US experience, see Mian and Sufi (2014).

with other policies which makes it difficult to isolate the effect of any given measure from other policy measures. Third, it is difficult to assess how important circumvention of measures is, be it credit expansion in less regulated financial institutions or manipulation of the rules. Finally, it may be difficult to assess the stringency of the measure especially without access to household level data revealing the distribution of leverage.⁵

Most studies looking into the effects of the demand-side credit measures consider the measures as part of a broader setting where several different types of measures are studied across different countries using aggregate data.⁶

When trying to understand the mechanisms and causal effects going beyond cross-country analysis is needed. A recent example towards this direction is van Bakkum et al. (2019) who study the effects of an LTV limit in the Netherlands. As a first step, the authors show that the LTV limit indeed reduced mortgage leverage ratios and debt servicing cost among the affected homebuyers.

In the second step, the authors focus on outcomes more directly relevant for household welfare. They conclude that the LTV limit reduced household liquidity in the short-run, led to fewer defaults but also reduced transitions from rental housing to owner-housing. The reduction in acquiring owner-housing was largest for the most financially-constrained households. These results suggest that the LTV limit may have important distributional effects.⁷

These results also hint towards more indirect effects in the housing market. For instance, if low-income buyers withdraw from the housing market due to the LTV limit, sellers of certain types of houses may face difficulties in finding a trading partner. In the presence of matching frictions, an LTV limit reduces housing market liquidity and may therefore lead to larger idiosyncratic price dispersion and longer time-on-the-market (see, Eerola and Määttänen, 2018).

What is the role of tax instruments?

⁵ Montalvo and Raya (2019) offer an interesting account of the Spanish experience where LTV ratio regulation was tied to appraisal values, not market values. Following LTV regulation, appraisal values were adjusted to the needs of the clients rather than trying to represent the value of the property.

⁶ For a discussion of the literature, see Morgan et al. (2019).

⁷ Carozzi (2019) also finds that especially transactions corresponding to cheaper housing units decreased markedly during the financial crisis in the UK. Tightening credit conditions is a likely explanation for this change.

In most OECD countries, owner-housing enjoys a tax favored status, mainly because the return to owner-housing, the imputed rental income, usually goes untaxed while the return to financial assets is taxed at a relatively high effective tax rate. In addition, realized capital gains from the sale of principal homes are often tax-exempt or taxation of gains can be deferred by reinvesting in another owner-house (Andrews, 2011). The literature studying the effects of the distortions created by such tax systems has shown that reforms abolishing the asymmetric tax treatment would lead to substantial efficiency gains (see e.g. Gervais, 2002).

The inconsistencies in the taxation of owner-housing are also reflected in other typical features of the tax systems: Even if regarded as highly distortionary, housing transactions are typically subject to a transfer tax (for detailed discussion, see Mirrlees et al., 2011). Similarly, even if regarded as quite non-distortionary, property taxes appear to be small in most countries at least when assessed by their low revenue shares (Andrews et al., 2011).⁸

Based on existing research it seems fair to say that transaction taxes and capital gains taxes induce sizable distortions to the housing markets. Both taxes increase the cost of moving, cause lock-in and reduce residential mobility.⁹

Mortgage interest deductibility in turn lowers the user-cost of owner-housing and makes borrowing for owner-housing more attractive. Changes in deductibility tend to have a direct impact on household borrowing.¹⁰

Less is known about the potential effects of taxation on price volatility and housing market liquidity. It is possible that housing transfer taxes and capital gains taxes reduce house price volatility by reducing speculative trading. On the other hand, high transaction costs may limit the use of arbitrage possibilities and increase price volatility. By increasing the cost of upgrading they also create an incentive to buy bigger houses and may thereby increase the leverage of especially young households.

What about local conditions?

⁸ There may exist political economy reasons for favoring transfer taxes over property taxes (Määttänen and Terviö, 2018) and for favoring owner-housing over other assets (Eerola and Määttänen, 2006).

⁹ For capital gains taxation, see Shan (2011). For housing transfer taxes, see Hilber and Lyytikäinen (2017).

¹⁰ Gruber et al. (2018), Saarimaa (2010), Fjaerli (2004) find that in Denmark, Finland and Norway, respectively high-income households reduced mortgage borrowing after a reform which limited their possibilities to deduct mortgage interest payments compared to the control group unaffected by the reform. Jappelli and Pistaferri (2007) do not find the same for Italy.

The local housing market conditions ultimately determine whether the market adjusts to demand shocks through prices or supply. Especially in areas where housing supply is highly inelastic because of land use regulation or other supply constraints, one would expect changes in borrowing conditions, price of credit and taxation to capitalize into house prices. Consistent with this mechanism, Hilber and Turner (2014) find that in the UK mortgage interest deductibility has a positive impact on homeownership rates only in markets with lax land use regulation.

Land use regulation itself also directly influences house prices. It is difficult to isolate the effects of regulation from other determinants of housing supply and prices. Nevertheless, there exists evidence suggesting that the land use regulation reduces the housing supply elasticity and increases house prices and volatility (see, e.g. Turner et al., 2014; Hilber and Vermeulen, 2016).

The differences in local housing market conditions may be important in determining how dangerous household indebtedness is for financial stability. The reason is that high leverage relative to disposable income is especially problematic when house prices are increasing and volatile.¹¹ In this situation, even a small negative house price shock causes a large decline in household net wealth.

To make matters worse, in growing cities, agglomeration economies are likely to increase the value of land in central locations. Efficient land use policies may increase housing supply and thereby help reduce the consequent pressure on house prices. On the other hand, if urban planning is successful in making these central locations even more attractive, house prices can continue to increase despite increased supply.

On the demand side, many tax instruments, macroprudential measures as well as interest rates are most likely relatively inefficient in addressing the differences in local housing market conditions. One potentially interesting exception is property taxation.

In theory, future property tax liabilities affect negatively property values. Empirical studies that have been able to reliably separate the effect of property taxes from other factors influencing house prices (e.g. public services) have shown that property taxes are largely capitalized into house prices (see, Gallagher et al., 2013; Palmon and Smith, 1998). Property taxes shift the timing of the costs of owner-housing: the up-front cost in the form of the transaction price is lower, but the subsequent annual cost is higher. Therefore, property taxes would directly reduce house price fluctuations relative to

¹¹ This mechanism is explored, for instance, in Mian and Sufi (2011) who study the relationship between mortgage credit expansion and house prices in the US. See also Cloyne et al. (2018) who show that in the UK, when house prices increase, especially highly leveraged households increase borrowing by extracting equity from their home.

income or net wealth. Consequently, they could also mitigate the negative aggregate effects of house price fluctuations.

What next?

In terms of aggregate outcomes, measures aiming at reducing household leverage can be useful in two ways. Firstly, they may mitigate negative effects of a drastic reduction in private consumption due to a sudden fall in household net wealth. Secondly, they may protect banks from defaults or limit losses given default and thereby increase the stability of the banking system.

The associated welfare losses for households come in the form of reduced possibilities to smooth consumption over the life-cycle and in reduced transition from renting to owner-housing. Through these effects regulating borrowing will have distributional effects which are largely ignored in the current debate on the relative merits of the different policy options. The welfare costs related to these measures are also amplified by the current tax advantages of owner-housing.

Two separate but closely connected concerns regarding the tax favored status stand out. Firstly, it may be at least partly responsible for the need to regulate borrowing. Secondly, it may strengthen the negative distributional effects of macroprudential regulation if the borrowing constraints reduce the transition from rental housing to owner-housing.

The overall goal should be to identify instruments that reduce the negative effects of household leverage while minimizing the welfare costs to households. Therefore, it seems important to move towards looking into the joint effects of the tax system and credit regulation and to take into account that risks related to high household leverage also depend on the local housing market conditions.

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