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Mortgage debt relief after economic shocks: lessons from the pandemic



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We discuss several features of the economic and institutional environment that are important for determining the design of household debt relief programs in response to aggregate economic shocks. For example, we describe how such program features should depend on the distribution of home equity across the population, the costs of participation to borrowers and lenders, and whether a shock is temporary or permanent. In light of these factors, we analyse the Irish response to the initial COVID-19 shock, which relied on a broad extension of temporary payment breaks to mortgage borrowers. Finally, we discuss potential features of mortgage contracts that may embed some of the benefits of the COVID-19 response after future shocks without the need for policymaker coordination.

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Introduction

Debt relief policies such as the modification of mortgage contracts play a central role in responses to economic crises, as evidenced by their widespread deployment in many jurisdictions during the Global Financial Crisis (GFC). A large body of literature emerged in the decade following the GFC, assessing the appropriate design of debt relief policies. These assessments emphasised the relative merits of permanent versus temporary relief and of policies that *reduced repayment burdens*, as distinct from *writing down obligations*. Moral hazard concerns were central to many of these contributions.¹

The COVID-19 pandemic presented a new challenge to the implementation of debt relief policies. While policy after the GFC responded to problems caused by factors including inappropriate credit decisions by banks and households, the pandemic represented a truly exogenous, unexpected shock. Borrowers' repayment difficulties were dictated not by their previous borrowing decisions, but rather by income losses arising from public health restrictions and households' aversion to health risks, resulting in labour demand reductions that depended heavily on sector of employment.

How should debt relief be designed in the face of such unexpected shocks? In recently published <u>research</u>, we sketch a conceptual framework for thinking through the implications of a range of important factors for mortgage modification policy design.

The economics of mortgage debt relief

There is no single optimal form of mortgage debt relief. Rather, the appropriateness of a debt relief policy will be determined by prevailing conditions, particularly in the aftermath of large shocks to household finances. We present a framework for designing and assessing debt relief policies, based on a number of factors that have received scrutiny in the economics and finance literature since the GFC.

1. Liquidity v solvency

Are borrowers insolvent or illiquid? Where illiquidity is the primary concern, temporary measures that avoid write-downs are probably the appropriate response. Where insolvency is more prominent, as would be expected in the aftermath of a credit boom-bust cycle, write-downs may be required, particularly to mitigate moral hazard concerns in cases of widespread negative equity.

2. The degree of targeting

Policy targeting can be thought of as a trade-off between speed and precision. Targeting of policies can deliver relief more precisely to those who most require it, which may lower long-run costs of relief. However, targeting is often time-consuming, imposes up-front costs, and can be operationally burdensome. In the mortgage market, targeted debt relief would require up-to-date and detailed information on borrower finances in order to "triage" borrowers by need. These costs may discourage lenders, which often vary in their operational capacity and willingness to engage in modification at meaningful scale.²

¹ See for example Geanakoplos (2010).

² Previous research from the HAMP experience in the USA (Agarwal et al., 2017) suggests that significant implementation frictions emerge when lenders implement policy responses on a case-by-case basis: variation in lenders' rate of mortgage modification varied substantially across counties, and predicted the subsequent pace of housing market and economic recovery.

3. The cost of default to borrowers

One benefit of debt relief programmes is that they can avoid certain direct costs of default to borrowers and lenders, especially home foreclosure. The extent of these costs plays an important role in considerations of how broad and generous debt relief programmes ought to be. Higher costs generally favour a more generous debt relief policy. Relevant factors include economic costs of default to borrowers, such as lower credit scores or credit records marked by missed payments or forbearance (which will arise even if defaulted loans are modified and avoid repossession), and the costs involved in losing a house due to foreclosure, as well as losses that may be more social or psychological in nature (see Guiso, Sapienza and Zingales, 2013, and Kuchler and Stroebel, 2020).

4. Mortgage ownership and the cost of default to mortgage loan owners

Since borrowers would almost always benefit from debt relief, low rates of private debt relief are usually the result of insufficiently strong incentives among lenders, or an over-emphasis on short-term costs (Adelino et al., 2013). This can arise due to dispersed ownership of mortgage loans, which results in the mortgage market of the United States due to securitization, for example. While this issue is more prevalent in cases where securitization models exist, the emergence of portfolio sales in Ireland and the EU since the GFC has raised these issues on this side of the Atlantic also: the interests of the ultimate owner may deviate from those of the borrower or even the mortgage servicer.

Banks, in particular, may face regulatory capital implications from debt relief programmes. Once an adverse shock has occurred, and banks acknowledge the risk inherent in loans that are being modified, provisioning requirements will rise for these loans, as will risk-weighted asset densities, because forbearance is often used as a trigger in probability of default models that underpin risk weight calculations. The macro-finance literature makes the case that, when banks suffer shocks to profitability and capital from loan impairment, they are more likely to curtail their lending supply, which may exacerbate economic downturns (Bernanke, 1983; Chodorow-Reich, 2014).

5. Interest rates and frictions to refinancing

If mortgage interest rates respond rapidly to a decline in benchmark interest rates, monetary policy can lead to an automatic reduction in borrowers' monthly payment obligations during a downturn (Di Maggio et al., 2017). However, borrowers may have fixed rate mortgages, or variable rate mortgages which do not respond rapidly to changes in the policy rate. For fixed rate mortgages in particular, the extent to which declining interest rates help to reduce monthly debt service expenses depends in part on the ease with which borrowers can refinance their mortgages. This, in turn, affects the need for relief among borrowers facing liquidity constraints, potentially including debt relief. During periods of declining house prices and economic distress, it may not be feasible for homeowners with negative equity or without documented income to refinance their mortgages, even if such a refinancing could help both the borrower and the lender by reducing the probability of default (Beraja et al., 2019; DeFusco and Mondragon, 2020). Therefore, programmes to reduce frictions in refinancing can complement debt relief policies by permanently reducing the monthly payment obligations of some borrowers.

The debt relief response to the pandemic in Ireland and the EU

Much has been written elsewhere about the breadth and decisiveness of the fiscal and monetary response to the pandemic.³ Here, we focus specifically on the mortgage market policy response.

³ See, for example, the <u>Central Bank of Ireland Governor's Blog. 6 May 2020</u>, for an overview of the monetary policy response.

Across Europe, market-wide debt moratoria policies comprised one important dimension of support to borrowers and lenders. In Ireland, lenders responded to the pandemic by offering loan moratoria to households and businesses; these moratoria were referred to locally as "payment breaks". Subsequent guidance from the European Banking Authority (EBA)⁴ ensured that these moratoria did not oblige lenders to reclassify borrowers as having experienced elevated levels of credit risk, which greatly enhanced banks' initial resilience to the pandemic shock and avoided the capital costs that would have resulted from such a reclassification. As for debtors, the Central Bank of Ireland confirmed at an early stage that availing of moratoria would not cause borrowers to obtain a record of "missed payments" or a "restructure event" on the Central Bank of Ireland's Central Credit Register (CCR).

Moratoria were available for all borrowers, initially for three months and eventually for a maximum of six months. The adoption rate in Ireland varied across asset classes, reflecting the extent of the crisis among smalland medium-sized enterprises in particular. At the end of June 2020, a moratorium applied to almost 30% of SME lending, 17% of corporate loan balances and around 10% of mortgage lending. The share of Irish mortgages with a moratorium was around the average level among EU member states in June 2020 (European Systemic Risk Board, 2021).

Following the expiration of mortgage payment breaks in late 2020, the resilience of household finances during the pandemic became apparent. Less than 10 per cent of those on payment breaks required additional forbearance or restructuring to support their mortgage repayment capacity. This resilience is the result of the success of direct fiscal support measures in the cases of vulnerable customers, as well as the sectoral skew in the mortgage market: economic sectors that were least affected by the pandemic are those with the highest shares of mortgage borrowers.⁵

Characterising the mortgage debt policy response to the pandemic

We characterise the policy response of the Irish and European authorities in light of the factors outlined above.

A liquidity shock: In many ways, the early stages of the pandemic were a textbook example of a liquidity shock. Importantly from a solvency perspective, there were no general declines in house prices or immediate indications of a permanent reduction in households' ability to make payments. From this standpoint, the focus on temporary payment moratoria rather than loan write-offs or longer-term relief was well-suited to a crisis that appeared likely to lead to substantial, albeit temporary, liquidity shocks for individuals.

A highly non-targeted response: In Ireland, as in all EBA-compliant mortgage markets, the simple declaration by the borrower of a need for relief was sufficient to qualify for a moratorium. This reduced implementation frictions and capacity constraints within the financial sector, to the greatest extent possible. By way of context, Labonne, McCann and O'Malley (2021) estimate that between 50,000 and 60,000 SFS files were completed per year at the height of the mortgage arrears crisis in 2011-13. Given that around 80,000 borrowers availed of payment moratoria, mostly during one to two months in the second quarter of 2020, the likelihood is that any additional reporting requirements to improve targeting would have overwhelmed the capacity of lenders to administer the moratorium scheme.

⁴ "<u>Guidelines on legislative and non-legislative moratoria on loan repayments applied in the light of the COVID-19</u> <u>crisis</u>", European Banking Authority, 2 April 2020.

⁵ Central Bank of Ireland Financial Stability Review 2020:I.

Borrowers' participation costs were lowered: In Ireland, moratoria did not lead to a change in borrowers' credit records on the Central Credit Register, meaning the policy response did not entail a missed-payment classification for borrowers, which is likely to have greatly increased the attractiveness of the scheme. While monthly repayments rose for borrowers who did not or could not extend their mortgage term, the design was such that the net present value of loan repayments remained constant. On moral hazard concerns, the fact that a moratorium was time-bound and involved no reduction in net present value is likely to have reduced the attractiveness of participation to borrowers who did not require support.

Costs of participation were minimised for banks: Since EBA-compliant moratoria did not require risk reclassification, they imposed no impairment costs on banks, from a regulatory capital perspective. This capital preservation greatly lowered the cost of offering moratoria to borrowers, relative to a counterfactual where all capital charges would have been taken on all borrowers receiving forbearance. Along with a strong starting position due to a decade of increasing capital requirements under Basel III, macroprudential buffers, and strengthened liquidity positions, the EBA-compliant moratoria acted to bolster capital ratios in the banking system during a time of financial stress. In so doing, the moratoria performed an important macroprudential function, helping to avoid the credit supply crunches that were a common feature of the GFC.⁶

Monetary policy operated in tandem: throughout 2020, prevailing interest rates in the Irish mortgage market continued their downward trajectory. As house prices grew, and more borrowers moved into greater positive equity, the constraints to refinancing reduced for Irish borrowers. Short-term mortgage fixation meant that for some borrowers, availing of these repayment savings was not possible. However, for the majority of Irish mortgage holders, loose monetary policy either provided continued direct easing through "tracker mortgage" products, or provided opportunity for cost-saving refinancing.

Lessons from the pandemic: An enhanced role for borrower optionality in the future?

We complete the paper by considering the role that mortgage contract design can play in facilitating rapid adjustment to future unexpected, exogenous shocks. We argue that, given the recent rising frequency of extreme weather events, geopolitical risk, and the risks of a future pandemic, now is a good time to consider the benefits of optionality in mortgage contracts, as a way of automatizing the positive features of the pandemic debt relief response.

We suggest that the option to postpone repayments could be made available to all borrowers, either upon the triggering of certain legislative definitions of an emergency, or for a fixed number of months in the life of each mortgage. The existence of such optionality would come with certain costs, and may lead to higher interest rate pricing. However, these costs must be weighed against the benefits in terms of speed of adjustment, lowering of participation costs, removal of operational frictions, and the mitigation of risks relating to policymaker appetite in future crises to implement widespread changes such as the EBA Guidelines which facilitated the 2020 pandemic moratoria. A full teasing out of the net benefits or costs of such a change in mortgage contracts, and whether it is something that should optimally emerge through private offers, or via regulatory change, is beyond the scope of our study. By raising these issues, we hope to stimulate thought and discussion among researchers on this important topic.

⁶ Reductions in regulatory minimum capital ratios by European banking supervision and releases of the countercyclical capital buffer played a complementary role in reducing the risk of credit supply amplifications of the downturn.

References

Agarwal, S., Amromin, G., Ben-David, I., Chomsisengphet, S., Piskorski, T. and Seru, A. (2017), "Policy intervention in debt renegotiation: Evidence from the home affordable modification program", *Journal of Political Economy*, Vol. 125, Issue 3, pp. 654-712.

Beraja, M., Fuster, A., Hurst, E. and Vavra, J. (2019), "Regional Heterogeneity and the Refinancing Channel of Monetary Policy", *The Quarterly Journal of Economics*, Vol. 134, Issue 1, pp. 109-183.

Bernanke, B. (1983), "Nonmonetary Effects of the Financial Crisis in the Propagation of the Great Depression", *American Economic Review*, Vol. 73, Issue 3, pp. 257-276.

Chodorow-Reich, G. (2014), "The employment effects of credit market disruptions: Firm-level evidence from the 2008-9 financial crisis", *The Quarterly Journal of Economics*, Vol. 129, Issue 1, pp. 1-59.

DeFusco, A.A. and Mondragon, J. (2020), "No Job, No Money, No Refi: Frictions to Refinancing in a Recession", *The Journal of Finance*, Vol. 75, Issue 5, pp. 2327-2376.

European Systemic Risk Board (2021), Financial stability implications of support measures to protect the real economy from the COVID-19 pandemic.

Gaffney, E., McCann, F., and J. Stroebel (2021). <u>The economics of debt relief during a pandemic: lessons from the experience in Ireland</u>. European Systemic Risk Board Occasional Paper No. 20, October 2021.

Geanakoplos, J. (2010). Solving the Present Crisis and Managing the Leverage Cycle. New York Federal Reserve Economic Policy Review, August 2010.

Guiso, L., Sapienza, P. and Zingales, L. (2013), "The determinants of attitudes toward strategic default on mortgages", *The Journal of Finance*, Vol. 68, Issue 4, pp. 1473-1515.

Kuchler, T. and Stroebel, J. (2020), "Social Finance", *NBER Working Paper*, No 27973, National Bureau of Economic Research.

Labonne, McCann and O'Malley (2021), Delivering Debt Relief through the Banking Sector: Lessons from the Irish Mortgage Market. Central Bank of Ireland Research Technical Paper 06RT21.

Di Maggio, M., Kermani, A., Keys, B.J., Piskorski, T., Ramcharan, R., Seru, A. and Yao, V. (2017), "Interest rate passthrough: Mortgage rates, household consumption, and voluntary deleveraging", American Economic Review, Vol. 107, Issue 11, pp. 3550-88.

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