

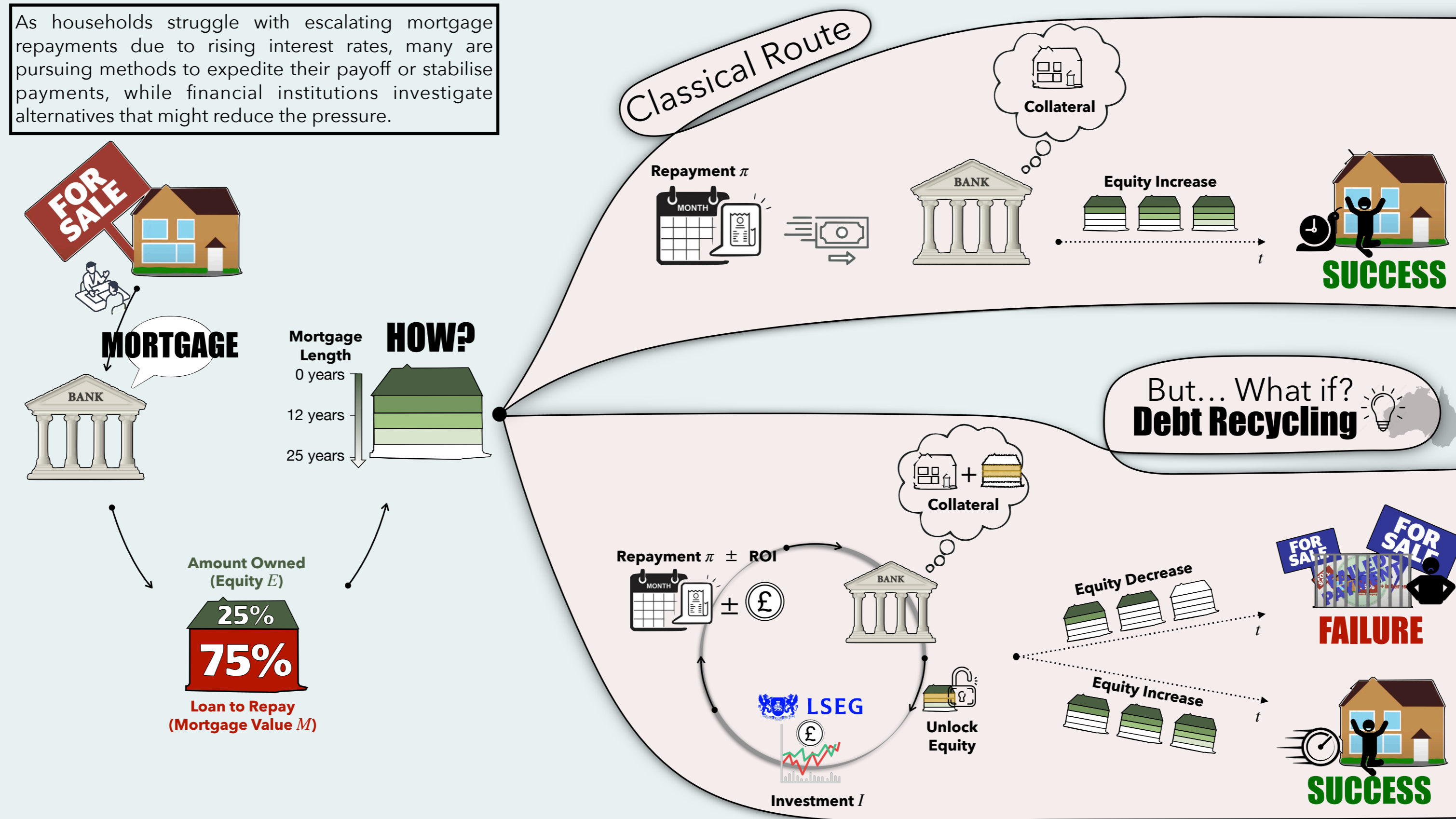
Financial Times, 20 January 2025:

UK Chancellor of the Exchequer favours proposals by financial regulator for banks to take more risks to boost home ownership

Rt Hon Rachel Reeves MP backs plans for looser limits on mortgage lending

On 16 January 2025, the Financial Conduct Authority wrote in its letter to the Prime Minister that it would “begin simplifying responsible lending and advice rules for mortgages, supporting home ownership and opening a discussion on the balance between access to lending and levels of defaults”. Rt Hon Rachel Reeves MP told the Financial Times that she welcomed proposals from the FCA to lift limits on mortgages and was “absolutely open to looking at ideas that can boost home ownership and help working families get on the housing ladder”.

## Debt Recycling: pay off your debt faster, but at what risk?



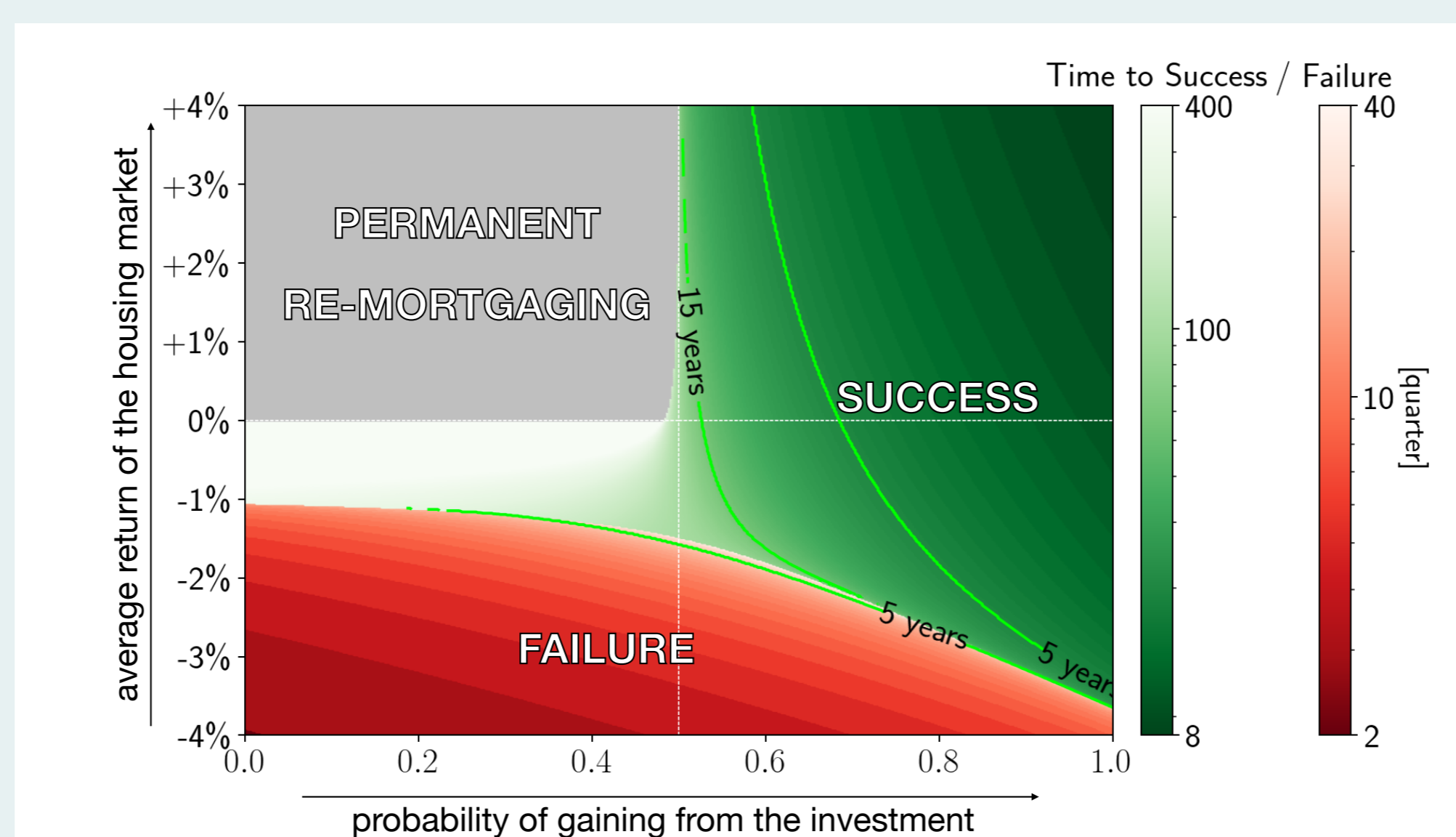
### The Idea

While the mortgage is being repaid, the home equity (the value of the fraction of the house owned thus far) is used to back a second loan, which is invested into a (risky) asset, e.g. the stock market. The idea is that the income generated by such investment will be used for a faster repayment of the mortgage.

The critical parameters are:

- loan-to-value ratio,
- investment risk,
- repayment schedules,
- borrower risk-proneness.

### The Result



### Policy Implications

The most influential parameters are the **initial mortgage-to-equity ratio**, rather than the individual values of mortgage and equity themselves (meaning the strategy's outcome does not depend strongly on whether we are dealing with a low or high-value house) and the **monthly repayments**. Our model identifies specific phase transition lines and discontinuities that policymakers should monitor closely to preemptively intervene when borrowers get too close to the dangerous phase.

- During periods of **housing market strength**, regulatory guidelines may be implemented and calibrated to support the strategy's viability. In these conditions, the positive performance of real estate assets makes a favorable case for debt recycling, as equity can be leveraged efficiently and investments are more likely to yield returns that accelerate mortgage repayments.
- During **market downturns**, regulatory oversight must tighten to mitigate risks of over-leverage and potential default.

It should be noted that such approaches are inherently **procyclical**, with the potential to amplify both market upswings and downturns, particularly in larger or highly interconnected markets, which could pose systemic challenges.

Several key policy levers within the debt recycling framework may enhance the strategy's resilience across different economic conditions. Policy interventions should establish diversified and standardized risk assessment frameworks for the investment assets used in debt recycling.

### Mathematical Modeling

The value of equity ( $E_t$ ) increases at each step by the amount  $\pi_t$  repaid regularly against the mortgage, whose value ( $M_t$ ) decreases by the same amount. Equity may also increase if the housing market is growing ( $r_t > 0$ ) and decrease if the housing market is shrinking ( $r_t < 0$ ). A positive (negative) return on the investment ( $I_t$ ) leads, respectively, to an increase (decrease) in the equity owned, which can be reinvested, and a decrease (increase) in the mortgage balance.

$$E_t = E_{t-1} + \pi_t + I_{t-1} + H_{t-1}r_t \quad (1)$$

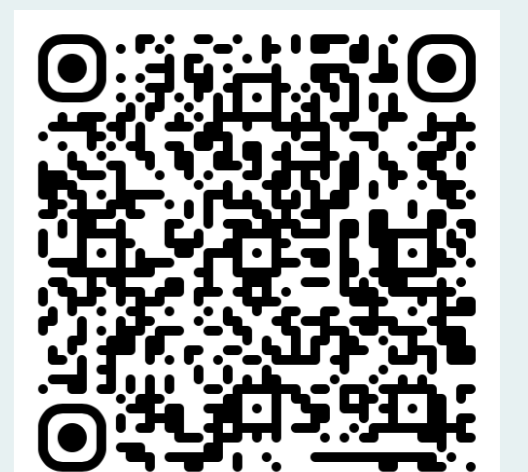
$$M_t = M_{t-1} - \pi_t - I_{t-1} \quad (2)$$

### Acknowledgements

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(a) Scan me for the FT article.



(b) Scan me for the whole paper:  
Aufero, S., Forer, P., Vivo, P., Caccioli, F., & Bartolucci, S. (2025). Phase transitions in debt recycling. *Journal of Economic Dynamics and Control*, 171, 105044.