*Costs of Portfolio Lending*

The cost of portfolio lending depends on the composition of the lender's balance sheet and the amount of equity capital $e_{jt}$. A lender sources financing at the firm level and has one balance sheet comprising mortgage assets across markets. There are two types of assets held on a lender's balance sheet: mortgages—the amount of which is chosen by the lender in each market—and other assets in the amount $m^b_{jto}$. The choice of the latter is determined outside the model and represent other assets that the bank chooses to hold on the balance sheet such as government bonds or commercial loans which it did not securitize. Lenders also differ in the amount of equity capital $e_{jt}$. The amount of equity and the asset composition of the balance sheet jointly determine the cost of portfolio lending for an intermediary. While these quantities are fixed in the baseline model, in Section V.E we allow for costly equity issuance as well as liquidating of non-mortgage assets.

A lender's risk-adjusted capital ratio $\rho_{jt}$ depends on the banks equity capital $e_{jt}$ and banks' risk-weighted assets $\xi_o m^b_{jto} + \sum_{ctg} \xi_g m^b_{jctg}$ :

$$\rho_{jt} = \frac{e_{jt}}{\xi_o m^b_{jto} + \sum_{ctg} \xi_g m^b_{jctg}} \tag{S.2}$$

Where $\xi_g$ represents the risk weight of mortgages of type $g$ and $\xi_o$ represents the risk weight of other assets the bank holds. Since jumbo mortgages have higher risk weights, they use up more statutory capital per dollar of actual lending. A bank's capital needs to be below its statutory capital requirement $\bar{\rho}$ if it wants to lend on its balance sheet.

The per-dollar cost of financing a portfolio loan of lender *j* depends on its capitalization:

$$\sigma^p_{jt} = \sigma^b_t + \sigma^{b1}\left(\rho_{jt} - \bar{\rho}\right)^{-\phi} \tag{S.3}$$

As before, $\sigma^b_t$ represents the underlying financing costs of funding in the macroeconomy. $\sigma^{b1}\left(\rho_{jt} - \bar{\rho}\right)^{-\phi}$ is the shadow cost of balance-sheet funding above this base rate. The closer a bank's risk-adjusted capital ratio is to the statutory requirement, i.e., the smaller $\left(\rho_{jt} - \bar{\rho}\right)$, the larger the cost of portfolio loan financing. $\phi$ and $\sigma^{b1}$ parameterize the extent of this cost. This formulation captures the fact that banks choose a capital buffer above the hard capital requirement. The micro-foundations of such a buffer can be generated in a dynamic setting but are not the central interest in this paper (see Corbae and D'Erasmo (2019)). We assume that balance sheet lending by shadow banks is prohibitively expensive. This assumption captures in reduced form the notion that shadow banks do not have access to a subsidized deposit funding and must use external financing instead.

*Regulatory Burden*

Banks face regulatory pressures beyond capital requirements. These regulatory pressures constrain banks' lending activity even if banks are well capitalized. Rather than changing costs of lending, which we model directly, regulatory burdens may also reduce traditional banks' activity on the extensive margin. For example, risk constraints and fear of enforcement or lawsuits may sometimes