

where $\underline{\sigma}^j, \theta^j \geq 0$. A positive θ^j implies that a large realization ε_t^j , affects not only v_t^j but also increases future volatility σ_{t+1}^j . Like in the data, volatility is persistent.

Occasionally, temporary selling (or buying) pressure arises that is reverted in the next period. Without credit constraints, risk-neutral experts bridge the asynchronicity between buying and selling pressure, provide market liquidity and thereby ensure that the price q_t^j of asset j follows its expected cash flow v_t^j . In other words, any temporary selling or buying pressure is simply offset by risk-neutral experts. When experts face credit constraints, their activity is limited and the price q_t^j can deviate from v_t^j . This gap captures market illiquidity, while the Lagrange multiplier of the experts' funding constraint is a measure of funding illiquidity.

Like in the papers in the previous section, the expert sector's net worth is a key variable. As long as expert net worth η is sufficiently large a perfect-liquidity equilibrium exists with $q_t^j = v_t^j$. For very low η , the funding constraint is always binding and market liquidity provision is imperfect. Interestingly, for intermediate values of expert net worth η , there are multiple equilibria and experts' demand function is backward bending. To see this, suppose temporary selling pressure drives down the price. Since price movements are typically due to permanent movements in v_t , uninformed households attribute most of the price movement to negative cash flow news Δv_{t+1}^j . Due to the ARCH dynamics, households expect a high future price volatility of the collateral asset. As a consequence, they set a high margin, which tightens the experts' funding constraint exactly when it is most profitable to take on a larger position.

For intermediate values of expert wealth, there exists one equilibrium, in which experts can absorb the selling pressure and thereby stabilize the price. Hence, households predict low future price volatility and set low margins/haircuts which enables experts to absorb the pressure in the first place. In contrast, in the illiquidity equilibrium, experts do not absorb the selling pressure and the price drops. As a consequence, households think that future volatility will be high and charge a high margin. This in turn makes it impossible for experts to fully absorbing the initial selling pressure.

As expert net worth falls, possibly due to low realization of v , the price discontinuously drops from the perfect liquidity price $q_t^j = v_t^j$ to the price level of the low liquidity equilibrium. This discontinuity feature is referred to as *fragility of liquidity*. Besides this discontinuity, price is also very sensitive to further declines in expert's net worth due to two liquidity spirals: The (static) loss spiral and the margin/haircut spiral that leads to delevering. The loss spiral is the same amplification mechanism that also arises BGG98 and KM97. Note that in BGG and KM97 experts mechanically lever up