it is more difficult to conduct a thorough welfare analysis. It is not clear which beliefs should one should assign to the social planner. Recently, Brunnermeier and Xiong (2011) developed a welfare criterion that can be applied to all models with hetereogenous beliefs. That is, it applies to the models discussed here in which solvency constraints force optimists to sell their assets as well as to speculative bubble models à la Harrison and Kreps (1978) and Scheinkman and Xiong (2003) in which the prospect of being easily able to the asset to a newly optimistic trader lead to "excessively" high valuation and trading volumes.

4   Demand for Liquid Assets

The driving force of amplification and instability so far was technological illquidity Φ and market illiquidity as productive experts have to sell off their assets to agents who can only use them less efficiently. These liquidity characteristics led to a time-variation in the price of capital q, and equivalently in Tobin's Q. Moreover, when price volatility interacts with debt constraints, liquidity spirals emerge that force experts to delever which amplifies the effects further.

In this section we focus primarily on the demand for liquid instruments. We start with settings in which these amplification effects are switched off. That is, there is no technological illiquidity – all capital investments are reversible – and hence the price of capital goods in terms of consumption goods, q, is constant. Hence, w.l.o.g. we can focus on borrowing constraints, which are unlike collateral constraints, do not depend on the price of the collateral asset.

The demand for liquid asset results from a desire to either (i) smooth consumption or (ii) self-insure against uninsurable risk. Bubbles emerge and fiat money takes on a role as store of value. Interestingly, most of the macroeconomic implications arise in both, the simple OLG settings as well as in incomplete markets settings with borrowing limits. In OLG models households try to smooth their consumption, while in incomplete markets settings they save for precautionary reasons. Within the incomplete markets setting, the basic economic insights are first derived in the more tractable setting without aggregate risk. Without aggregate risk all macro and price variables are not time-varying. We then introduce aggregate risk. Finally we switch on the ampifying effects and make capital illiquid. This allows one to study the interaction between amplification and the demand for liquid assets.