

# **The Fragility of Discretionary Liquidity Provision Lessons from the Collapse of the Auction Rate Securities Market**

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## **Summary**

The recent financial crisis has underscored the complex relationship between the credit risks and liquidity provisions of major financial intermediaries. In this paper, we study the fragility of liquidity during systemic events. We focus on discretionary liquidity provision, where a financial intermediary is only implicitly assumed, rather than legally obligated, to provide liquidity to investors. The laboratory of our study is the recent collapse of the market for auction rate securities (ARS).

ARS are long-term bonds or preferred stocks whose interest rates or dividend yields are periodically reset through auctions. Until its collapse, the ARS market had been an important and growing source of funds for municipalities, student loan authorities, and closed-end mutual funds. Meanwhile, it was widely used by corporate treasurers and wealthy individuals as a cash-equivalent investment. The ARS market collapsed in mid-February 2008, with the rate of auction failures shooting up to about 85 percent. Before that, ARS auctions had rarely failed.

Our main findings are the following. First, we find that ARS auctions frequently drew insufficient investor demand in the pre-crisis period, with the demand problem solved by auction dealers acting as market makers. Second, despite that the dealer's market-maker role is only implicitly assumed, it affects significantly both investor demand and auction clearing rates, and these effects are consistent with the predictions of uniform-price auction theories. Third, we provide quantitative evidence that discretionary liquidity provision is fragile. Auction dealers stopped making markets when their own survival was under threat, effectively forfeiting their reputational capital in favor of preserving their financial capital. In addition, reputational externality caused contagion among dealers in withdrawing liquidity supports, which exacerbated the fragility of implicit contracts.

The lessons we learn from the ARS market have broader implications. First, implicit liquidity support by dealers can be a source of systemic risk, because such support is likely to vanish precisely when dealers are suffering from losses in other financial markets. Second, implicit liquidity support is subject to contagion, in the sense that one dealer's decision to withdraw induces others to follow. Third, our analysis draws attention to how regulations should treat implicit liquidity support for nonderivative products, such as ARS.

Importantly, our study does not necessarily imply that regulators should directly restrict the use of implicit contracts. The theory of implicit contracts suggests that, under certain conditions, implicit contracts are optimal and can also foster the growth of reputational capital, even if explicit contracts are enforceable. However, certain policy measures, such as increases in market transparency, may help reduce the fragility of implicit contracts.