## **General Discussion\***

In response to Douglas Gale's comments on the paper by Gobert et al., Michel Poitevin emphasized that the model was highly stylized, and that the introduction of institutions or markets could solve some of the problems, notably those related to intermediation.

Kevin Clinton commented that, based on the different states of the world, risks would appear to be diversifiable, and surely there is the incentive for some market mechanism to remove this risk. Poitevin agreed, but stressed that the purpose of the model was to demonstrate the externality that agents do not recognize the potential benefits of providing liquidity to one another. Gale said that it is not diversifiable risk, but rather the incompleteness of markets (in this case, the absence of a market to swap liquidity over time), that leads to the result.

Claudio Borio raised the following questions regarding the Gropp and Vesala paper:

- (i) Contagion problems necessitate the identification of shocks between bank-specific versus market-specific shocks. Using quarterly data creates information lags so that the shocks are difficult to discern. Had the author thought about using bank-specific news shocks to allow for more specific identification?
- (ii) Controlling variables—Why not use tail events in stock market specification?
- (iii) Crisis periods—Should they be considered positive or negative?

<sup>\*</sup> Prepared by Jason Andreou.

General Discussion 101

Jukka Vesala responded that he was looking at positive or negative shocks with regard to large movements in the distance to default. These do tend to map to real-world events, and he cited the example of certain Italian banks. With respect to the first point, Vesala said that Borio's recommendation suggests a different approach, possibly by examining industry shocks rather than bank shocks and attempting to identify the channels of contagion. Bank characteristics capture bank effects, and Vesala conceded that there may be a problem with timing because of quarterly data.

Georges Dionne noted that the capital-level variables were not significant and asked whether this implies that regulation says nothing about risk. Vesala agreed, but added that weak banks can still suffer from contagion.

John Helliwell asked about the link with geography and whether there was a connection based on distance. Vesala replied that formally, in aggregated data, links between countries in interbank markets are significant, except the case of Germany and Spain.

Angela Redish asked about the distance-to-default measure, and the link between distance to default and contagion, and whether there may be an overstatement of the extent of contagion. She also wondered about the extent of survivorship bias, since there are no defaulted banks in the sample. Charles Freedman asked why there was no pick-up in the results with stock returns. Vesala responded that banks do not fail in Europe. He was surprised that stock returns appear insignificant, but this was more of a concern for small banks than for large ones.

Paul Beaudry raised the issue of controlling for macro shocks, citing GDP as an example. Freedman followed up by asking about using weekly stock data but quarterly GDP data. Raphael Solomon asked about the association of tail events with the exchange rate mechanism and whether the authors controlled for this.

Freedman began the general discussion of the paper by Eric Santor by noting that it may be interesting to look at 1950s data for a noticeable change in the foreign-asset exposures of Canadian banks, and to look at annual reports to tie changes to strategy. He suggested that Santor consider using U.S. dollar values to reduce volatility. Freedman said that with respect to the comments by the discussant, Xiaodong Zhu, the same result can be seen in Latin American countries, where, after a crisis, foreign banks expand their share of the domestic market. Santor noted that technical innovations apply more easily to domestic rather than foreign banks. He added that he has foreign currency exposure data and may attempt to implement the suggestion in future work.

102 General Discussion

Sean O'Connor asked whether the balance-sheet data were consolidated and whether foreign exposures included equity positions in foreign banks. Santor said that the effects do transmit onto the balance sheet, and looking at stock returns would not be helpful, since they do not come up on the balance sheet.

Lawrence Schembri asked how much of the assets were marked to market. Santor replied that securities were marked to market, but loans were recorded at book value. Helliwell followed up by asking whether these were gross or net measures and what was backing up the assets measured. Santor said that he used gross measures and he would look more closely at the liabilities, since this choice will affect asset selection.

Borio was impressed with the data, and said it was important to distinguish between cross-border and local loans. He noted that there was a shift from cross-border to local loans and wondered whether this will continue after the case of Argentina. The timing of measurement is important, and it is worthwhile to look at the sensitivity of exposures. Borio observed that on the balance sheet what seems to happen is a ballooning of exposures. Santor acknowledged the difficulty of achieving the right timing and said that perhaps one could adjust the risk models used.

Freedman remarked that historically, the net position of foreign currency exposure would be small, and gross versus net exposures on countries would be very different. As well, there are complex legal issues on the gross versus net question. He stated that reputational risk is such that the foreign banks still make a commitment locally.

Alexandra Lai suggested that one should consider different ways to measure globalization and noted that Canadian banks were concentrated in U.S. dollar securities. Santor thought that a more explicit portfolio model of foreign exposures would be useful.