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Chapter Title: Comment on "Listing Policy and Development of the Tokyo Stock Exchange in the Pre-War Period"

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Comment Masaya Sakuragawa

This chapter comprises two parts. The first part provides detailed evidence on the history of development of the Tokyo Stock Exchange (hereafter, TSE), and the second part develops a theoretical and empirical analysis to explain the development of the TSE. A look at a number of figures constructed by the authors shows that the TSE took off around 1918. The authors stress that no significant institutional change happened around 1918 and try to explain the take off of the TSE by relying on the notion of expectation equilibria, the idea of which depends heavily on the search theoretic approach that began with the pioneering work by Peter Diamond (1982).

I have three comments. The first is on the theoretical explanation. The authors try to explain the take off of the TSE by relying on a model of multiple equilibria that are generated by the bilateral causations between market liquidity and the number of initial public offerings (IPOs). The "low" equilibrium is identified as the one with low liquidity and the "high" equilibrium as the one with high liquidity and the large numbers of IPOs.

Marco Pagano (1989a,b) develops sophisticated models of multiple equilibria in the development of the stock market. If the stock market is thin, prices will be volatile, and investors will exploit only small liquidity gains. Risk-averse investors anticipate to gain less from trading so that they will hesitate the entry in the market. The thin market is actually realized.

Equilibria are self-fulfilling. "Low" and "high" equilibria coexist, and a small perturbation or a change in belief of investors leads to a large change in the equilibrium from the "low" to "high" equilibrium.

The second comment is on the estimation approach. Basically, their system would be written as a two-equation system by:

$$\text{Number of IPO}_i = \alpha_0 + \alpha_1 \text{ Liquidity}_i + \alpha_2 Z_i + u_i \tag{1}$$

$$\text{Liquidity}_i = \beta_0 + \beta_1 \text{ Number of IPO}_i + \beta_2 X_i + v_i, \tag{2}$$

where Z_i is an exogenous variable to identify equation (2) with $\text{Cov}(Z_i, u_i) = 0$, X_i is an exogenous variable to identify equation (1) with $\text{Cov}(X_i, v_i) = 0$, and u_i and v_i are error terms with $Eu_i = 0$ and $Ev_i = 0$.

However, the strategy of authors is to consider only one direction from market liquidity to the number of IPOs. Why don't the authors also think the reverse causation given by equation (2)? In addition, in estimating equation (1) only, ordinary least squares (OLS) give an endogenous bias to the estimate of α_1.

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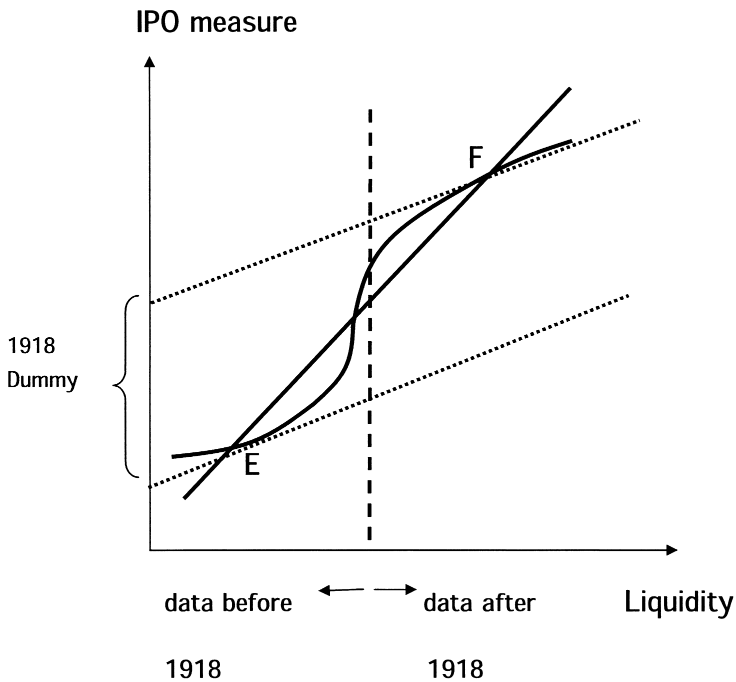

Fig. 2C.1 Multiple equilibria

Apart from the simultaneous problem, what makes thing complicated is that the pair of positive coefficients, $\alpha_1 > 0$ and $\beta_1 > 0$, does not guarantee the existence of multiple equilibria. Either $\alpha_1 > 1$ or $\beta_1 > 1$ is necessary to guarantee multiple equilibria, at least for some range of variables. This job may not be easy.

I propose an alternative approach that will be simple. As figure 2C.1 illustrates, if the authors' hypothesis is valid, samples before 1918 should roughly lie around E, while those after 1918 around F. An estimation using a time dummy may be a good idea. In doing so, the authors should make an effort to convince readers that no significant institutional change happened around 1918. Authors seem to use the market liquidity as a measure of market efficiency. The volatility of prices may become another possible measure.

The final comment is on the interpretation on the cause of the take off. Reading this chapter, readers might be tempted to imagine an alternative hypothesis for the take off. Exogenous shocks such as the economic boom during and after the WWI or the earthquake that occurred in Tokyo in 1923 may have influenced the change in the financial system.

References

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