Do announcements of bank acquisitions in emerging markets create value?

Summary of Working Paper no. 315 Farouk Soussa and Tracy Wheeler

The liberalisation of emerging financial markets (EFMs) in the mid-to-late 1990s paved the way for a marked rise in the number of emerging market acquisitions by banks in developed countries. This paper examines the net benefits of these acquisitions for the acquiring bank using an event-study methodology to indicate whether value was created by the merger. If the value of the acquiring bank increases following the acquisition then expansion into EFMs is considered to have had net benefits. The results show that acquisition announcements are generally associated with a loss in value for the acquirer, but this persists for only one week. Losses in value are found to have been greater during and immediately after the East Asian crisis but (i) the size of the acquisition, (ii) the region of the target, and (iii) whether the target is a bank or non-bank financial institution are found to have no impact. It should be noted that this study analyses the effects of acquisition only on the acquiring bank. Acquisitions in aggregate may still create value if the value of the target bank increases sufficiently as a result.

The fact that banks still make acquisitions in EFMs despite the resulting value losses found in this study presents a puzzle. Two explanations are offered. The first is that markets are not perfect, and hence that equity price movements do not reflect the full impact of the acquisition on future profits. The second is that there could be a so-called principal-agent problem, whereby managers have greater incentives to pursue EFM acquisitions than stockholders. While stockholders can benefit from any associated increase in profits, they also bear the full financial exposures associated with the acquisition. The managers, however, have less financial exposures and can improve their future wage prospects if the acquisition provides a positive signal to the labour market regarding their ability.

Financial infrastructure and corporate governance

Summary of Working Paper no. 316 Helen Allen, Grigoria Christodoulou and Stephen Millard

One of the core purposes of central banks is the maintenance of financial stability, which entails their detecting and working to reduce threats to the financial system as a whole. An essential part of the financial system is its infrastructure: for example, payment systems, securities settlement systems, central counterparties and messaging services. These enable transactions ranging from individual consumer payments through to transactions in both domestic international wholesale financial markets. Were any of these infrastructures to fail, the impact would affect the whole economy. Transactions might not be completed, or might be delayed, in turn hampering other transactions; problems in one area could spread rapidly beyond the original source. In other words, there is systemic risk in financial infrastructure. This threat to financial stability largely explains why central banks seek to ensure — via their 'oversight' role — that financial infrastructures take sufficient measures to mitigate risk.

In effective management of systemic risk, many aspects of the design and operation of an infrastructure play a role — among them, overall risk management (notably of credit, operational, liquidity and legal risks), the criteria for participation (defining which institutions can connect to the infrastructure) and system governance. This paper explores the role of governance of infrastructures in the management of systemic risk. If different governance arrangements of these infrastructures affect their incentives to mitigate such risk, then this should help overseers to advocate particular governance structures for financial infrastructures.

To analyse this question, we consider the case of a generic infrastructure provider operating under two different forms of ownership: owned by outside shareholders (and hence maximising profits); or operating as a mutual body of its users, following the arrangements commonly seen in the market for payment services. Intuitively, the mutual infrastructure provider may decide to commit more resources to risk mitigation, as it has a strong, direct incentive to avoid risks to its users' (and owners') own operations caused by problems in the infrastructure.

Nevertheless, from the perspective of the economy as a whole, this level of risk mitigation may still be inadequate. That is because the infrastructure provider may not take account of the infrastructure's malfunction on consumers in the wider economy. This is the disruption likely to be felt by individuals, households and companies very distant from the infrastructure's governance.

If a public authority wished to offset this underprovision of risk mitigation, there are several policies it could adopt. Along with the imposition of direct regulatory requirements, some combination of taxes, subsidies and disclosure standards are commonly considered in mitigating such problems. However, in practice we know there are cases where the information and policy levers to apply potential policies are lacking. In particular, policymakers may have few, if any, direct powers of enforcement over multinational infrastructures (which are becoming increasingly common).

Given that these 'traditional' ways of addressing inadequate risk mitigation might not be feasible in the case of financial infrastructure providers, particularly where these operate in many countries, we consider the alternative of placing external stakeholders on boards to act as 'guardians' of the public interest of systemic risk reduction. In effect, voting by these external stakeholders could re-weight the objectives of the firm to take into account any costs imposed on other sectors of an economy. There are, however, important caveats to this possibility — in particular, identifying appropriate individuals, designing their contracts and ensuring their voice is sufficiently recognised in the infrastructure's decision-making.

On balance, though, we conclude that external stakeholder representation may be a practical, first option in a limited toolkit. Even if formalised powers to address systemic risks in other ways ultimately came about, trying to maximise the results from this market-based route may at least offer a better starting point from which to take further decisions.

Corporate debt and financial balance sheet adjustment: a comparison of the United States, the United Kingdom, France and Germany

Summary of Working Paper no. 317 Peter Gibbard and Ibrahim Stevens

Two types of variables may help to explain corporate debt: those suggested by the 'trade-off' theory — the balance between the benefits of obtaining debt capital, such as the tax deductibility of interest payments on debt capital, and the costs of having too much debt, such as the likelihood of financial distress — and those suggested by the 'pecking order' theory — the preference for internal finance, such as retained profit, over debt capital and external equity financing. The 'trade-off' variables are those that determine the optimal level of debt — when the marginal benefit of obtaining debt capital equals to its marginal cost, variables such as the ratio of the market value to the book value (market-to-book ratio or value) of the firm. The pecking order variables are those that determine the immediate external financing needs of the firm. These variables include investment, acquisitions and cash flows.

This paper provides a comparison of the determinants of corporate debt in the United States, the United Kingdom, France and Germany. It uses a model which assesses the contribution of investment, acquisitions, cash flows and market-to-book values to the determination of debt, and also the tendency of debt to revert to its appropriate or optimum level. We obtain data from COMPUSTAT (Global) — a database of company accounts. While there is considerable previous work on the determinants of corporate debt, cross-country comparisons are relatively scarce. And few use the latest modelling techniques that are available.

The analysis in this paper takes a panel data approach — a method of examining data jointly for separate individuals and for a specific subject. We use autoregressive distributed lag equations — these equations take into account past behaviour of the regressed variable. First we estimated the equations for the total data set — the data set which included companies from all the countries. Debt was found to have a positive effect on the financing needs of the firm while the optimum level of debt had a negative effect on the market-to-book ratio. This casts some light on the procyclicality of debt. It suggests the growth of debt in a boom is explained by the increase in financing needs; and this more than offsets the fall in the optimum level of debt associated with the rising market-to-book value. The equations describing equity issuance reveal that financing needs are partly met by equity issuance, and thus are inconsistent with a pure version of the pecking order theory — which proposes that immediate financing needs are met only by debt issuance. Finally, debt has a significant negative coefficient in the investment equation, indicating that at higher levels of debt, external finance becomes more difficult to obtain.

Second, equations were estimated for the individual countries, and the following three facts emerged. First, German investment appears to be the most dependent upon external finance — both debt and equity — and French investment the least dependent. Second, the sensitivity of debt to investment and acquisitions is greatest in Germany and the United States. Third, Germany and the United States tend to be slower to pay down their debt. So, in a boom, German and US debt might tend to rise above the optimum level by more than in the United Kingdom and France, responding to the higher levels of investment and acquisitions. And in a slowdown, when adjusting back down to the optimum, German and US debt tends to be paid down more slowly.

There are a number of different ways in which debt may be affected by the market-to-book ratio. For example, one version of the trade-off theory posits an effect due to the relationship between default risk and debt; another version an effect due to the relationship between 'growth opportunities' and debt. To isolate the effect on default risk on debt, we supplement our US data set with time series of Standard and Poor's credit ratings. A new version of the model for debt is then estimated, replacing the market-to-book ratio with credit ratings. We find that ratings downgrades do tend to reduce debt, although the strength of this relationship (the coefficient) is significant only at the 10% level.

Does Asia's choice of exchange rate regime affect Europe's exposure to US shocks?

Summary of Working Paper no. 318 Bojan Markovic and Laura Povoledo

The extent to which Asia's choice of exchange rate regime affects Europe's exposure to US shocks is a pertinent issue to examine at present for two reasons. First, a number of commentators have suggested that the United States' large current account deficit is unsustainable and will likely decrease (perhaps caused by shocks in the United States). Second, the authorities in China, the largest Asian economy, have made a number of suggestions over the past year that they might allow greater flexibility in the exchange rate movements of the renminbi.

We use a three-country model, calibrated for the United States, Europe, and Asia, to analyse the effects on Europe of US shocks, and compare two cases: (1) when the currency of the Asian bloc is pegged to the US dollar; and (2) when the Asian currency freely floats against both the US and European currencies.

The following example explains why shocks in the United States can affect demand for European output. First, any shock that raises US consumption, increases US demand for worldwide, and thus Europe's output. Aggregate demand for Europe's output is further affected by the consequent reaction of consumption in Europe and consumption in Asia. Second, demand for Europe's output depends not only on world consumption, but also on the allocation of consumption across countries, because households are biased towards consuming domestic products. Hence, a unit increase in consumption in Asia has a different effect on demand for Europe's output than a unit increase in consumption in Europe. Third, the allocation of consumption over time (usually known as consumption smoothing) also affects the demand for Europe's output over time. The strength of these effects will depend, in part, on the choice of the exchange rate regime.

Our results show that Asia's choice of the exchange rate regime has a significant effect on Europe's exposure to US shocks in the case of a productivity shock in the US non-traded goods sector. In case of a demand shock or a productivity shock in the US traded goods sector, the impact of Asia's choice of exchange rate regime on Europe's exposure to US shocks is more modest.

When nominal exchange rates cannot be used as a buffer for shocks, Asian firms react to shocks originating in the United States by implementing large price adjustments (since prices now have to do all the work) and this, in turn, strongly affects Europe's relative competitive position. This adjustment is relatively more pronounced after a shock occurring in the US non-traded goods sector. Our model shows that the adjustment of Asian prices dominates the other effects induced by the pegging of the Asian currency. Overall, the fixed exchange rate in Asia increases the exposure of output and inflation in Europe to shocks originating in the United States albeit modestly. We can extend this result to China, the largest Asian economy. If China eventually decided to float her currency, Europe's exposure to US shocks would decrease modestly.

Our results also indicate that, for a reasonable calibration, the overall volatility of Europe's output and inflation depends mainly on domestic, and not foreign, shocks. Therefore, even these significant changes in Europe's exposure to US shocks, following China's floating, might not have large effects on the overall volatility of Europe's inflation and output.

Too many to fail — an analysis of time-inconsistency in bank closure policies

Summary of Working Paper no. 319 Viral Acharya and Tanju Yorulmazer

Resolution policies for bank failures that regulators try to follow in a consistent manner over time suffer from a 'too-many-to-fail' problem. In order to avoid losses resulting from the closure and liquidation of banks, a regulator finds it optimal to bail out banks when the number of failures is large. In contrast, if only a small set of banks fail, there may be a market solution that involves private sector participation in the form of acquisition of failed banks by the surviving banks. In particular, as the number of failed banks increases, the total investment capacity of surviving banks decreases and it becomes more likely that some banks would have to be liquidated to investors outside the banking sector resulting in a loss of continuation values. In turn, it becomes optimal for the regulator to bail out some of these failed banks instead of liquidating them during financial crises that affect a significant portion of the banking industry, that is, during crises that are systemic in nature.

This means that the regulator bails out banks during systemic banking crises, but during minor crises the regulator resorts to a private sector resolution where the failed bank is acquired by healthy banks. This too-many-to-fail guarantee induces banks to herd and take on similar investments in order to increase the likelihood of being bailed out when they fail. For example, they may lend to similar industries or bet on common risks such as interest and mortgage rates. This, in turn, leads to too many systemic banking crises, where a significant portion of the banking system is severely affected. Thus, the regulator suffers from not being able to follow a credible resolution policy that is consistent over time. The policy of bailing out banks during systemic crises creates herding incentives for banks, resulting in too many systemic banking crises. To prevent this, the regulator should follow a policy of not rescuing banks in crises — but this is not credible when systemic crises occur.

While the too-big-to-fail problem has been extensively studied in the literature, the too-many-to-fail guarantee has received less attention from policymakers and academics even though such guarantees have been provided regularly to banks during systemic crises. Recognising and modelling the too-many-to-fail guarantee focuses attention on choices of banks as a group rather than on individual choices, which are the focus of the too-big-to-fail literature. Furthermore, while the too-big-to-fail problem affects primarily the large banks, the too-many-to-fail problem is potentially different in that it may also affect smaller banks.

In this paper, we formalise these ideas in a framework wherein the optimal bank failure resolution policies are derived based on a well-specified objective for the regulator, which involves maximising the output generated by the banking industry. We show that the too-many-to-fail guarantee focuses attention on choices of banks as a whole whereas the too-big-to-fail literature focuses on individual choices. Furthermore, while the too-big-to-fail problem affects primarily the large banks, the too-many-to-fail problem may also affect smaller banks.

It is important to emphasise that there may be other sources of bank herding and we view the too-many-to-fail channel of bank herding proposed in this paper as being complementary to the other channels discussed in the literature. The theories that do not rely on a role for the regulator include models that emphasise how bank managers have an incentive to mimic each other to preserve their reputation in the labour market. The issue of which of these channels are more prominent for bank behaviour is an empirical question, which requires further research in this interesting area.