

# ISAS Brief

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## **The Global Financial Crisis and Cross-border Mergers and Acquisitions in Developing Asia**

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The global outward foreign direct investment (FDI) stock, which stood at US\$14 billion in 1970, increased over 140 times to almost US\$2,000 billion by 2007. Of importance also is the fact that a large part of the upsurge in global FDI has been due to mergers and acquisitions (M&As) of existing entities, as opposed to establishing an entirely new entity (that is, 'Greenfield' investment). According to the United Nations Conference on Trade and Development (UNCTAD), global cross-border M&A deal in 2006 were valued at around US\$880 billion, having peaked in 2000 at almost US\$1,200 billion. In comparison, there were a negligible number of deals pre-1980 and a relatively modest US\$150 billion worth of M&A deals in the early 1990s. Also noteworthy is the growing significance of developing Asia in these cross-border M&As, both as sources of finance as well as destinations of investments. These cross-border M&A flows have deepened the economic integration of developing Asia with the global economy.

### **M&As involving developing Asia**

According to UNCTAD data, the Triad (the European Union, Japan and the United States) continue to dominate, both as sources and destinations of M&A deals. However, it is interesting to note that, in 2003-06, the share of the developed economies' M&A purchases (sales) declined from 96.5 (95) percent in 1987 to 87 (83) percent by 2006. This decline was largely reflected in a rise in developing Asia's share. The region is home to more cross-border M&As than any other part of the world, in terms of both value (that is, United States dollar amount) and the number of deals.

At a general level, the buoyant global economic conditions and the liberalisation of most of the developing Asian economies in the early- and mid-1990s led to a significant wave of M&As globally and regionally. However, there was a marked increase in M&A sales in the region following the Asian crisis of 1997-98, with the average of M&A sales jumping threefold from US\$7 billion between 1994-96 to US\$21 billion between 1997-99. Clearly,

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this spike in sales was a combination of fire-sales, possibly due to the depressed asset values compared to the pre-crisis period, as well as the simultaneous liberalisation of foreign ownership regulations in crisis-hit Asian economies. Not surprisingly, purchases rose sharply particularly in the three economies hit by the crisis, viz. Indonesia, Korea and Thailand.

Interestingly, Hong Kong also experienced a significant jump in M&A sales. Apart from purchases by outward bound Chinese companies, Hong Kong's currency board arrangement (CBA) necessitated that all the adjustment to the external shock took place via domestic prices. Thus, it faced a rather deep domestic asset price deflation. In contrast, M&A purchases by developing Asian firms remained subdued between 1998 and 2004, with Singapore being a notable exception. The city state which came out of the crisis in fairly good condition used the opportunity to aggressively expand its overseas purchase of assets both within the region and extra-regionally. M&A purchases from Singapore averaged just above US\$1 billion annually in the first sub-period and close to US\$8 billion in the second sub-period. These investments were by Singapore companies, foreign multinationals based in Singapore as well as by Singapore's sovereign wealth funds (SWFs), Temasek and Government of Investment Singapore. Apart from Singapore, Hong Kong and China have been the top developing economy sources of M&A in recent years. India also shows up prominently as a source of funds, a reflection of the more aggressive stance taken by Indian multinationals with regard to overseas acquisitions and building their global footprints (Table 1).

### **Intraregional Asian M&A Deals**

For the purposes of examining intra-Asian deals in more detail we draw on the Zephyr database compiled by Bureau Van Dijk Electronic Publishing and consider all bilateral transactions that conform to the 10-percent threshold to be considered FDI (rather than portfolio flows). For the period 2000 to 2007, our dataset shows an annual average of 643 cross-border M&A deals or 14 percent of total global cross-border M&A deals in developing Asia (i.e. most of Asia excluding Japan) which, on average, are worth about US\$350 million. Of these deals, 295 (worth on average close to US\$350 million) originate from developed countries, 290 deals (worth on average US\$360 million) are from developing Asia themselves, and the rest are from other developing economies in our country samples (63 deals worth on average almost US\$250 million). Interestingly, almost 50 percent is from other developing Asian countries (that is, intra-Asia), followed by the United States and the European Union.

Concentrating on just intra-Asian deals which appear rather large, we see that, on average, over our sample period, China has the highest M&A purchases of above US\$600 million while Hong Kong has the highest M&A sales of around US\$600 million. In the case of FDI data, a significant degree of round-tripping is observed. In the case of M&As, it becomes clear that something similar is going on in the sense that a number of mainland Chinese companies have acquired Hong Kong companies. Interestingly, however, we do not observe the reverse (that is, Hong Kong purchases of Chinese enterprises). We can see this from Table 1 which highlights the top 50 bilateral M&A transactions in developing Asia. While China's purchases of assets in Hong Kong constitute 17 percent of total M&A deals in Asia in 2007, Hong Kong's purchases of mainland Chinese assets were relatively modest. This may suggest that while most of the FDI from mainland China into Hong Kong has involved purchases of existing entities in Hong Kong, the flows from Hong Kong to China have involved primarily 'Greenfield' investments. This helps to further clarify the types of round-tripping taking place

between the two economies. This also explains the seemingly large share of intra-developing Asian M&A transactions.

Apart from China and Hong Kong, the other leading investors from the region are Singapore, Indonesia, Malaysia, India, Korea and Taiwan. As for M&A sales, most developing Asian companies within our sample period merged or acquired companies based either in Hong Kong or Singapore. This may be because both economies have been regional bases of many corporations. Apart from these, companies in China, Taiwan, Malaysia, India and Korea were important targets for intra-regional investments.

### **What Drives M&As?**

In order to better understand the main drivers of cross-border M&As, we estimated a simple model using panel data comprising almost 3,000 source-host country pairs from 2000 to 2007 involving both developed and developing economies. The aim was to develop a relatively parsimonious model which includes commonly-used determinants as well as to focus on specific financial variables. To what extent does lower liquidity and greater financial risk hurt M&A activities globally and regionally? This is clearly an issue of contemporary relevance in view of the ongoing global financial crisis.

To examine this, we followed the basic gravity-type framework which argues that market size and distance are important determinants of the choice of location of direct investment's source countries and then augmented the gravity model with available financial variables as well.

The model fits the data quite well. Greater distance between the host and source country tends to lower bilateral M&As. Despite all the hype about the "death of distance" and the "world being flat", cross-border economic transactions remain hampered by physical distance which may be proxying transaction costs and/or information gaps. As expected, larger countries experience greater purchases and sales of M&As. The level of liquidity in source country positively impacts the level of M&As in the host country. A one-percent increase in the ratio of broad money supply to gross domestic product in the source country is associated with a two-percent increase of M&As to the host country and this result is statistically significant, signalling that the sources and/or availability of funds are important. Greater real exchange rate variability appears to deter bilateral FDI flows. With regard to the financial risk variables, market risks in the host country proxied by stock market volatility appears to deter M&As to that country (statistically significant at the 10-percent level), while the result on the liquidity risk's impact is statistically significant but not so economically significant. A host country that is more financially open seems to attract more M&A deals flows, this result being highly significant both economically and statistically. Overall, financial variables – liquidity as well as risk – clearly impact cross-border M&A transactions.

Do financial variables impact intra-Asian M&A flows differently from M&A flows globally in general? Our empirical analysis highlights four findings. First, there is some evidence that real exchange rate volatility hurts intra-Asian M&As relatively less than they do global M&A flows (elasticity in absolute terms decreasing by almost 1), though this result is not statistically significant. This may be attributed at least partly to the fact that most deals in the region tend to be denominated in US dollars. Second, the availability of credit in the source country appears to be relatively more important to intra-Asian M&As, with the elasticity rising by 0.6 and the result is somewhat significant statistically (at the 10-percent level).

Third, intra-Asian M&As appear to be very sensitive to market risks, with the elasticity in absolute terms rising by almost 1. Fourth, financial openness appears to be particularly important in the case of intra-Asian M&As, this result being highly statistically and economically significant. The last two findings are especially striking. All in all, there is evidence that financial variables (liquidity and risk) impact global M&A transactions in general, but especially intra-Asian ones.

As a result, the ongoing global financial crisis is likely to sharply curtail the extent of cross-border M&A transactions. Besides attempting to ease domestic liquidity sharply and taking steps to boost macroeconomic stability in general, at a time of depressed macroeconomic conditions, Asian governments would be well advised to focus on reviewing possible microeconomic and regulatory factors that may hinder cross-border M&A transactions, particularly intra-Asian ones.

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**Table 1: Top 50 Bilateral M&A Deals between Asian Countries**

Source	Host	Value of M&A deals	In percent of deals to Developing Asia
China	Hong Kong	5,698.6	17.0
Hong Kong	Singapore	853.5	2.6
China	Taiwan	849.2	2.5
China	Singapore	844.7	2.5
Indonesia	Singapore	530.1	1.6
Hong Kong	China	526.4	1.6
Malaysia	Singapore	443.2	1.3
Singapore	China	420.7	1.3
Taiwan	Singapore	222.1	0.7
Indonesia	Malaysia	210.2	0.6
India	Singapore	208.2	0.6
India	Malaysia	187.1	0.6
Korea	China	184.6	0.6
Singapore	India	172.9	0.5
Singapore	Taiwan	150.9	0.5
China	Malaysia	142.0	0.4
Singapore	Malaysia	99.8	0.3
Korea	Singapore	97.6	0.3
Thailand	Singapore	97.5	0.3
Pakistan	Singapore	94.8	0.3
Taiwan	Hong Kong	91.9	0.3
Indonesia	Hong Kong	91.2	0.3
China	Korea	91.1	0.3
India	Hong Kong	85.2	0.3
Malaysia	Hong Kong	73.1	0.2
Singapore	Hong Kong	61.6	0.2
Korea	Hong Kong	52.2	0.2
Indonesia	Korea	36.5	0.1
Vietnam	Hong Kong	34.6	0.1
Thailand	Hong Kong	30.4	0.1
Malaysia	Korea	25.6	0.1
Hong Kong	Malaysia	23.9	0.1
Malaysia	Indonesia	23.7	0.1
Philippines	Singapore	23.4	0.1
Korea	Taiwan	23.4	0.1
Indonesia	India	22.7	0.1
Singapore	Indonesia	21.4	0.1
Singapore	Philippines	21.0	0.1
Thailand	India	19.6	0.1
Vietnam	Singapore	16.3	0.0
Thailand	Philippines	14.5	0.0
Hong Kong	Taiwan	14.4	0.0
Malaysia	India	13.8	0.0
India	Korea	13.6	0.0
China	Thailand	13.0	0.0
Korea	India	11.4	0.0
Thailand	Malaysia	10.0	0.0
Singapore	Thailand	9.9	0.0
Taiwan	China	9.6	0.0
Thailand	Korea	7.2	0.0

Source: UNCTAD and Zephyr.