Asia's Investment Puzzle

Inspecting a skyscraper under construction in Korea.

Charles Kramer

Despite the recovery in Asia, lingering uncertainty appears to be holding back investment

THE BUILDUP of large current account surpluses in Asia since the 1997–98 financial crisis has focused attention on the source of these imbalances, with two views gaining credence among economists. The "savings glut" view contends that Asia is flooding the world with excess savings, driving down world interest rates to artificially low levels and fostering counterpart external deficits in the United States. The "investment slump" view maintains that investment has been depressed since the Asian crisis. The two views are important because of their differing policy implications.

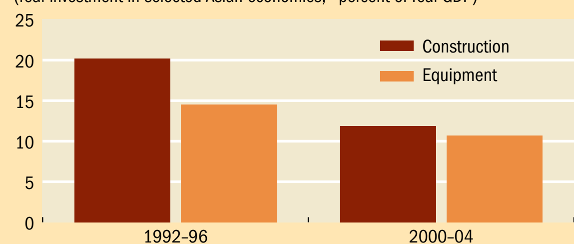
This article examines the possibility that a significant part of the picture reflects an investment slump in emerging Asia. Excluding China, aggregate saving has been relatively stable over the past 10 to 15 years and, according to some IMF studies, broadly consistent with economic fundamentals (IMF, 2005). In contrast, aggregate investment declined sharply around the time of the crisis, has recovered only partially, and by some measures seems low relative to its fundamental determinants.

Chart 1

Broad-based decline

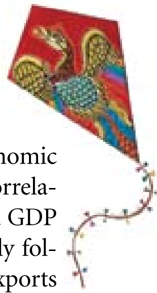
Investment in both construction and equipment has fallen off since the crisis.

(real investment in selected Asian economies,[1] percent of real GDP)



Sources: CEIC Data Company Ltd; and IMF, World Economic Outlook database.
[1]Comprises Korea, Philippines, Singapore, Taiwan Province of China, and Thailand.

©International Monetary Fund. Not for Redistribution



To be sure, the underlying picture is more complex—notably, the mix of saving (public, household, and corporate) has changed over time, and the extent and nature of the investment slump, as well as the factors underlying it, differ across countries. But the broad-based decline in investment relative to GDP warrants an attempt at a regional explanation.

Protracted investment decline

The investment decline in emerging Asia—defined here as Hong Kong SAR, India, Indonesia, Korea, Malaysia, Philippines, Singapore, Taiwan Province of China, and Thailand—has been prolonged, sizable, and broad-based, reflecting a fall in private investment (IMF, 2006a). For example, comparing 1992–96 with 2000–04, private investment declined by between 5 and 18 percentage points of GDP in Hong Kong SAR, Korea, Singapore, Malaysia, and Thailand (public investment has been comparatively stable). Asia's investment decline has also been severe compared with other regions during the past 15 years—although similar to that in Latin America during the 1980s debt crisis.

The investment downturn reflected both a collapse in real estate spending following a boom, and a decline in equipment investment (see Chart 1). By the mid-1990s, signs of overheating in construction were evident in several countries, with occupancy rates falling, real estate lending expanding rapidly, and property prices remaining buoyant. Starting in 1997, however, investment in construction fell quite sharply, declining, for example, by 10 percentage points of GDP in Thailand. Real estate prices plummeted in tandem, as once-booming real estate lending contracted. At the same time, lower equipment investment was also an important source of both the contraction during the crisis and the postcrisis sluggishness. In Thailand, for example, equipment and construction investment were equally responsible for the post-crisis fall in investment. In Korea, investment in transport and machinery equipment fell by half from its 1996 peak of 14 percent of GDP and has remained in the doldrums in recent years, whereas construction investment has recently staged a modest recovery.

Is investment too low? Some recent studies seem to say yes. Chinn and Ito (2005) find that investment in emerging Asia, excluding China, is much lower than predicted by their empirical model, especially in recent years. Eichengreen (2006) finds that the sharp fall in investment cannot be explained by changes in fundamentals. And a recent IMF study suggests that investment rates in Asian countries are below long-run levels (IMF, 2005).

On the other hand, the bursting of real estate price bubbles and pruning of overinvestment has undoubtedly brought investment down to more rational levels in several countries. A fall in the relative prices of investment goods, and an improvement in their efficiency, could reduce capital investment; but investment deflators have not fallen by much, relative to the GDP deflator, and real investment ratios have declined as well. And, although Asia's investment rate is below precrisis levels, it has remained above those in other regions.

Then, too, the relationship of investment to macroeconomic fundamentals seems to have changed. For example, the correlation between the ratio of investment to GDP and lagged GDP growth—a simple "accelerator" relationship—fell sharply following the crisis. In addition, the relationship between exports and investment, as well as between profits and investment, seems to have broken down since the crisis.

What might be crimping investment?

What is causing the continued lower rate of investment? A number of factors are worth examining, including the effects of financial and corporate sector restructuring, competition from China, and perceptions that the investment environment is riskier. The increase in perceived risk seems pervasive, whereas the other factors are more country-specific.

Financial and corporate sector restructuring. Financial and corporate sector stresses and subsequent restructuring aggravated the sharp decline in investment following the financial crisis, but these factors no longer seem to restrain investment. In the financial sector, the sharp deterioration in banking system solvency and liquidity in the wake of the crisis caused banks to rein in credit, with sizable repercussions for investment. The impact was particularly severe because corporate bond markets—which serve as an important backstop to bank lending during periods of financial stress—were underdeveloped. More recently, banking system performance has improved significantly, with nonperforming loan ratios down substantially (albeit generally above developed country levels), regulatory capital ratios higher, and the return on assets improved. And, in some countries, a recovery in real estate prices has helped to take pressure off bank balance sheets. While credit to the private sector as a share of GDP has stagnated since the crisis, this seems to reflect weak corporate demand for funds more than difficulties in banking systems, given that lending rates have been declining. Indeed, consumer lending has been expanding sharply in recent years.

> **"A riskier macroeconomic and microeconomic environment may have prompted firms and households to increase precautionary savings, in addition to dampening investment."**

In the corporate sector, balance sheets and profits have improved considerably. During the crisis, leverage rose sharply (partly because of the currency depreciation that raised the local-currency value of liabilities); interest coverage (the ratio of earnings before interest and taxes to interest

©International Monetary Fund. Not for Redistribution

expenses) and return on equity plunged. Subsequently, firms cut investment as they rebuilt balance sheets and restructured operations. In recent years, however, leverage has returned to around precrisis levels, interest coverage has risen to a 10-year high, and profitability has returned close to precrisis levels. These facts suggest that emerging Asian corporates have adopted a fairly conservative financial stance, perhaps because of the perceived increased risk. Indeed, corporate savings have risen in Group of Seven countries, in part for similar reasons (IMF, 2006b). The conservative financial stance could also reflect corporate governance considerations; that is, low leverage and high liquidity may reflect preparedness to buy back shares or take other measures to fend off takeovers. Thus, with corporate balance sheets at least as strong as in the early 1990s, corporate sector weaknesses seem unlikely to be responsible for holding back investment at a regional level.

This broad picture masks pockets of weakness in the corporate sector, however. For example, the data analyzed above include only listed firms and thus exclude many small and medium-sized enterprises (SMEs), whose weaknesses have been an important drag on investment in some countries—most notably Korea (see box). In addition, the bursting of the global information technology bubble early in this decade had a strongly adverse effect on technology firms, at the same time that they faced heightened global competition.

Competition from China. China's considerable success in attracting foreign direct investment (FDI) has raised the question of whether this success might be coming at the expense of other countries. Direct investment flows into China have risen by about 10-fold since the early 1990s, making it one of the world's top destinations for FDI. But, at the same time, the growth both in China's domestic market and in its exports has created demand for products from other countries and, thus, new opportunities for trade and investment—including for other countries to invest in China and become part of its expanding production chain.

There is evidence of investment diversion in selected countries and industries. For example, in Korea, overseas net investment increased by 42 percent annually during 2002–04; in this period, almost 43 percent of overseas investment was directed toward China. SMEs accounted for about 40 percent of overseas investment, double the share of the early 1990s. SMEs tend to reduce their domestic investment after making overseas investment, whereas large companies increase both together. With a rising share of overseas investment undertaken by SMEs, the increase in Korean firms' overseas investment in China could thus have crowded out some domestic investment. In the electronics sector, investment in fabrication plants has risen sharply in China while it has contracted sharply in Southeast Asia.

Recent formal studies, however, have been unable to find systematic evidence that China is diverting FDI from other Asian countries (Chantasasawat and others, 2004; Mercereau, 2005; and Eichengreen and Tong, 2005). Indeed, after controlling for other drivers, some studies find that inflows of FDI to most Asian countries seem to be *positively* related to flows into China, suggesting complementarity. This confluence of positive and negative effects could partly explain the limited evidence for a diversion effect.

Investment risk. Perceived macroeconomic and microeconomic risks are higher than in the precrisis period. For example, the risks surrounding the outlook have increased. Consensus surveys show a 60 percent increase in the dispersion of GDP growth projections across forecasters, comparing forecasts made for 1996–98 with those made in the past three years (see Chart 2), along with a sharp decline in expected growth. Both greater uncertainty and lower expected growth could have pushed down investment in the postcrisis period. Indeed, in modern investment theories, uncertainty plays a central role, implying that greater uncertainty deters investment. The increase in perceived mac-

Korea highlights investment problems

In Korea, investment in transport and machinery equipment has remained sluggish since the crisis, largely reflecting weaknesses among small and medium-sized enterprises (SMEs). During 2003–04, for example, a sharp decline in facility investment by SMEs offset rapid growth in such investment by large firms (see chart). This may reflect the relatively better health of large firms, as well as the difficult operating environment for SMEs with increasing globalization and the weak domestic economy.

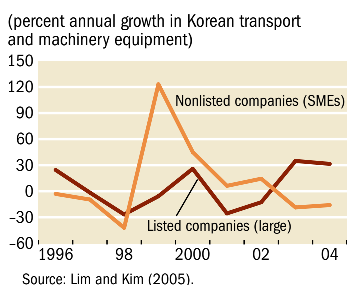
With the domestic economy weak, an estimated one in four firms has been unable to cover interest expenses with operating profits. But structural problems are at work, too: rising competition from China has raised pressure on labor-intensive SMEs, particularly in low-end manufacturing. Also, manufacturing SMEs seem to suffer from excess capacity, while excess capacity and low productivity in the service sector, where many SMEs operate, have also held back their investment. Persistent labor market rigidities have made it more difficult and expensive for companies to manage the workforce, pushing many to look to expand operations elsewhere.

Rapid expansion of government credit guarantees to SMEs may also have hampered investment. Since 1997, such guarantees have expanded threefold to about 6 percent of GDP. As they benefit mainly existing SMEs, they raise barriers to entry (and exit) and delay needed restructuring. Restructuring of SMEs and revitalization of the service sector through further deregulation and financial sector reform will be crucial for a sustainable recovery in facility investment.

Holding back

Investment by SMEs has remained depressed since the crisis.

(percent annual growth in Korean transport and machinery equipment)



Source: Lim and Kim (2005).

©International Monetary Fund. Not for Redistribution

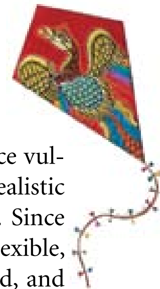
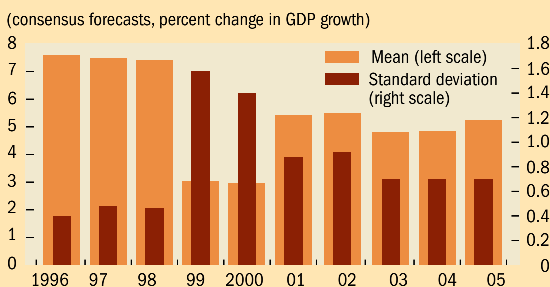


Chart 2

Riskier predictions

Greater dispersion in forecasts suggests an increase in perceived risk in Asia since the 1997–98 crisis.

(consensus forecasts, percent change in GDP growth)



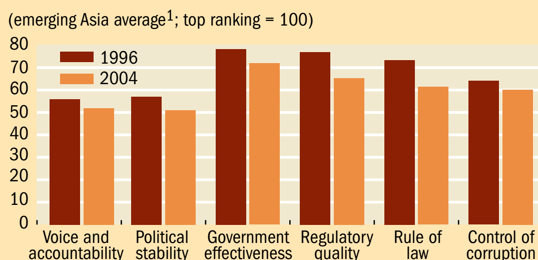
Source: Consensus Economics.
Note: Simple averages for Indonesia, Korea, Malaysia, Singapore, and Thailand. Forecasts are as of January for subsequent year (for example, "1996" = January 1995 forecast of 1996 growth).

Chart 3

Falling behind

Asia's governance rankings have deteriorated since the crisis.

(emerging Asia average[1]; top ranking = 100)



Source: World Bank.
[1]Excludes China.

roeconomic uncertainty could reflect a variety of factors. For example, the crisis may have served as a wake-up call, shaking investors out of complacency about risks and vulnerabilities, particularly those associated with capital flows.

Microeconomic risks faced by firms have increased as well. For example, guarantees have been (appropriately) withdrawn in many instances, including both explicit government guarantees and cross-guarantees by banks and affiliates. Moreover, the perceived ranking of the governance environment is weaker than it was before the crisis. Along six different dimensions—voice and accountability, political stability, government effectiveness, regulatory quality, the rule of law, and control of corruption—emerging Asia ranked lower in 2004 than in 1996 (see Chart 3). This indicates a potentially important change in the investment environment since governance is a significant determinant of FDI (Mercereau, 2005). And, with the shift of lower value-added manufacturing activities in sectors such as textiles to China, some Asian countries now must compete for market share in higher-end electronics markets, where investment is riskier because of constantly changing technology and consumer tastes.

The perceived increase in risk, despite steps to reduce vulnerabilities after the crisis, may partly reflect more realistic perceptions and a change in the distribution of risk. Since the crisis, exchange rate regimes have become more flexible, banking and corporate sectors have been strengthened, and large stocks of foreign exchange reserves have been accumulated, all of which have made Asia less vulnerable. At the same time, investors were likely underestimating investment risks prior to the crisis; with the withdrawal of guarantees, they appropriately bear more of those risks. Thus, investor perceptions may, to some extent, be more realistic than they were before the crisis. But the perceived increase in risk is not necessarily just an artifact of the crisis; it could also reflect changes in the structure of trade and production that are apt to persist in the future—namely, the shift of production toward higher-end electronics markets, one of the most volatile sectors of the global economy.

Impact on investment

Given increased levels of risk and uncertainty, how will future investment fare? The medium-term outlook varies considerably across subregions of emerging Asia. In the newly industrialized economies, the investment ratio is projected to remain broadly flat. In the southeast Asian economies of Indonesia, Malaysia, Philippines, and Thailand, the investment ratio is projected to stage a modest recovery but would remain well below the precrisis peak. In India, by contrast, the ratio is projected to rise to well above mid-1990s levels.

The postcrisis decline in investment partly reflected a collapse in overheated real estate markets that in some countries reflected the bulk of the investment decline—meaning that a return to inflated precrisis investment levels is neither likely nor warranted. In addition, technological innovation, by creating more efficient capital goods, could conceivably lower the optimal investment ratio, although these goods also tend to depreciate rapidly, and the effect seems likely to be small. Partly for those reasons, the "right" level of investment is impossible to identify with any precision.

The emphasis of policy prescriptions must depend on the circumstances in individual countries. However, given that there seems to be some room for improvement in the investment environment, it might be enhanced in several ways:

- ***Prudent monetary and fiscal policies that have helped contain an increase in perceived macroeconomic risk should be sustained*** (and bolstered where there is scope for improvement).
- ***Structural improvements in the investment environment at the microeconomic level, notably in governance frameworks, would in some instances be helpful as well***, to deal with uncertainty, raise expected rates of return, and improve competitiveness in the face of globalization. Key elements could include trade liberalization, deregulation, and improvements to infrastructure. (At the same time, subsidies and guarantees that distort investment decisions should be avoided.)
- ***Financial systems should be deepened and broadened***, especially by encouraging the further development of cor-

©International Monetary Fund. Not for Redistribution

porate bond markets, helping to develop additional channels for investment finance and to provide backstops for banking systems in the event of stress. At the same time, better-developed financial systems can help firms to cope with a more uncertain environment by facilitating the management and diversification of investment risks in financial markets.

But should one dismiss a role for saving in the adjustment in current account balances? No. In fact, a riskier macroeconomic and microeconomic environment may have prompted firms and households to increase precautionary savings, in addition to dampening investment. If this is correct, steps to alleviate the perceived risks in the macroeconomic and microeconomic environments could both reduce savings and boost investment, helping to narrow current account imbalances along both dimensions. ■

Charles Kramer is a Deputy Division Chief in the IMF's Asia and Pacific Department.

References:

Chantasasawat, Busakorn, K.C. Fung, Hitomi Iizaka, and Alan Siu, 2004, "Foreign Direct Investment in China and East Asia," Stanford Center for International Development Working Paper 233 (Stanford, California: Stanford University).

Chinn, Menzie D., and Hiro Ito, 2005, "Current Account Balances, Financial Development and Institutions: Assaying the World 'Savings Glut'," NBER Working Paper 11761 (Cambridge, Massachusetts: National Bureau of Economic Research).

Eichengreen, Barry, 2006, "Global Imbalances: The Blind Men and the Elephant," Issues in Economic Policy No. 1 (Washington: Brookings Institution).

———, and Hui Tong, 2005, "Is China's FDI Coming at the Expense of Other Countries?" (mimeo; University of California, Berkeley, and Bank of England).

International Monetary Fund, 2005, World Economic Outlook, September 2005, Global Imbalances: A Saving and Investment Perspective, *World Economic and Financial Surveys (Washington), pp. 91–124.*

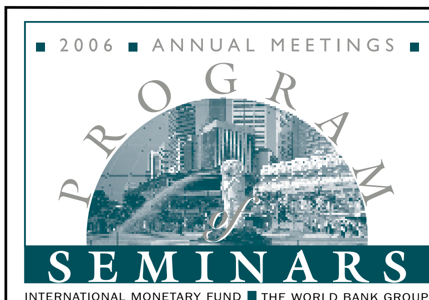
———, 2006a, Regional Economic Outlook: Asia and Pacific, May, *World Economic and Financial Surveys (Washington).*

———, 2006b, World Economic Outlook, April 2006, *World Economic and Financial Surveys (Washington).*

Kramer, Charles, Reza Siregar, Giovanni Dell'Ariccia, Alain D'Hoore, Leif Eskesen, Roberto Guimaraes-Filho, Kenneth Kang, and Olaf Unteroberdoerster, "Analyzing Asia's Investment Decline" (unpublished; Washington: International Monetary Fund).

Lim, Kyung-Mook, and Dong-Suk Kim, 2005, "Recent Facility Investment Trends," Quarterly Economic Outlook, *(July) (Seoul: Korea Development Institute).*

Mercereau, Benoît, 2005, "FDI Flows to Asia: Did the Dragon Crowd Out the Tigers?" IMF Working Paper 05/189 (Washington: International Monetary Fund).



WHEN: September 16–18, 2006

WHERE: Pan-Pacific Hotel Singapore

For further information please contact:
Annual Meetings Program of Seminars
IMF — World Bank Group
Washington, D.C. 20431 U.S.A.

Telephone: [1](202) 473-3394
Facsimile: [1](202) 623-4100
Email: seminars@worldbank.org
Website: **www.worldbank.org/pos**

Asia in the World, the World in Asia

HAVE YOU REGISTERED YET?

Thought Provoking → Agenda Setting → Action Inspiring

The **Program of Seminars** is a premier global forum where you can join influential private sector executives from around the world, high level policymakers from 184 countries, and other thought leaders in the international development and financial fields for a robust and constructive dialogue to strengthen the network for cooperation in the global economy.

Key Themes for PoS 2006

- Asia Rising: Myths and Realities
- Capital Markets and the Financial Sector in Emerging Markets
- Corruption, Governance, and Growth
- Infrastructure for the 21st Century
- Why Investment Climate Matters
- Trade and Investment
- Energy and Security
- Growth and Equity
- Regional Economic and Financial Integration
- Innovation and Technology

©International Monetary Fund. Not for Redistribution