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Building a competitive finance function: **An executive roundtable**

By focusing on talent development, new roles for finance, and creative benchmarks, CFOs can deliver a competitive advantage to their companies.

CFOs and the finance organizations they head are under intense pressure from the capital markets and activist investors to keep pace with a rapidly changing global market—to go beyond merely crunching numbers and create value on their own. Although finance organizations have a reputation for resisting change, those at world-class companies have made some progress in promoting it.

Such companies require finance professionals to be competitive as well as competent, to lead activities that the finance organization is uniquely suited to direct, and to assume responsibility even for activities that some find uncomfortable, because otherwise those things just won't get done. Such expectations mean companies must attract and retain the best finance professionals they can—which in turn perpetuates an environment where the finance organization can create more value and do higher-quality work.

These are among the perspectives of a panel of experts convened at McKinsey's 2007 CFO forum in London. The panelists were Jesper Brandgaard, executive vice president and CFO of Novo Nordisk; John Connors, a partner at the venture capital firm Ignition Partners and former CFO of Microsoft; Jonathan Peacock, CFO and chief administrative officer of Novartis Pharmaceuticals; and Helen Weir, group finance director of Lloyds TSB. Herbert Pohl, a partner in McKinsey's Dubai office, moderated the discussion. What follows is an edited and abridged version of it.

McKinsey on Finance: *Let's start the discussion by talking about how CFOs and the finance functions they head can go beyond measuring performance to create value as well. How does that happen, John?*

The panelists

Jesper Brandgaard, executive vice president and CFO of Novo Nordisk (2000–present), joined the company in 1999 as vice president of corporate finance. He is chairman of the boards of NNE Pharmaplan and NNIT and serves as vice chairman on the board of SimCorp (all in Denmark).

John Connors is a partner at Ignition Partners (2005–present). Previously, John spent 16 years at Microsoft, in several roles, including senior vice president of finance and administration and CFO, vice president of the Worldwide Enterprise Group, and vice president and chief information officer. He serves on the board of trustees of the Nature Conservancy of Montana and on the national advisory board of University of Montana Athletics.

John Connors: There are a number of areas where a CFO and the finance organization play a critical role in creating value. Some of them are widely understood, such as ensuring that the company has a highly effective capital structure, setting expectations for investors—and then not surprising them—and setting stretch goals for revenue and profitability that meet the company's long-term aspirations.

Other roles are less common. An important one is for the CFO to contribute to and orchestrate the relationship between the board and executive management—to set an effective rhythm to the business, in the planning processes and the review processes, for how things get done on a monthly and quarterly basis. That adds a lot of value when it's done well; if it's not done well, these things can be a huge drain on people's time.

Another role that the CFO is uniquely and personally well positioned for is to expose areas of underperformance and those that are a real drag on value. That's a very hard thing to do, and it takes a lot of political skill to do it right. But once it's done, the CFO can create an agenda for change, either to get those units to perform better or to figure out how to get rid of them.

Jonathan Peacock is CFO and chief administrative officer of Novartis Pharmaceuticals (2005–present). Prior to joining Novartis, he was a partner at McKinsey (1998–2005).

Helen Weir is group finance director of Lloyds TSB (2004–present). Prior to joining Lloyds, she was group finance director of Kingfisher (2000–04), finance director of B&Q (1995–97), and a consultant at McKinsey (1990–95). She is a nonexecutive director of Royal Mail Holdings and a member of the Accounting Standards Board.

McKinsey on Finance: *Jonathan, what happens in your organization?*

Jonathan Peacock: Our finance organization creates value by pulling together cross-functional teams to really think about how we can drive productivity and efficiency, how we can allocate resources, and where we can find more value in the business. Function by function, we work with the businesses to identify areas that can be centralized to improve efficiency and opportunities to offshore. Is a specific skill something that we need in house? If we're going to offshore it, could we also outsource it?

And because our business is organized around a fairly decentralized commercial business, a fairly centralized manufacturing group, and a centralized research and development organization, we find that unless we, as a broader finance group, drive these efforts, they become fragmented. They just don't happen. And while this is a role that some finance people find uncomfortable, for others it's a great opportunity to bring significant value to the business in a very tangible way.

McKinsey on Finance: *That requires the finance organization to be more than competent—that it be competitive in* *the marketplace and close to the business as well. How do you create that competitive edge within the finance organization?*

Jesper Brandgaard: With benchmarks—particularly in industries where companies may historically have been complacent about tracking their performance very explicitly. In our case, we're benchmarking the costs of managing and financing our business so that we can demonstrate improvement year on year. That makes us more credible in asking our colleagues in the rest of the organization to raise their own performance levels.

CFOs need to look externally for performance benchmarks, and maybe they won't be ideal, but even reasonable benchmarks suffice. There are some external institutions and consultancies that do pretty good ratings—providing benchmarks on performance, on delivering adequate financial returns, and so forth. As an example you can find relevant performance measures on working-capital levels and related process efficiency and set ambitious goals for them. And if you can't find one comprehensive measure, you can still find measures for individual areas.

John Connors: As Jesper suggests, benchmarking performance in the finance organization can be difficult because there are few metrics you can use to measure quality and competitiveness. At Microsoft we settled on four. The first was obviously people, and one way of assessing the quality of your people is to look at whether you've hired people others would like to hire, either outside of the company or internally. And if you have people who are in demand, you probably have a good starting point.

Second, we liked to push our groups to win awards. We expected our investor relations group every year to be the top-rated investor relations group by Institutional Investor. We expected our treasury organization to win awards in the Alexander Hamilton Award process in the United States for the best in treasury in a number of classes.

We also set concrete goals for how much cost we wanted to take out, for how quickly we should have the books closed at the end of every month, and for Sarbanes-Oxley compliance processes, for example. And the overarching goal was to have the best financial-information systems in the world, such that other companies would come to Microsoft to see the tools we'd built for the use of businesspeople as well as operations people worldwide.

McKinsey on Finance: *How, specifically, do you drive talent management?*

Jesper Brandgaard: One of the ways I do it is to set the very concrete goal of being a net exporter of management talent to the rest of the group. You can really instill discipline within the rest of the organization by taking finance people with very solid and systematic skills and positioning them elsewhere in the business. The most recent example I've had is reassigning the head of investor relations in our finance group to become the executive assistant of our chief science officer and responsible for strategic planning in research and development. That allows us to extend the discipline and reporting culture of the finance organization into the most challenging part of the value creation process in pharma: the research and development area. I am certain this will drive tremendous value.

Helen Weir: As Jesper says, a lot of organizations, including my own, are trying to move people around much more—to bring people who do not necessarily have accountancy training into the finance organization and to make sure that finance people go outside. But this issue also goes back further than that, to the kind of people we bring into the finance organization in the first place.

And attracting good people can be a chicken-and-egg problem because one of the key things needed to draw them is good development opportunities. If all you can offer is a very basic finance role, you're not going to be able to attract good people. So what you need to do is make sure you've got the right tools and systems to take away a lot of the more mundane activity. Then people can spend their time focusing on helping the business add value. If you give them good career development and the opportunity to progress, both within the finance area and outside, and they have interesting people to work with and learn from, you'll be able to attract really good people.

'One of the ***key issues*** *is that there are a lot of very good finance people but not as many good leaders'*

Furthermore, one of the key issues is that there are a lot of very good finance people but not as many good leaders. And that's something that we have to develop. Many people who work in finance are good technically but not necessarily the best people to lead and influence. So we have to be smarter at attracting the right kind of people, either from the beginning or through the finance career path, and enabling them to move the function forward. It's a whole package that goes together, to my mind.

Jonathan Peacock: And building on that, it's important to bring a more diverse talent base into the finance organization and for the finance community to build a broader base of experience early on. So in our organization, while we bring people without finance experience into finance, we also encourage people to move out of finance for two years to get operational experience so that they can be better CFOs in the future. For example, we brought into our finance organization somebody with a science background who's spent two years in strategic planning. So he has the science background, he has the structure of the strategic-planning background, and now he's moving into the performance-management area.

McKinsey on Finance: *Helen, you spoke of a chicken-and-egg problem: you want to attract the right people but you don't have the opportunities for them. How did you change this?*

Helen Weir: When I joined Lloyds TSB we had quite a traditional finance organization—typical of what you'd find in many banks. There had always been an emphasis on the technical side because accounting in finance and banking does tend to be quite technical and quite complex. And typically what you don't find is a lot of people with more commercial skills. So one of the things I did was to set out what I saw as the core values of finance, which were objectivity and simplicity and, above all, commerciality. We spent a lot of time thinking about what being commercial meant within the finance area.

And then change involved bringing some key people together—some like-minded people who understood what I was talking about, who knew what the finance function could be in terms of being a commercial business partner. Some of them were in the organization already; others had to be brought in. But the task was finding those people, bringing them through, and giving them the opportunity to set the overall direction and tone of the finance function.

One aspect was high-potential development programs—picking out key individuals, who may be at the middle-management level but who've got the potential to become leaders of the organization. It's about finding people who are really commercial and making sure they get the right development opportunities.

Jonathan Peacock: We shouldn't under-play the technical side of the accounting function either, because it's very easy to end up with middle-of-the-road finance people who are good at running the basic numbers, but you need people who are technically very strong as well—on both accounting and systems. It's that diversity of skills you need so you have real spikes in the technical side of finance as well as the more commercial side of it.

John Connors: The starting point for recruiting and retaining good people, really, is that the CFO has to be well regarded. These are intensely scrutinized roles. The board scrutinizes you, the CEO scrutinizes you, the line-of-business people scrutinize you, as well as regulators and people in the industry. It matters what people think of the CFO and the management team and whether people aspire to have those jobs. If you have good, respected leadership, good things happen to the talent pool of the entire organization.

The second important thing for managing talent is that you have the very best people you can have, given the circumstances at the time, in each of the key roles: the controller, the treasurer, the internal auditor. That doesn't mean having the very best in the world—it means having the best you can get. The thing that I've always found in every job is that the troops all know when a manager or a leader isn't very good, and they underperform if that leader or manager isn't as good as he or she could be.

At Microsoft we had a big program to get the very best people we could in each of the key leadership roles. Then we developed a talent-development program for managers. We had a big emphasis on ensuring that the diverse character of the business was heavily represented. We had a two-year program where we would try to build these people up with technical skills, with speaking skills, with job rotation assignments. And then, finally, we instituted a university-recruitment program with the idea that we wanted to get the very best students out of universities as our incoming group of employees.

McKinsey on Finance: *How does that emphasis on recruiting good talent translate into improving quality?*

Jonathan Peacock: Just raising the bar each year can be a good start—to expect more of the people in the finance group in terms of financial management and business support. Specifically, our finance organization measures quality around five themes: high integrity, which is about strong compliance, controls, and speaking up; no surprises in performance management, which is about being close to the business, anticipating issues before they arise, and forecasting accuracy; and productivity and value creation, where we set some pretty high bars for the finance organization to define and run cross-functional programs to bring productivity benefits to the bottom line. Then there's talent, where we ensure that 20 percent of everyone's annual objectives are set on people leadership and talent development and tailoring individual objectives to the roles they play. Finally, there's global community, where we expect everyone in finance to be active contributors to the global finance community, as well as good local partners to our business.

Jesper Brandgaard: We also had an approach to improving quality by trying to measure the mistakes we made. That turned out to be tricky because getting any-one to admit the mistakes that they make is difficult. But we found out it could be a really significant improvement opportunity if we rewarded people for learning from their mistakes, bringing forward excellent learning examples, and discussing them. And we saw real improvement. MoF

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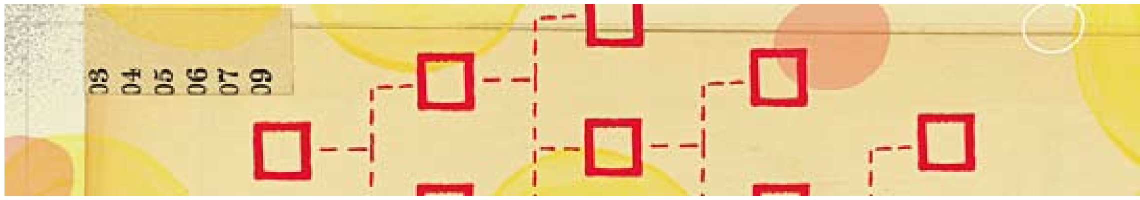


Deal making in 2007:
Is the M&A boom over?

Reports of the demise of the M&A boom may be greatly exaggerated. But to keep it going, companies must work even harder to ensure that deals create value.

Antonio Capaldo, Richard Dobbs, and Hannu Suonio

Are reports of the demise of M&A activity premature? Announced mergers reached $4.4 trillion globally in the first 11 months of 2007, and record volumes from January to July had already surpassed the record full-year level, set in 2006. But midyear, as the subprime-lending crisis began to rage, merger activity plunged about 40 percent from the second to the third quarter.

Although the dive generated much commentary that the M&A boom had ended, a more subtle analysis suggests a different conclusion for deal makers: the slowdown over the last few months of 2007 was concentrated largely in the private-equity sector. Corporate M&A lost none of its vigor as the year rolled on. Furthermore, our annual review of M&A activity finds that acquiring shareholders still appear to be getting more value from deals than they did during the last M&A upswing, in the late 1990s. Acquirers still have considerable room for improvement, but their newfound discipline appears to be keeping bid premiums under control and sustaining improvements in the flow of value to the acquirer.

Private-equity deals were another story: in the second half of the year, their volume fell by over 50 percent (Exhibit 1), hit by turbulence in the credit market and a more troubled market outlook. Yet before the August credit crunch, the volume of such deals reached unprecedented levels—it not only was more than four times higher than it had been during the previous peak, in 2000, but also represented more than 20 percent of M&A activity in the current boom. Meanwhile, corporate M&A activity remained high throughout the year, and significantly higher than in 2006.

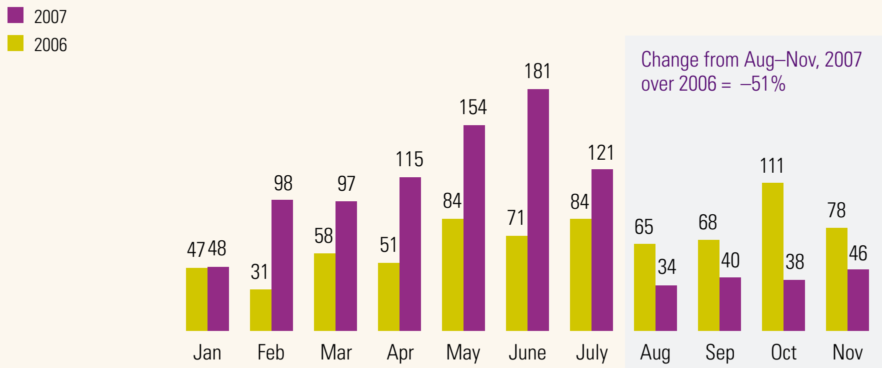
Some specific activities, evident throughout the current merger boom, remained prominent this year:

Exhibit 1

A correction for private equity

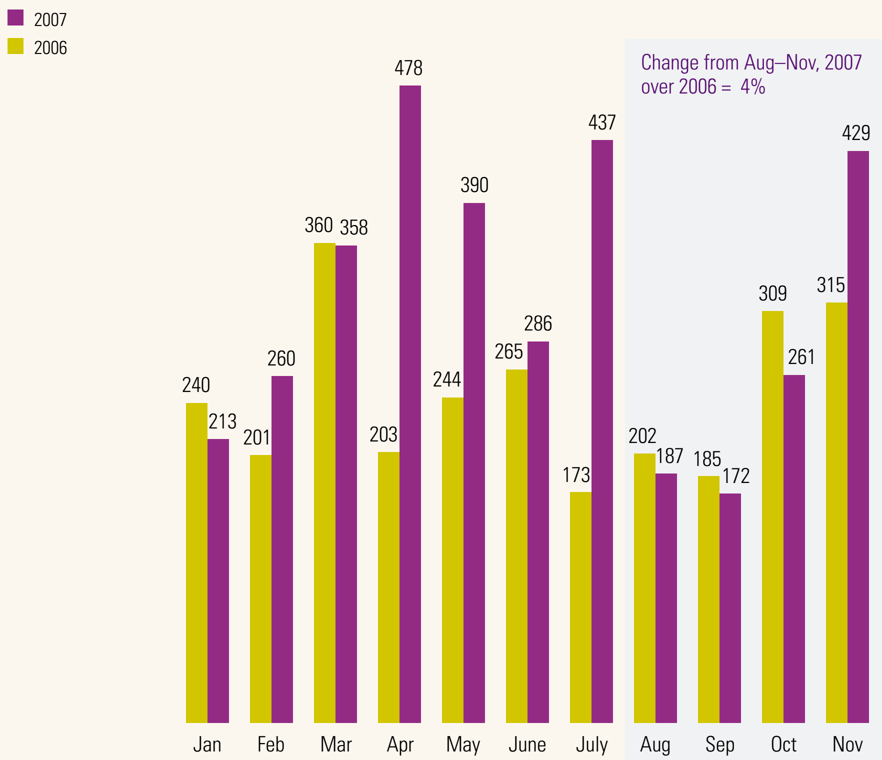
The slow-down in M&A over the last few months of 2007 was concentrated largely in the private-equity sector.

Value of announced private-equity M&A deals,[1] $ billion



	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov
% change 2007 over 2006	2	216	67	125	83	155	44	–48	–41	–66	–41

Value of announced corporate M&A deals,[1] $ billion



	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov
% change 2007 over 2006	–11	29	0	135	60	8	153	–7	–7	–16	36

[1]Includes deals (announced and not withdrawn) >$25 million in value.

Source: Dealogic; McKinsey analysis

- Cross-border activity, replicating the fast-paced globalization of economic and financial flows, is increasing. It now represents 40 percent of global M&A, up from 20 percent in 2000 and 30 percent in 2005.

- Companies in emerging markets have increasingly and substantially established themselves as both buyers and sellers in this cross-border activity. Overall, Asia and the Middle East now represent about 15 percent of global volumes; India, China, and the Middle East are up by 110 percent, 47 percent, and 38 percent, respectively, over 2006. Moreover, companies in these regions can be major global deal makers, as shown by a number of large transactions: the acquisition by India's Tata Steel of the United Kingdom's Corus, a leading metals group with international reach; the acquisition, by the United Kingdom's Vodafone, of Hutchison Essar, a leading mobile operator in India; and the significant role Borse Dubai played in the stock exchange consolidation involving itself, NASDAQ, OMX, and the London Stock Exchange. Also, Asian and Middle East banking giants and sovereign funds took significant stakes in top global financial companies, such as Abu Dhabi Investment Authority's (ADIA) purchase of a 4.9% stake in Citigroup for $7.5 billion and Chinese insurer Ping An's purchase of 4.2% in Fortis for €1.8 billion.

- Megadeals—deals with a value of more than $10 billion—contributed 30 percent of the year's overall volume. That is considerably above the long-run average of about 20 percent (over the past ten years), though the number of megadeals fell from 54 in 2006 to 45 in 2007.

- Hostile takeovers generated 12 percent of total deal volumes in 2007, again considerably higher than the long-run average of about 3 percent (over the last ten years).

Overall, data from the market's reactions to deals suggest that M&A activity continues to be value creating.[1] Deals went on generating high total value. The year's average deal value added (DVA)—our measure of the total value created for buyer and seller—reached 6.5 percent (Exhibit 2), well above the long-term average and just slightly below the record levels of the previous two years.[2] The overall trend shows that significantly more value has been created in the current boom than in the previous one.

One major driver of the higher DVAs of recent years has been an improvement in the acquirers' DVA, which has gone up from an average of –7.0 percent (1997–2004) to around –0.5 percent during the past three years. By contrast, the DVA for the shareholders of target companies has remained largely stable, at 10 percent, throughout the past decade. Buyers continue to do better.

In general, the news is good—acquirers no longer transfer more than 100 percent of the short-term value created by deals to the target—but too much of the value often still goes to the sellers. The proportion that may have overpaid, at least according to the markets' initial reaction as measured by our proportion of overpaid (POP) index,[3] remained low for the third year running (Exhibit 3). Premiums paid[4] decreased modestly, to 18 percent, from last year's low of 19 percent, despite greater competition from private-equity firms in the early part of the year.

However, the strong value creation seen in the aggregate indexes hides high underlying variability in discipline and value creation.

[1] To monitor trends in value and value creation from mergers and acquisitions, we assessed the financial markets' initial reaction by comparing the share price for each company two days before and two days after it was announced. Academic research has found a positive correlation between long-run value creation and these "announcement effects," which are useful to assess trends in M&A, as they strip out the impact of other factors that affect share prices. For a closer look at the methodology and long-term analysis of value creation in M&A, see Richard Dobbs, Marc Goedhart, and Hannu Suonio, "Are companies getting better at M&A?" *McKinsey on Finance*, Winter 2007, pp. 7–11.

[2] The deal value added (DVA) is defined as the change in the market capitalization of both the acquirer and the acquired company (adjusted for market movements, from two days prior to two days after the announcement of a deal) as a percentage of the transaction's value. Since the DVA index is derived from immediate market reactions, it isn't a definitive view of a deal's true value creation, but it is useful to monitor aggregate value creation characteristics and trends over time.

[3] The proportion of overpaid (POP) is defined as the proportion of transactions in which the share price reaction (adjusted for market movements, from two days prior to two days after the announcement) was negative for the acquirer. This definition assumes that the share price of the acquirer declines if the price it pays for the target is higher than the target's stand-alone value plus synergies (hence, overpayment).

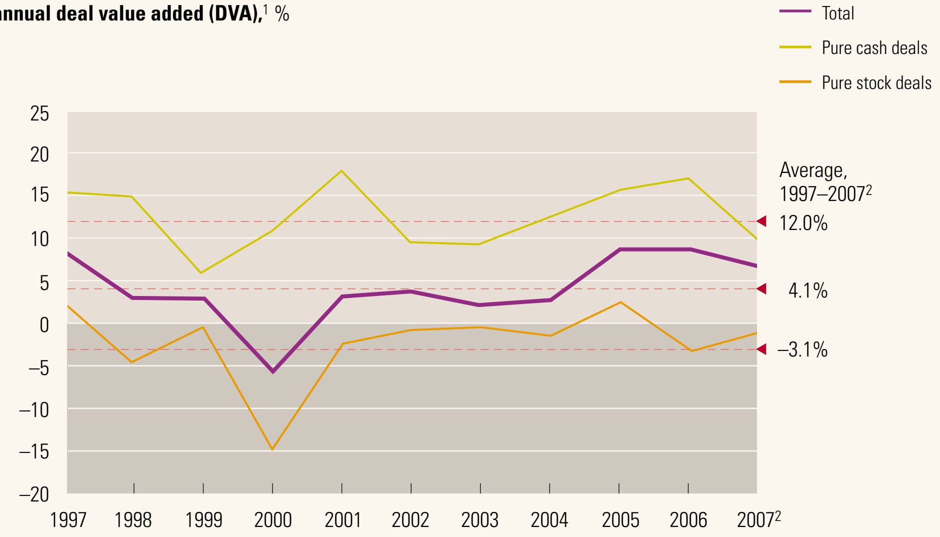
[4] The premium here is the increase in the price offered per share over the target company's share price one week before the announcement.

Exhibit 2

Still creating value

M&A deals continued to generate strong value in 2007.

Average annual deal value added (DVA),[1] %



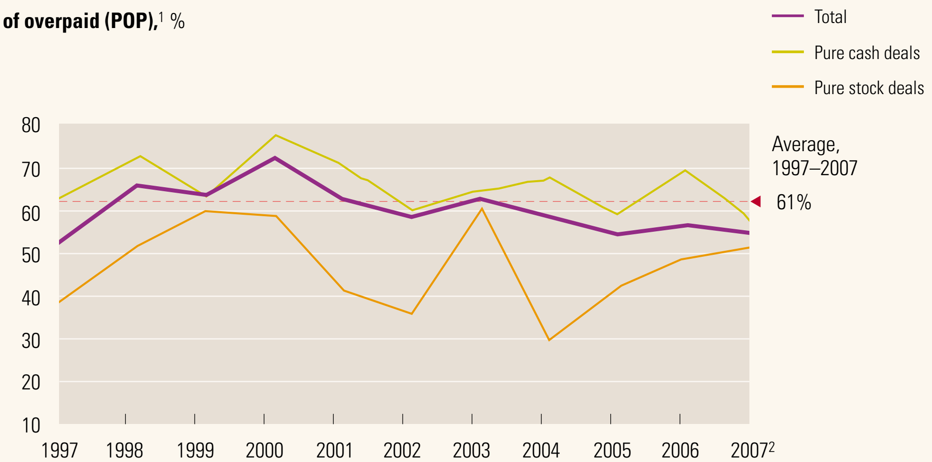
[1]For M&A involving publicly traded companies; defined as combined (acquirer and target) change in market capitalization, adjusted for market movements, from 2 days prior to 2 days after announcement, as % of transaction value.
[2]Through Nov 30, 2007.

Exhibit 3

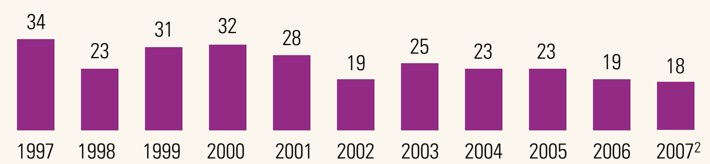
Modest improvement

The acquirer's share of the overall value created by deals has improved somewhat.

Proportion of overpaid (POP),[1] %



Premiums paid,[3] %

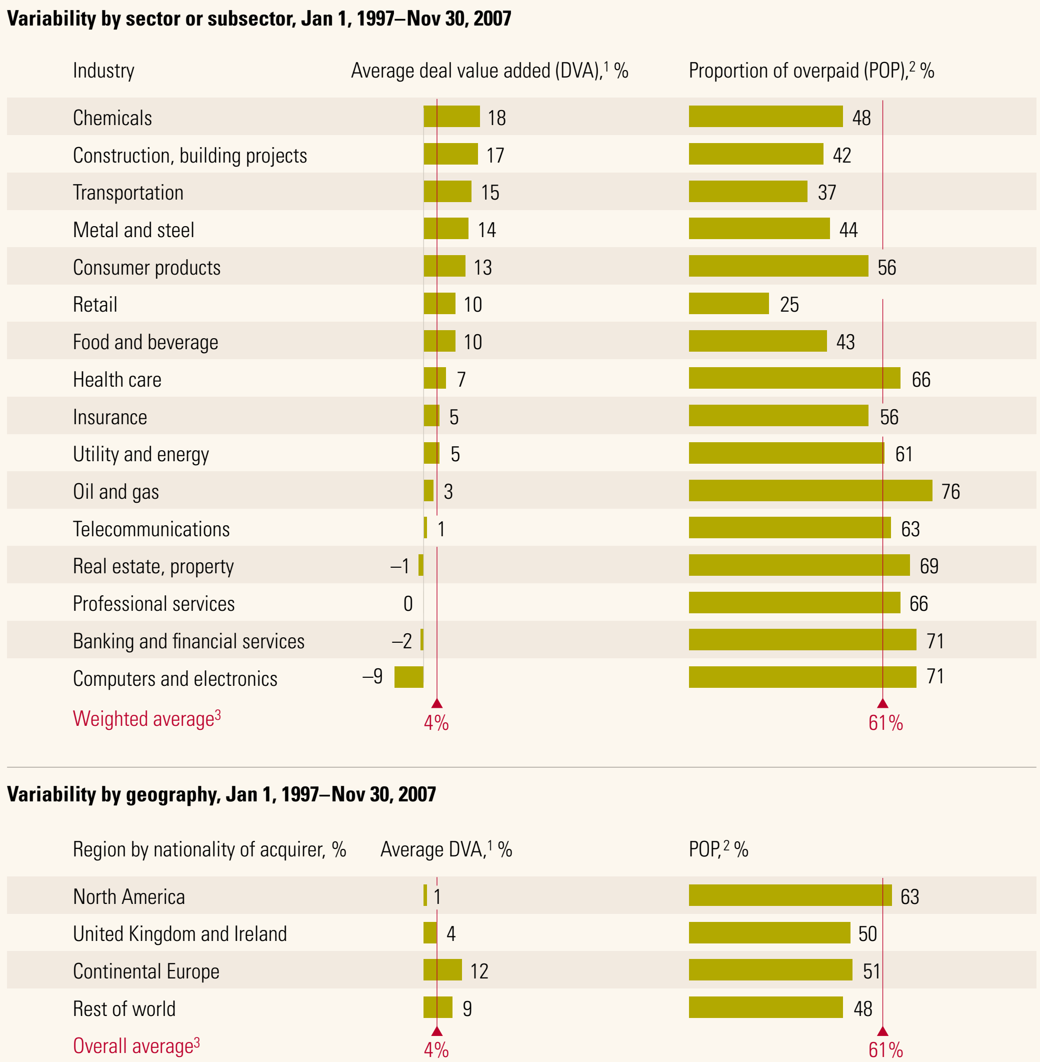


[1]For M&A involving publicly traded companies; POP defined as proportion of transactions in which share price reaction, adjusted for market movements, was negative for acquirer from 2 days prior to 2 days after announcements.
[2]Through Nov 30, 2007.
[3]For M&A involving publicly traded companies; median 1-week premium = price offered per share vs target company's share price 1 week before announcement.

Exhibit 4

Value at the announcement

The levels of value created by deals in different sectors and geographies continue to diverge significantly.



[1]For M&A involving publicly traded companies; DVA defined as combined (acquirer and target) change in market capitalization, adjusted for market movements, from 2 days prior to 2 days after announcements, as % of transaction value.
[2]For M&A involving publicly traded companies; POP defined as proportion of transactions where share price reaction, adjusted for market movements, was negative for acquirer from 2 days prior to 2 days after announcements.
[3]Weighted by number of deals per sector or region.

Source: Datastream; Dealogic; McKinsey analysis

Cash deals, for instance, generally get a more favorable market reaction than stock deals because of the trading and signaling effects.[5] But in 2007 (and especially during its last few months) cash deals performed less well than they have historically on both their POP and their DVA. Their performance also became more variable: in 2007 the standard deviation of DVAs (a measure of their variation) reached 32 percent, significantly higher than it has been in all recent years except the 2000 peak. Further, the share of bad deals (those with a DVA of less than –15 percent) reached a surprising 17 percent of total deals in 2007. That was three times higher than their level in 2006 and consistent with their level at the corresponding point in the previous

[5]For a comparison of cash deals and stock deals, see Richard Dobbs, Marc Goedhart, and Hannu Suonio, "Are companies getting better at M&A?" *McKinsey on Finance*, Winter 2007, pp. 7–11; as well as Gregor Andrade, Mark Mitchell, and Erik Stafford, "New evidence and perspectives on mergers," *Journal of Economic Perspectives*, 2001, Volume 15, Number 2, pp. 103–20.

boom (in the late 1990s), which was characterized by a significant overall destruction of value from bad M&A.

Furthermore, the value created by deals in different sectors and geographies continues to diverge significantly. The sectors with the highest levels of value creation[6] and discipline[7] include basic materials (such as chemicals, building products, metals, and steel) and the consumer sector (including consumer products, retailing, and food and beverage). The reason may be that investors think the benefits of mergers are highest in these two sectors. Geographically, the acquisitions of continental European and Asian companies get a more favorable reaction from the market than those of North American ones (Exhibit 4).

The year 2007 was a record but highly turbulent one in M&A. Merger activity continued to be strong, particularly considering the impact of the subprime crisis on private equity–driven acquisitions. In the aggregate, buyers went on exerting discipline to ensure that they created and captured value, as they had not in the previous boom. But the variability in performance suggests that acquiring management teams and boards must continue to focus on whether they can create value and on ensuring that they don't overpay. MoF

[6]Deals with an average DVA above 10 percent.
[7]Deals with a POP well below 50 percent.

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The new role of **oil wealth** in the world economy

Regulators may worry when Arab investors acquire stakes in Western companies, yet vast reserves of petrodollars have kept down interest rates and buoyed financial assets. What's the broader effect of the surge in petrodollars?

Diana Farrell and Susan Lund

As oil prices continue to set new records, investors outside Europe and the United States are increasingly shaping trends in financial markets. Petrodollar investors have a newfound influence, and the more than tripling of oil prices since 2002 makes them the largest and fastest-growing component of a broad shift in global economic markets—a shift that also includes Asian central banks, private-equity firms, and hedge funds.[1] High oil prices are, in effect, a tax on consumers, generating windfall revenues for oil-exporting nations, which in 2006 became the world's largest source of net global capital flows, surpassing Asia for the first time since the 1970s (Exhibit 1). A majority of these revenues have been recycled into global financial markets, making petrodollar investors increasingly powerful players.

Moreover, the influence of petrodollar investors is likely to continue to grow over at least the next five years. The exact size of future petrodollar foreign investments will depend on oil prices, which are subject to considerable uncertainty. Nonetheless, we can estimate the general direction of petrodollar assets using three benchmark price points and research on global energy demand by the McKinsey Global Institute (MGI).

At $50 per barrel of oil the annual net capital outflows of the petrodollar countries would amount to $387 billion a year through 2012 (Exhibit 2).[2] This total represents an extraordinary infusion of capital into global financial markets at a rate of more than $1 billion per day. At $70 a barrel petrodollar flows into global markets would grow even larger, reaching $628 billion annually by 2012, implying new petrodollar investments of nearly $2 billion a day. By 2012 the total stock of petrodollar foreign assets would grow to $6.9 trillion. Even if oil prices declined to $30 a barrel, petrodollar foreign assets would grow at a robust average rate of 6 percent annually, to reach about $4.8 trillion in 2012, when the oil-producing countries would add $147 billion to the global financial system.

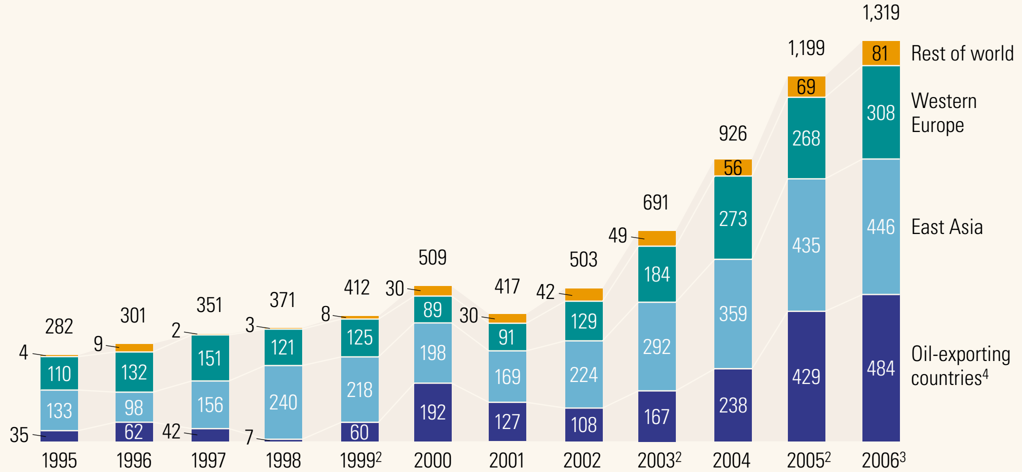
[1] The full report, *The New Power Brokers: How Oil, Asia, Hedge Funds, and Private Equity Are Shaping Global Capital Markets*, is available free of charge online at www.mckinsey.com/mgi.
[2] Net capital outflows are equal to current-account surpluses, less errors and omissions.

Exhibit 1

Impressive growth

Oil-exporting countries have become the world's largest source of global capital flows, surpassing Asia.

Net capital outflows from countries with current-account surpluses,[1] $ billion



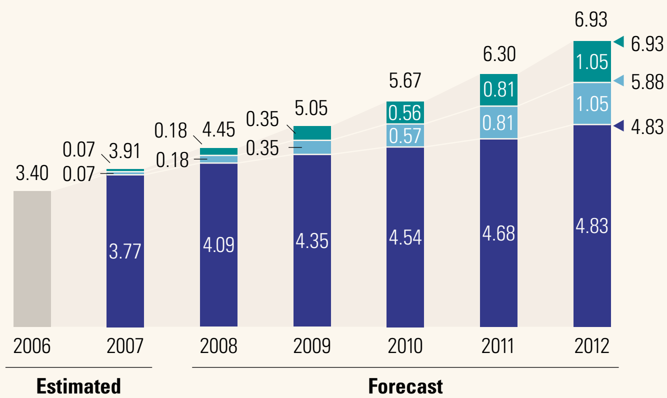
[1]Include only those countries, in any given year, with current-account surpluses and capital account deficits.
[2]Figures do not sum to total, because of rounding.
[3]Estimated.
[4]Algeria, Indonesia, Iran, Kuwait, Libya, Nigeria, Norway, Russia, Saudi Arabia, Syria, United Arab Emirates (UAE), Venezuela, and Yemen.

Exhibit 2

Three scenarios of growth

Even if oil prices declined to $30 a barrel, foreign assets purchased with petrodollars would grow at a robust average annual rate.

Petrodollar foreign-investment assets, $ trillion



Scenarios		Compound annual growth rate (CAGR), 2006–12, %
6.93	Oil price $70	13
5.88	**Oil price $50 (base case)**	**10**
4.83	Oil price $30	6

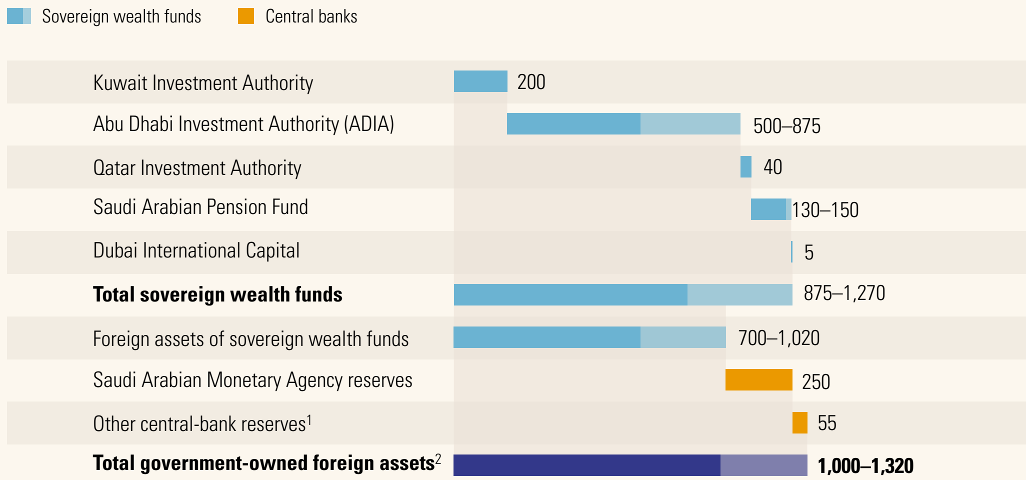
Source: *BP Statistical Review of World Energy 2006*; Global Insight; McKinsey Global Institute global capital flows database; McKinsey Global Institute analysis

Exhibit 3

Sovereign wealth

The Abu Dhabi Investment Authority (ADIA) is the largest sovereign wealth fund among oil exporters.

Estimated assets of major Middle East government investment companies, 2006, $ billion



[1]Estimates of Kuwait, Oman, Qatar, and United Arab Emirates (UAE) foreign-reserve assets.
[2]Figures do not sum to total, because of rounding.

Source: Interviews; McKinsey Global Institute analysis

That figure is larger than petrodollar surpluses throughout the 1990s.

Without a doubt, this flood of oil money is creating new dynamics, and the rise of petrodollar investors feeds growing concern about their government connections and influence on markets. Since facts about these powerful new investors have been scarce, our research aims to ground the debate by providing new data and analysis.

Where petrodollar assets are held

By our estimate, investors from oil-exporting nations owned $3.4 trillion to $3.8 trillion in foreign financial assets at the end of 2006.[3] That sum is invested overseas in a number of ways.

Central banks

Some petrodollars end up as resources held by central banks, which invest in foreign assets to stabilize currencies against balance-of-payment fluctuations. The primary investment objective of central banks is stability, not the maximization of returns. They hold foreign reserves, mainly in the forms of cash and long-term government debt—at present, largely US Treasury bills. Among the oil exporters, Saudi Arabia has the largest central-bank funds, with an estimated $250 billion in 2006.

Sovereign wealth funds

Most oil-exporting countries have set up state-owned investment funds, often called sovereign wealth funds, to invest oil surpluses in global financial assets. Unlike the reserves of central banks, these funds hold diversified portfolios that range across equities, fixed-income vehicles, real estate, bank deposits, and alternative investments, such as those provided by hedge funds and private-equity firms. Most sovereign wealth funds allocate their portfolios in a relatively traditional way across asset classes, often relying on external global asset managers. To date, the funds have rarely taken majority shares in foreign companies. The largest

[3]Determining the true size of the oil exporters' foreign assets is difficult because no comprehensive official figures exist. Our estimates are based on published data sources, our own research, and interviews with banking experts in the region.

sovereign wealth fund among oil exporters, the Abu Dhabi Investment Authority (ADIA), reportedly has total assets of up to $875 billion (Exhibit 3).

Government investment corporations

Increasingly, oil exporters channel some of their wealth into smaller, more targeted funds, such as Dubai International Capital (DIC) and Istithmar. These entities invest directly in domestic and foreign corporate assets, shunning the portfolio approach of the sovereign wealth funds. Many operate like private-equity firms, actively buying and managing companies, either alone or with consortiums of investors. Their investments include the Tussauds Group (owner of the London wax museum), purchased by DIC in 2006—subsequently sold to Merlin Entertainments in 2007—and Barney's New York, which Istithmar bought in 2007.

High-net-worth individuals

In almost all oil-exporting countries except Norway, private wealth is highly concentrated among a few wealthy and ultrawealthy individuals.[4] These investors place a large portion of their wealth abroad, often using financial intermediaries in London, Switzerland, and other financial hubs, and most have highly diversified asset allocations. They also have some unique preferences, with a penchant for equity and alternative investments. Overall, MGI estimates, private individuals have made 40 percent of all petrodollar foreign investments.

Government-controlled companies

Particularly in the Middle East, with its limited domestic markets, some state-owned companies in oil-exporting nations receive direct or indirect government funding and then invest in companies abroad. A lot of public attention has accompanied some of these deals—notably the recent acquisition of GE's plastics unit by Saudi Basic Industries (Sabic) for $11.6 billion and the purchase, by Dubai's DP World, of the British ferry conglomerate P&O for $8.2 billion. In 2005 and 2006 alone, acquirers from the Gulf Cooperation Council (GCC) states spent more than $70 billion on international M&A.[5]

Private companies

Finally, private companies in oil-exporting nations, like their counterparts elsewhere, use retained earnings and capital growth to finance foreign investments. They include Kuwait's Mobile Telecommunications Company (MTC), the National Bank of Kuwait, and the Kuwait-based logistics business Agility, as well as Egypt's Orascom. As with government-controlled companies, we do not include the value of the foreign acquisitions of private companies in our estimates of petrodollar wealth.

Fueling liquidity—and possibly asset bubbles

Since 2002, oil prices have tripled, and much of the incremental increase has ended up in the investment funds and private portfolios of investors in oil-exporting countries. Most of the money is then recycled on global financial markets, whose liquidity is therefore rising.

In fixed-income markets, this added liquidity has significantly lowered interest rates. We estimate that total foreign net purchases of US bonds have brought down long-term rates by about 130 basis points. Twenty-one of them can be attributed to purchases by the central banks of oil-exporting countries,[6] an impact as large as that of the capital flows from financial hubs such as the Cayman Islands, Luxembourg, Switzerland, and the United Kingdom, though less than half the impact of Asia's

[4] Some of the wealth that oil exports generate ends up in middle-class and mass-affluent households. However, they are less sophisticated investors and generally keep the majority of their wealth in the domestic financial system. In the Middle East these investors have an estimated $200 billion to $250 billion in assets. Because our focus is the impact of petrodollars on global financial markets, we exclude middle-class and mass-affluent investors from our analysis.

[5] The total value of foreign acquisitions by all companies in oil-exporting countries is probably much higher and could add a few hundred billion dollars to the pool of petrodollar foreign assets. However, we don't include the value of these corporate acquisitions in our calculations. First, they are exclusively in companies and not in portfolios of financial assets, and, second, it is difficult to calculate their value—the acquirers typically are not public companies and thus report limited information. The GCC member states are Bahrain, Kuwait, Oman, Qatar, Saudi Arabia, and the United Arab Emirates (UAE).

[6] We based this assessment on a methodology developed by Francis E. Warnock and Veronica Cacdac Warnock, "International capital flows and U.S. interest rates," NBER Working Paper 12560, October 2007. See appendix B of MGI's report for more details.

central banks on US interest rates. Petrodollars have added liquidity to international equity markets as well. Taking into account the allocations of GCC investors,[7] we estimate that each year equity markets receive $200 billion in petrodollars, accounting for about $2 trillion—or 4 percent—of their capitalization.

Some observers worry that this new liquidity is having an inflationary effect on asset prices, perhaps fueling bubbles. Our analysis shows that this concern isn't justified in public-equity markets. Although their capitalization has risen rapidly since the 2000 stock market decline, we find that rising corporate profitability and share buybacks (often using debt) are the main reasons. In Japan and the United States, private-equity ratios have declined in recent years, while in Europe they have risen only incrementally. (In China, India, and some other emerging markets, however, they have increased.)

The story is different in global real-estate markets. According to research by the Economist Intelligence Unit, real-estate values in developed countries have increased by $30 trillion since 2000, reaching $70 trillion in 2005 and far outstripping GDP growth over the same period.[8] This rise reflects not only the preference of petrodollar investors for global real estate but also the home-equity loans and larger mortgages that low interest rates and risk spreads have made possible.

Indeed, petrodollars have helped increase global leverage in many forms. Low interest rates and credit spreads have enabled the rise of hedge funds and the private-equity boom, which may have stalled for the moment.[9] Although low rates and spreads have created ample liquidity for consumer credit in the United Kingdom, the United States, and many other countries, a reassessed appetite for risk could burst this global credit bubble, causing pain to lenders and borrowers alike. In mid-2007 problems in the US subprime-mortgage market sparked a repricing of credit risk and a credit crunch. A note of caution is therefore warranted, despite the bullish impact of petrodollars on the liquidity of world financial markets.

Growing concerns

Despite the many beneficial effects of petrodollars in increasing global liquidity and spurring the growth of various financial-asset classes throughout the world, the rise of investors in oil-exporting countries has created concerns.

One worry is that the huge size of petrodollar sovereign wealth funds, coupled with their relatively high appetite for risk, could make global capital markets more volatile. The limited transparency of these funds amplifies the anxiety. Our research, however, finds that their investment portfolios are widely diversified not only across asset classes and regions but also through a number of intermediaries and investors. Diversification reduces the risk that the funds could make financial markets more volatile. Moreover, petrodollar investors have a track record of sensitivity about the broader market impact of large flows and use derivatives and intermediaries to lessen it. ADIA, for instance, reportedly invests 70 percent of its funds through external asset managers—intermediaries who know they must move slowly in markets to avoid adverse price adjustments. Direct petrodollar investors tend to adopt a relatively low profile.

A second concern has also attracted growing attention among financial-market regulators in Europe and the United States: the

[7] See the full MGI report for estimated portfolio allocations of different types of petrodollar investors.
[8] "In come the waves," *Economist*, June 15, 2006.
[9] Antonio Capaldo, Richard Dobbs, and Hannu Suonio, "Deal making in 2007: Is the M&A boom over?" in this issue.

prospect that sovereign wealth funds could use their growing financial heft for political or other noneconomic motives. The rise of large government investors in financial markets is a new phenomenon—and one at odds with the shrinking role of state ownership in real economies. Given the limited transparency and enormous size of these investors, some observers question the motivations underlying their investment strategies. How will state investors behave as public shareholders or owners of companies in foreign markets? Will they seek to maximize value creation and long-term growth, or will their investments reflect the political objectives of their governments and the interests of businesses in their home countries? Financial markets require the free flow of information to function efficiently. The presence of huge, opaque players with noneconomic motives could distort the pricing signals that other investors need. A growing number of economists and policy makers in Europe and the United States now support the creation of disclosure standards for government investors.

Most sovereign wealth funds have historically invested at least part of their assets through external managers, which should help ease these anxieties. To the same end, it would be in the funds' interest to increase their voluntary disclosures about their size, investment objectives, target portfolio allocation, and internal risk-management and governance procedures; this information would allow well-managed funds to stand out and demonstrate a spirit of cooperation. Some observers consider Norway's Government Pension Fund a model because it makes its asset allocation, investment criteria, and investments available to the public on its Web site.

Regulators in Europe and the United States should ensure that they base any policy decisions about the activities of sovereign wealth funds on an objective appraisal of the facts. It will be essential to differentiate between the direct acquisition of corporations by state-owned enterprises and by government investment companies in oil-exporting regions, on the one hand, and the passive investments of sovereign wealth funds in debt and equity markets, on the other. Sovereign wealth funds typically hold a diversified portfolio of assets in public debt and equity securities rather than large stakes in foreign companies.

A final concern: the long-term economic impact of higher oil prices. In the 1970s their rise sparked inflation in the major oil-consuming economies and sent global banks on a petrodollar-fueled lending spree in Latin America. Both developments inflicted significant economic pain on the countries involved. Today higher oil prices have been a boon for global financial markets, but, paradoxically, inflation hasn't risen very much. Can higher oil prices really be good for the world economy? As we have seen, petrodollars are creating inflationary pressures in markets for illiquid investments, such as real estate, art, and companies. If the pressures move beyond those markets, the potential asset price bubbles could burst. So far the world economy has accommodated higher oil prices without a notable rise in inflation or an economic slowdown, but this may change in the future. MoF

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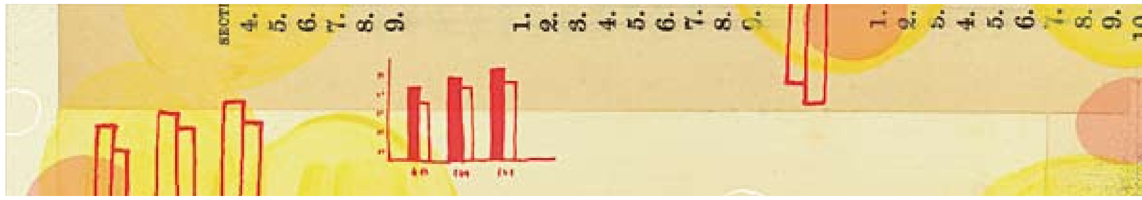


What businesses need to know about the **US current-account** deficit

A correction in the US current-account deficit, when it comes, will have surprising consequences. Governments and businesses should prepare for them.

Diana Farrell and Susan Lund

At $857 billion and growing, the US current-account deficit absorbs the vast majority of the world's capital outflows. To finance this chronic deficit, the United States has amassed trillions of dollars of foreign debt, leaving itself vulnerable to sudden changes in the sentiment of global investors. Many economists believe that the deficit is unsustainable and that a major correction involving a significant depreciation of the dollar looms.[1]

New research from the McKinsey Global Institute (MGI), however, finds nothing inevitable about a correction in the US current-account deficit over the next five years. Instead, it could continue to grow, and the world would have enough capital to finance it. Any correction from shifts in exchange rates could occur very gradually, over a period of many years.

Yet while a large, sudden depreciation in the dollar is unlikely, the magnitude of today's imbalances and the pressure they place on the dollar remain significant. Business and government leaders would therefore be wise to plan for the changes in world demand and trade that could follow if a correction were to occur.

In general, US goods and services would be significantly more competitive in the global economy, and foreign companies would find the United States a more attractive location to build manufacturing and R&D facilities. Specifically, European demand for many types of financial and business services from the United States would increase. The US trade deficit with many Asian countries, including Japan, South Korea, and Taiwan, would become a trade surplus, as would its current trade deficit with Canada and Mexico. In contrast, China would retain both its

[1] See Maurice Obstfeld and Kenneth Rogoff, "The unsustainable US current account position revisited," NBER working paper 10869, June 2005; Martin N. Baily, "How Large a Dollar Adjustment to Reduce the US Imbalance?" presented at joint Bruegel, Korea Institute for International Economic Policy, and Peterson Institute for International Economics Workshop on Adjusting Global Imbalances, Washington, DC, in February 8–9, 2007, and revised March 19, 2007; William R. Cline, *The United States as a Debtor Nation: Risks and Policy Reform*, Institute for International Economics, 2005.

manufacturing cost advantage and its trade surplus with the United States.

Two views of the future

MGI reached these conclusions by analyzing two very different five-year scenarios describing the evolution of the US current account.[2] In the first, we assessed whether the US current-account deficit could continue to grow over the next five years if exchange rates remained the same and whether the rest of the world could finance an ever-larger US deficit. The second scenario posits a world where the dollar depreciates enough to eliminate the entire US current-account deficit—by some 30 percent from the dollar's level in January 2007—and the subsequent impact on trade patterns. MGI created the scenarios by using a microeconomic approach to analyze the effects of a depreciation of the dollar on demand for 30 different product categories in 100 countries, as well as on US foreign assets and liabilities. The two scenarios paint vastly different pictures of the US current account, trade balance, and net foreign income in 2012.[3] While reality is likely to lie somewhere between these two extremes, understanding them should help business leaders and policy makers better prepare for what lies ahead.

Continued growth of the US current-account deficit

Our analysis shows that a correction in the US deficit is not imminent or inevitable. If current trends in global savings and investment continued for an additional five years and there were no adjustments in exchange rates, the US current-account deficit would reach $1.6 trillion by 2012, or 9 percent of GDP (Exhibit 1). However,

[2] For more detail, see the full report, *The US Imbalancing Act: Can the Current Account Deficit Continue?* available free of charge online at www.mckinsey.com/mgi.

[3] By contrast, another component of the current account—transfer payments, mostly remittances that workers send abroad and foreign-tax payments—would be the same in both scenarios, as they grow in line with US GDP and are not sensitive to exchange rate movements.

Exhibit 1

Vastly different outcomes

McKinsey Global Institute posited two scenarios with vastly different outcomes for the US current account.

US current account, $ billion (nominal)

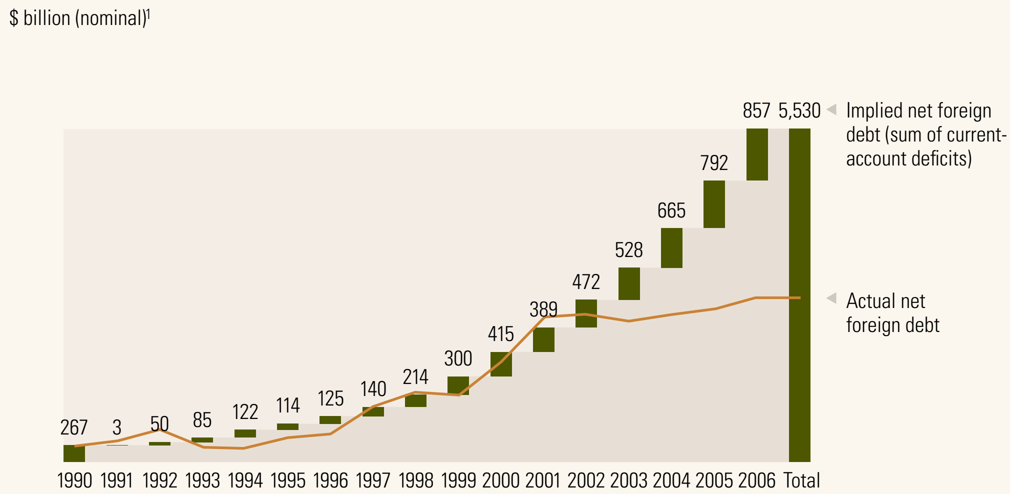
[1] Figures do not sum to total, because of rounding.

Source: International Monetary Fund; McKinsey Global Institute global capital flows database

Exhibit 2

Returns minimize debt

The returns on foreign assets are higher than payments to overseas investors; the US foreign debt is smaller than the sum of past current-account deficits.



[1]Figures do not sum to total, because of rounding.

Source: International Monetary Fund; McKinsey Global Institute global capital flows database; McKinsey Global Institute analysis

under plausible assumptions, global capital outflows from other countries, reaching $2.1 trillion in 2012, would also grow large enough to finance a deficit of that size.[4] Under this scenario, the US deficit would simply resemble a more exaggerated version of the status quo, and the United States would increasingly borrow from abroad to pay for it.

It's not implausible that the United States could pay for such a large imbalance. Running a current-account deficit of this size would triple today's net foreign debt, from $2.7 trillion at the end of 2006 to $8.1 trillion in 2012, or 46 percent of GDP. Yet a number of countries, including Australia, Ireland, and Mexico, currently carry a net external debt of a similar size relative to GDP. Furthermore, the United States is likely, at least over the next five years, to retain some unique advantages that help service a large foreign debt. Most obviously, it is denominated in the country's own currency, the dollar, eliminating the risk of ballooning payments resulting from currency swings.[5]

What's more, the United States has historically earned higher returns on its foreign assets than it has paid to overseas investors. One consequence is that the US net foreign debt today is significantly smaller than the sum of past current-account deficits (Exhibit 2). If this pattern continues, interest payments on the large external debt resulting from an even larger current-account deficit would be relatively low, less than 1 percent of GDP.

Finally, foreign investors have continued to demand dollar assets, providing financing for the US deficit. Capital inflows into the United States have grown conti-

[4]We modeled capital outflows separately for four regions: Asia, oil exporters, Europe, and rest of the world. Growth in each region is based on a forecast of GDP growth, current-account balances, and, for oil exporters, oil prices.

[5]By contrast, the East Asian financial crisis of the 1990s was exacerbated by the fact that many countries held substantial dollar-denominated debt. When the value of their own currencies declined relative to the dollar, many could not repay it.

nually despite the September 11 terrorist attacks, the war in Iraq, the ever-increasing deficit, and rising defaults in the subprime-mortgage market. Foreign investments in the United States reached a new record in 2006, at $1.8 trillion, and foreign purchases of US equities and long-term debt have more than made up for the recent drop in purchases of US government debt. If these patterns continue, the United States will have no difficulty financing its current-account deficit, at least for the next several years.

Elimination of the US current-account deficit

Even though the US deficit could continue to grow, a variety of economic shocks could spark changes in global trade, consumption, and savings patterns that might eliminate the US current-account deficit by 2012. US consumers may be forced to save more as the housing boom ends, for example. Asian countries might boost domestic consumption, perhaps through increased spending on education and health care, and save less in the form of US securities. Such changes would increase the supply of and lower demand for the US dollar, causing its value against other currencies to fall.

Our analysis suggests that a 30 percent depreciation of the dollar from its January 2007 levels would fully balance the US current account by 2012.[6] A smaller decline—of 20 to 25 percent from January 2007 levels—would reduce the deficit to roughly 2 to 3 percent of GDP, which many economists feel is sustainable.

A 30 percent trade-weighted depreciation of the dollar could play out in multiple ways. Historically, currencies have rarely moved evenly against one another. Since 2003 the dollar has fallen in nominal terms by 19 percent against the euro, 22 percent against the pound, and 6 percent against the renminbi while gaining 5 percent against the yen.

We therefore considered three ways that the dollar might depreciate using 2005 data as our baseline (Exhibit 3). In the first, the dollar depreciates evenly by 33 percent against all other currencies.[7] In the second, Asian countries abandon their de facto peg to the dollar and their currencies appreciate more than other global currencies. In the third, Asian countries maintain their de facto dollar pegs and the dollar depreciates only against the euro and other world currencies such as the Canadian dollar and Mexican peso.

In any of these cases, even with a balanced current account in 2012 the US trade deficit in goods would remain quite large—around $720 billion, roughly today's level. However, the United States would export more services and earn more income from overseas investments.[8] Indeed, rather than being a large net debtor, owing about 46 percent of GDP, the country would be a significant net creditor, with claims equaling some 28 percent of GDP. The factors underlying this dramatic reversal are the same ones that limit the accumulation of net foreign debt today: the positive spread between the interest that the United States earns on its foreign assets and what it pays on its liabilities, as well as the appreciation of US assets abroad (in this case accelerated by a depreciation of the dollar).

Preparing for both scenarios

Which of these scenarios is likely to play out? Since the United States could continue

[6] For modeling purposes, MGI assumed that all depreciation would occur at once and then played out the results over the five-year period.

[7] Under all scenarios, we calculate the depreciation from December 2005 levels. The depreciation required against the euro would be slightly lower today, given that the dollar depreciated against the euro over the course of 2006.

[8] The US trade surplus in services would reach $430 billion, while net foreign income would grow to $435 billion a year by 2012.

Exhibit 3

Variations

MGI considered three variations of a major dollar depreciation.

3 variations of a major dollar depreciation

Variation	Rationale	% of dollar depreciation against currencies in given region: Asia	Europe	NAFTA countries[1]	Rest of world
'Evenly distributed'	The dollar falls evenly against all major currencies	33.4	33.4	33.4	33.4
'Asia adjusts most'	The dollar depreciates most against Asian currencies, as Asian central banks allow their currencies to appreciate	45.0	24.7	24.7	24.7
'Europe and NAFTA countries[1] adjust'	Asian nations maintain current exchange rate policies, so Europe, NAFTA countries,[1] rest of world adjust	0	39.4	39.4	39.4

[1] North American Free Trade Agreement: Canada, Mexico, and United States.

Source: McKinsey Global Institute analysis

running a large current-account deficit for the next five years, there's no reason to expect that the dollar will depreciate abruptly. For many years, foreign investors have displayed a growing appetite for dollar assets. The United States has offered better returns on financial assets and business investments than have other mature economies, such as Europe and Japan, along with lower volatility and better institutional protection than can be found in emerging markets.

There's also no reason to expect that today's global trade, consumption, investment, and savings patterns will persist indefinitely. Redressing the imbalances will require the United States to save more and consume less, while other regions—especially Asia, Canada, Europe, and Mexico—would consume and import far more than they do today. As imports become more expensive for consumers in the United States, companies around the world will intensify their sales efforts elsewhere and lessen the global focus on the US economy.

The prudent course for business is to prepare for an adjustment of the US deficit, whether that happens gradually or abruptly. Despite the great uncertainty surrounding the deficit's fate, few companies have developed contingency plans for a significant depreciation of the dollar and the major shifts in trade and investment that would follow. Our analysis describes the implications of these changes.

Europe and the United States

The United States runs a trade surplus with Europe across many service subsectors, including business services (such as accounting, computer and information, consulting, and financial services), education, telecommunications, and travel. If the dollar declined and US services became cheaper for Europeans, these surpluses would more than triple in value.[9]

[9] After a 30 percent dollar depreciation, the US trade balance in services with Europe would increase to $84 billion, from $22 billion.

After a depreciation of the dollar, the US trade deficit in goods with Europe would shrink but not disappear. Two-thirds of the improvement would come from increased US exports to Europe—particularly of machines and other goods, such as farm and construction equipment. Also, US imports of manufactured products from Europe, such as scientific instruments and consumer goods, would decline.

European companies should prepare for the possibility that they will face new, more cost-competitive US entrants, perhaps by further differentiating their offerings. In general, they would also find the United States a more attractive place to build manufacturing and R&D facilities to serve both it and other markets.

Asia and the United States

The US trade deficit with China will persist for years, even in the unlikely event of a major short-term depreciation of the dollar against the renminbi.[10] The reason is that China's exports to the United States today are five times as large as its imports; moreover, the cost difference in the goods the United States imports from China—such as toys, clothing, and consumer electronics—is too large for even a significant depreciation to erase. Further, China imports many components of the goods that it exports, and a stronger renminbi would reduce the cost of those inputs, helping to preserve China's manufacturing cost advantage. As a result, the preoccupation of business and government leaders with the depreciation of the renminbi seems misplaced.

In contrast, the US trade deficit in goods with Japan, South Korea, and Taiwan would become a trade surplus in the event of a significant depreciation; US imports of automobiles, computers, electrical appliances, and telecommunications equipment from them would decline. These three countries have major trading relationships with many other markets and would need to increase exports to them. And despite lower exports to the United States, Japanese, South Korean, and Taiwanese companies would enjoy lower costs for building and running plants there to serve its domestic market.

Still, policy makers in the three countries (and others that have traditionally depended on exports to drive economic growth) would find it prudent to foster domestic consumption by liberalizing their service sectors, improving their credit systems and products to facilitate consumer borrowing, and letting their currencies appreciate to improve consumer purchasing power. Although US consumption played an important role in revitalizing these economies after the 1997 financial crisis, it cannot continue to fuel global growth forever.

Canada, Mexico, and the United States

Canada and Mexico, whose trading relationships with the United States make up the majority of their total trading activity, would be significantly affected by a short- or long-term depreciation of the dollar. Because of the relatively low labor costs of these countries, they have enjoyed many production cost advantages over the United States since the creation of North American Free Trade Agreement (NAFTA), in 1993. After a major depreciation, however, those advantages would largely disappear. Instead of increasing investments in offshore-manufacturing facilities in

[10] We find that the United States would still have a bilateral trade deficit with China even if the dollar depreciated by 45 percent against the renminbi.

Canada and Mexico, US companies would find it more cost effective to produce goods at home, where labor costs would be comparable and new factories could be built without the complexity and expense of operating abroad.

Exports from Canada and Mexico to the United States could decline as much as their imports from it increased, creating a double shock. Both would export fewer manufactured goods there, especially furniture and clothing, and Canada would also export smaller quantities of mineral fuels. At the same time, both would consume more US goods, especially industrial and electrical machinery, medical devices, computers and other high-tech gear, and farm and construction equipment. Canada and Mexico might need to increase their trading with Central America and other parts of the world as a result. To do so, Mexico would have to move more quickly into higher-value-added types of production, since it could no longer rely on low wages to compete.[11]

Maintaining healthy economies throughout the NAFTA region benefits everyone, so the three members should work together to prepare for the possible effects of any depreciation of the dollar. Even if differences in their production costs were to narrow, the free-trade area would continue to benefit all member countries; the growth unleashed by the integration of European economies in recent years is a testament to this point. By reducing trade barriers, NAFTA has already allowed low-cost manufacturers, especially in Mexico, to increase their exports to the United States. Increases in other types of cross-border commerce are still possible. All three countries should continue to build the physical and telecommunications infrastructure necessary to facilitate such trade by harmonizing product standards and regulations and streamlining border procedures and red tape.

Lessons for the United States

For US companies and government leaders, economic pragmatism is surely the wisest course. Emphasizing those areas in which the United States has genuine potential to improve its trade and current-account position will have more impact than focusing on some of the red herrings—revaluing the renminbi, for example—in the public debate. The highly productive and innovative US high-tech sector warrants special attention because of its direct exports and its role in facilitating innovation in other sectors; it produces not only computers and semiconductors but also components for a wide range of goods, such as surgical instruments and medical devices, office equipment, farm and construction machinery and vehicles, and air-conditioning and heating systems.

Fostering the high-tech sector will require the United States to provide an environment that facilitates innovation. Competition is vital, as is the free flow of ideas across companies and borders. Since the terrorist attacks of September 11, policy changes prompted by national-security concerns may have jeopardized this flow. The long delays in approving visas for highly skilled foreign workers and graduate students are shortsighted. Policies that discourage investment by foreign companies in the United States also will do more harm than good.

Service businesses in the United States should prepare to increase their exports to

[11] Diana Farrell, Antonio Puron, and Jaana K. Remes, "Beyond cheap labor: Lessons for developing economies," *The McKinsey Quarterly*, 2005 Number 1, pp. 98–109.

Europe by tailoring their offerings to meet local regulatory requirements and consumer preferences. Other companies ought to consider what adjacent services they might provide. US trade negotiators should continue trying to reach global agreement on the removal of tariff and non-tariff barriers to trade in services, and policy makers would be wise to initiate broader long-term efforts to break down the language and cultural differences that constrain the growth of service exports. Foreign-language study, for example, should receive more emphasis in US schools.

The US current-account deficit could continue to grow for at least the next five years. When the adjustment does take place, it is more likely to be gradual than abrupt. Still, a major depreciation of the US dollar and large shifts in global consumption and savings are possible. Governments, business leaders, and investors around the world should prepare for the potential effects. MoF

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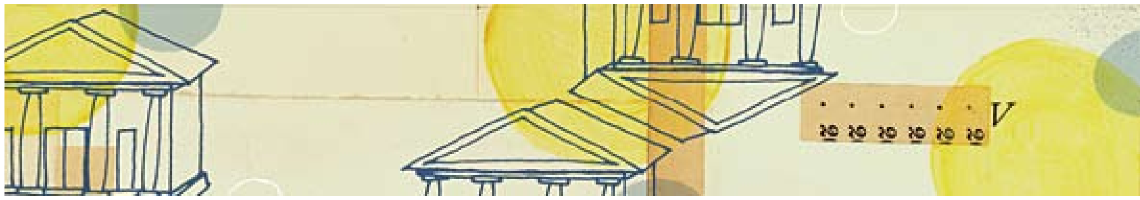


Taking stock: Ten years after the Asian financial crisis

The Asian financial system could become a full-fledged economic powerhouse, but only if its regulatory systems, economic ministries, and financial institutions improve dramatically.

Dominic Barton

This year marks the tenth anniversary of the beginning of the Asian financial crisis, a collapse brought on by macroeconomic imbalances that exposed fundamental weaknesses in Asia's corporate and financial sectors. The sequence of events that began with the Thai baht's collapse in July 1997 ultimately cost the region tens of billions of dollars and led many observers to speculate about an impending "lost decade" in Asia.

Today, after a remarkable ten years of transformation, Asia's financial system is substantially deeper and more robust than it was in 1997. Sitting atop an enormous rising economic tide, it is poised to benefit from a host of factors, including the rise of China and India, the reemergence of Japan, robust intraregional trade, enormous infrastructure-financing needs, and the opportunities presented by increasingly powerful Asian sources of capital. Asia appears set to play an important role in the world's financial system over the coming decade—a true third partner in the global triad, along with Europe and the United States.

But it would be foolhardy to believe that Asia has been immunized against imbalances, shocks, and dislocations. The sheer pace of growth and financial innovation across the region makes it inevitable that imbalances will build and shocks occur. Asian risk-management systems may have improved, but they have not become fully mature in just a decade. Asian regulators and CEOs of financial-services companies have concerns about the coordination of central banks, regulators, and government ministries—both within and among the region's countries. Asian financial institutions face ever-stiffer competition for talent at a time when their activities are becoming increasingly complex. And worrying signs of asset bubbles are emerging in China, Hong Kong, Indonesia, Singapore, and Vietnam.

The Asian financial system will achieve truly global stature only if a number of critical improvements and initiatives, which should put the region on a stable path for the next decade, are implemented over the next two or three years. It has a very good chance of maintaining its momentum and emerging as a global leader, but it will take concerted effort to build on the progress of the recent past.

Yesterday and today

During the next ten years, the region is poised to rival Western Europe as a pool of financial-services revenues. From 2005 to 2015, Asia could contribute more than 27 percent of projected global growth in financial services, up dramatically from the 13 percent of 2000 to 2005. Asia's share of global revenues could easily rise from 20 percent in 2005 to more than 25 percent by 2015.

Given the blow the region suffered in 1997 and 1998, this is a remarkable outlook. But to achieve it, Asia's executives and policy makers must recognize the value of the reforms left unfinished from the Asian crisis—and work to complete them.

The contours of the Asian financial crisis are broadly understood. In the years leading up to 1997, enormous short-term foreign funds flowed into a variety of longer-term investment opportunities, with the assumption that exchange rates were essentially fixed. Much of that funding passed through structurally weak and underdeveloped banking systems into equally weak corporate sectors.

This flood of relatively cheap foreign funds generated speculation in real estate and other sectors, fueled by strong direct and indirect links between banks and corporations. Net foreign reserves were largely negative or just barely positive in many Asian countries. When the baht collapsed, it quickly became clear that linkages among them were much denser than regulators understood. Few, for example, realized that South Korean merchant banks, guaranteed by South Korean commercial banks, had been providing significant loans to Thai property developers and buying Indonesian derivatives.

Ten years later, many of Asia's key micro and macro metrics have improved dramatically. Exchange rates, once mostly fixed, are now mostly flexible or floating. (China remains the significant exception.) Ratios of foreign-exchange reserves to short-term debt are better in all Asian countries. The composition of foreign funding in Asia has shifted and improved: short-term lending from foreign banks has been halved as a percentage of GDP—to 4 percent, from 8 percent—and the proportion of loans in local currencies has risen from 16 percent in 1995 to 42 percent in 2006. Economic growth is strong across the region, and interest rate differentials are on the whole lower than or similar to those in the United States.

At the micro level as well, there has been broad improvement. Banks are considerably more profitable and efficient than in the years before the crisis. Since the late 1990s, the proportion of national banking assets owned or tightly controlled by the state has decreased. In many countries, national banking systems have become much more open to foreign competition. In South Korea, for example, foreign ownership of domestic banks has increased to more than 10 percent, up from 2.7 percent in 1997.

Banking systems have also consolidated dramatically, and if recent trends continue the region is likely to become home to a greater proportion of the world's most significant financial institutions. Already, three of the top ten banks, by market capitalization, come from Asia. Over the next ten years, we believe that the underlying growth of Asian markets will propel even more into the top ranks. (We should recall that Japanese banks were dominant globally in the late 1980s. The difficulties they subsequently encountered at home and abroad offer lessons to Asia's emerging financial leaders. Some are taking steps to avoid such difficulties: certain Chinese banks, for example, have formed joint ventures and partnerships with foreign institutions and are focusing on building up their capabilities.)

Financial markets have developed somewhat more slowly. Across Asia, the banking sector still accounts for 30 percent or more of the financial system's assets (55 percent in China), compared with less than 20 percent in the United States and 25 percent in the eurozone. Although equity markets are soaring, effective markets for corporate bonds and other debt securities—important to provide lower-cost, longer-term capital to companies; to create competition for banks; and to give banks opportunities to shed credit risk through securitization—are largely absent.

Today, according to the latest City of London Index, four Asia-Pacific cities rank among the world's top ten financial centers: Hong Kong (three), Singapore (four), Sydney (seven), and Tokyo (nine). Still, they remain far below the top two—London and New York—in significance. Asian stock exchanges outside Japan represent 14 percent of global market capitalization, up from 4 percent in 1998, but many Southeast Asian exchanges still have high trading costs, low turnover velocity, and higher equity risk premiums than do their counterparts in more developed markets.

Capital flows within the region remain surprisingly small, particularly in the light of growing trade links and integration of supply chains. Asia is likely to see greater intraregional capital flows in the years ahead as powerful Asian pools of capital emerge. But for the moment, the majority of cross-border holdings are distributed among the three big global financial centers: the United States, the United Kingdom, and the eurozone. The cross-border capital linkages of Asian countries are mainly with those three centers. Control of the flow of funds is different: Asia's central banks, which invest primarily in long-term dollar- and euro-denominated assets, account for roughly 65 percent of all capital outflows from the region. By contrast, private investors account for the majority of capital outflows from Europe and the United States.

If this balance changes and private capital becomes a greater part of investment into foreign markets, more capital will probably stay in the region—an important boost for its aspiring financial centers. Assuming that countries continue to open up, as China has just started to do, to deregulate vital support activities (such as legal services), and to attract leading global talent, some of them should become more significant global hubs. Hong Kong, Shanghai, and Singapore are particularly well placed to do so. This transition will be made easier if Asia develops as a more integrated financial market, with a degree of coordination and specialization (for example, bond markets and the consolidation of regional exchanges). If these things do come to pass, there is no reason Asia's hubs shouldn't eventually challenge London and New York.

Recommendations and imperatives

Private- and public-sector institutions have undertaken a number of important improvement initiatives across the region. But to entrench the progress of the past decade, more remains to be done.

1. *Embed and deepen risk-management processes, capabilities, and culture in financial institutions.* In many banks, the organizational chart has been drawn, boxes have been filled, and the discussion has moved from theory to practice, yet risk management doesn't permeate the organization. This must change. CEOs and corporate boards should consider establishing an annual, independent, enterprise-wide audit of risk-management processes and practices. The compliance function must be seen as one of the top three roles in a bank. Supervisors and regulators should focus their scrutiny not only on top-level executive decision making but also on activities two or three levels down. Branch visits should be a regular part of the regimen.

   The importance of managing credit risk was one of the important reform themes arising from the 1997 crisis. The instability that recently emanated from the US subprime-mortgage market is a reminder that managing market risk and liquidity risk are equally important.

2. *Ensure that top management, both in the private sector and in regulatory bodies, conducts annual scenario- and contingency-planning exercises.* Once a year, banks and regulators should stress-test the performance of their organizations against significant interest rate increases, liquidity and funding shortages, operational risks (such as disrupted payment systems and unexpected surges in trading and transactions), and external factors (like oil price fluctuations and bird flu). These exercises should expose weaknesses and improve decision protocols, approaches to internal and external communication, and information management. They should also highlight opportunities—for example, by exploring whether a bank ought to make acquisitions.

3. *Shift the major banks' emphasis in corporate governance from "hardware" to "software."* Asia's financial institutions have made good progress in establishing well-structured corporate boards, but it is by no means clear that the mind-set and behavior required for effective governance are in place. Boards and management should agree to more explicit mandates and priorities, as well as more active discussion and questioning by independent board members, the greater involvement of the board in reviews of senior management, and better materials for meetings of the full board and committees. As with risk management, boards would be well advised to

review their operations against best practices every year, with the corporate-governance and nomination committees leading the way.

4. *Focus on developing talent.* Since the cost of a regional financial crisis runs to hundreds of billions of dollars, why is there any reluctance to invest in recruiting and developing skilled professionals to oversee the financial system? There is a strong case, across Asia, for doubling the money allocated to regulators and supervisors for hiring, training, and building the skills of the best people—and for retaining them.

   The UK Financial Services Authority (FSA), for example, will spend about $100 million over the next three years to train its 3,700 staff members—some $9,000 per person a year.[1] While significant, the sums of money involved are hardly great when set against the costs of regulatory failure.

   Banks themselves could do more to develop talented managers with a global perspective and specialist skills, especially in wholesale financial services and treasury operations. As more banks expand beyond their national borders, they will need executives who are comfortable operating and leading in a number of countries. Openness to external hires and disciplined globalization programs are highly desirable.

5. *Increase and intensify the formal cooperation and interaction among government bodies with economic responsibilities.* Effective oversight of financial institutions and markets requires a systematic approach.
   All countries in Asia badly need better cooperation and coordination among financial-market regulators and government ministries with economic responsibilities—for example, the finance, economy, planning, and commerce ministries.

6. *Formalize and greatly increase the interaction among regulators and supervisors across Asia.* A first step would be to promote training, the sharing of knowledge, and development by forging stronger links with established regulators—for example, the Bank for International Settlements, the International Organization of Securities Commissions, and the International Association of Insurance Supervisors. To ease the process, Asia may wish to implement an Asian forum for regional coordination, with the understanding that it must eventually integrate globally. The forum would have a threefold mission: improving the exchange (and standards) of information and making the structure, conduct, and performance of the entire financial system more transparent, within and across countries; conducting programs to share best practices; and developing regular regional scenario-planning and crisis-management exercises.

7. *In each Asian country, launch master plans, developed cooperatively by both the public and the private sectors, for the financial system.* The next five years will be critical for the development of Asia's financial system. The region's higher growth rates, as well as the rising wealth and significance of its consumers and corporations in an increasingly

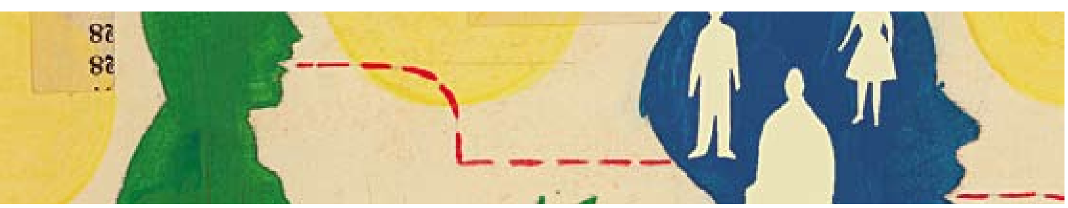
[1] Financial Services Authority, Business Plan 2006/07.

linked global financial system, will create many strains on the world economy. Leading global institutions will be ramping up their focus on the Asian opportunity.

Banking consolidation within and across countries, the development of capital markets, and regional financial integration will create a rich menu of issues for market participants. It will be necessary to deal comprehensively with the role and approach of regulators: basing regulation on principles or on compliance with prescriptive rules, regulating whole businesses or specific entities, establishing information standards, and deciding whether to encourage local banks to become regional or global champions. Such issues can be addressed only if the private and public sectors work together.

One particular warning: perhaps the most important challenge for Asia is to avoid the arrogance or overconfidence linked directly to extraordinary success. Overconfidence was certainly evident in Asia during the early part of 1997, as it was recently on Wall Street and in London—and in the run-up to all the financial crises of the past century.

Financial institutions and regulators across Asia have done a tremendous amount of good work since 1997. Massive opportunities lie ahead, but to seize them Asia must not only consolidate its gains but also build for the future—informed by a keen sense of recent history and its own fallibility. MoF



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