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Special Report

The New Competition for Global Resources

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The New Competition for Global Resources

Companies in the U.S. and Western Europe once had unfettered access to the world's resources, such as raw materials, capital and talent. No more. Thanks to increasing demand from India, China, Brazil, Russia and other rapidly developing economies, access is no longer assured. In this special report, experts from Wharton and The Boston Consulting Group discuss the ways in which this unprecedented "race" for resources is reshaping global business, and how key political and financial trends in emerging economies are likely to affect companies doing business anywhere in the world.

The Race for Energy: What Will It Mean for Western Firms?

Rising energy demand from China and India has unleashed a worldwide race to secure access to scarce fossil fuel resources, a more difficult proposition with the emergence of national oil companies in the resource-owning countries. While Western companies will likely feel the pain of increasing energy costs, there is a potential upside to global energy scarcity, according to experts from Wharton and The Boston Consulting Group: Renewable and nuclear energy present huge opportunities for investors and entrepreneurs, underscored by concern over a global stalemate surrounding curbs on carbon-dioxide emissions.

The International Energy Agency (IEA), an autonomous body set up within the framework of the Organization for Economic Cooperation and Development, says in its November 2007 World Energy Outlook that "if governments around the world stick with current policies, the world's energy needs would be well over 50% higher in 2030 than today." Global energy demand would grow an average of 1.8% annually, from 11.4 billion tons of oil equivalent (toe) in 2005 to 17.7 billion toe by 2030. Fossil fuels would make up 84% of that increase, the report notes, although oil's share would fall from 35% to 32% while coal's share would jump from 25% to 28%.

Worldwide, the IEA expects an investment need of about $22 trillion in energy-supply infrastructure. Not surprisingly, its latest report is focused on China and India; these two countries account for 45% of the increase in demand in the "reference scenario" it forecasts. China's energy-supply infrastructure would need investments of $3.7 trillion until 2030, while India's would need $1.25 trillion, the IEA says.

The dramatic growth of the Chinese and Indian economies in recent years has caught stakeholders in the global energy industry ill-prepared, according to Hal Sirkin, senior partner and managing director at BCG and head of its global operations practice. "China and India are changing the global balance points in resources," he says, noting that the emerging consumer markets in these two countries are behind the boost in demand.

The forces at work in the emerging scenario are energy security, energy affordability, climate change and sustainability, says Balu Balagopal, senior partner and managing director at BCG. "There is a clear recognition that energy security and independence are top of mind because the demand side of the equation shows quite healthy growth driven by the growth in these emerging economies such as India and China," he notes. "At the same time there is an uptick from a supply standpoint — traditional oil and gas are coming under some pressure."

> Renewable and nuclear energy present huge opportunities for investors and entrepreneurs, underscored by concern over a global stalemate surrounding curbs on carbon-dioxide emissions.

Balagopal says that while "alarmists talk of peak oil," it might more appropriately be characterized as the end of cheap oil. Proponents of the peak-oil theory say that global petroleum production will peak sometime between 2025 and 2030, after which total available energy will decline continuously. Balagopal suggests that many new sources of energy are potentially being brought on stream, including frontier energy such as deepwater exploration and oil sands. But all that will take time to come through, he says, and "they are also more expensive."

Securing Access

"In the medium term, the Chinese and Indians will have to import more oil, and that is making them both nervous," says Wharton management professor Witold Henisz. "Interestingly, the battlefield today is in Africa." According to various reports, Chinese and Indian companies investing in Angola and Sudan are "not being as concerned [as Western firms] with corruption and other practices," Henisz says. That should give them "a strategic advantage as compared to the Western oil companies."

Rick Peters, senior partner and former leader of BCG's energy practice, points to "a lot of deals and a lot of effort on the part of India and China to lock up the incremental production." Adds Sirkin: China wants to be an investor, "not because it wants to invest, but it has an imperative to get access to resources and that is the best way." As the world's oil majors rush to secure their supplies of hydrocarbon reserves, they are encountering wholly unfamiliar territory. "Increasingly, the balance of power has shifted," Peters says. Until several years ago, "these super majors could go into the resource-holder countries and were welcomed because of their unique expertise." The entry of Chinese and Indian oil companies competing for the same resources has provided the resource owners many more options in securing more favorable terms, he notes.

Resource owners across Latin America, the former Soviet Union and Africa are also trying "to do a lot more on their own," Peters adds. For successful developers, the model is very much shifting to local development, technology transfer, and companies and divisions within countries having a localized face. "That model is the right model. You have to be more and more creative about the win-win opportunities." The resource owners "have become much more aggressive and savvy about relinquishing their rights to those resources and the conditions under which they will relinquish [them]," Balagopal points out.

Henisz predicts that "one or two or three Chinese and Indian or Russian state-owned oil companies will emerge as globally integrated producers of oil that will rival Exxon Mobil, Shell and BP." He says consolidation within the industry is an imperative, and that it will provide "at least perceived security of oil supplies for China and India" and a greater pool of investment resources.

Access by itself can mean little, and "it may be better not having access because you may lose it," says Sirkin, pointing to nationalization of oil companies in Venezuela and elsewhere in the developing world. "Some South American countries changed their royalty systems.... Companies have to work with them or leave."

Wharton management professor Mauro Guillen cites Gazprom, Russia's state-owned natural gas company, as an example of governments' reneging on their commitments. "Gazprom is continuously renegotiating deals with foreign companies, and in the long run this is going to come back and hurt it; people are going to get the impression it is not reliable," he says. Gazprom "is way too much an instrument of the Russian government to project its power"; governments should not use their state-owned companies as foreign-policy instruments, he argues. "If anything, it should be the other way around. Governments should help their companies grow.

"Once an international firm commits a large investment, it is difficult for the [local] government to renegotiate terms," Guillen says. "But because the resources are where they are — you cannot move them — it creates a very tricky situation where the two parties are always trying to take advantage of the other or gain the upper hand."

Dealing with Local Opposition

The established oil majors and the newer players like the Chinese national oil companies (NOCs) have faced local opposition in some resource-owning countries. Henisz talks of Chinese oil companies encountering protests in Africa. "For the first time, people realized that [these companies] have worse labor practices, invest less in the local community and are more tolerant of corruption." The local communities and local nongovernmental organizations don't view China as an alternative investor, but as "a worse investor and one that requires greater efforts in monitoring and highlighting abuses."

Many of those sentiments can be attributed to the bad taste left by previous experiences with international oil companies. "There is a growing level of dissatisfaction among civil societies in Africa and Latin America with the perceived treatment of local communities by these international oil companies," Henisz says. As a response to the concerns, "Exxon Mobil, Shell and BP have made great efforts to improve their external stakeholder relations."

According to Henisz, the newer entrants have to learn from those experiences. "The Chinese and Indians have a lot of catching up to do here," he says. They need to think about an oilfield as not just something to take, but about their need to be partners and their need to take a more inclusive and holistic view about what they are doing in a place like Angola or Sudan, and how to manage that process. They are far behind Western companies in those realizations and in the development of those capabilities; that will be a big struggle for them in the medium term."

The companies that will succeed in these environments are those that can manage not just the technological challenges, but also the interface with national governments, the NGOs and civil society in these countries, Henisz says. "The set of external stakeholder relations is going to be an increasing driver of value, because these companies are going to have to go to places where politics are unsettled, where rules change, and they will have to manage political and social coalitions in order to continue to generate value over decades."

Balagopal says the strategies that will help new entrants will be those that bring "new value propositions" to the resource owners and that deploy capabilities in exploration and production to aggressively seek new energy frontiers. The international oil companies aspiring to secure access to the resources in these countries need to recognize "that the landscape has shifted in terms of the value propositions they may have to negotiate with the national resource owners."

If those new value propositions mean that international oil companies have to be present across the spectrum of activities, from exploration through refining and retailing, many of the companies would hesitate to go that far, predicts Peters. Gasoline retailing, for instance, tends to be initially more profitable in developing countries than in developed markets, but the margins start to tighten after about 18 months. "Over a period of time, these margins tend to migrate back to the levels in developed markets," he says. "So in general — and this is in general — most of the majors we work with are not so inclined to enter the gasoline retailing market unless they really have to."

Challenges in India and Other Markets

Henisz offers an explanation for why some Western oil majors have been slow to enter the Indian oil and gas industry. "If you go into India, you are up against the national oil companies and the big business conglomerates within India," he says. "There is a pattern in electricity or telecommunications of foreign companies not actually capturing the rents on investments they have made."

For the oil majors, India is unlike Angola, Chad or Sudan, where they have an advantage because of their size and clout, Henisz adds. "If you have to forecast who is going to capture the rents in India, China and Russia, it will be the Indian, Chinese and Russian firms. They are big enough, powerful enough and have the domestic capital base to fund their investments." In what represents a new trend, he says, oil majors are winning projects by forging partnerships with engineering services firms such as Halliburton and Bechtel.

Guillen suggests that while many companies in the United States and Europe "are going to be hurt" by the rise of China and India, the new opportunities will be "tremendous." For instance, U.S. and European companies could supply capital equipment and technology required to build the infrastructure in China and India to support their growing domestic and export industries.

Companies in the developed world could supply China and India a range of products including machine tools, cranes and heavy equipment, Guillen notes. "The energy sector is going to generate so much business for these countries. All you need to do is check the increasing number of flights that are being added between the U.S. and China and India."

The Rise of Renewable Energy

Rising oil prices present other opportunities, according to Guillen. "It is good that the price of oil and gas is not $20 a barrel and it is a natural resource that we cannot renew." High prices will force consumers to economize, "and this creates a very powerful incentive for technological innovation and for finding alternative sources."

Renewable energy resources are presenting vast new opportunities for investors and entrepreneurs, says Paul Kleindorfer, emeritus professor of operations and information management at Wharton and professor at INSEAD. "Responsive parliaments" in the European Union and elsewhere are encouraging investors in renewable energy by legislating minimum demand and floor prices, he notes.

In January, the EU specified targets for its member countries to achieve on greenhouse gas emissions. Dubbed "20/20/20 by 2020," they seek to ensure that by 2020, Europe cuts greenhouse gas emissions by 20%, produces 20% of its energy from renewable sources and increases energy efficiency by 20%.

Kleindorfer says EU member states will take that forward in a variety of ways, including providing subsidies, establishing portfolio standards for different economic sectors and guaranteeing investment returns for specific technologies. "If there is an entrepreneur looking at a seven- to 10-year horizon for new energy investment, he has a pretty good idea about what are going to be the floor prices or the sources of revenue as returns on investments," he says. "You are not looking at something as volatile as the price of a barrel of crude. There is a little more concreteness to it on the downside."

Investments in renewable energy sources are economically attractive at current prices, or even at lower levels, says Peters. The downside, he says, is that often "you are faced with enormous [costs] to try to do the development in a way that is as environmentally clean as possible."

Kleindorfer notes that there are "interesting possibilities in nuclear power, all the way from the birth of plants to decommissioning old nuclear power plants at the end of their useful life." The nuclear energy industry is "alive and well" in France, and robust in many Pacific Rim countries including Japan and Taiwan, he says. "The U.S. remains pretty much a cold fish on the nuclear front. But globally, that is not the case." Kleindorfer is also optimistic about the possibilities of a "hydrogen economy" that fuels both industrial uses and personal transportation. "There is plenty of hydrogen in the universe and it doesn't have any CO2 in it," he says.

International oil companies and others in the developed world will continue to have the edge in technology, skill sets and experience even as developing countries find it increasingly easier to access capital and buy technology. "International oil companies do have a value proposition," says Balagopal. "However, they have to work to communicate that and be accepted and known in a manner that gives them rent." He says those value propositions are about experience, technology and the ability to invest and co-invest with a resource-owning country. "It is no longer the case where it was much more of a passive negotiating partner at the other end," he says. "It's a much more vigorous owner you are dealing with."

Deepwater exploration is one such area, says Henisz. "If you believe that a growing percentage of the reserves to be discovered are going to be 3,000, 5,000 or 10,000 feet underwater, you start seeing quite rapidly an advantage for some of the majors." Peters says while that is true, the state-owned China National Offshore Oil Corporation "is pretty strong" in deepwater drilling technology and Petronas of Malaysia "is becoming a fairly sophisticated NOC."

Grappling with Greenhouse Gas Emissions

Developing countries will account for nearly three-quarters of the increase in global energy use over the next two decades, and the share of coal in that mix will increase significantly, the IEA predicts. "Higher oil and gas prices are making coal more competitive," the IEA says in its energy outlook report, adding that India and China, which already account for 45% of the world's coal use, will account for more than 80% of the increase in its use between now and 2030.

That scenario forces policymakers across the world to address issues that have frustrated agreement on containing carbon dioxide emissions. The United States wants to have "precommitments" from India and China on their emissions targets before it makes its own commitments. That is the key obstacle, says Kleindorfer. He points out that India and China feel that the United States has had its share of consuming fossil fuels and that now it's their turn.

"India and China are saying that they are not interested in something that doesn't recognize their right to grow to achieve a standard of living that is in some ways approximate to that of the U.S.," Kleindorfer says. The United States must "reestablish itself as a player rather than its current position of more of a barrier to the implementation of agreements such as the Kyoto protocol." He suggests it take cues from the EU's "20/20/20 by 2020" policy. In any event, he expects traction on that front only after the U.S. presidential election in November.

Choosing the right strategies may be difficult with so many moving pieces in the emerging energy scenario, but Henisz cites Royal Dutch Shell as an example of a decisive corporation. In a January letter to all employees, CEO Jeroen van der Veer said, "By 2100, the world's energy system will be radically different from today's." He forecast that solar, wind, hydroelectricity, biofuels and nuclear energy will make up a large share of the energy mix.

Van der Veer laid out two scenarios to reach that state, one called "Scrambles," the other called "Blueprints." The "Scrambles" approach, "like an off-road rally through a mountainous desert, promises excitement and fierce competition. However, the unintended consequence of 'more haste' will often be 'less speed,' and many will crash along the way." He says the alternative "Blueprints" scenario "resembles a cautious ride with some false starts on a road that is still under construction."

Shell "traditionally uses its scenarios to prepare for the future without expressing a preference for one over another," Van der Veer stated as he laid out his choice. "But faced with the need to manage climate risk for our investors and our descendants, we believe the Blueprints outcomes provide the best balance between economy, energy and environment." Says Henisz of that resolve: "They have come to a fork in the road in the global energy sector and they have said they have a stake in the outcome. They are going to lobby and work hard and undertake whatever they can do to push the needle in one direction." ❖

Huge Reserves, Emerging Market 'Challengers' and Other Forces Are Changing Global Finance

Rapidly developing economies (RDEs) have increasingly become drivers of change — and sometimes disruption — in global financial markets. That has important implications for companies in the United States and Europe as new players emerge, including sovereign wealth funds, state-controlled entities and acquisition-minded corporations.

Companies that do not run a tight ship could see unsolicited takeover bids from companies in countries with merchandise- or energy-related trade surpluses.

As these groups bolster their foreign exchange reserves, they will increasingly look to buy assets beyond their borders, including controlling stakes in foreign companies, according to experts at Wharton and The Boston Consulting Group (BCG). At the same time, aging populations in the United States and in Europe will be seeking to liquidate some assets to finance their retirements. This combination of trends will present both opportunities and threats for companies in the developed world. Companies that do not run a tight ship could see unsolicited takeover bids from companies in countries with merchandise- or energy-related trade surpluses. Additionally, top executives at Western companies will need to understand sovereign funds' investment criteria and even get to know decision makers personally.

Seeds for this change date in part back to the Asian financial crisis of 1997 and 1998, says Wharton finance professor Franklin Allen. Back then, "The International Monetary Fund got many countries in Asia to do drastic things in exchange for loans," Allen explains. Most decided they never wanted to undergo such economic austerity again and they started building large foreign exchange (forex) reserves as buffers. Even countries relatively unaffected by the crisis — such as China and India — took the lessons to heart. Today, forex reserves for those two countries "have just become huge," he says. China now has some $1.5 trillion in reserves, up from a few hundred billion dollars just a few years ago. "India is building too — nothing like the same scale but it is up to about $200 billion" and rising rapidly, Allen notes.

This build-up in forex reserves by many RDEs gathered momentum through export-led economic policies, particularly in Asia. Leveraging comparative advantages in labor costs and other inputs, many RDEs transitioned from command-and-control to more deregulated, market-oriented economies, though not always with private ownership. Their success helped create some large trade surpluses, often with high savings and investment rates.

Asia's long-standing "model of prosperity" has concentrated on exports, says Jeremy Siegel, professor of finance at Wharton and author of *The Future for Investors.* "Many of these countries are producing more than they are consuming and basically the government is expropriating the difference between the two. It is a mercantilist view. It is true of China and true of India."

That model has helped to create what Ben Bernanke, the Federal Reserve chairman, has labeled a "savings glut." Regardless of what happens to world economic growth this year, these trade surpluses are expected to continue to grow strongly in the foreseeable future.

Richard Marston, Wharton finance professor and director of the George Weiss Center for International Financial Research, notes another key aspect of today's global financial imbalances. "Everyone talks about the Chinese [trade] imbalances and neglects the far larger imbalances due to increases in commodity prices," he points out. "You can see it in the Middle East, in Russia, and even in commodity producers such as Brazil. There's been a tremendous windfall due to this massive [increase] in commodity prices."

Whatever the source, the huge increase in global liquidity has helped moderate world interest rates and finance a large U.S. trade deficit and — until the current economic slowdown — a spending spree by U.S. consumers, who have reduced their savings rate to near zero. This is the other side of what some call a global financial imbalance: The world's richest country is borrowing from poorer nations.

Shifting Capital Inflows

Borrowing to finance the twin deficits (trade and budget) has come largely through issues of relatively low-yielding U.S. Treasury securities. That exchange looks likely to be redirected. "China and others are not happy with the U.S. Treasury bond interest rates," Allen says. As these investors seek higher returns, expect attention to turn to corporations in the United States and Europe, he says. New money from the BRIC countries — Brazil, Russia, India and China — and other RDEs increasingly is seeking outward investments through mergers and acquisitions and other strategic stakes.

The most visible examples of these shifting capital flows came late in 2007 and early in 2008. That is when some of the biggest nameplates on Wall Street and in Europe turned to offshore money, largely sovereign funds, for bailouts from the severe credit crunch sparked by the U.S. subprime mortgage crisis. Investors from China, Singapore and Middle East oil-producing countries injected some $60 billion to $70 billion into Citigroup, Merrill Lynch, Morgan Stanley, Bear Stearns, UBS and Credit Suisse. Following the moves, some Europeans questioned how much foreign investment should be permitted in their banking systems. The United States took a more laissez-faire attitude — at least initially. That contrasts sharply with the outcries over other recently proposed foreign acquisitions. Strong negative public and government reaction in 2005 derailed the China National Offshore Oil Corp.'s $18.5 billion bid to acquire Unocal, a U.S. oil company. The U.S. Congress helped torpedo that bid on strategic grounds. In 2006, similar politics blocked Dubai Ports World from gaining control of six U.S. port operations.

Unlike those oil company and port acquisition proposals, none of the recent investments in financial institutions by sovereign funds involved a controlling interest. But against the background of a credit crunch and a real need for cash injections, the deals thrust sovereign funds onto center stage. U.S. and European companies realized they were blinking more brightly on the sovereign funds' radar screens and on the screens of flush — and newly confident — RDE and energy-producing firms.

Rising Sovereign Stars

Sovereign funds in early 2008 totaled some $2.5 trillion. That compares with some estimates for private equity firm investment pools of $1 trillion, hedge funds of about $5 trillion, U.S. mutual funds of $10 trillion and pension funds of $60 trillion. Some projections peg sovereign funds at $15 trillion to $20 trillion within 10 to 15 years, possibly sooner. Morgan Stanley estimated in March that sovereign funds could soon bypass the forex reserves of central banks.

Sovereign funds investing in the United States appear to enjoy an advantage. Recent reports note that government-held investments in stocks and bonds and the like are exempt from taxation, Siegel says. Yet private foreign investors would face withholding taxes of up to 20%. "Some think we should change our law and force the funds to pay tax on that," Siegel adds.

"The sheer scale of funds under management tells me [sovereign funds] are the new guys on the block," notes Wharton management professor Michael Useem. He believes they resemble the large mutual funds of 15 to 20 years ago, which went from "almost nothing" to wielding strong influence in corporate governance today. "Managements have taken note that these big institutional holders will have 1%, 2% or sometimes 3% to 4% of a large publicly traded company," Useem says. Shareholder activity levels vary, but their stakes have brought "a new kind of power and influence ... especially when companies falter." Sovereign funds could follow a similar path.

A common concern in the United States and Europe is that sovereign funds — and similar capital pools tightly connected to governments — might harbor noncommercial motivations. The rise of sovereign funds, along with hedge funds and private equity, "has changed the balance of the global financial system," states *Global Risks 2008*, a Global Risk Network Report prepared in collaboration with the Wharton Risk Management and Decision Processes Center, the World Economic Forum, and several global finance and insurance corporations. "Sovereign wealth funds, which have become particularly important as rising oil prices and global economic imbalances have massively increased the foreign reserves of certain countries, present a new set of challenges, including relative lack of transparency over investment strategies, concern over possible political intervention and potential large-scale market moves," the report says.

Reasons for Concern

Here is one example that causes some observers to worry: In 2006, a sovereign fund from Norway shorted bonds from banks in Iceland having financial difficulties. The fund was forced to back off after strong protests from Iceland politicians. Whatever the fund's motivations, the incident was a reminder that other sovereign funds could one day act with strategic rather than financial purpose. "Sovereign funds don't have to just follow monetary goals, although many do," notes Allen. "They can pursue other goals. And since some have gotten so big, they have a lot of power — and not just in financial markets. If they concentrate that power in a certain industry, they have the potential to distort markets, such as in commodities."

Sovereign funds contend they are passive investors seeking the best financial return. But concerns about them already run so deep that by March the European Commission, the IMF and other world financial organizations and nations were working on market-oriented best practices or codes of conduct for governance and transparency, in some cases in cooperation with the sovereign funds themselves. U.S. Sen. Charles E. Schumer of New York early this year was considering legislation targeting similar concerns.

Apart from such codes, would limiting the stakes that sovereign funds are permitted to hold reduce the risks of non-market-oriented influence? "It would be difficult to limit stakes because the question with China, for example, is who are 'they?'" Allen says. "The Chinese government controls many companies and investment funds. It could simply set up two entities instead of one and gain control that way."

Others view sovereign funds as important sources of capital that offer corporations new opportunities, even if — perhaps especially if — they were to concentrate investments in one area. "Some in the media report on them as a threat, but I don't think that is the way to look at it," says Rajiv K. Kacholia, a global strategist at GE Commercial Finance. The funds could transform sectors for the good, he explains. "Imagine if a number of sovereign wealth funds started taking large positions in venture capital investments in companies seeking alternative energy solutions. You'd have a large potential force which is complementary to a lot of other venture capital firms." Expect to see more partnerships involving Western companies and sovereign funds, including venture capital firms, Kacholia says. "The funds are great potential partners for large projects."

Rapidly Emerging Companies

Companies from the BRIC countries and other RDEs pose additional challenges. They are on the hunt for acquisitions and merger partners with motives that range from a desire for growth, profit, scale, technology, natural resources or R&D expertise to a search to add new brands, customers and distribution channels.

In *The 2008 BCG 100 New Global Challengers: How Top Companies from Rapidly Developing Economies Are Changing the World,* The Boston Consulting Group updates its list of the 100 top challengers — as competitors, customers, candidates for partnering in mergers or acquisitions, and as potential acquirers. Eighty of the 100 top companies hail from BRIC countries. The BCG 100 grew at a compound annual growth rate (CAGR) of 29% from 2004 to 2006, "close to three times the rate of companies in the S&P 500 and Fortune 500," bringing 2006 revenues for the select group to $1.2 trillion, according to the report. "Still more impressive — and perhaps more worrisome for managers defending their home markets — the group's international revenues grew even faster, achieving a CAGR of 37% from 2005 to 2006. As a result, the BCG 100 generated 34% of their revenues offshore, compared with 32% in 2004."

Certainly, Indian companies "are becoming a lot more assertive" in making outbound mergers and acquisitions, Allen notes. Last year, in a huge M&A deal, India's Tata Steel acquired Anglo-Dutch steelmaker Corus Group for $13.6 billion. That made Tata Steel, a BCG 100 Global Challenger, the world's sixth-largest steelmaker. Tata's chief competition in the auction was Brazil's CSN, another BCG Global Challenger.

Reasons to Sell

In the United States, companies are finally going to see "the ramifications of [the country's] huge cumulative trade deficit" and relatively low savings rate, says John R. Percival, adjunct professor of finance at Wharton. The main destination for the huge, RDE-related dollar holdings will be the United States. "They will spend here, and not in retail, but they will want to buy assets, real estate and companies, because that is what we have here in the U.S., lots of wonderful companies."

Expect U.S. shareholders to welcome RDE participation, at least indirectly and if only at first. This all occurs as the Baby Boom generation enters the retirement years, Percival explains. "They have lots of stock, but who is going to buy it all?" The countries with all the dollars, he points out.

Siegel agrees. As the aging of the developed world requires it to import goods from the much younger developing world, he notes, "We will get a huge shift of ownership of assets, from being Western-owned to being increasingly owned by investors from developing countries. That is the very long-run view. China is a little bit of an aging country, too, so that will be a slightly different dynamic, but it will happen with India and other developing countries." So there is a demographic component, a government trade-policy component, and an energy and natural resources component to the shift, Siegel says.

Expect RDE companies to follow the Japanese model and build manufacturing plants in their U.S. competitors' backyards. "When the Japanese built their auto plants here, it was not about reducing shipping costs," Percival says. "They had revenues in dollars but expenses in yen. The only way to hedge exchange rates in the long run is to have revenues and expenses in the same currency."

One unwelcome result could be a backlash of financial or trade protectionism, Percival notes. "Will Congress say, 'Wait a minute, Americans don't own anything anymore?' What happens when the Saudis want to buy Boeing? What happens when [Venezuelan President Hugo] Chavez wants to buy up U.S. assets?" Notes Allen, "If the U.S. wants to run a trade deficit of up to 7% to 8% of GDP, then there will be a lot of consequences. [Foreign entities] can come back and buy us."

In July, one high-profile purchase occurred when the Abu Dhabi Investment Council bought a 90% stake in the iconic Chrysler Building in New York City, investing some $800 million. The purchase was reminiscent of a similar deal in the 1980s when some Japanese investors, flush with export-generated cash, were buying up real estate and other assets in Hawaii and elsewhere in the U.S. But when they wanted to buy famous properties such as the Pebble Beach Golf Course in California and New York City's Rockefeller Center, the Japanese groups were met with negative public opinion (though both deals went through). Such politics could prove to be the biggest constraint to RDE investors seeking acquisitions in the U.S., says Daniel Stelter, senior partner and managing director in BCG's Berlin office and global leader of BCG's corporate development practice.

There has not appeared to be any major reaction to the Chrysler Building purchase, at least initially. But the fact that the sovereign fund sought out a real estate investment was interesting on its own merits. Some sovereign funds had their "fingers burnt" by getting into the U.S. banking equity market too early, only to see the value of many of those investments fall, in some cases dramatically, notes Stelter. The sovereign funds for now may look to avoid financial assets in favor of other asset classes, he says.

Marston points out that as countries become "enormously productive," they will run trade surpluses, accumulate wealth and gain influence. He agrees that a widely held concern exists about government-owned or government-controlled funds. But he notes that "companies always have to worry about hostile takeovers by any investor, whether from Ohio or from France or China, particularly if they are underperforming." What matters is not so much the source of capital but the acquirer's intentions. "If they just want the brand … well, that sometimes happens with the takeover of one American company by another American company."

Not a New Threat

Marston also notes that "we've had cross-nation

M&A since World War II." Today there are more players, but "most companies are not worried one way or the other. A GE or a Boeing would see great opportunities in the accumulation of great wealth around the world, and they would certainly reemphasize their global production and their global marketing, but it would not be a source of particular concern to the CEOs or CFOs of those companies."

BCG's Stelter agrees that fast-growing companies from RDEs will increasingly look for opportunities to acquire companies in the U.S. and in Europe long term. In the short term, however, a slowing world economy could impede the growing stream of external acquisitions by the up-and-coming companies from RDEs, he says. For one thing, these companies will have less to work with in the short term. Stelter notes that equity markets in India were down some 30% during the first half of 2008, and China has seen a 20% drop following a stretch of exuberance.

While top-performing companies from RDEs will likely grow relatively faster than many of their counterparts from developed countries, RDE company stock prices have and can overshoot their basic value. The companies "can still lose some market value, and if they do, they will not feel as at ease as they otherwise would to do acquisitions," Stelter says. Some RDE companies — such as those in China — will have support from their governments, and that will underpin some ongoing level of acquisitions, he adds.

Meanwhile, the emerging middle classes in many RDEs offer U.S. and European companies opportunities for sales and more efficient operations bases. The opportunities will vary by sector, notes Kacholia. But companies that view the rise of these economies as more of a threat will adapt more slowly. And while some smaller companies will fail to benefit, "anything that touches infrastructure, heavy engineering, construction — anyone involved in any aspect of airports or shipping ports, bridges, tunnels and roads — should do well. It's great to be in the cement business, manufacturing airplanes, or an airplane parts supplier."

For companies planning to tap RDE markets, Percival warns, "You are not the only one going. Not everyone will make money." Companies must ask themselves, "What is my believable story about my competitive advantage?" Percival says. "If you are thinking of going into the insurance business in China, which is highly regulated, for example, then you'd better have an 'in' with the government."

What Managers Should Be Thinking About

Looking ahead, Siegel advises that companies recognize the fact that their shares will increasingly be owned by foreign investors. "There is really nothing they can or indeed should do about it. Why would you want to steer away a buyer? It is a huge opportunity," he says. "If managers don't run their companies well, the stock price goes down and it could get unsolicited takeover bids financed from abroad." As with any takeover bid, management may or may not be happy about it, "depending on the price. It could be their savior or it could be a hostile takeover."

Fifteen to 20 years ago, American CEOs and CFOs had to learn how to work with big institutional holders and equity analysts, notes Useem. To be an effective top team member today takes "knowing how sovereign wealth funds work and building a relationship with their officers. It's important for top executives to know the funds' investment criteria, but also to get to know the people who are decision makers personally. It's very important to become personally acquainted. Personal relationships still matter in international business."

Either way, the playing field is shifting quickly. Recognizing this, BCG, in its *New Global Challengers* report, recommends that companies consider the following to best prepare for the changes already under way: 1) Challenge-proof your business model by speeding innovation, lowering costs and revisiting how your company adds value. 2) Attack challengers on their home turf where economically viable. 3) Acquire fast-growing RDE-based players. 4) Convert challengers into partners and customers.

In the meantime, experts say, expect sovereign funds and RDE-based companies from the BRIC countries and the Middle East to continue to tip the scales of capital flows. ❖

Not What, Not How, but Who? Western Companies Face a Worldwide Talent Crunch

Faced with an aging workforce and a growing demand for skilled workers in emerging markets like China and India, companies in the West are grappling with a talent crunch of unprecedented scope. According to experts at Wharton and The Boston Consulting Group, firms are increasingly questioning their workforce requirements and quality, training and development, and wage levels. Responses vary from over-hiring to meet future needs, upgrading training in concert with universities and in-house corporate schools, and extracting greater productivity through innovation.

Jim Hemerling, senior partner and managing director at BCG in San Francisco, says two factors are combining to exacerbate the so-called "war" for talent: the "significant aging of the workforce in North America, Europe and Japan [which is] shrinking the supply of experienced people in developed markets," and the rise of "rapidly developing economies, or RDEs, driving up demand."

Western companies are trying to retain people with 20 or 30 years of experience and who are heading into retirement age, even though they are expensive and have limited growth prospects, Hemerling says. At the same time, they want to hire people by the "tens of thousands" in the RDEs to both exploit the market opportunities and to leverage lower-cost talent by shifting some of their workforce requirements to those countries, he adds.

Hemerling recalls a client telling him, "We used to worry about what to do from a strategy standpoint. Then we worried about how — operations. Now, in addition to strategy and operations, we worry about who. Who is going to be there to get the work done? In fact, our biggest challenge is not what, it's not how — it's who." Such companies, he notes, "have very aggressive growth plans, both for the domestic market but also for offshoring or best-shoring of their operations. Everyone is trying to do that at the same time."

Foreign employers trying to access RDE workforces also face stiff competition from fast-growing local companies — "the new global challengers," Hemerling says. BCG studies have tracked the competitiveness of these global challengers relative to Western companies both in the latter's home markets and in developing countries.

"Many of these companies [from RDEs] are becoming major competitors and in some cases have become very attractive employers. People want to work for the local champions and the new global challengers developing in these economies." As a result, he says, everybody is competing for the same talent pools.

> "People want to work for the local champions and the new global challengers"
> —Jim Hemerling, senior partner and managing director, BCG

Does a Talent Shortage Really Exist?

Peter Cappelli, a Wharton management professor, says he is skeptical about characterizing the emerging scenario as a talent shortage. He discounts the concerns that many express about rising wages in the RDEs. "Employers drive the agenda and the discussion of these topics and we take their description of what's going on as being accurate, and I don't think that's right," he says. At present, he sees no shortage of talent. "From an economist's point of view, a shortage means that you can't buy what you need or want at market prices. That's not true in these countries." As for rising wages, Cappelli argues that is exactly what employees want, and so do others who are concerned about living standards. "If wages don't go up, standards of living stagnate."

But talent shortages are real for employers looking to hire people with the "right education" and "10 to 20 years of management experience," Hemerling says. "There are obviously billions of people, but there is a real shortage of leaders who can manage the younger people coming out of universities." The shortages run across functions including product sourcing, marketing and even managing factories which increasingly require more efficient lean operations practices to offset rising costs.

The talent shortages can be moving targets for employers as they tend to "shift very rapidly" across work profiles, regions and time of year, Hemerling says. "For instance, up until a couple of years ago, there was almost an infinite supply of basic, unskilled labor in China." Now, migrant workers are in short supply in China's southern region of the Pearl River Delta, having switched loyalties to higher-paying high-tech industries that have moved in. The shortages "can materialize very quickly," as happens with, for example, unskilled garment workers during the peak summer months, ahead of the Christmas shopping season, he adds. There is further pressure on seasonal production, as China recently modified its labor code to make it difficult for employers to hire and lay off workers depending on seasonality of demand, Hemerling says.

Companies Rework Their Approaches

Talent has become a strategic issue, as companies increasingly make decisions based on the availability of labor and skills — and face the challenges of finding and keeping good people. Four best practices are emerging, Hemerling says, referring to the findings published this year in a new book he co-authored with BCG's Hal Sirkin and Arindam Bhattacharya titled, *GLOBALITY: Competing with Everyone from Everywhere for Everything*. According to the book, they include 1) recruiting for rapid growth; 2) developing deep skills and commitment in their people; 3) training and deploying new hires quickly for early results; and 4) allowing leaders to seize and build on opportunities. Companies that have embraced these practices include challengers rising up from RDEs such as Hisense, Johnson Electric, Embraer, Wipro, the Tata Group and ICICI, and some Western companies with operations in RDEs including Honeywell, Nokia, Cisco and Corning.

Hemerling says corporations, especially Western companies, have until now "essentially relied on poaching from other companies" — escalating talent costs in "a zero sum game." But that is changing, with companies including Toyota and Motorola investing in training local talent in India and China, respectively, he says. Motorola University China, for instance, has 203 instructors who deliver 130 courses across subjects including Six Sigma business improvement and supply chain management. Toyota's Technical Training Institute in Bidadi, near Bangalore, is honing local talent to meet its needs with 21 permanent faculty members who deliver a three-year training program, a strategy that also helps build employee loyalty.

According to Hemerling, the companies cited in *GLOBALITY* are addressing talent retention by building strong "umbrella brands" that put common faces to multiple brands across group companies. They combine that effort with career opportunities across these companies — both locally and globally — to make themselves more attractive to existing and potential employees. As part of the effort to build bench strengths, many firms operating in China and India are also over-hiring, which helps in offsetting attrition and planning for growth, Hemerling says.

In addition, firms are "accelerating leadership development" by "giving people more responsibility sooner, and identifying high-profile individuals and giving them more training and developmental experiences," Hemerling says. To dispel fears of a glass ceiling, these companies are also elevating local employees to senior-level jobs, "sending a very powerful message that all the jobs are available to local people." Furthermore, they institutionalize the empowerment of local operations by moving away from the old hub-and-spoke organizational model to a "multi-centered" structure, he says, citing as examples companies like IBM, Nokia, Cisco and SAP that have established global development centers in India and China.

Where Universities Fall Short

For the most part, however, universities in China and India are not keeping pace with the new demands, Hemerling says. "There is a huge range in quality of engineers coming out of these universities, from among the best in the world to others who [have] the equivalent of high school science." The problem is not one of producing the required number of engineers or other graduates, but "ensuring they have the right set of skills."

"In India, the big problem right now is the education system," says Cappelli. "Employers can't find the people with the requisite skills, and they find their basic education level is too weak." He does, however, give the country bonus points for its "meritocratic approach in access to education."

Training and development of these universities' graduates is a big challenge, Cappelli notes. He traces the problem to a shift in assumptions about an employer's responsibility. "A generation ago in the U.S., the assumption was that as long as employers had bodies, they would train them and manage them and develop them. Now, the assumption is that employers shouldn't have to train or develop anybody, that they should be able to hire people who are ready to walk in the door today and contribute exactly what needs to be done, and they should be able to let them go as soon as they don't need them any more."

Cappelli emphasizes the need for companies to partner with universities to build talent appropriate to their needs. "The closer the education providers are to the employers, the better. Basically, what employers want is not in conflict with what educators want. Employers can provide the context where the students can see the connection between conceptual material and applied material. It actually ends up being a win-win."

Cappelli points to three "best-known models" for such university-industry interface. One is Philadelphia Academies, a nonprofit that came about as a result of the race riots of the 1960s and that brings local high schools into partnerships with employers to build skill sets around industries such as health care and electronics.

Another is the North Carolina Community College System. "The schools organize training, aggregate it up from many employers and put together courses [that are] part of the requirements for getting a job in a company," he says of the program that also dates to the 1960s.

The third is the Silicon Valley model, where he refers to institutes such as the Stanford School of Engineering, which offers a part-time management degree program for "high-level employees to advance their education while they are working."

Necessity, the Mother of Innovation

In the present environment, one feature that companies in rapidly developing economies like India have working in their favor is a predisposition towards innovation when resources are lacking. "The operating environment in India and China causes different stresses, which can lead to different perspectives," says Hal Sirkin, senior partner and managing director at BCG and head of its global operations practice. "That different perspective can give rise to innovative ways of thinking, not just about how to create products for foreign markets but about even a company's domestic products."

Sirkin expands that concept with the example of how a cell phone for the Indian market would call for a much lower-cost product design than one for the U.S. or the French market. "You might design it with less durability. You might make a trade-off to get 80% of the value for 30% of the cost," he says. "But that might actually give you an insight into a U.S. product that could have 90% of the performance for 50% of the cost and could serve the lower end of the U.S. market."

Ravi Aron, senior fellow at the Wharton School's Mack Center for Technology Innovation, also sees innovation at work in response to competitive pressures. "Just as necessity is the mother of invention, it is also the mother of innovation," he says. As an example, he refers to Indian information technology firm Wipro's doing sophisticated work such as remote infrastructure management for companies in the United Kingdom and the United States from control rooms in Bangalore and Chennai.

Arun Maira, chairman of BCG's Indian operations, points to process improvements implemented by Mumbai's "dabbawallas" or lunch-box carriers, organized under the Nutan Mumbai Tiffin Box Suppliers Trust. "This cooperative organization is able to deliver thousands of hot-cooked meals from the homes of office workers in distant suburbs to their individual offices downtown without mixing up or losing a meal and then return the utensils to the workers' homes in the afternoon," he says. "The key process innovations are in the design and governance of the organization. Measurement has shown that its process reliability exceeds that of Six Sigma, all without using any computers to manage the supply chain, and by using the public transportation system to keep the costs of their service low."

Arindam Bhattacharya, BCG partner and head of its industrial goods practice in India, sees changes in the ways corporate strategists respond to India's numerous infrastructure constraints. "The sheer logistical and other challenges lead to business innovation," Bhattacharya says. "Indian companies have learned to design their plants at a much lower capital cost than their counterparts in the developed world. Indians have an innovation culture. There is an inherent DNA to innovate."

Supply Chain Talent Sourcing

Cappelli's advice to all corporations grappling with talent challenges is to borrow the supply-chain model from manufacturing — an approach he advocates in his new book titled, *Talent on Demand: Managing People in an Age of Uncertainty*. "The big problem companies face is uncertainty — not knowing what the demand will be and what kind of talent you will need and how many people you will need in different jobs. This is a problem supply chain management has wrestled with for a while. The idea is to figure out how to get the desired level of talent without taking huge risks in terms of costs of recruiting, talent development, having excess employees and not having enough employees, and how to minimize those costs."

According to Hemerling, increasing the level of automation in work processes and producing higher-value goods and services are among the ways companies are extracting enhanced productivity from their employees in China and India. "There is a natural movement toward higher-value products where the cost of labor is being driven up," he says, citing industry in the Pearl River Delta and the Yangtze Delta in China as examples.

"When wages start to rise, employers make much bigger investments in the kind of things that improve productivity," Cappelli says. Meanwhile, "U.S. employers [have] stopped training and developing people and haven't paid any attention to who's going to replace the people who are going to be leaving the workforce."

He adds that corporate folklore also thrives on "myths" surrounding the desirability of a younger workforce. "If you look at the West, the population is aging a lot, and if you look at India, the population is getting younger. Is that a good thing? It's not a good thing unless you are interested in lots of cheaper workers getting into the workforce." It is not clear if China is at a disadvantage because India has a younger workforce. "The workforce in China has one of the most stable population distributions in the world."

Cappelli points to how economists and other experts once viewed such workforce trends in the United States. "In the U.S. in the 1970s, the conclusion was that the slowdown and stagnation in U.S. productivity was because we had dumped so many young workers into the workforce," he says. "If your workforce changes and gets younger, basically that means your workforce is getting less skilled, less experienced and less senior. It's not obvious that's a good thing."

All the talk about Baby Boomers' retiring is another myth, Cappelli says. The average age of the Baby Boomers is about 51 now, he says. Many are likely to keep on working beyond the traditional retirement age. "They're probably going to be working longer than any generation before," he says. It's likely that "more people retired at age 65 in the previous generation than are likely to retire now."

Bulking Up

Although companies such as IBM, Cisco and Citigroup have bulked up their Indian operations with large-scale hiring programs, Jim Andrew, senior vice president at BCG and leader of its global innovation practice, feels many Western companies are barely scratching the surface of the opportunity to access talent in India and China. "Hiring 10 or 20 or even 50 people in India is not fully leveraging the talent in those countries," he says. "Hiring 500 or 5,000 people begins to tap into that talent." Many companies don't understand the magnitude of that opportunity "or what it takes to be an employer of choice for the highest-performing talent in those countries."

Western employers also have to come to terms with the fact that wages will rise in India and China to levels where they may have to rework their outsourcing math, says Cappelli. While the average worker in India is still "incredibly cheap by world standards," U.S. employers won't want quite as many of those workers if they get uncomfortably expensive.

Cappelli warns that it would be wrong to assume that wages in India will continue to be a tenth of what they are in the United States. He also resists the corporate temptation to decry the trend of rising wages. "I wouldn't call it wage inflation. It's a natural process of rising standards of living," he says. "Wage inflation is a bad thing, but raising your standard of living is not a bad thing. What does it mean to grow if we never make any more money?" ❖

Political Tensions Are Creating New Rules for International Business

After more than a quarter century of expansion following the collapse of the Soviet Union, emerging economies still promise opportunity but also political risk for international businesses. Growing income disparity in rapidly developing economies (RDEs), geopolitical tensions and anti-U.S. attitudes are among the broader political trends that could shape global business in the future, according to Wharton faculty.

"Increasingly, politics will intervene and political management skills will be valuable for multinationals," says Wharton management professor Witold Henisz. "What determines who wins in China and Russia and Brazil is not necessarily the best technology or market pitch or cost. Who wins is whoever can navigate the political game — not just today, but tomorrow."

According to Henisz, emerging market countries are going through a "counter-movement" to the mass privatization and financial liberalization policies of the 1990s that focused on driving economic growth. Now, countries are taking a closer look at how economic growth should filter out through society. "A theme in many countries I'm observing is a new form of populism," he says. Emerging markets — especially those rich in resources — are beginning to demand more from foreign investors in return for giving outsiders access to natural resources, labor or growing consumer markets. Governments in emerging markets are less likely now to use foreign income for extravagances such as lavish government buildings. Instead, they are funding poverty alleviation programs and infrastructure that will support growth, Henisz notes.

Philip Nichols, Wharton professor of legal studies and business ethics, says the war on terrorism has the potential to distort global economies in much the same way the Cold War stalled growth in countries that were propped up by one side or the other. Countries that aligned with a particular side were rewarded with economic support but failed to develop their own efficient economies. Ultimately, the standard of living in those countries declined. If the United States and other Western governments prop up countries as a defense against terrorism, and Islamic governments similarly align, emerging nations caught on one side or the other may never build viable economies. "The war on terror could lead to a lot of distortive behavior, and emerging economies are especially sensitive to these types of distortions. We may see regimes propped up that make no political sense and that make astonishingly bad economic decisions," Nichols says. "That's too bad because a lot of people may suffer again."

> "Increasingly, politics will intervene and political management skills will be valuable for multinationals."
>
> —Witold Henisz, management professor, Wharton

Markets Reinventing Themselves

Another broad political trend that Nichols sees influencing global business is emerging countries' reluctance to accept ideas affiliated in some way with the United States. "A lot of emerging economies are just finding and reinventing themselves," he explains. "They're assiduously trying not to pick up ideas that come from the United States." Nichols says much of the animosity stems from the way in which the war in Iraq has been carried out, which he says has eroded trust in the United States and any goodwill generated following the Sept. 11, 2001, attacks. "If the United States becomes more sensitive to multilateral rather than unilateral action — or threat of action — that might change. But right now, it's something to keep an eye on if you are a businessperson."

Howard Pack, Wharton professor of business and public policy, notes that emerging markets have made strides in upgrading their financial and political systems to sustain growth. Some measures indicate there is less corruption and better legal enforcement in these countries, although he cautions that these measures are subjective evaluations, often of large foreign firms. "It's very hard to know which of these accurately describes true conditions on the ground."

Many countries have managed to move toward democracy, he says. Most Latin American countries have working democracies, which is a major change from the 1970s and 1980s. Pack points out that a number of African nations are also functioning as democracies. While Russia cannot be considered a "serious democracy," many of the nations in Eastern Europe are reasonably stable democracies, he notes. However, "some of the [emerging market] democracies that seem to be functioning well are fragile.... [Last year,] who would have predicted Kenya would fall into disarray?"

An important element of political stability in emerging markets has been the rise of international commodity prices — owing largely to Chinese and Indian demand — which has helped raise incomes in Latin America and Africa. However, the economic slowdown in the United States will adversely affect China and, indirectly, Africa and Latin America, Pack says. In Africa, there was little change in income per person from 1960 to 2000, but in the last five to six years there has been a significant upturn, primarily as a result of commodity sales to China. In the Middle East, emerging countries did well from 1960 to 1985, but suffered when oil prices fell. In the last four to five years, economies of oil-rich countries including Saudi Arabia and Kuwait have ascended. More populous Middle Eastern countries such as Algeria, Egypt, Morocco and Tunisia have enjoyed some growth, but it has hardly been rapid, and all of these nations face the challenge of creating enough jobs to support a growing labor force.

In Latin America, Wharton management professor Gerald McDermott notes, growth is at a standstill and countries are highly dependent on the North American Free Trade Agreement and the U.S. economy. McDermott says that while participation in trade agreements such as NAFTA is a good first step, emerging countries must initiate deeper institutional reform to sustain long-term growth. "Not radical change," he says, "but new or deeper processes that allow all the parties to have voice and influence, and that's difficult for them."

An Important Role for the Left

The institution of social democratic politics incorporating the left is the most important political change under way in Latin America at the moment, McDermott says. For decades, the political environment was shaped by the right or populist authorities who repressed the left. The election of President Luiz Inácio Lula da Silva in Brazil is a "massively strong signal that disaffected people have a real institutional alternative and it doesn't have to be along the route of [Venezuelan President] Hugo Chavez." He points to several shaky countries — Peru, Bolivia and Ecuador — where Chavez's influence is growing. And he says it is important to remain aware of the power and influence China now holds in Latin America, where it has been building relationships as a result of its demand for resources.

McDermott notes that Eastern European emerging market nations have been joining the European Union at a rapid pace. "There are places that were basket cases 15 to 20 years ago and are now reasonable places," he says. The European Union has found ways to invest money efficiently in emerging markets where corruption is declining while regulatory controls and foreign direct investment are on the rise. "There's a little bit of a bubble atmosphere there." Real estate prices have soared in major cities and there is concern about how growth will smooth out, he adds.

Meanwhile, the Kremlin continues to dominate the neighboring former Soviet republics, which McDermott says remain a "no-man's land" with marginal assets. Even Ukraine and Georgia, which have undergone waves of reform and democratization, remain unstable. Russia is a quasi-capitalist country that "day by day is consolidating an authoritarian political structure." The country is benefiting from high prices for oil and natural gas, but it is unclear what would happen if commodity prices fell. "Now, Europe and NATO in general are in a bind because they are more and more dependent on Russian resources for gas and oil, and Russia plays these cards effectively," McDermott says.

India's 'Horse Race'

India is in a "horse race," Nichols says, between the growing number of people in poverty and the advancing middle class. "That race will have a tremendous influence on whether India can continue to be ever more hospitable to business or revert to the kind of populist socialism it experienced in the first decades of independence after throwing off Britain." In rural states, he says, economic development has been subverted by corruption and a difficult political environment. Meanwhile, many major cities are growing, free-market centers with prosperous knowledge-based industries. "If you are spending time in Bangalore or Hyderabad or Mumbai, you might say the race is over. But when you get to the countryside of poorer states it's not by any means," Nichols says. "One could be lulled into a sense of complacency and forget there are still half a billion poor people whose votes can be swayed against business."

The gap is widening and could lead to the kind of political change that brought Chavez to power in Venezuela. "The gap got so big [that] a populist — and perhaps not economically savvy fellow — essentially became the dictator." If, however, the economy lifts the entire population, he says, India has the potential to become vastly more dynamic than China, with more natural resources, better-educated people and a strong network in Europe and North America. "India has astonishing potential," he says, adding that it is important to pay attention to India's "uncomfortable" relationship with neighboring Pakistan, which "could precipitate something either great or bad."

China's Economic Power

In Southeast Asia, the most important potential political development is China's relationship with countries in the Association of Southeast Asian Nations.

While China has been courting business relationships in Africa and Latin America, it has been less involved with its neighbors. "With ASEAN, China has been assiduously hands-off politically, protecting each member's autonomy and independence, which isn't necessarily China's style or in China's interest," Nichols says. "If China uses its economic power to woo ASEAN and can start picking off ASEAN members one by one, it will change a lot of the dynamic in that particular region."

As for China itself, Wharton management professor Marshall Meyer says many economists and political scientists make the mistake of thinking of its government as a federal system. In fact, he says, there is a "constant tug of war" in China between the central government and powerful local authorities. For example, every year at the Chinese New Year the national government issues a series of decrees. This year — and for the last five years — the priority has been to shift land ownership to farmers with deeds and clear systems of compensation. "Will this be implemented?" Meyer asks. "It's totally unclear. Local governments, especially at the township and village level, have been making a lot of money selling farmers' land to developers and pushing the farmers off their lands. This is creating unrest."

Meyer says Elizabethan England faced the same problems and worked it out through development of a parliamentary system, but it took years. China, he says, has "telescoped time. Who knows how long it will take to sort out the internal administration of China? But the creation of a workable, more efficient system of administration and the creation of national markets are the next two big tasks." ❖

BCG's Hal Sirkin on 'Globality' and the New Two-way Street of Global Business

According to Hal Sirkin, senior partner and managing director at The Boston Consulting Group, "The age of globalization is over." In its place is a new reality that Sirkin and BCG colleagues Jim Hemerling and Arindam Bhattacharya define in their recently published book, *GLOBALITY: Competing with Everyone from Everywhere for Everything*. In an interview with Knowledge@Wharton, Sirkin describes how rapidly developing economies like India and China have changed global business from a "one-way street" benefitting Western multinationals to a two-way competition in which "blending the best of the East with the best of the West is most likely the winning formula."

> "What has changed over the last few years with the rise of China, India, Russia, Eastern Europe and Brazil is the emergence of a two-way street."
> —Hal Sirkin, senior partner and managing director, The Boston Consulting Group

Knowledge@Wharton: You call your book *Globality*, but isn't it really about globalization?

Sirkin: The one thing we have found is that the age of globalization is actually over. Globalization was a one-way street. It was about the companies from the U.S. and Europe, and then later on Japan, going to the rapidly developing economies with large populations and very low wage rates and either producing product or buying product, shipping it back to the developed markets, and then shipping over some very high-end and often luxury goods to those markets. So, it was fundamentally a one-way street.

What has changed over the last few years with the rise of China, India, Russia, Eastern Europe and Brazil is the emergence of a two-way street. What we have seen over the last five years is not just companies from the West coming to India and China, etc., but companies from India, China, Russia and Brazil becoming real companies that are not just operating in their local markets, but are actually taking their rightful place on the global stage. And, in doing so, they are starting to challenge the traditional multinational companies.

Now, it's a two-way street and a competition. That means that companies from India, like Tata, or companies from China, like Baosteel, play on the global stage, and compete with the Western companies. That's globality. It's about lifting up 15% to 20% of the world's population that's trying to get enough food to get through the day and having them become part of the consumer society.

Knowledge@Wharton: What is the "Triple E" threat and what are some of the ways in which it manifests itself?

Sirkin: We're talking about the need to compete with everyone, from everywhere, for everything. It's a threat to companies that don't understand it because those companies from the developing countries have a set of advantages. You may overlook them as potential competitors, but they are starting to show up in the U.S., in Europe and in Japan.

They're starting to build positions that could threaten the traditional multinationals. But of course, the flip side of a threat is an opportunity. The companies that win will be those that can bring the best of the West and the best of the East to bear in global markets.

Knowledge@Wharton: I wonder if you could explain a little bit more about your concept of globality and how does it differ say from Thomas Friedman's ideas about the world being increasingly flat?

Sirkin: We don't think that the world is flat at all. We think that the world is very spiky. Thomas Friedman wrote a great book that really awakened people to the changes that are taking place in the world. And, it's a wonderful title: *The World Is Flat.* But the reality is that the world is very spiky and that's precisely why this is happening. If the world had the same wage rates everywhere, we wouldn't be seeing the rise of globality. If the world had the same capabilities everywhere, we wouldn't be seeing it.

Companies that operate in environments with different spikes, such as low-cost labor, are beginning to use those spikes to their advantage. Then they can build on that advantage by investing in research and development, new product development and distribution. And, in the case of companies like Tata, a $25-billion company in India, they buy companies like Jaguar and Corus Steel [formerly an Anglo-Dutch company] in order to build strong positions on those markets. As we see that happening, we see the environment changing.

Knowledge@Wharton: What are the implications for companies in places like India and China? What are the opportunities and threats that globality presents for them?

Sirkin: They face the same opportunities and threats in many ways as the Western companies. Companies that operate in an environment where wage rates are about $1 an hour and rising at 8% a year have a tremendous advantage relative to companies in the U.S., where wages are $25 an hour and growing at 2.5% a year, or Germany, where wages are about $50 an hour with the Euro now approaching $1.60. They can use that advantage.

But if they sit back and just stay local, they'll end up losing the advantage over time, because companies compete on more than just wages. If you want to produce a low-end product, you can do it that way. But you'll need to step out into other markets to learn about how to bring the best of the rest of the world to bear on your own business.

If you're not taking a global perspective, your competitors in India or China may come into your market and take your position. The world is going to get much more competitive. To compete, companies must know how to balance things.

Low cost won't be enough to win, because at this point in time just about anybody can access low cost in China, India or Brazil. So, it's a great way to start because $1 versus $25 — all else [being] equal — you know which one will win. But over time, everybody will have access to lower costs.

Knowledge@Wharton: So, if that's the case, what are the implications for companies in more mature markets? What should be their strategy to globalize?

Sirkin: It's about picking the right locations, but it's more than just going to those countries, acquiring low cost labor, producing things and exporting them. If you look at the population in India, there are about 1.1 billion people. China has about 1.3 or 1.4 billion people. So, we're talking about 2.5 billion people. Those are huge markets. And if you look at the rapidly developing economies overall, there are about 3.5 billion people.

We think that over the next 20 years, another billion consumers will move from abject poverty and enter the consumer market. That means a lot of opportunities for consumer products, but also for companies that make things for businesses that sell to those consumers.

Recognize that a billion people is more than the combined population of the U.S., Western Europe and Japan. It is a huge opportunity.... If you sit in Chicago or Philadelphia or Paris or Frankfurt and ignore a billion-person market, you'll regret that you missed that opportunity.

Knowledge@Wharton: Do you see any companies that haven't missed it and who actually are pursuing creative strategies to access that billion-person market?

Sirkin: A lot of companies are doing that. Perhaps one of the best examples is Nokia, the Scandinavian manufacturer of cellular telephones. They built a position in China in the early days, by selling the traditional way — by offering a higher-cost Western product. When cell phone demand was really low and only the super-rich could afford them, that wasn't really an issue.

However, a bunch of local companies came in and started producing cell phones at a much lower cost. The demand increased and Nokia started to lose market share. And of course, those local cell phone companies started to move up the value chain and started to attack Nokia's traditional high-end market. The conventional response might have been to retreat.

But Nokia was much smarter than that and said, "No, I have to stand my ground here and fight for the customer." They rethought their product development, moved it to China, and changed their phones to better meet the needs of the Chinese consumer. They also found a way to produce a high quality product at a much lower cost.

Nokia also changed its third-party distribution system, recognizing that when it came to sales and understanding customers — particularly the retailers — they had to be there themselves with their own people. Nokia's market share, which had dipped to the low teens, is now back up around 30% because they stood their ground and adjusted their approach to the market.

This gave Nokia an incredible learning experience. They now understand how to operate in rapidly developing economies such as China. The lesson is: You have to be there, you have to learn, and retreat is not an option.

Knowledge@Wharton: How much does this erode the competitive advantage of emerging challengers from these countries, when multinational companies set up operations there?

Sirkin: It's always easier when you start from a place to understand what it takes to operate there, just as it's hard for Chinese companies to come to the U.S. and operate. So even if you hire local people, there's a huge gap between the corporate center, which may be again in Philadelphia, and the operations, which may be in Bangalore. That's a real disadvantage.

Now the Western companies have the advantage, so the advantage of the emerging local company is reduced. But the smart local company will learn from Western companies and begin competing with them by selling in Philadelphia, Los Angeles and Paris.

And again, it will become a significant battle. That's why we think globality is about competing with everyone, from everywhere, for everything.

Knowledge@Wharton: So, it will balance out eventually.

Sirkin: It will balance out because there will be competitive dynamics.... Losers and winners will come from the rapidly developing economies as well as the developed countries. A new equilibrium will eventually settle in, but it will be a long time before that happens because a lot of change will take place first.

The fundamental inflation we're seeing now with the prices of oil , raw materials and food — this is what we mean by competing with everyone from everywhere for everything. Historically, competition was about product, but now it's for resources and human capital. We see this in India, where a competitor hires away your talented new people after six months –- for a lot more money. There is a huge competition for human resources.

There will be massive competition for raw materials and we're seeing increasing competition for intellectual capital. So the basis of competition that this new equilibrium is starting to create is also different. And you have to start thinking about the pricing and sourcing of all these things. They're not commodities at this point in time, but all of these [are] important ingredients to run your company in a very different way.

Knowledge@Wharton: You referred to the fact that there will be winners and losers, both among the challengers as well as among the incumbents. What separates the winners from the losers and how can you ensure that you don't become a loser?

Sirkin: You can ever ensure it, but it's about changing the odds. It requires a willingness to understand the other paradigm. If you take a U.S.-centric perspective, then you'll get one solution. If you go to India, you'll get a different solution. The way to increase the odds of success is to blend those two perspectives together. The "best of the East and the best of the West" is most likely the winning formula.

In our book we call it pinpointing, which is deciding what you'll do where.... I look at an Indian company like Bharat Forge in Pune, India, which is the third-largest manufacturer of forgings in the world. They've made some very important decisions and they just don't focus on low cost. They've made acquisitions in Germany, in China and in different parts of the world to get closer to the customer and to access technology.

They're blending the best of the East and the West and saying, "I'm okay being a high-cost competitor in some places because it's worth it. I can charge the right price and learn the right skills. I don't have to be just a low-cost competitor." And they've done an excellent job of blending who they are.

Again, if you sit in a corporate center and don't see that, then get ready to lose. Or if you're in a developing economy and want to play on the global stage, you'd better be thinking about how to compete effectively in the developed markets. It's the blend that will probably win.

Knowledge@Wharton: Isn't it also true that some lessons are easier to learn than others? And I'll tell you what I mean: If you take companies like IBM or Accenture, they've set up big operations in India now for their IT practices. They have hundreds of thousands of employees there. So in that sense, you're absolutely right that they are able to match the low-cost operations of companies like Infosys or Wipro or TCS.

On the other hand, the Indian IT companies like Infosys and Wipro have always had the challenge of developing relationships with customers in the Western countries, which is what the Accenture's and the IBMs have excelled at. So with that kind of a dynamic, it almost seems easier to me for IBM to create a production back end that can mimic the costs of the Indian challengers, but not that easy for the Indian challengers to develop the customer relationships off of the incumbents. How do you think that dynamic will play out?

Sirkin: One more thing to add to the dynamic is creativity. If you sit in the West, the paradigm that affects your thinking is very different from the one you'd have if you were in India. In the West we have a very traditional engineering mindset that is hard to break out of. If you sit in India or China, the things you don't know can actually work in your favor.

So if you look at a product like the Tata Nano, the small $2500/1 lakh car, and you asked auto manufacturers in Detroit or Stuttgart, "Is that possible?" they would say, "No, you can't do that." Well, the reality is that you can and Tata is proving it. That level of creativity may well be leveling the playing field.

Knowledge@Wharton: You mentioned rising oil prices and the Tata Nano, the emergence of this inexpensive car. What other ways will people — everyday consumers — recognize the emergence of this process outside of business?

Sirkin: We are seeing it in all sorts of places. My son is a junior in high school and I'd certainly love for him to go to Wharton. But his competition is going to be far more fierce than when I applied in 1976. Probably 20% or 30% of the students here were not born in the United States and that will probably go up over time. So as we think about my children's future — my son is 17 and he is looking at colleges – he'll be facing a greater level of competition from around the world. So, competing for everything includes competing for the right to go to Wharton.

Knowledge@Wharton: We are all talking about this global slowdown, especially the credit crunch in the U.S. and the mature economies. Does that affect the process of globality at all?

Sirkin: It may speed it up a little bit because there will be more pressure to lower costs, which of course is one of the advantages of operating in developing economies. That may encourage even more Western companies to go beyond their own borders to lower costs, and may also create more opportunities for companies from India, China, Russia and Brazil. It also may mean more outbound M&A from the developing world, which will give the emerging companies access to brands and technology, possibly at lower prices. ❖

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