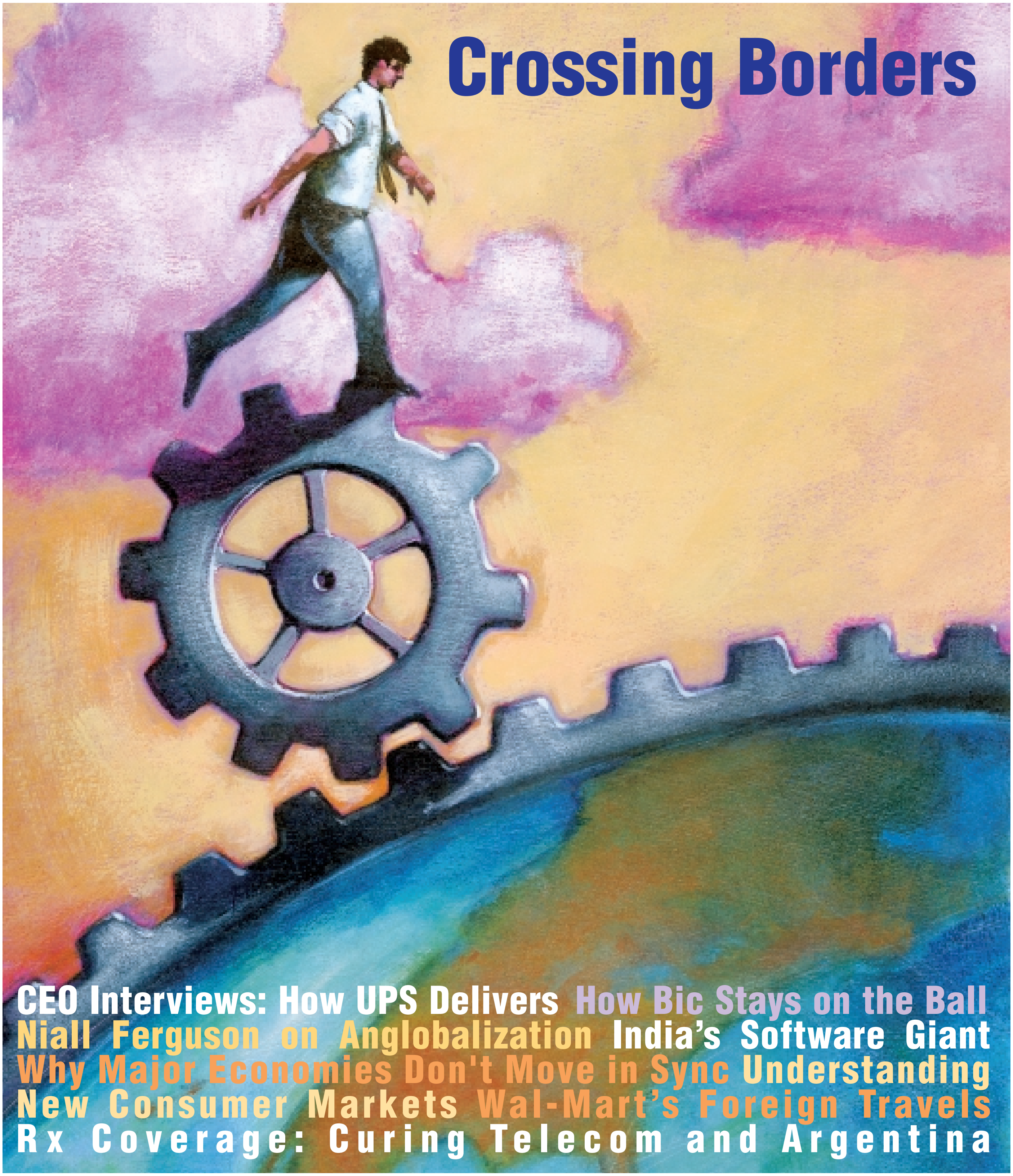
SPRING/SUMMER 2003

STERN*business*



Crossing Borders

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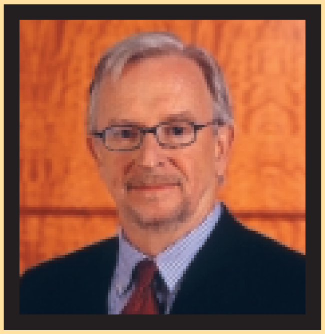

It's more than fitting that this issue focuses on the topic of globalization and crossing borders. In recent months, Stern has seen significant milestones in our international efforts. This past January the inaugural, 28-person class of executive MBA students from TRIUM, the program Stern offers jointly with the London School of Economics and the HEC School of Management in Paris, completed their studies. The second TRIUM class, with 35 members, completed its first module at our campus in New York that same month. This innovative program, geared toward inculcating a global perspective in its students, will continue throughout the year with sessions in Paris, London, Brazil, and Hong Kong.

While many of our alumni remain in the New York area, and hence can easily maintain connections to Stern, and with one another, Stern graduates who live in 98 countries have fewer opportunities to do so. In October, we held our second international alumni conference at La Pietra, NYU's conference center in Florence, Italy.

At La Pietra, where nearly 160 people gathered for a weekend of fine food, fine art, and fine discussion, Stern's approach toward business – and business education – was on full display. Panels brought together executives and scholars to discuss topics ranging from corporate governance to the direction of the global economy. A session on the business of opera included the administrators of New York's Metropolitan Opera, Munich's Bayerische Staatsoper, and Milan's La Scala.

Meeting in the heart of Europe, and with people from different business cultures and scholarly disciplines, added a great deal of context to all our discussions. Of course, history is an important component of context. Business history – long a strength at Stern – has been augmented by the arrival in January of Professor Niall Ferguson, who recently joined us from Oxford University and is the author of the definitive two-volume history of the Rothschild banking empire. His most recent book, *Empire* – which is partially excerpted in this issue – is a significant contribution to the growing literature on globalization.

As several articles in this issue argue, understanding the historical development of international markets, companies, and financial systems is crucial for leaders grappling with contemporary questions and challenges. After all, locating our place and role in an increasingly connected world is the fundamental task of all educational endeavors, but in particular of business and management education.

We look back on recent accomplishments with pride and a sense that we are affording all members of the Stern community a greater understanding of the world in which we live and work. And we look forward eagerly to the future – and to this issue of STERN*business*.

Thomas F. Cooley

Thomas F. Cooley
Dean

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Bruno Bich

chairman and chief executive officer

Société Bich

Bruno Bich is the Chairman and CEO of Société Bich, a leading manufacturer of stationery products, lighters, and shavers that was founded by his father, Marcel Bich, in 1945. Based in Paris, France, Bich has subsidiaries in several different countries and sells products in more than 160 countries. The company's U.S. subsidiary, Bic Corporation, based in Milford, CT, accounted for about 53 percent of Bich's 1.53 billion€ in 2001 sales. Bic manufactures three million ball point pens, 2.5 million shavers, and 1 million lighters each day. Mr. Bich graduated from NYU Stern with a Bachelor's Degree in Marketing, and has worked at Société Bich for more than three decades. After holding positions including national sales manager, vice president of sales and marketing, and Chairman and CEO of Bic Corp., Mr. Bich was elected to succeed Marcel Bich as Chairman and CEO of Société Bich in 1993.

ML: *You certainly are the quintessential multi-national, multi-lingual executive. Tell us what's going on in the global economy. Is it really as difficult, demanding, and daunting as it appears?*
BB: We are slightly affected by the downturn in the economy. There are good reasons to be careful right now. We created a bubble and we are paying the price. There was a bubble in Asia, which corrected a couple of years ago, and now is trying to recover. In Europe, there was an Internet bubble, but to a lesser extent than in the U.S. It's just like a pendulum. We went too far one way, we go too far the other way. Short term, I'm concerned. Long term, I'm very optimistic. In three years or so, business will come back to its normal pace.

ML: *Do any of your major products face specific challenges now? For example, lighters. We see what's happened with cigarette smoking in this country, and notably in this city, and presumably that will spread. Or your White Out business, when more and more people are using computers?*
BB: Smoking is going down one to two percent per year in the U.S. or world. That's a very small decline. In fact, we have increased our sales of lighters about four percent a year over the last five years. We keep on gaining market share despite the tough market. Computers have not really done much to our White Out business. That market also grows two, three percent a year. Our highlighter business has actually increased quite a bit. People are highlighting a lot of computer reports.

ML: *Shavers must be a challenging market, especially with a goliath of a competitor like Gillette. How do you make that business grow?*
BB: Our company was started right after World War II by my father. In the U.S., we went in the shaver business against Gillette. Gillette was strong in what I call the system and replaceable blade. To go through the door and attack that market head on would have been extremely difficult. Instead, we went into the one-piece or disposable razor. We went through the side door. And today, if you look at the western world, 55 to 60 percent of the people shave with a disposable razor. There are more people shaving with the disposable razor than with the system razor. Now, the system is bigger in value. But, in volume, we are about equal with Gillette, in the U.S. and in Europe.

ML: *What is your strategy for expanding in terms of new and different products?*
BB: First of all, the consumer goes to the store, and has a choice. Consumers usually

Marshall Loeb, the former managing editor of *Money* and *Fortune*, conducts a regular series of conversations with today's leading chief executives on the Stern campus.

"We can never forget that in today's world, approximately 20 percent of the people earn less than $2 a day."

spend about 20 seconds deciding which product to buy. The quality of the brand name in the subconscious of the consumer becomes very important, as does his recollection of how well he was served by the product in the past. That is really where we concentrate our strategy.

The second thing is, we develop products with new technologies that offer different services to the consumer in relation to their purchasing power. Thirty years ago, you had a ball point pen and you had a mechanical pencil. Then came the first felt products, the first flair pens. Instead of four colors, now there are 12 colors of ink. And the point size, which dictates the width of a line of color on a piece of paper. There used to be only 0.7 millimeter and 1 millimeter. Now we have 1.2, 1.0, 0.7, 0.5, and even 0.3 in Japan. So all those technologies offer choices to consumers, which they like to indulge.

Then there are different types of markets. In both developed markets and emerging markets, but particularly in the developed markets, you have the need market and the pleasure market. People want a basic ball pen that writes well. On the other hand, people--particularly young people--want to find a little bit of pleasure in their everyday life. And that's where they really look at the design of the product, and new technologies with different ink colors. At the same time, we can never forget that in today's world, approximately 20 percent of the people earn less than $2 a day. So our strategy is serve the consumer, never forget the basic product, and work on the quality all the time. If people want to spend a bit more money, and they have the money in certain countries of the world, then we'll present a wider choice, with newer technology.

ML: *Where are you going to make your major thrust for expansion?*

BB: My father started the business in France. But France, today, represents only nine percent of our sales. Overall, Europe is about 34 percent, North America about 56 percent, South America eight percent. We have the most opportunity in Asia. We started doing business two years ago in Asia, but building a business there will take 10 or 20 years. I think that in the 1970s, you could not call yourself an international company if you were not strong in the United States. I think in 10 or 20 years you will not call yourself a strong global company if you are not strong in Asia.

ML: *You have a management team that is stationed all over the world. How do you manage that?*

BB: Well, I have two offices--one in Paris and one in New York. And I commute. I'm in New York 50 percent of my time, Europe 30 percent of the time, and somewhere else 20 percent of the time. We have put together a group of managers who come from different backgrounds and different civilizations, because there is a lot of value to finding what are the common points between consumers in Europe and the United States, South America and Europe, and even Asia. I think too often, people start to talk about the differences. First, let's talk about the common points. Ethics. Teamwork. Internationalism. When you look at consumers, they write the same way, they shave the same way. We use English as our language of business, which is pretty advanced for a French company. Once a month, we video-conference with top managers around the world. We get together face to face every three months.

If there's one weakness in the United States, it is that American companies call themselves international when in fact, there are very few executives at American companies who are multi-lingual and very few people who come from foreign backgrounds.

ML: *What are some of the differences between American managers and non-American managers?*

BB: The main difference is that the American managers are very results oriented. And the French, who are more intellectuals, love to discuss and do more research. I think Europeans are extremely inventive in terms of technology. And when you put them together with Americans, who are very good at process, you have stupendous machinery. The idea is to use the strength of each toward the same goal, versus focusing on the differences. That's arduous work. But the payoff is great.

ML: *You have some of the world's best known brands. How do you develop a brand, and how important is that to you?*

BB: Our brand name is my family name so I look at it as a signature. I think that a brand stands for an agreement or a contract, your signature to the consumer that what you deliver to him is what he expects. You can build a brand, with advertising, with a very good product, and with consistent quality in your product. But you can lose it very, very quickly. I don't think that any brand in the world can be number one or number two by offering inferior quality. The strength of a brand is in the long-term faith of the consumer around the world. The important ingredients are quality, reliability, and value. After that, you're going to add the pride of having the product. And this is where advertising comes in. For example, we used John McEnroe in our shaver advertising. That campaign showed the consumer that Bic has a simpatico side to it. When it comes to the advertising or the design of the product, I personally spend a lot of time on it, because it affects the long term strength of the company. Our managers know exactly how to manage things like pricing. But they are not responsible for the soul of the company, which is the brand name, or the design of the product.

ML: *When you seek to hire*

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Michael Eskew

chairman and chief executive officer

United Parcel Service

Michael Eskew is the Chairman and CEO of United Parcel Service. UPS is the world's largest package distribution company and logistics provider. In 2001, the company reported sales of $30.3 billion. After nearly a century in business, the UPS name is synonymous with reliability and integrity. Today UPS' 360,000 employees deliver more than 13 million packages and documents each day, serving nearly eight million customers. The company's website handles more than six million tracking requests each day. Mr. Eskew, a graduate of Purdue University, joined UPS in 1972 as an engineer. In his 30-year career with the company, he has held a variety of posts in the U.S. and Germany, including Corporate Vice President for Industrial Engineering and Vice Chairman. In January 2002, he was named Chairman and CEO.

ML: *What do you think is going on in this economy? What is really wrong, and what's going to pull us out?*
ME: We released our earnings in July and we concluded that the economy, at that time, was sluggish across all the different sectors that we serve. The only area where we saw anything going on was in mortgage refinancing. An awful lot of letters and documents were going back and forth between banks. We used to think that we were a good leading indicator for Gross Domestic Product (GDP). But as inventory levels over the last few years have come down, we don't think we see changes in GDP until they happen.

ML: *What do you see as the greatest spurs to innovation?*
ME: For our business, we think about two dynamics that are in place: globalization and what we call "consumer pull" - consumers being able to look into the supply chain and pull through what they want, when they want it. As far as globalization goes, our international business is strong. The last quarter our exports from Europe were up 13 percent and our exports from Asia were up 17 percent. China was up nearly 40 percent year on year. We see an awful lot of power in that dynamic. The other dynamic, consumer pull, is powerful as well. I'll give you an example. The first computer I bought was an IBM XT. I went to a retail shop to buy it. All the computers looked alike. They were all configured the same way. And they were delivered by truckloads. Today I can order one computer and I can configure it exactly as I want. I can select the screen size and printer. And today, consumers can pull these custom-made computers through the supply chain one-by-one. They come one-by-one in a package delivered, I hope, by a brown package car. This dynamic is making the supply chain cheaper.

ML: *Tell me about globalization and its effects upon your company.*
ME: We have an awful lot of customers who really do want to expand their markets. And it's not just the big companies, it's the smallest companies, companies that started with us when they were in a garage. The nice thing is, we can act like each customer's package is the only package we have. We can tailor solutions on a one-by-one basis.

ML: *UPS is engaged in what seems to be a pretty basic business. You deliver packages by trucks. It doesn't sound like a very romantic or exciting or challenging business, yet I suspect that it is.*
ME: UPS has been in business for 95 years. It was founded in 1907 by a teenager in Seattle named Jim Casey. He started out delivering mes-

sages in Seattle. In about 1911, a new technology put Jim's company out of business: the telephone. The need to run messages all over Seattle went down dramatically. So he changed his business and started to deliver goods for stores. Jim had to go convince the stores of Seattle that if a customer came downtown on the streetcar and didn't want to carry his goods home, his company could deliver those goods to the customer's home. And he could put all the packages together and create scope and scale and put them all in a clean car with a uniformed driver and do it professionally. That's how the whole thing started. That business went on until after World War II. Then people didn't go downtown to shop anymore. They drove to suburbs and shopping centers, bought things and drove them home. So the business model was again threatened by technology. Jim Casey had to go into the common carriage business and compete directly with the post office. The business spread from there.

I joined UPS in 1972. We were in 37 states and had revenues of about a billion dollars. Since then, we've moved into 200 countries and we've moved beyond just ground, to air, to ocean, to international. And we've moved beyond just small packages. We now service the whole supply chain. All commerce is all about three flows. Goods flow, information flows, and funds flow. Our business is the flow of goods. And today, thanks to technology, we facilitate the flow of information and funds. We know exactly when a package was picked up, when it was delivered, and whether it was signed for.

Think about a camera or a computer or an elevator or a printer or an aircraft or a medical device, any high tech device. Usually folks that buy those devices need two-to-four-hour part replacement when something breaks. You can't run a McDonald's if the cash register doesn't work. Satisfying the need for two hour part replacement anywhere in the world requires the best transportation company in the world, which we've been building for 95 years. It requires a lot of technology. It requires central stocking, keeping those critical parts in one or two or three locations in the world. It requires forward stocking locations, places where you can keep parts so that they can be where they are needed two hours after that phone call is made. We can put all those services together anywhere in the world.

We also have repair locations. We do repairs on those parts also, because it all needs to come together at one time and place. Those companies in the U.S., and in Asia, and in South America, and in Europe want one throat to choke. We are it. They want one entity to manage the supply chain. So we do get excited about this mundane business. It's making customers better.

ML: *You have a very strong brand. How would you define it? How do you preserve and protect it?*

ME: Our brand was just evaluated and we determined that we have the second best business brand in the U.S., next to Coke. We've done a lot of work with our brand recently. It used to be that our purpose was to satisfy the small package needs of our customers. Now our purpose is to enable global commerce. We went to brand consultants. They told us that we don't use our colors the way we should use our colors. We need to call attention to brown, the color we own. We also need to think about more than just the package, how to make the brand about enabling global commerce.

"Our business is the flow of goods. And today, thanks to technology, we facilitate the flow of information. We know exactly when a package was picked up, when it was delivered, and whether it was signed for."

When the brown campaign came out, we did a lot of surveys and we felt that there were two other colors that companies owned. Blue was one of them, that was IBM. And pink was the other one, and that was Owens-Corning. And so we felt like we really could stake brown.

ML: *What is unique and distinctive about the UPS culture?*

ME: We have two strengths at UPS. One is the way we're organized. We have district organization so we can be close to the customer. The people that run our business day-to-day are in the field. The other strength is our culture. We have 360,000 employees in 200 countries around the world. And there are no superstars. None of us are more important than the other. None of us are sufficient by ourselves. We are a team. There are no private jets. We drive ourselves to the airport. I parked my own car and carried my own bag today. And I answer my own phone. Our culture is that we are one group. We try to treat each other the same. For instance, I eat in the cafeteria every day and I don't bring coffee and drinks to my desk because we ask the drivers not to drink coffee and eat lunch in their cars. That driver is as important as I am. That's part of our culture.

ML: *Do your executives get out and actually drive the trucks?*

ME: We all did, every one of us. I started at UPS as an engineer. I did some basic engineering for about the first two months. Then I went on to deliver packages for about two or three months. And you never forget the look in the customer's eye, the things they look for. If a package is late, you'll never, ever forget it. And when you get it there on time and it delights and they needed it, you'll never forget it. When I was a district manager in New Jersey I would ride once a month. I would ask the staff to ride once a month. That's not uncommon.

ML: *You have a lot of long time, long-term employees.*

ME: We do. We have about

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somebody, what do you look for?
BB: Personal values. I don't think leopards change their spots. We want to find people who believe in the same values that we do. Respect for the consumer. Respect for your fellow workers. That leads you to teamwork. Modesty. That leads you to the acceptance that there are good ideas all over the world. Then you move on to professionalism. Internationalism. There was a time when I used to say, attitude is more important than aptitude. I don't say this to the human resources department anymore. I tell them, I want both. There are good people all over the world, people with the right values, and the right brain. I also look for people who are hungry.

ML: *Yours is a family business. The family owns a little more than a third of the shares and has a little more than 50 percent of the voting power. What are some of the particular advantages and the particular challenges of being in a family business?*
BB: Over all, being a family business is a big plus. The big plus is that you build the business for the long-term. In Europe, we don't report quarterly earnings. We report semiannually. Of course, when you are a public company in the U.S., you must report quarterly earnings. That puts pressure on management to do things that are not necessarily good for the long-term. But if you're a family business, you can build for the long-term. And that means, in our view, that you don't have debt in such a way that you are under pressure to make short-term decisions in order to cover your debt. And you don't over promise to Wall Street. I sense that some of the things that have happened recently on Wall Street are the result of pressure to generate earnings, which frankly were not realistic in relation to the growth of the market. Also, the people who work in the company must know that they will be evaluated and fairly promoted, even though they are not in the family. And we in the family must do an excellent job. When I came to the U.S., and when I got more and more responsibility, my father was testing me. If I had not succeeded in the U.S., I would not have the job I have today. I tell my children and nephews and nieces, first you'll have to ask to join the business and then you'll have to prove yourself.

Student questions

Q: *How do you create synergies between your managers of different nationalities around the world and what kind of different talents do you expect from them?*
BB: You create synergies by choosing the right people. You've got to have people who deliver on a regular basis. And you have to be very careful about communication. When you have people from different backgrounds who speak different languages, you have to be very, very attentive. One of our philosophies is, "It's not enough to explain. You have to be understood."

Q: *Do you sell the same razor at the same price in the U.S. as you do in China, India, or South America? Many retailers have a terrible problem when they price discriminate because their merchandise is smuggled from third world countries into developed markets and sold at below market prices.*
BB: We do price to market and we do have that issue. If you want to grow in Eastern Europe, you have to offer your product at a price that is lower than in Western Europe because people in Eastern Europe don't have the money. But you need to know your business. You need to know an account well enough to see that if you get an order from a wholesaler four times bigger than any order that you have ever got from that wholesaler before, there is something fishy about it.

"I think that in the 1970s, you could not call yourself an international company if you were not strong in the United States. I think in ten or twenty years you will not call yourself a strong global company if you are not strong in Asia."

Q: *Failure is part of the growing process to become a good manager. Could you share with us one of the most humbling losses that you had while growing up in your business?*
BB: My biggest failure was the acquisition of Shaeffer Pen. It hasn't worked out yet. I think one of the reasons is that a lot of the Shaeffer business is in Asia. And shortly after we bought the business, Asia went straight downhill. The second thing is that people today, executives, do not have a sense of pride in having a high-quality, high-end writing instruments. We need to revive that part of the industry. We did not thoroughly analyze the high-end of the business. We did not do enough homework before the acquisition.

Q: *Would you please tell us about your trajectory to the top of Bic?*
BB: When I was 16 or 17, instead of going to England to learn English, I came here for the summer. And I loved it. Later, I took a year off and traveled all over the United States driving a car. It was 1964 and we were a very small company. And I would go to retail stores and check on our distribution. I became very interested. After a year, my father asked me what I wanted to do. I said, I want to go to business school in America. In 1964, there was no other place to go to business school. After I graduated from NYU Stern, I went into investment banking. I worked for White Weld in the U.S. and Europe for about four years, and then joined Bic. I became president of the U.S. business in 1983. That's when we started to introduce new products which we didn't have in Europe. And that's how North America became 56 percent of our global business. My father gave me the chance to show what I could do here in the U.S.

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four percent turnover, which means that people last on average 25 years among the full-time ranks. The loyalty that they have is terrific.

ML: *What kind of characteristics and qualities do you look for when you are hiring someone?*
ME: We really think about folks that can work with people. This is a people business. It's not a place for everyone. If you want private cars and private jets and country clubs and you want to see your name up in lights, don't come to UPS. It's not that kind of place. But it is a place that you can work and know that you do something that's honest and noble. Delivering a package is noble. We are enabling commerce, making our customers better, taking them places. It's an honest job and it's a great place to work. And we think we make a difference.

"We have 360,000 employees in 200 countries around the world. And there are no superstars. There are no private jets. I parked my own car and carried my own bag today. And I answer my own phone."

Student questions
Q: *Can you give us an example of how you create high value, innovative solutions for customers?*
ME: We think about this in terms of four dynamics. We think about things we do internally and things we do externally, things we do for existing businesses and things we do for new businesses. In terms of things we do internally, we look at the product process with our marketing group. For example, they take next day air and second-day air and make it 8:30 and 10:30, and they replicate that model and integrated delivery network throughout 200 countries. The way we grow existing businesses externally is through mergers, acquisitions, partnerships, and alliances. We've done several acquisitions. We've done hundreds of partnerships and alliances, generally in the high- tech space. We know that we have to go to external sources to be able to grow existing some businesses.

With new businesses, we can try new things and we can fail small fast, so we try to innovate down there. For example, we investigated web-based grocery delivery. We tried it and failed fast. But we didn't fail with a lot of money. We use a strategic enterprise fund to examine new business opportunities. We use that to fund pre-IPO companies that do things in spaces that we're interested in. And we support research at universities. One of those companies was a company named Savi, which does radio frequency (RF) transponders. We move 13 million packages across the world every day and we want to know where every one is at every moment. Right now, we do that by scanning every package several times. That's a lot of labor. What we'd like to do is use RF transponders as a way to track packages.

"We went through brand consultants. They told us that we don't use our colors the way we should use our colors. We need to call attention to brown, the color we own."

Q: *What items are on your capital expenditures wish list?*
ME: We spend a billion dollars every year on technology, and we have for the last 15 years. We've been described as a technology company with trucks and that's a fair description. We're going to continue to spend money on technology. We just opened our new air sort in Louisville. It's the most phenomenal sort you've ever seen in your life. The packages sort themselves! The packages move 400 feet a minute but if you could make time stand still, you could find that package within 12 inches in a building that is the size of the Pentagon. It's a phenomenal thing. Also, we're going to continue to add to the 300 aircraft we own, to be able to take our customers' packages around the world.

Q: *In your ongoing effort to globalize your market, how has it been different doing business in other countries?*
ME: We did our first international expansion in Germany in 1976. We all thought that we could do things there just like we did them in the U.S. For example, we called each other by our first names in the U.S. Well, Germans don't do that because of the formality of the language. We want to be able to build our overall brand so that folks all over the world learn to think of UPS. Our website is available in 19 different languages. It's tailored to 109 different countries. So if you're in a remote part of Nigeria, you can find out how long it takes to get a package to Japan.

Q: *UPS has invested very heavily in aviation over the past decade. I know that you have experimented with using that aviation equipment in other ways. Can you tell us about that?*
ME: We do sometimes experiment in that kind of new business. We look at three different dynamics. First, it has to be an attractive market, a growing market. Second, it has to leverage our strengths, our skills, our brand, our customer base, our technology, our people. Third, it has to fit our strategy. Again, that strategy is to enable global commerce. We didn't think flying passengers on the weekends to cruise ships necessarily was an attractive market. It almost distracted us. So we got out.

C R O S S I N G

By **Daniel Gross**

From the ability to communicate with friends in London via instant messaging to the presence of canned okra from Lebanon in the aisles of Stop'n'Shop, there is evidence all around us that the world is becoming a smaller place. So too, alas, are indicators that significant distances – political, cultural, and economic – stand between us and our fellow inhabitants of the earth.

In his 2000 best-seller, "The Lexus and the Olive Tree," *New York Times* columnist Thomas Friedman rhapsodized about the positive implications of globalization and the proliferation of the latest development in information technology. No two countries with McDonald's, he reported, had ever gone to war. His 2002 best-seller, "Longitudes and Attitudes," focuses more on the downsides of globalization. It turns out, of course, that in our global village, terrorists can use the Internet to organize, and that even isolated countries like North Korea can gain the expertise needed to produce highly sophisticated weaponry.

Despite today's uncertainties – many of which have been economically disruptive – the forces that spurred globalization are still immensely powerful. The trade in goods, services, and ideas is increasing, not decreasing. In a fascinating interview, Michael Eskew, the chairman and chief executive officer of United Parcel Service (UPS), provides insight into one of the workhorses of the global economy (p. 4). UPS, which began life as a messenger operation in Seattle, now employees 370,000 people in 200 countries. But while UPS' fleet of brown trucks and brown-clad delivery people provide the muscle, the human element is only half the story. "What really makes us the best is information," Mr. Eskew says. "Information that tells us where that package is, when it's late, what building it's been in, where it went, who sorted it in the wrong direction."

Yes, information – and information technology (IT) – increasingly drive commerce. Unlike oil or bananas, bits and bytes can move freely and cheaply from pretty much any point on the globe to another at the click of a mouse. That allows an enterprising company to provide IT services to U.S. clients from a location as seemingly remote as India. Today, Infosys, a software giant based in India and listed on the Nasdaq, counts dozens of blue-chip U.S. companies among its clients. In their case study (p. 10) Raghu Garud, Aruna Kumaraswamy and Monica Malhotra show how Infosys is creating a new paradigm that can be emulated by companies from Bangalore to Boston. "What most distinguishes Infosys is the way it systematically built up a post-modern, scalable enterprise for harnessing intellectual capital in the new information economy," they write.

The realization that gaping cultural, political, and economic gulfs exist in a world theoretically made smaller is just one of many apparent contemporary paradoxes. Here's another: In recent years, the trade in international financial assets has increased sharply. And yet at the same time, the major economies have seen their paths diverge. We're growing together while growing apart. These two phenomena – financial globalization and real regionalization – as Fabrizio Perri and Jonathan Heathcote tell us, are directly related (p. 40). After all, when capital moves more freely, it can follow and pursue returns, and react quickly to local shocks.

The recent experience of Argentina, whose decision to devalue the peso has caused massive economic dislocation, shows that discussions about capital flows are not simply academic exercises. At a lively Stern forum last

B O R D E R S

fall (p. 30), Argentina's former economy minister Domingo F. Cavallo (a Henry Kaufman Visiting Professor at NYU Stern), Mario Blejer, a former governor of the Central Bank of Argentina, and NYU Stern professor Nouriel Roubini debated the causes of – and potential solutions to – the Argentina morass. Surprisingly perhaps, the economists spent a good deal of time talking politics. "For economic growth, you need strong institutions. And for that, you need a well-functioning political system," Professor Cavallo said. "The functioning of the constitutional system is more important than any question related to the exchange rate system."

Niall Ferguson, the distinguished Oxford historian who is a professor at NYU Stern, similarly argues that institutions matter. In an elegant and provocative essay – drawn from his most recent book, "Empire" – Ferguson argues that the institutions and practices promulgated by the British Empire in the 19th and early 20th century made it one of the original progenitors of globalization (p. 24). "A case can be made that the British Empire was economically beneficial, not only to Britain herself, but also to her Empire – and perhaps even to the world economy as a whole," he writes.

History similarly informs Lawrence J. White's present-minded discussion of the telecommunications meltdown (p. 44). Drawing parallels between the current telecom glut and the overcapacity of railroads in the 1880s and 1890s, the savings and loan debacle of the late 1980s, and Japan's rolling crises of the past decade, Professor White offers some advice for regulators and entrepreneurs: declare bankruptcy, recognize and absorb losses, and move on. And continue to use sound antitrust policy to encourage innovation. "Good public policy could steer us through the turmoil and allow us to emerge fairly rapidly with a more efficient telecommunications sector."

Mature companies must expand in order to continue growing. But the leap into a foreign market can be daunting. Many companies gain initial knowledge from the experience they build up at home. But, report Peter Golder and Debanjan Mitra, crucial knowledge "can also be generated in foreign markets in which the firm already operates that are similar to potential new markets." In examining Wal-Mart's mixed efforts to expand overseas (p. 34), David Liang concludes that the retailing giants could have benefited from what Professors Golder and Mitra call "near-market knowledge." When it first opened in Argentina, Wal-Mart stores stocked 110-volt appliances; the local standard was 220 volts. Wal-Mart has stumbled, Mr. Liang concludes, in part because it has failed to replicate sufficiently the sources of competitive advantage – its brand, product mix, logistics operations, among them – that it has developed at home.

Increasingly, growth-seeking giants like Wal-Mart are going to turn to Asia, says Bruno Bich, the second generation chairman and CEO of the French consumer products company. "I think that in the 70s, you could not call yourself an international company if you were not strong in the United States," he said in a NYU Stern interview (p. 2). "I think in 10 or 20 years you will not call yourself a strong global company if you are not strong in Asia."

Today, globalization is a loaded term. It inspires visionary idealists and embittered protesters alike. There's a tendency on both sides of the debate to inflate the costs and benefits of this powerful and unstoppable trend. But if you take the long view, and analyze trends, and place them in their proper context – as the authors in this issue do – you can't help but think that the way of the future lies more in crossing borders than in isolation.

DANIEL GROSS *is editor of* STERN*business.*

A Passage From INDIA

Infosys has emerged as a titan of the global software industry by carefully designing and constructing a unique corporate culture. Continued growth will test the quality and soundness of the company's architecture.

By **Raghu Garud**, **Arun Kumaraswamy** and **Monica Malhotra**

The software company Infosys is one of India's great business success stories. Infosys was founded in 1981, when seven professionals led by N.R. Narayana Murthy, currently the chairman and chief mentor, collectively invested $1000. Now, Infosys is the third largest company in India, with a market capitalization of more than $10 billion. Based in the emerging information technology (IT) center of Bangalore, Infosys in 1999 became the first Indian company to be listed on the Nasdaq. In a country where many companies have opaque financial statements, Infosys has voluntarily adopted stringent accounting practices. In a country where ownership and control of businesses have been concentrated in the hands of a few families, Infosys has distributed ownership and control broadly among its 10,000 employees, known as "Infoscions."

But what most distinguishes Infosys is the way it systematically built up a post-modern, scalable enterprise for harnessing intellectual capital in the new information economy. Nandan Nilekani, Infosys's CEO and managing director, uses the term "scalability" to refer to Infosys's ability to grow from past experiences even while maintaining the integrity of operations. In a broader sense, scalability means Infosys can simultaneously increase revenues and profitability while growing across cultural value systems and value chains. This scalability is built into the company's DNA, and it pervades the way the company develops software, mentors employees, formulates strategy, and governs itself.

Indeed, this scalability has allowed Infosys to evolve continually. In particular, Infosys has created a malleable and responsive learning organization that continually uses its experience to replenish and transform its stock of resources and capabilities. In other words, Infosys is an organization that is perpetually in the making – which is what it takes to succeed in the fluid, global, rapidly evolving IT industry.

ILLUSTRATIONS BY CHRIS MCALLISTER

EXHIBIT 1

INFOSYS AUDITED FINANCIAL INFORMATION, 1994-2001

$ in thousands (except per share data)

For the years ended March 31,	2001	2000	1999	1998	1997	1996	1995	1994
Revenues	$413,851	$203,444	$120,955	$68,330	$39,586	$26,607	$18,105	$9,534
Cost of revenues	213,614	111,081	65,331	40,157	22,615	15,638	10,606	5,621
Gross profit	200,000	92,363	55,624	28,173	16,971	10,969	7,499	3,913
Operating expenses:								
Selling, general and administrative expenses	57,641	26,656	16,199	13,225	7,010	4,351	3,344	1,314
Amortization of deferred stock compensation expense	5,081	5,118	3,646	1,520	768	361	46	–
Compensation arising from stock split	–	–	12,906	1,047	–	–	–	–
Total operating expenses	62,722	31,864	32,751	15,792	7,778	4,712	3,390	1,314
Operation income	137,515	60,499	22,873	12,381	9,193	6,258	4,109	2,598
Equity in loss of deconsolidated subsidiary	–	–	(2,086)	–	–		–	–
Other income, net	9,505	9,039	1,537	801	769	1,460	746	322
Income before income taxes	147,020	69,538	22,324	13,182	9,962	7,718	4,856	2,920
Provision for income taxes	15,072	8,193	4,878	770	1,320	895	893	251
Subsidiary preferred stock dividends	–	–	–	68	–	–	–	–
Net Income	$131,948	$61,345	$17,446	$12,344	$8,642	$6,824	$3,963	$2,670
Earnings per share:								
Basic	$2.01	$0.93	$0.28	$0.21	$0.15	N/A	N/A	N/A
Diluted	$1.98	$0.93	$0.28	$0.20	$0.15	N/A	N/A	N/A
Cash dividend per equity share	$0.14	$0.11	$0.09	$0.04	$0.02	N/A	N/A	N/A
Balance sheet data:								
Cash and cash equivalent	$124,084	$116,599	$98,875	$15,419	$8,320	$7,769	$8,046	$2,885
Total assets	342,348	219,283	153,658	48,782	32,923	27,261	23,051	9,400
Total long-term debt	–	–	–	–	–	–	–	–
Total stockholders equity	311.792	198,137	139,610	41,146	30,640	23,925	19,668	8,852

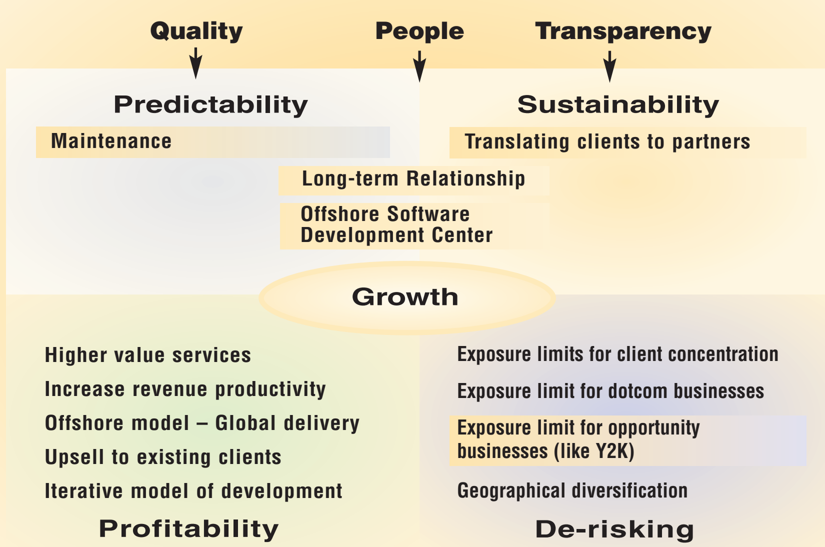
Source: Infosys Annual Reports

Scalable Strategy

Professor Marti G. Subrahmanyam of NYU Stern School of Business, and an independent director of Infosys, pointed out that "A key element of a strategy for survival and even rejuvenation in a downturn is a flexible financial framework within which a company operates." Infosys's PSPD Model that emphasizes predictability, sustainability, profitability, and "derisking," is an integral component of such a flexible framework. These four strategic goals are, in turn, accomplished through a set of sub-models and guiding principles. For instance, the Customer Relationship Model, which emphasizes the creation of long-term relationships with each client, helps ensure the predictability and sustainability of revenues. More

EXHIBIT 3

INFOSYS PSPD MODEL



Source: Infosys Annual Reports

EXHIBIT 2 **Infosys Timeline, 1981-2001**

1981	• Year of incorporation in India
1987	• Opened first international office in the U.S.
1992	• IPO in India
1993	• Listed successfully in India • Obtained ISO 9001/TickIT Certification
1995	• Set up development centers across cities in India • Received best Annual Report Award from ICAI (every year from '95)
1996	• Set up Infosys Foundation to focus on contributing back to the society • Established e-Business practice • Set up first European office in Milton Keynes, U.K.
1997	• Attained SEI-CMM Level 4 • Set up office in Toronto, Canada • Set up Engineering Services practice
1998	• Rated first in Economic Times India's "Award for Corporate Excellence" • Established Enterprise Solutions practice
1999	• Listed on Nasdaq • Crossed $100 mm in annual revenues • Attained SEI-CMM Level 5 • Rated India's most admired company by The Economic Times Survey • Opened offices in Germany, Sweden, Belgium and Australia • Established two development centers in U.S. • Established Infosys Business Consulting Services • Reorganization for competence building - DCG, SETLABS,CAPS
2000	• Became first company to be awarded the "National Award for Excellence in Corporate Governance" conferred by the Government of India • Crossed $200 Million in annual revenue • Set up offices in France and Hong Kong • Set up Global Development Centers in Canada and U.K.; Set up third Development Center in the U.S. • Combined dedicated e-Business practice with rest of the organization
2001	• Crossed $400 mm in revenues • Rated Best Employer of India in a study by Business Today-Hewitt Associates • Opened new offices in Singapore, UAE, and Argentina • Set up new development center in Japan

Source: www.infy.com

than 80 percent of Infosys's business is generated from repeat customers. The Global Delivery Model, under which a major portion of project execution costs is shifted from costly "on-site" client locations to relatively cheaper locations in India, plays an important role in ensuring profitability. Derisking is accomplished by, for example, limiting exposure to any specific client, domain or type of project to less than 10 percent of annual revenues, and by adopting a conservative financial policy that limits debt.

Of course, the PSPD model is not applied without reflection to address new challenges that continually arise. Models cannot replace human judgment, which is why Infosys has created several processes to study, review, and coordinate strategic initiatives and operational priorities. These processes unfold in several forums, including the Board of Directors, and the 57-member Management Council, which includes the board and department heads, as well as nine representatives from the younger generation at Infosys. The Management Council meets frequently to discuss market trends and any other issues of strategic/tactical relevance.

Even though Infosys departments enjoy considerable autonomy to develop and implement strategic and operational initiatives, the core implementation process is essentially the same across the company. Infosys also takes a measured approach to implementation. "Usually, when we come up with a possible solution or a plan, we pilot it to see how it works," observed S.D. Shibulal, director of customer delivery: "Then, we go back to the solution and correct it based on the results. We institutionalize the solution only after two or three such cycles." Infosys's ability to learn and adapt as it evolves is implicit in this approach. Here, scalability is evident in the ways Infosys encapsulates past experiences to shape future aspirations.

Developing Intellectual Capital

No company can execute strategies without the right personnel in place. And Infosys has taken great pains to recruit, train, and mold a scalable workforce. In the middle of Infosys's sprawling 'Infosys City' university campus sits an imposing structure where Infoscions regularly receive training. New employees enter a 14-week educational program. After this rigorous initial training, each Infoscion must undergo 15 days of formal training annually to upgrade technical and managerial skills. In addition to training Infoscions, the company's 50-faculty strong Education and Research Center (E&R) conducts research on new technologies and pilots them as they emerge. For example, E&R enabled Infosys to leverage the late 1990s corporate "mind-shift" towards e-commerce. Infosys's revenues from e-commerce related projects rose from a mere 1.7 percent of revenues in the first quarter of 1999 to 18.8 percent of revenues in the first quarter of 2000.

Intellectual growth is all-pervasive at Infosys. People learn from one another as they rotate from one project group or from one knowledge domain to another. When recruiting, Infosys looks for people with "learnability" – the ability to derive generic conclusions from specific situations and then apply them to a general class of unstructured situations. Learnability is crucial to manage the rapid career progression. "By 28, an Infoscion could well be a general manager, and by mid-30s, a director of the company," said Nandita Gurjar, associate vice president of Learning and Development. "Those who have been rewarded are those who have been able to jump from one paradigm to the next."

Under the company's intensive mentoring process, Infoscions at every level groom and teach those under them. Top executives coach newly minted middle managers on the need to spend ample time on networking, interdepartmental socializing and meetings, fire-fighting and logistics administration. To design an effective leadership program, Infosys has established the Leadership Institute at Mysore, India.

Knowledge Management

For an entire company to be scalable, it must be able to leverage knowledge across all its employees. "Learn once, use anywhere," as a key Infosys motto puts it. Infosys has now instituted an integrated approach to the management of knowledge. "The vision is that every instance of learning within Infosys should be available to every Infosys employee," said Mahesh Venugopalan, a member of Infosys's Knowledge Management (KM) Group.

"What most distinguishes Infosys is the way it systematically built up a post-modern, scalable enterprise for harnessing intellectual capital in the new information economy."

The four pillars of Infosys's KM system – people, content, process, and technology – comprise the architecture that guides the creation, transfer, and reuse of knowledge at Infosys. Its origins can be traced to company efforts starting around 1992 to create Bodies Of Knowledge (BOK), which are nuggets of experiential knowledge on topics ranging from technologies and application software to adapting to new cultures. Dr. J. K. Suresh, principal knowledge manager, pointed out that such BOKs, and other reusable content, were created and reused in isolation within any given project context. But they lacked visibility as well as extensive use across the organization till the development and deployment of a formal, enterprise-wide KM system during 1999-2000.

Besides creating and recording internal knowledge, white papers, and re-usable code, the KM system affords Infoscions access to external content like websites and technology and business news. Eighteen different content types have been identified (BOK being one of them). Every item in the central KM repository is associated with one or more nodes (representing areas of discourse) in a 'knowledge hierarchy' and tagged to facilitate ease of submission, classification, and retrieval. Currently, approximately one fifth of all Infoscions have contributed at least one knowledge artifact to the central KM repository, and more than a thousand knowledge artifacts get downloaded by Infoscions for serious use every day.

Since practice units lack the time and resources to create domain or technology specific knowledge, Infosys created two internal consulting groups: the Domain Competency Group (DCG) and the Software Engineering & Technology Labs (SETLabs). The DCG covers industry dynamics and trends, key players, regulatory and accounting practices. SETLabs focuses on technology architectures to create frameworks that can be used by project teams and business units.

To sow the seeds for the emergence of new knowledge and competencies, Infosys created three new business units to focus on the emerging e-business, ERP solutions, and telecommunications sectors, and an engineering services group to offer engineering services focused on quantitative modeling. S. Sukumar, head of corporate planning, explained: "Over time, people from these business units are moved around to other units to transfer competencies."

To facilitate the transfer of knowledge and a culture of sharing, Infosys developed an Intranet portal – the K-Shop. If a question is posted on an electronic bulletin board that is part of the knowledge management system, it is not surprising to get several responses from employees across the organization within a few minutes. The KM group has created an application called the "expert locator," which allows Infoscions to declare their specific expertise so colleagues may consult them when necessary. The KM group has also instituted formal mechanisms for the sharing of best practices across the company – quarterly meetings of business managers, for example.

To encourage knowledge sharing, the KM group has instituted various rewards, recognition, and incentive programs. Specifically, Infoscions can earn Knowledge Currency Units (KCUs) for contributing, reviewing or using the BOKs or other knowledge assets. Another form of KCUs (termed the composite KCUs) also serves as a metric to assess content quality (as determined by the various attributes related to content usage, and ratings by users across the organization) and measure the effectiveness or benefits of the knowledge management program. "Overall, the number of KCUs generated and distributed to employees – currently more than 160,000 – provides a clear indicator of the increasing level of knowledge sharing within Infosys," said C.S. Mahind, a member of the KM group.

Organizing for Global Delivery

Infosys thrives on its ability to solve clients' problems that lie distributed across the globe with software solutions created in India. In 1998, Infosys decided to abandon its traditional strategic business unit structure in favor of a combination of geography and focused services based business units (also known as Practice Units (PU)). The three largest delivery units are located in the U.S., Infosys's largest market, which accounts for nearly 75 percent of its business. In keeping with Infosys's Customer Relationship

"In 1998, Infosys decided to abandon its traditional strategic business unit structure in favor of a combination of geography and focused services based business units."

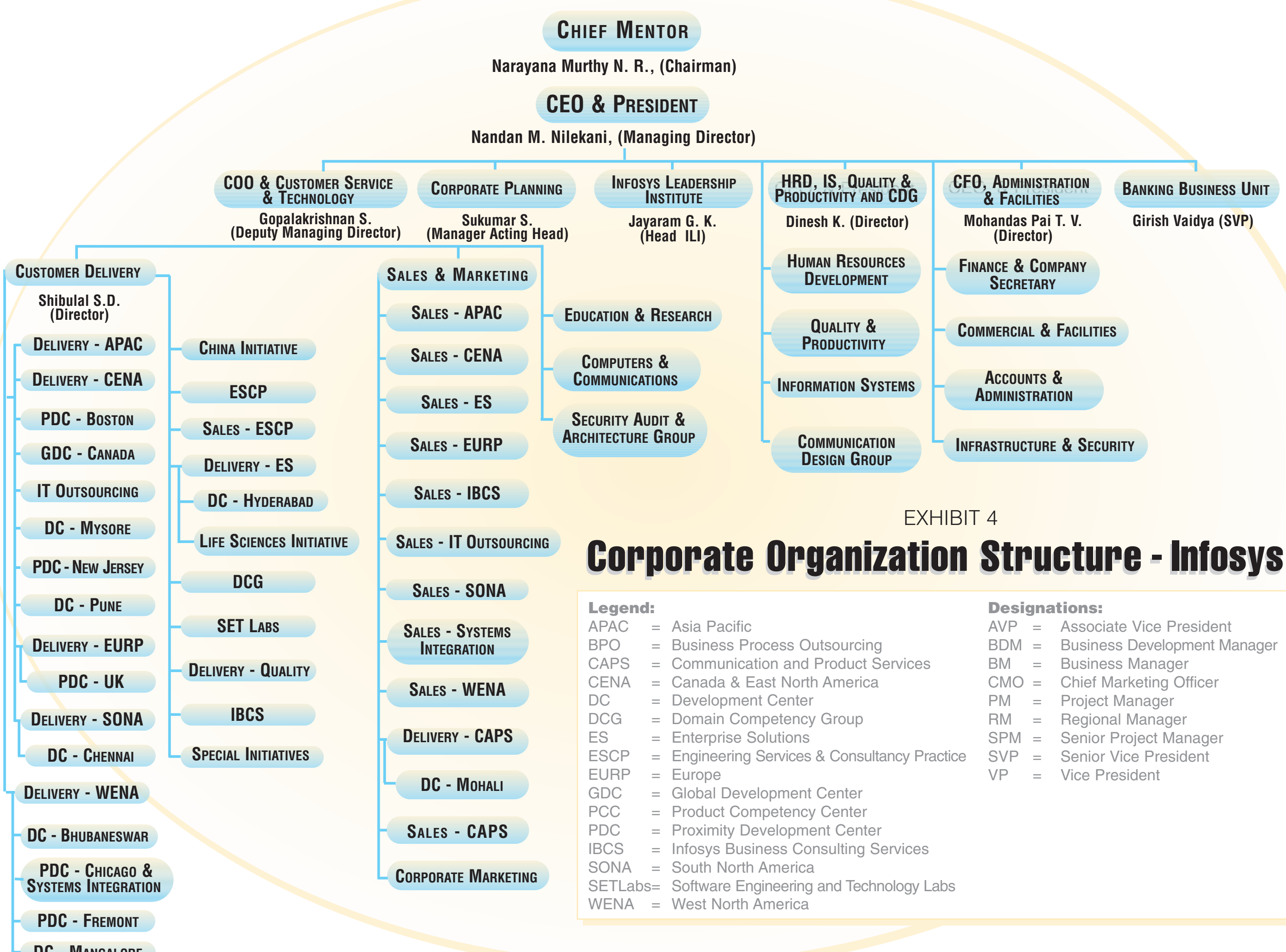


EXHIBIT 4

Corporate Organization Structure - Infosys

Legend:

APAC = Asia Pacific
BPO = Business Process Outsourcing
CAPS = Communication and Product Services
CENA = Canada & East North America
DC = Development Center
DCG = Domain Competency Group
ES = Enterprise Solutions
ESCP = Engineering Services & Consultancy Practice
EURP = Europe
GDC = Global Development Center
PCC = Product Competency Center
PDC = Proximity Development Center
IBCS = Infosys Business Consulting Services
SONA = South North America
SETLabs= Software Engineering and Technology Labs
WENA = West North America

Designations:

AVP = Associate Vice President
BDM = Business Development Manager
BM = Business Manager
CMO = Chief Marketing Officer
PM = Project Manager
RM = Regional Manager
SPM = Senior Project Manager
SVP = Senior Vice President
VP = Vice President

model, a PU is responsible for its clients globally, even if the clients' operations are spread across regions in other PUs. In addition to building close relationships with clients, this structure generates scale economies with support functions such as human resources and finance located in India.

Organizing for economies of scale does not necessarily result in scalability along the value chain, because PUs are purely oriented toward execution. Infosys has created structures and processes to address this challenge. The domain and technology specific knowledge that the DCG and SETLabs offer, combined with the relationship specific knowledge that PUs offer, generates value that is scalable across geographical contexts. Project teams are cross-functional with members possessing multiple, overlapping skills.

Eventually, whether or not a company is scalable is determined not just by how its activities are partitioned, but also by the processes that integrate these various parts. If processes are static, the corporation may settle into an efficient structure that lacks evolutionary capabilities. But there is nothing static about the organizational routines that govern Infosys's operations. The best way to understand these routines is by examining the software development and deployment process. The Capability Maturity Model (CMM), developed by the Software Engineering Institute at Carnegie Mellon University, forms the backbone of Infosys's processes. CMM assesses the maturity level of a software development company's processes and methodologies on a scale of one to five. Each maturity level requires the organization to develop specific capabilities in certain key process areas. And Infosys is one of the few organizations in the world to be assessed at Level 5.

An important component of CMM is the capability to learn, which ensures continuous improvement in processes. CMM generally emphasizes learning from experience and feedback. But Infosys learns not only from its own experiences, but also actively seeks to import relevant external knowledge. "If there is something better, we are willing to learn," said S. Gopalakrishnan, COO and deputy managing director. "We look at other organizations, study them, and then do it our own way."

"Infosys reports its financial performance in compliance with the generally accepted accounting practices of seven countries."

The continuous improvement philosophy inherent in CMM has been institutionalized for the rest of the company in the Infosys Excellence Initiative. Using the seven criteria of the Malcolm Baldrige National Quality Award (MBNQA) framework, Infosys assesses its entire cross-functional supply chain to identify areas that need attention. In these areas, Infosys has enacted changes to improve quality and productivity using the 6-Sigma technique and the ISO 9001 initiative.

Inverting Traditional Hierarchies

Managing intellectual capital is challenging. Employees can influence a company's value proposition by determining the extent and quality of their intellectual contributions. As Chairman Narayana Murthy observed, Infosys's employees walk out of the door every day and it is the management's task to make sure that they come back.

The need to maintain employee loyalty has imposed demands upon Infosys's management. "Bright, young people want to work in smaller companies. They don't want to be part of a team or work for a large company," said Chief Financial Officer T.V. Mohandas Pai. "So, Infosys needs to retain the flexibility, speed, collegiality, and openness of a small company." Infosys attempts to do so by ensuring that decision rights remain with those who possess relevant knowledge – its front-line workers.

Such an inversion of the traditional hierarchy is only possible if people assume the responsibility to use information to arrive at superior decisions. K. Dinesh, director of HR, Quality and Productivity, offered the following maxim as a guiding principle for decision making: "In only God we trust. The rest of you bring facts." Infoscions are encouraged to challenge one another based on the facts they can marshal. As a result, the company culture itself is built around a dialectic tension where employees agree to disagree, thereby generating informed consensus.

What role can top management play if front line knowledge workers make most decisions? At Infosys, managers are part of a larger process of mutual mentorship, a process that the founders hope will create an institution that survives them. "As we go up the corporate ladder, our role becomes directional," said Pai. "Our philosophy and duty is to recruit people who are brighter than us and to mentor them." This paradox speaks to a deep sense of security among managers. On the one hand, Infosys managers deploy their considerable experience to guide those under them. On the other, they learn from the very employees they teach.

Transparency

Because investors are naturally wary of new economy companies, Infosys has proactively adopted the highest international financial standards. In 1994-95, it was the first Indian company to adopt stringent U.S. Generally Accepted Accounting Principles (GAAP) for financial accounting and to include complete and detailed disclosures of accounts and activities in annual statements.

Also, it was the first Indian company to publish audited quarterly statements and release annual statements promptly after the end of its financial year. Now, Infosys reports its financial performance in compliance with the generally accepted accounting practices of seven countries.

By embracing transparent practices, Infosys is compelling other large businesses in India to follow suit. As V. Balakrishnan, vice president of Finance, pointed out: "We feel that transparency is a competitive advantage. Investors have more faith in a company that is more transparent." Infosys has leveraged its pursuit of transparency into an international brand. After embracing GAAP financial reporting standards, Infosys listed on the Nasdaq – a strategic move that created a currency to be used for stock options and potential acquisitions.

To date, Infosys has grown continually by employing its resources as platforms for improving existing initiatives and launching new ones. In this sense, Infosys has demonstrated what it means to be a scalable corporation. However, this process will surely be put to the test as Infosys continues scaling across value creation activities and cultural value spaces. As Mr. Nilekani observed, "The challenge now is to ensure that we are able to scale on all fronts – the physical front, the global front as well as on the soft issues front. All this, while we are still able to retain the quality and effectiveness we had as a small company."

For example, Infosys would like to move up the value chain in the software services industry – from low-cost project execution to high-margin end-to-end solutions. According to Balakrishnan, Infosys's dream is "to get U.S. revenues at Indian costs." But doing so means that the iterative model of software development and close contact with clients will increase. Infosys will thus lose some of its flexibility to move higher-margin consulting projects off-shore. And as competition for programming talent increases in the global IT sector, salaries in India are also rising. That will pressure Infosys to raise its incentive and compensation packages, which will make it difficult for Infosys to maintain its profit margins.

Infosys executives believe that organic growth may be too slow in accomplishing the desired transformation. Therefore, Infosys is evaluating acquisition opportunities. But unless the potential target has a compatible culture, it would be difficult for Infosys to integrate the alien culture without disrupting its well-oiled processes and well-defined values. After all, any effort at integration would be Infosys's first.

Growth, coupled with geographic dispersion of employees, may also make it more difficult for Infosys to leverage its collective knowledge effectively. Given that more than 90 percent of Infosys's revenues accrue from outside India, any growth must be global in scope. As a result, employees may have to spend more time removed from their base in India. Not only does this impose enormous lifestyle and psychological burdens on remote employees, it also complicates the task of managing and monitoring them. Infosys is trying to tackle this problem by rolling out company-wide e-mails, newsletters, and magazines. Furthermore, Infosys trains its managers to manage and monitor their teams more effectively over distances.

However, as Infosys moves up the value chain and grows globally, the length of time spent by employees at customer premises will increase. Ms. Hema Ravichander, senior vice president of Human Resources, worried that this may dilute the Infoscion culture, values and processes, which may make it difficult for an increasingly global organization to configure and integrate its systems, processes, and business units effectively. Such geographic dispersal and loss of identity may also make it difficult for Infosys to develop leaders with a common purpose to manage for the future.

The two faces of the Greek God Janus symbolize an end as well as a beginning. If one were to apply this image to Infosys, the promise of scalability lies in Infosys's ability to continually evolve from the very platforms it creates. Outcomes and processes are so intertwined that any end state is but a new beginning. It remains to be seen whether this promise will continue to hold as Infosys becomes a legitimate player in the global market.

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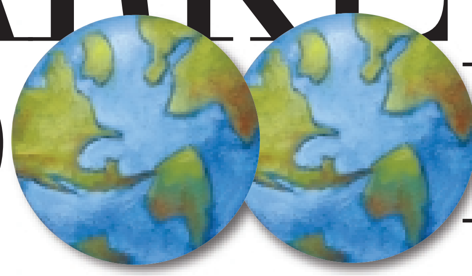
MONICA MALHOTRA *is a Stern MBA 2001.*

THE MARKET NEXT DOOR



Too frequently, companies with global ambitions simply try to export a business model that works well in their home markets. But international expansion is not always so simple. Smart managers can gain valuable knowledge and experience by operating in markets that are culturally and economically similar to their ultimate targets.

By **Peter N. Golder** and **Debanjan Mitra**

Market entry decisions are among the most important strategic choices companies make. Entering any market requires a major commitment of financial and managerial resources, but foreign markets can be especially demanding. Even though many companies established multinational operations long ago, some of today's leading companies are currently making the decisions to go global. Half of *Business Week*'s top 50 companies were established within the last 20 years and began to internationalize only within the past decade – think of blue-chips like Dell Computer, Cisco Systems, Home Depot, and Best Buy. And many companies have found decidedly mixed success expanding in foreign markets. Wal-Mart, for example, did not initially adapt its retail format in Argentina to the local culture. Nonetheless, the giant retailer's experience in Argentina provided it with valuable insights that it applied to subsequent operations in similar countries.

Most of the research on the internationalization process focuses on two factors as the primary determinants of foreign market entry: cultural similarity and economic attractiveness. Many researchers find that cultural similarity with respect to the domestic market is an important determinant of entry, while others have found that market entry decisions are positively related to country size and the levels of development, trade, and infrastructure. But no current study has considered the role of knowledge developed by a firm's subsidiaries in similar markets on subsequent foreign market entries.

Intuitively, it makes sense that the knowledge of the economic and cultural environment of a foreign market will affect the probability of entering that market. Theories of organizational learning argue that firms develop knowledge based on their experiences. This store of knowledge constitutes an important resource and is a source of competitive advantage. At first, of course, knowledge comes entirely from the home market, and companies make comparisons between the characteristics of the home market and those

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of potential new markets. But such knowledge can also be generated in foreign markets in which the firm already operates that are similar to potential new markets. Operating in Argentina, for example, may have provided Wal-Mart with some insights as to how to run a store in Chile.

We have dubbed this phenomenon *near-market knowledge*. But the term does not refer to markets that are geographically close. Rather, it refers to markets that are economically and culturally similar. Such knowledge can be broken down into near-market cultural knowledge, and near-market economic knowledge. These terms refer to a firm's understanding of the culture and economy, respectively, of potential new markets based on knowledge generated from operating in similar markets. When multinational corporations (MNCs) internationalize, they can use such near-market knowledge to select other foreign markets where the firm is more likely to succeed.

We set out to gauge the influence and relative importance of near-market cultural and economic knowledge by gathering extensive data and using it to test the validity of several widely accepted assumptions about foreign-market entry.

Prevailing Assumptions

First, we assume that cultural distance is negatively related to foreign market entry timing. In other words, companies will hesitate to enter markets that are culturally unfamiliar to them. Nearly all research on the impact of culture on foreign market entry has considered the distance between a firm's domestic culture and the culture of each potential market. Differences in culture have been found to affect brand image strategies, consumer innovativeness, negotiations, and marketing decision-making. When companies operate in countries with different cultures, they need to modify their operations in these areas as well as other elements of the marketing mix. Since such modifications increase costs and risks, companies are likely to enter countries with cultures similar to the domestic market before entering countries with less similar cultures.

Likewise, most people assume that economic distance is negatively related to foreign market entry timing. Why? Firms seem more likely to be successful operating in countries with economic characteristics that are similar to the firm's home market. Similar economic characteristics may reflect potentially important similarities between countries where knowledge transfer is valuable. For example, similar economic conditions might be associated with similarities in consumer demand and business institutions like distribution channels and media. Since knowledge of these factors can help firms succeed in foreign markets, companies are likely to enter countries whose economies are comparatively similar to the familiar domestic market.

"Knowledge can also be generated in foreign markets in which the firm already operates that are similar to potential new markets. Operating in Argentina, for example, may have provided Wal-Mart with some insights as to how to run a store in Chile."

The same set of assumptions pertains when dealing with near-market knowledge. Since companies can acquire and share knowledge throughout their organizations, they will likely make some effort to transfer knowledge generated from operating in foreign markets to other similar markets. The knowledge generated in successful markets should increase the probability of entering similar markets. When companies have positive experiences in foreign markets, the cultural and economic knowledge generated in those markets will lead to earlier entry in similar markets. Both concepts – cultural and economic knowledge – are dynamic and change over time, with companies' experience.

Perhaps the most important factor in foreign market entry decisions is the economic attractiveness of a country. All things being equal, firms are likely to choose more prosperous and accessible economies. The extensive literature on foreign direct investment (FDI) supports this view. FDI theory argues that firms face various disadvantages in foreign markets and invest only when expected benefits exceed those costs. These benefits depend on the economic characteristics of each country. Finally, in general, researchers have regarded economic factors as playing a larger role in companies' foreign market entry timing decisions than cultural decisions. Companies can mitigate the negative impact of cultural distance by gaining experience in similar foreign markets and by hiring managers with knowledge of the local culture. But while companies can learn about consumer demand and economic institutions, they have practically no influence on the economic prosperity, size, and infrastructure of a country.

Identifying Frequent Entrants

As we set out to test these assumptions, we conducted an extensive search for the complete entry data of many multinational firms. We focused on consumer products companies, based in a variety of domestic markets, that have successfully entered many countries. (The companies in our final sample generate more than half of their revenue outside their domestic markets). All these firms have survived for at least several decades, hold leading market share positions, and have not withdrawn from any foreign market entered. Using largely public sources, we were able to identify foreign market entry data for 19 of the 35 firms that satisfied these criteria. The average year of the most recent entry across these firms was 1992. We contacted all 19 companies and corroborated 292 of our entry events, finding only negligible differences for less than 1.5 percent of these observations. The final data set includes 12 firms from the United States, two from the United Kingdom, two from Japan, and one each from the Netherlands, France, and Switzerland.

Next, we collected data on cultural and economic factors. As most other researchers of cultural distance do, we rely upon the measures of the four dimensions of culture identified by Dutch social scientist Geert Hofstede: individualism, uncertainty avoidance, power distance, and masculinity. By calculating the variance of these measures across different countries, we derived a quantitative measure of cultural distance. We based our measure of near-market cultural knowledge on two key criteria. First, every market in which a firm operates that is more similar to a potential market than the domestic market is to that potential market will increase the cultural knowledge of the potential market. Second, the duration of experience in each of these markets will increase cultural knowledge, albeit with diminishing returns. Thus, each potential market will have its own measure of near-market cultural knowledge, and it will change over time.

The factors we used to measure near-market economic knowledge were somewhat more straightforward. Essentially, we used three sets of variables: measures of economic attractiveness, economic distance between the home market and potential markets, and near-market economic knowledge. Economic attractiveness can be calculated by the measurement of four variables: consumer prosperity, as measured by Gross National Product per capita; economic size, as measured by Gross National Product; population density; and the development of infrastructure, as measured by the density of railroad networks. Economic distance is calculated as the difference of such measures across countries. Our measures of near-market economic knowledge capture the economic similarity between each foreign market and the similar foreign markets in which the firm already operates, based on the four economic attractiveness measures for each country. Just as is the case with near-market cultural knowledge, near-market economic knowledge will change over time as firms enter additional similar markets, operate for more years in those markets, and as the basic economic attractiveness variables change over time.

We then ran all the data through a hazard model, which models the rate at which market entry occurs based on dependent and independent variables. In this instance, the dependent variable is the time, in years, between the year of incorporation and the year each country is entered – through the initial establishment of a sales or manufacturing subsidiary in that country. Our independent variables are the measures of cultural distance, near-market cultural knowledge, economic attractiveness, economic distance, and near-market economic knowledge. When we finished the tests, we polled senior executives at the firms directly to gauge their opinions.

TABLE 1
SAMPLE OF COMPANIES

Company	Age of Company (Years)	Number of Countries Entered	End of Observation Period
Burger King	45	44	1999
Cadbury	100	28	1995
Campbell Soup	98	20	1997
Danone	33	40	1998
General Foods	70	28	1984
General Mills	71	28	1995
Gillette	98	38	1998
Johnson & Johnson	112	48	1990
Kellogg	93	24	1981
Kimberly Clark	127	29	1995
Matsushita	81	46	1990
McDonald's	44	41	1990
Nabisco	123	37	1994
Nestle	132	60	1990
Philips	108	59	1995
Pillsbury	130	25	1997
Procter & Gamble	109	26	1981
Sony	53	36	1997
Unilever	109	45	1974

Examining the Results

What did we find? **Table 2** shows that on average, it took 24 years for these firms to enter their first foreign markets. However, this time has decreased significantly to nine years for newer companies. This suggests that firms have sought international opportunities more quickly over time. There was no significant difference in time to first entry among firms based in different countries.

Table 2 also shows that, on average, firms have entered 37 countries. Therefore, the typical firm in our sample has yet to enter many countries. We did find that the newest firms were significantly more likely to have entered more foreign markets than the middle-aged firms in our sample. However, there was no significant difference between the newest and the oldest firms. Overall, we believe that **Table 2** shows a common number of countries entered over time and across firms from different countries. These findings suggest that newer firms move through the internationalization process more quickly. It also suggests that there is some central tendency for the number of countries in which firms choose to operate.

TABLE 2
Characteristics of Foreign Market Entry

Criteria	Sample	Number of Firms	Average Years to First Foreign Market Entry (Standard Deviation)	Average Number of Foreign Countries Entered (Standard Deviation)
	All Firms	19	24 (15)	37 (12)
Age of Firms	<50 years	3	9.0 (4.4)1, 2	42 (2.8) 1
	51 to 100 years	8	22 (13)1	32 (9.0) 1
	>100 years	8	32 (16)2	37 (15)
Home Country	United States	12	27 (16)	33 (9.0)
	Europe	5	18 (12)	47 (14)
	Japan	2	25 (23)	44 (4.9)

1 significantly different at $p < 0.05$
2 significantly different at $p < 0.01$

We analyzed the results further to determine which factors seem to have an impact on foreign-market entry. And here the results were somewhat surprising.

In a conclusion that differs from that of much research on internationalization, we found that, after controlling for other variables cultural distance had no impact on foreign market entry timing. Even when we estimate a model with only cultural distance and economic attractiveness variables, cultural distance was not significant. This suggests that previous studies may have overstated the importance of cultural distance by not controlling for economic attractiveness.

In addition, one of our assumptions was that companies will be more likely to enter countries with market conditions that are similar to their domestic market. But our results did not find that the measure of economic distance, overall, bore any particular relation to market entry. However, we did find that one of the variables – economic prosperity distance – had a significant bearing on market entry. This variable may be more likely than the other economic distance variables to reflect knowledge that might be valuable in other markets. For example, consumers in foreign markets with GNP per capita similar to the domestic market are more likely to buy similar types of products and have access to similar types of media.

In contrast with our results on cultural distance, we find that higher near-market cultural knowledge is associated with higher probability of entry. That suggests that culture still has an important impact on entry decisions. However, cultural knowledge generated in similar markets seems to be more important than cultural knowledge from the home market. This result seems logical because companies should be more successful when they transfer knowledge from countries that are more similar. Therefore, our results suggest that near-market cultural knowledge may be a better measure than cultural distance for the impact of culture on foreign market entry timing.

With respect to the economic questions, we found that higher near-market economic knowledge is associated with higher probability of entry. And we found that all four economic attractiveness variables are positively associated with foreign market entry timing. Not surprisingly, firms tend to enter these high-potential markets earlier. Finally, the weight of our findings suggests that even though near-market cultural knowledge is significant, as we suspected, economic factors are relatively more important determinants of foreign market entry timing.

Asking the CEOs

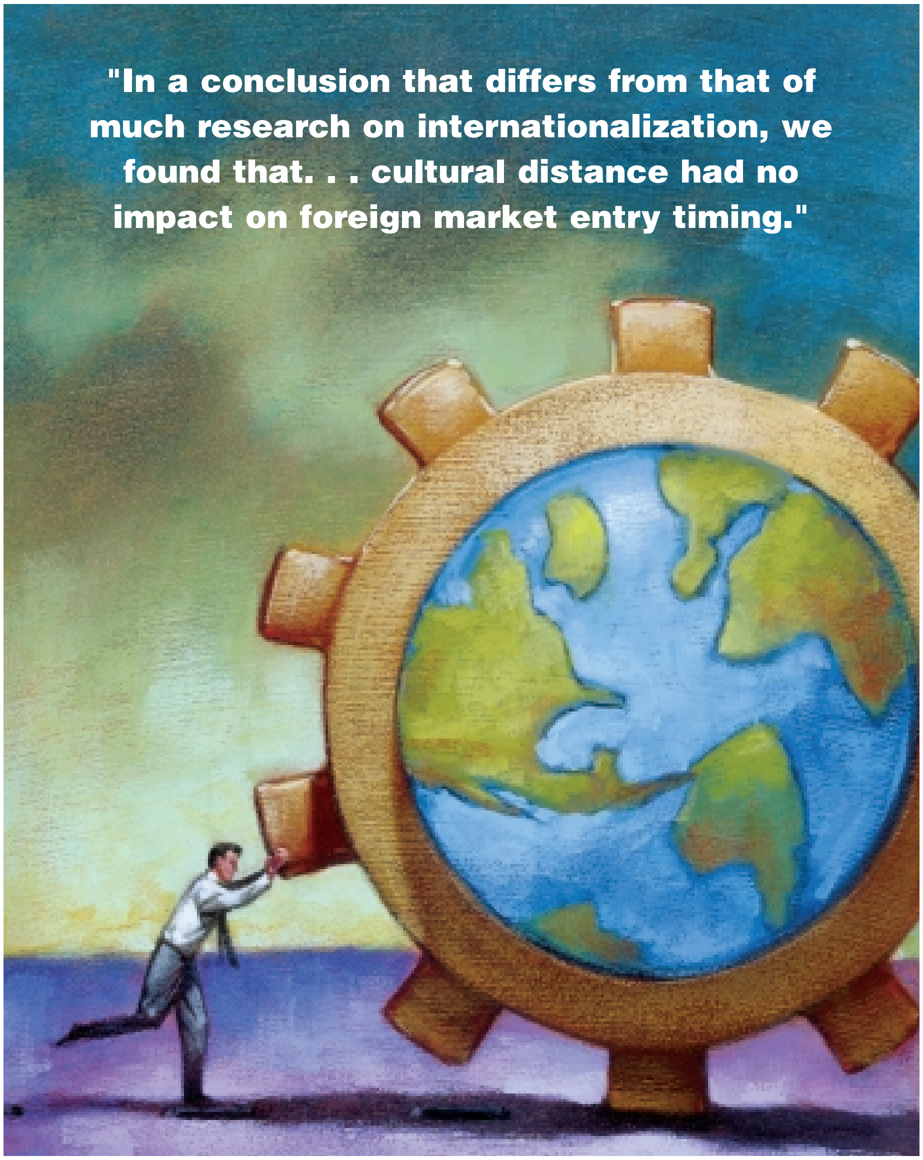
To validate our model results, we sought input from executives at successful multinational firms. Since top executives are responsible for international entry decisions, we contacted only the Chief Executive Officer and the other top executive most directly responsible for international operations at each firm. Nine of these executives agreed to answer questions about how economic and cultural factors influence their foreign market entry decisions.

In **Table 3** we present the survey

Table 3
Survey of Senior Executives on Foreign Market Entry

Questions	Mean Response*
1. I prefer to enter a country that is similar to the home market of my company in terms of economic factors like market size, income, infrastructure, etc.	**2.6**
2. I prefer to enter a country that is similar to the home market of my company in terms of cultural factors like attitudes, beliefs, customs, etc.	**2.2**
3. In selecting foreign markets, I place more importance on economic factors than cultural factors.	**5.1**
4. In selecting foreign markets, I value experience gained in other foreign markets that are economically similar.	**5.4**
5. In selecting foreign markets, I value experience gained in other foreign markets that are culturally similar.	**4.9**
6. When entering a new country, I transfer knowledge developed in the most similar countries.	**5.0**
7. When entering a new country, I prefer to use managers with experience in other foreign countries that are most similar.	**4.7**

*** responses on 7 point scale where 1=strongly disagree and 7=strongly agree**



"In a conclusion that differs from that of much research on internationalization, we found that. . . cultural distance had no impact on foreign market entry timing."

questions along with the mean response for each question. These responses support our model results. In particular, knowledge generated in similar markets is important to these executives. When selecting foreign markets, they highly value experience gained in markets that are economically and culturally similar. Moreover, once they have entered countries, they transfer knowledge and managers from similar countries. The survey also confirmed that executives place more importance on economic factors than cultural factors. Finally, these responses support our finding that cultural distance from the home market is not an important determinant of foreign market entry. However, an alternative explanation for this result may be that most of the executives who participated work at companies that have already entered many countries similar to their home market. These responses support our thesis about near-market knowledge and the importance of including our new measures of near-market cultural and economic knowledge.

What it All Means

Our new measure of near-market cultural knowledge is one step toward a broader consideration of the role of culture on foreign market entry. We find that this new measure captures a more significant impact of culture than the traditional measure of cultural distance. This finding provides support for the importance of being market-oriented by collecting and disseminating relevant knowledge throughout the organization. The firms in our sample seem to have based their entry decisions on knowledge generated in similar foreign markets.

Companies making foreign market entry decisions today can learn from the successful multinationals in our data. Today's internationalizing firms may be wise to place less emphasis on cultural differences and more on economic factors. However, the successful multinationals in our data may have been able to overcome some of the negative effects of cultural distance by hiring local managers and transferring knowledge from similar markets. Indeed, our results confirm the importance of considering both economic and cultural factors in modeling foreign market entry timing. And since both sets of factors play some role, it is not surprising that small cultural distances do not always lead to strong performance.

Finally, the primary implication of our findings for today's expanding companies is to consider developing experience in foreign markets that will provide the best basis for entering other similar markets. By investing in a small country first and learning about the cultural and economic characteristics of its consumers and business institutions, a firm may be more successful when entering a larger country with similar characteristics.

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ANGLOBALIZATION

The great British Empire of the 19th century isn't merely a quaint historical relic. It stands as one of the first great examples of globalization.

By **Niall Ferguson**

Recent economic history has not been kind to the British Empire. According to one influential school of thought, late 19th century capital exports to the country's numerous colonies diverted resources away from the modernization of British industry. It's even been claimed that the Victorians could have withdrawn from Empire with impunity, and reaped a 'decolonization dividend' in the form of a 25 percent tax cut.

But a case can be made that the British Empire was economically beneficial, not only to Britain herself, but also to her Empire – and perhaps even to the entire world economy. In fact, when we consider its influence on capital and labor flows, on creating and promulgating the infrastructure that supports economic development, it is clear that the British Empire was a major force for global integration. Call it Anglobalization.

It's now widely accepted that protectionism in less developed economies was one of the principle reasons for widening international inequality in the 1970s and 1980s. When they compared per capita (GDP) growth among developing countries, economists Jeffrey Sachs and A.M. Warner found that "the open economies grew at 4.49 percent per year, and the closed countries grew at 0.69 percent per year." In the previous era of globalization – the period from the mid-19th century until the First World War – economic openness was imposed by Britain (and the other colonial powers) not only on Asian and African colonies, but also on South America and even Japan.

A similar point can be made with respect to flows of labor. The more free movement there is of labor, the more international income levels will tend to converge. One reason that modern globalization is associated with high levels of inequality is that there are so many restrictions on the free movement of labor. But the British Empire actively promoted emigration.

Consider also the evidence on international capital flows, another key component of globalization. According to the simple classical model of the world economy, capital should flow naturally from developed to less developed economies, where returns are likely to be higher. But as Robert Lucas, the Nobel Prize winning economist, has pointed out with respect to the United States and India in the 1970s, this does not seem to happen.

Although some measures of international financial integration seem to suggest that the 1990s saw bigger cross-border capital flows than the 1890s, in reality most of today's overseas investment takes place within the developed world. In 1996 only 28 percent of foreign direct investment went to developing countries; by 2000 their share was less than a fifth. The overwhelming majority takes place between the United States, the European Union, and Japan. Investors in the developed world prefer to invest in countries with high levels of per capita GDP.

Did Empire Encourage Investment?

In the first era of globalization the share of cross-border capital going to poorer countries was significantly larger then than it is today. In 1997 only around five percent of the world stock of capital was invested in countries with per capita incomes of 20 percent or less of U.S.

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per capita GDP. In 1913 the figure was 25 percent. In 1995 the share of developing countries in total international liabilities was 11 percent, compared with 33 percent in 1900 and 47 percent in 1938. Those figures suggest the possibility that the existence of formal empire encouraged investors to put their money in less developed economies.

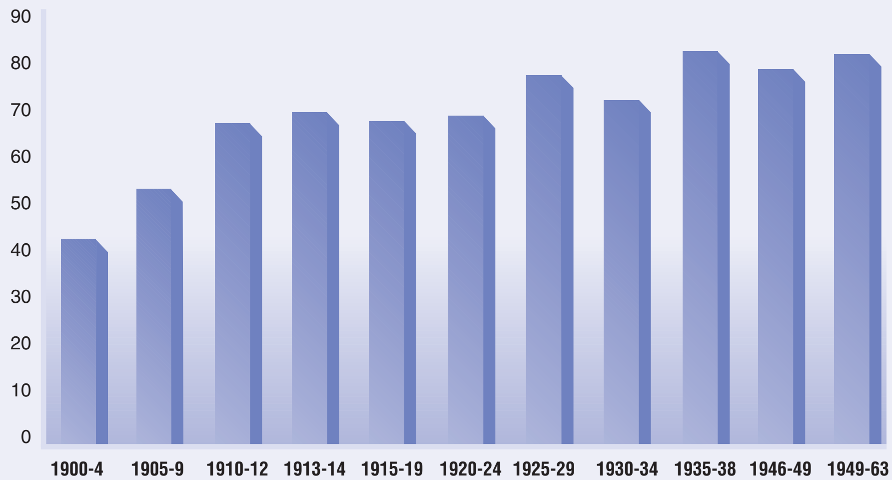
Finally, we need to consider recent empirical work on the institutional and political preconditions for growth. The historian David Landes has argued that "the ideal growth-and-development" government would secure rights of private property (the better to encourage saving and investment) and enforce rights of contract. Such a government would be stable, honest, responsive, governed by publicly known rules, and hold taxes down.

While British colonial rule was not democratic (outside Canada, Australia, and New Zealand), many of these criteria were among the British colonial administration's defining characteristics. Indeed, a striking number of the things currently recommended by economists to developing countries were in fact imposed by British rule.

In an ideal world, of course, free trade would occur naturally. But history and political economy tell us that it does not. For most of the 19th century, free trade spread more because of Britain's power than because of Britain's example. From the 1840s until the 1930s, the British political elite and electorate remained wedded to the principle of *laissez faire* – and the practice of "cheap bread." That meant that – certainly from the 1870s – British tariffs were significantly lower than those of her European neighbors, and that tariffs in much of the British Empire were also kept low. Abandoning formal control over Britain's colonies would almost certainly have led to higher tariffs being erected against British exports in their markets. After they secured independence, for example, the United States and India pursued highly protectionist policies. Britain's imperial rivals, France, Germany, and Russia also maintained high tariff regimes after the late 1870s.

CHART 1

PERCENTAGE OF ALL UK OVERSEAS EMIGRANTS GOING TO EMPIRE, 1900-1963



According to one estimate, the economic benefit to Britain of enforcing free trade could have been anywhere between 1.8 and 6.5 percent of GNP. But what about the benefit to the rest of the world? As one eminent Victorian put it, Britain was "the great Emporium of the commerce of the World." Between 1871-5 and 1925-9, the colonies' share of Britain's imports rose from a quarter to a third. More generally, as Jeffrey Williamson has argued, it was (mainly British) colonial authorities that resisted protectionist backlashes to the dramatic falls in factor prices caused by late 19th-century globalization.

In the same way, there would not have been so much international mobility of labor – and hence so much global convergence of incomes before 1914 – without the British Empire. True, the independent United States was always the most attractive destination for 19th-century emigrants. But as American restrictions on immigration increased, the significance of the white "Dominions" as a destination for British emigrants grew markedly (**see Chart 1**). They attracted around 59 percent of all British emigrants between 1900 and 1914, 75 percent between 1915 and 1949, and 82 percent between 1949 and 1963. Nor should we lose sight of the vast numbers of Asians who left India and China to work as indentured laborers, many of them on British plantations and mines, in the course of the 19th century. Perhaps as many as 1.6 million Indians emigrated under this system. There is no question that the majority of them suffered great hardship. But we cannot pretend that this mobilization of cheap and probably underemployed Asians to grow rubber or dig gold had no economic significance.

Capital Exports

From the mid-19th until the mid-20th centuries, Britain acted as the world's banker, channeling colossal sums of British (and other European) savings overseas. By 1914 total British assets overseas amounted to somewhere between £3.1 and £4.5 billion, compared with a British GDP of £2.5 billion. True, around 45 percent of British investment went to the United States and the Dominions. But 16 percent of British foreign investment went to Asia and 13 percent to Africa, compared with just six percent to the rest of Europe. As late as 1938, around 18 percent of British overseas assets were in Asia, and 11 percent in Africa. British investment in developing economies principally took the form of portfolio investment in infrastructure, especially railways. But the British also sank considerable sums directly into plantations to produce new cash crops like tea, cotton, indigo, and rubber.

Why were British investors willing to risk such an exceptionally high proportion of their savings by purchasing securities or other assets overseas? One possible answer is that the adoption of the gold standard by developing economies offered investors a "*Good Housekeeping* seal of approval."

Yet there is a need to distinguish here between anticipated and actual returns on overseas investments. For the period 1850 to 1914, anticipated returns were not significantly lower on colonial bonds than they were on other foreign bonds. But the same cannot be said of the actual returns. In a sample of 11 major capital-importing economies, if one takes an average of the three colonial countries – Australia, Canada, and Egypt – the anticipated yield was 5.3 percent, compared with 4.7 percent for the three South American countries in the group. But the actual returns were significantly different: 4.7 percent as against 2.9 percent. So when the same countries returned to the bond market in the inter-war years, they paid significantly different risk premia. On average, the returns Latin American borrowers had to offer investors were 270 basis points higher than those on new colonial issues. Even so, actual returns on Latin American bonds were once again worse than expected and worse than those on colonial bonds.

"A striking number of the things currently recommended by economists to developing countries were in fact imposed by British rule."

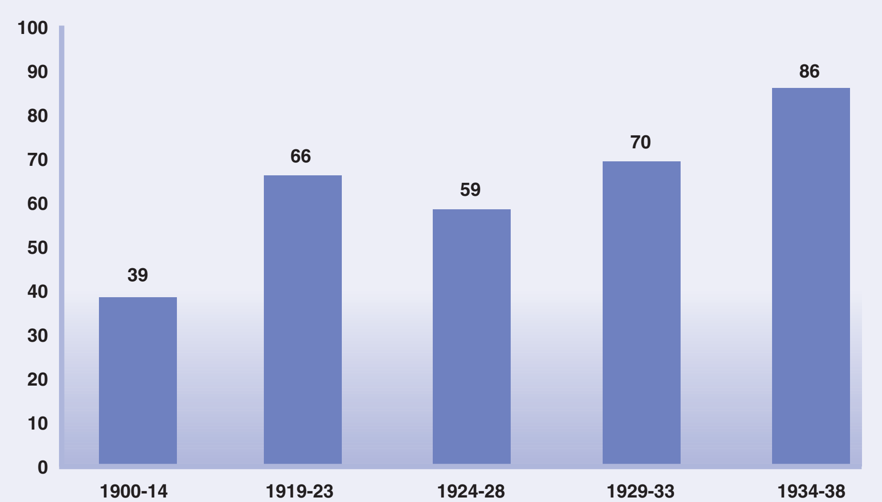
In other words, money invested in a *de jure* British colony such as India, or in a colony in all but name like Egypt, was more secure than money invested in an independent country such as Argentina. This was because the commitment to the gold standard was essentially voluntary. Gold standard members who were sovereign states could not only suspend gold convertibility in an emergency, they could also default on debts. To varying degrees and at various times, Argentina, Brazil, Chile, Mexico, Japan, Russia, and Turkey all did. But British colonies were unlikely to suspend convertibility and not much more likely to default than Britain herself.

In addition to the cast-iron commitment of colonial governors and administrators, a variety of explicit legal guarantees offered by the Colonial Loans Act (1899) and the Colonial Stock Act (1900) gave colonial bonds the same "trustee status" as the benchmark British government perpetual bond, the consol. It was inconceivable, declared the Governor of the Gold Coast in 1933, that the interest due on Gold Coast bonds should be compulsorily reduced: why should British investors "accept yet another burden for the relief of persons in another country who have enjoyed all the benefits but will not accept their obligation"?

This sentiment explains why an increasing share of British overseas investment ended up going to the Empire after the First World War (**see Chart 2**). Between 1856 and 1914, approximately two-fifths of

CHART 2

IMPERIAL SHARE OF NEW CAPITAL ISSUES IN LONDON, 1900-1938 (AVERAGE PER YEAR)



British overseas capital went to the Empire. But between 1919 and 1938, the Empire received two-thirds of such investment while the rest of the world got one third. Nor is it surprising that more than three-quarters of all foreign capital invested in sub-Saharan Africa was invested in British colonies.

Encouraging Imports

For much of the 19th and 20th centuries, British economic policy was heavily influenced by the financiers of the City of London, with their ethos of "gentlemanly capitalism." International finance came first and British export industries a poor second. In order to ensure that loans to developing economies were repaid, British policy-makers were prepared to go to considerable lengths, ultimately allowing a system of differential tariffs to evolve that gave colonial manufacturers easier access to the British home market than British

"Money invested in a *de jure* British colony such as India, or in a colony in all but name like Egypt, was more secure than money invested in an independent country such as Argentina."

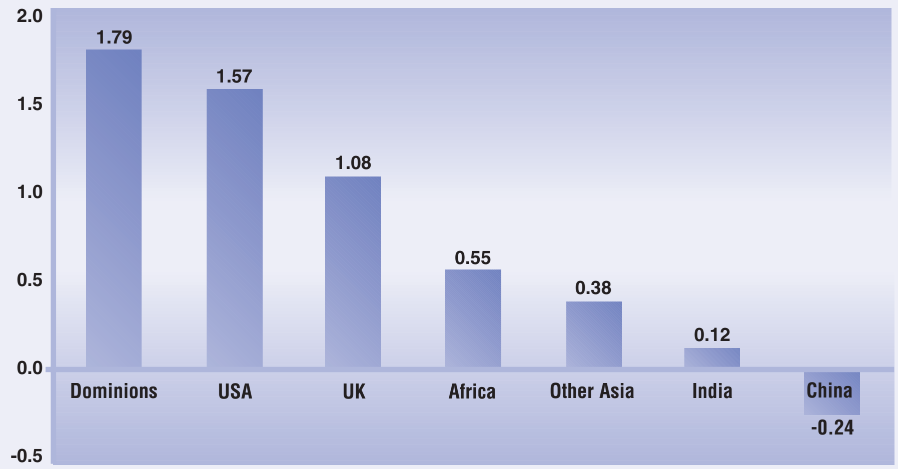
manufacturers enjoyed to colonial markets.

The British did not see the economic development of Asia and Africa as their primary concern. Nevertheless, the intended policy of financial rather than industrial domination of the world economy had secondary positive outcomes. Under the right circumstances, this policy was conducive to rapid economic growth on the periphery.

The results of Anglobalization

CHART 3

THE AVERAGE ANNUAL GROWTH RATE OF PER CAPITA GDP, 1820-1950



were in many ways astounding. The combination of free trade, mass migration and unprecedented overseas investment propelled large parts of the Empire to the forefront of world economic development. Canada, Australia, and New Zealand produced more manufactured goods per capita than Germany in 1913. Between 1820 and 1950, their economies were the fastest growing in the world. Indeed, per capita GDP grew more rapidly in Canada than in the United States between 1820 and 1913 (**see Chart 3**).

The Asian Exception

But the performance of the Dominions was not matched in the rest of the Empire, least of all in Asia. India attracted £286 million of capital raised in London between 1865 and 1914 – 18 percent of the total placed in the Empire, second only to Canada. But between 1857 and 1947, Indian per capita GDP grew by just 19 percent, compared with an increase in Britain of 134 percent. **Chart 3** shows that between 1820 and 1950, it grew at a mere 0.12 percent per annum.

The nationalist explanation for Indian "underdevelopment" under British rule has four essential components. First, the British deindustrialized India by opening it to factory-produced textiles from Lancashire, whose manufacturers were initially protected from Indian competition. Secondly, they imposed excessive and regressive taxation. Thirdly, they drained capital from India, even manipulating the rupee-sterling exchange rate to their own advantage. Finally, they did next to nothing to alleviate the famines that these policies caused. This negative view of the British role in India continues to enjoy wide currency.

Yet recent research casts doubt on key aspects of the nationalist critique. Economic historian Tirthankar Roy has shown that the destruction of jobs in the Indian textile industry was probably inevitable, regardless of who ruled India, and that an equal if not greater number of new jobs were created in new economic sectors built up by the British. Even in the case of textiles, by the 1920s the Government of India was clearly giving preference to Indian manufacturers over Lancashire's mills. Roy also casts doubt on the idea that taxation under the British was excessive. And the supposed drain of capital from India to Britain turns out to have been comparatively modest: only "about 0.9 to 1.3 percent of Indian national income from 1868 to the 1930s," according to one recent estimate of the export surplus.

Moreover, British rule had some distinctly positive effects. It greatly increased the importance of trade to India, from between 1-2 percent of national income to over 20 percent by 1913. The British created an integrated Indian market: they unified weights, measures and the currency, abolished transit duties and, in Roy's words, introduced a "legal framework [which] promoted private property rights and contract law more explicitly." Between 1891 and 1938, the acreage under irrigation more than doubled. The British introduced a postal and telegraph system, deployed steamships on internal waterways, and built more than 40,000 miles of railway track (roughly five times the amount constructed in China in the same period). The railway network alone employed more than a million people by the last decade of British rule. Finally, there was a significant increase in financial intermediation. By comparison with the other major Asian empire – China, which remained under Asian political control – India fared well.

The explanation for the disappointing impact of these improvements in per capita incomes lies not in British exploitation, but rather in the insufficient scale of British interference in the Indian economy. The British expanded Indian education – but not enough to make a real impact on the quality of human capital. The British invested in India – but not enough to pull most Indian farmers up off the base line of subsistence. The British built hospitals and banks – but not enough to make significant improvements in public health and credit networks. These were sins of omission more than commission. Unfortunately for Indians, the nationalists who came to power in 1947 drew almost completely the wrong conclusions about what had gone wrong under British rule, embarking instead on a program of sub-Soviet state-led autarky whose achievement was to widen still further the gap between Indian and British incomes, which reached its widest historic extent in 1973.

Economic historians continue to debate the causes of the "great divergence" of economic fortunes which has characterized the last half millennium. In this debate, the role of colonialism – and specifically the British Empire – has a crucial role to play. If geography, climate, and disease provide a sufficient explanation for the widening of global inequalities, then the policies and institutions exported by British imperialism were of marginal importance. However, if the key to economic success lies in the adoption of legal, financial, and political institutions favorable to technical innovation and capital accumulation, then it matters a great deal that between around 1880 and 1940 a quarter of the world was under British rule.

"The combination of free trade, mass migration and unprecedented overseas investment propelled large parts of the Empire to the forefront of world economic development."

In all likelihood, the dichotomy between geography and institutions is a false one. The British settled in large numbers in temperate zones, taking their institutions with them; in the tropics, they preferred to rely on monopoly companies and plantations run in (unequal) partnership with indigenous elites. But by the last third of the 19th century this distinction had faded somewhat. Even in the tropics, the British endeavored to introduce the institutions that they regarded as essential to prosperity: free trade, free (and indeed forced) migration, infrastructural investment, balanced budgets, sound money, and the rule of law and incorrupt administration. If the results were much less impressive in Africa and India than they were in the colonies of British settlement, that was because even the best institutions work less well in landlocked, excessively hot, or disease-ridden places. There, the investments which would have been needed to overcome geography, climate, and its attendant deleterious effects on human capital were beyond the imaginings of colonial rulers.

Yet it is far from clear that the very different policies adopted by post-independence governments and international agencies have been more successful. A simple calculation of the ratio of British per capita GDP to that of 41 former colonies is instructive. Between 1960 and 1990 the gap between the British and their former subjects narrowed in just 14 cases. While it is convenient for contemporary rulers in countries like Zimbabwe to blame their problems on the "legacy of British rule," the reality is that British rule was on balance conducive to economic growth. Tragically, most post-independence governments have failed to improve on it.

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His most recent book is Empire: The Rise and Demise of the British World Order and its Lessons for Global Power *(Basic Books), from which this article is adapted.*

ILLUSTRATIONS BY CHRIS MCALLISTER

DON'T CRY FOR ARGENTINA

The continuing crisis in Latin America's third largest economy is a matter of global concern. At a Stern event, Argentina's former Economic Minister and a former governor of its Central Bank dissect the roots of the nation's problems – and point toward solutions.

The collapse of the Argentinian economy has been one of the most hotly debated economic events of the past year. Fiscal and monetary reforms enacted in the late 1980s seemed to tame the country's cycle of hyperinflation and devaluation. In 1991, Argentina established a currency board, under which the value of the peso was pegged directly to that of the U.S. dollar. After several years of growth in the mid-1990s, the Argentine economy began to slip into recession. And as government deficits rose and the solvency of the banking system came into question, depositors began to withdraw their funds. Amid social unrest, Argentina announced in late 2001 that it would stop paying interest on its $155 billion in foreign debt – the largest such default in history. In January 2002, it abandoned the currency board and let the peso float against the dollar. Within a month, the peso had lost half its value, destroying savings and rendering borrowers unable to repay debts.

At NYU Stern on November 26, 2002, a distinguished panel gathered to discuss the Argentinian crisis and its implications. It included: Domingo F. Cavallo, the Henry Kaufman Visiting Professor at NYU Stern, who served as Minister of Finance for Argentina from 1989 to 1996 and was the architect of the currency board; Mario Blejer, a former governor of the Central Bank of Argentina and currently Director, Bank of England Centre for Central Banking Studies; and Nouriel Roubini, associate professor of economics at NYU Stern, and a former senior economist for international affairs at the White House Council of Economic Advisers. NYU Stern Economics Professor Paul Wachtel moderated the discussion.

PAUL WACHTEL: Should Argentina have left the currency board?

DOMINGO CAVALLO: When a domestic currency has to compete with foreign currencies you have to create some credibility so you need a tutor. Most modern currencies had gold as a tutor during the gold standard period. More recently, it's been the dollar. And we thought that using a tutor for a while would be important. The time to exit the currency board and abandon the tutor is when your currency has become credible. Argentina could have exited the currency board in 1997 after having averted the devaluation forecasted at the time. The currency was growing very fast and there was a significant inflow of capital. If the Central Bank had let the peso float, it would have appreciated vis-a-vis the dollar. That's what happened with Singapore in the 1970s, and they started to have a strong currency.

But Argentina didn't abandon the currency board for a very simple reason. As part of the competition for the presidency in 1999, the government was trying to finance very large deficits of the provincial governments. [Then-President] Carlos Menem would call the private banks and get them to provide financing to the provinces. This fiscal management, which stemmed from the political competition, prevented the government from taking the natural opportunity to exit the currency board.

WACHTEL: Let me ask Mario about that, and more generally, whether emerging economies should maintain currency boards?

MARIO BLEJER: I'd distinguish between the currency crisis and the crisis in confidence. Governments were clearly afraid of abandoning the one-to-one peso to dollar peg. In 1997, the main constraint was the cost. They didn't want to have the risk of having the currency first appreciate and then depreciate. The IMF put out a paper that concluded you should exit currency boards when things are good. This is appealing academically, but it's not practical advice. It's like saying you should have a divorce when the marriage is going well.

The crisis really stems from the inconsistency between fiscal policies and the saving investment balances. The sharp increase in the government's fiscal deficit brought a very high increase in the interest rate spreads. The convertibility of the peso to the dollar helped bring down hyper-inflation in Argentina, but this rigidity imposed certain constraints on the conduct of macro-economic policy that were not respected.

NOURIEL ROUBINI: I'd like to put Argentina in the context of other emerging market crises we've seen in the last decade in Mexico, Thailand, Korea, Malaysia, Indonesia, Russia, Brazil, and most recently in Turkey. One of the lessons we've learned from all these episodes is that capital markets tend to collapse. And when this happens, emerging markets tend to move either toward flexible exchange rates or toward hard pegs. Until recently I think people categorized dollarization and currency boards as among the hard pegs. But after what happened in Turkey and Argentina, we realize that if your policies are not consistent, even a currency board can collapse.

"The convertibility of the peso to the dollar helped bring down hyper-inflation in Argentina, but this rigidity imposed certain constraints on the conduction of macro-economic policy that were not respected."

In each crisis, fixed exchange regimes collapsed and there was some overvaluation of the currency. That led to current account deficits, which led to an accumulation of foreign debt or foreign liabilities. When you have a current account deficit, you can finance it either by equity inflows, or in the form of debt. These countries all had too much debt and too little equity. And eventually that means the banks are going to be in trouble. Argentina met most of these conditions. Two thirds of Argentinian bank assets were in debt to households or to the government, which was borderline insolvent.

How can countries be less vulnerable to financial crisis? First of all, you need sound macroeconomic and fiscal policy. And if you're an emerging market, you have to overachieve. Countries like this should have debt ratios that are lower than those of developed countries. Having a sustainable exchange regime means either you pay the cost of dollarization – and few countries are truly willing to do so – or otherwise go to a floating regime and maybe use inflation targeting or some other anchor as a way to stabilize inflation. You can use regulation to reduce the currency mismatch by encouraging more equity investment. And if you have periods in which hot money is flowing in, some controls on inflows of capital may be useful.

WACHTEL: So, Domingo views the dollar as a tutor, Mario views the dollar as not being responsible, and Nouriel views the dollar as being a monster that helped create the crisis. Perhaps we can turn our attention back to the present situation in Argentina, and ask what are the prospects for policy and economic reform in Argentina?

BLEJER: To restore and start rebuilding confidence you need to pacify some sectors, like the foreign exchange market. I'm not talking about the need to fix the exchange rate, but the need to stop chaos. Certain types of capital control may restore that sort of confidence. The situation in January 2002 was very chaotic in Argentina: a lack of confidence in the peso, the abolition of convertibility, and a lack of confidence in the government.

The supposed outcome at that point would have been hyper-inflation, and the total collapse of the financial sector. We've avoided that so far. You have to intervene in the foreign exchange markets, provide liquidity to the banking sector, and have a very active and aggressive monetary policy with very high interest rates.

These are the preconditions for a turnaround. The question is if the turnaround can be sustained. The problems are daunting, because the foreign and domestic debt has not been negotiated, wages are frozen, and inflation is 40 percent.

CAVALLO: For economic growth, you need strong institutions. And for that, you need a well-functioning political system. The historical problem was that Argentinians in general did not consider paying debts as something that you had to do. In a sense inflation was a reflection of that attitude. The government would print money to finance its deficit, and would permanently devalue the currency to soften its domestic debt. Of course in a country in which nobody honors their debt, there is no credit.

In the 1990s, the convertibility law – not the currency board – but the convertibility law, made the difference. So did the decisions to have savings protected by dollars and the emphasis we put in legislation on honoring obligations and fighting tax evasion. Our development in the 1990s was really financed from domestic savings. And that permitted the incredible expansion of the banking system, from $10 billion up to $80 billion, and the creation of the pension funds. This modernized much of the economy and created an increase in productivity, particularly in traditional export sectors like agriculture.

As for the next decade? If the old ideology that destroyed savings, prevented investment, and generated inflation in the past, rules the day, then the first decade of the new century will be a lot like the 1980s. The 1980s started with a default, and we struggled with foreign creditors. Eventually, it will wind up in the complete collapse of the monetary and financial system through inflation.

"Two thirds of Argentinian bank assets were in debt to households or to the government, which was borderline insolvent."

Argentina has realized that the rules of the game of the 1990s were much superior to the previous rules. The recent rule changes did not come about because the markets forced them. They were created by big private sector debtors associated with the governors and with some politicians.

Building institutions is a very difficult political task. But I think these problems will be fixed, because fortunately we have a republic. I think the judiciary will force the executive and the legislative power to reverse many of the decisions that were adopted. The functioning of the constitutional system is more important than any question related to the exchange rate system.

ROUBINI: There's no disagreement that institutions matter. But compare Hong Kong and Argentina. They both had a currency board. Hong Kong in 1998 had a major shock. But there was no budget deficit, no public debt problem, a very dynamic economy, and high productivity growth. They cut wages by 15 percent and that's how you achieve the real devaluation. In Argentina, you have a large public debt, a large budget deficit, a current account deficit, and rigid labor markets. When you have a bunch of shocks, eventually the regime collapses. So institutions mattered, but having also some policies mattered as well.

On convertibility, I'll be really blunt. I think they lived under the delusion that one peso was one dollar. You know these currencies tend to collapse, so one peso is worth much less than a dollar. What's more, the peso-based assets were loans made to a government that was bankrupt. So the idea that a dollar in a Buenos Aires bank is the same thing as a dollar in Miami or New York was a false idea.

CAVALLO: I'd argue that the illusion that Argentina had that we were saving dollars is exactly the same illusion that people in Texas had that they were saving in dollars after the collapse of the price of oil in the late 1980s.

ROUBINI: But that's why all those savings and loans and oil companies went bankrupt in Texas.

CAVALLO: But they went bankrupt in spite of the fact that the dollar was the American currency. If relative prices go down – like if the price of oil plummets – of course all the sectors whose income is tied to those prices will have a problem. You can't solve

"The idea that a dollar in a Buenos Aires bank is the same thing as a dollar in Miami or New York was a false idea."

that with any monetary regime.

BLEJER: Saved in pesos, in dollars, or in chewing gum, the banking crisis would have happened because the government was crowding out the private sector. The government was pushing bonds into the banking sector. And this has nothing to do with the exchange rate.

CAVALLO: He's right. We created the climate for getting a lot of financing from our citizens, because they were convinced that they were saving dollars and that their savings were protected. They left their savings in the country and that generated credit. But if this facility for credit simply allows the government to raise funds, and the government wastes those resources and accumulates debt, of course it's bad. The question is how to keep the savings and create credit while also protecting property rights of the people. The answer is to impose discipline on the fiscal sector to prevent the misuse of those savings.

BLEJER: Without macro-economic stability you are not going to have investment and growth. Argentina has paid a tremendous high price for this crisis, no doubt. Today more than 50 percent of the population lives below the poverty line, 25 percent are below what's called extreme poverty. Unemployment is 22 percent. I think that there is basic agreement in the fact that one needs to rebuild a different framework, but at the same time one has to be very careful to implement macro-economic policies that are conducive to the recuperation of confidence of credibility.


WAL-MART
EXIT
ENTER

THE BIG STORE GOES GLOBAL

What retailers can learn from Wal-Mart's international expansion

By **David Liang**

Wal-Mart bestrides the mammoth U.S. retail market like a colossus. The original category-killer, it has branched out from hard goods into groceries and electronics. Even amid the recent economic slowdown, Wal-Mart has seen its sales grow at a rate far faster than that of its customers. Through the first 11 months of 2002, the store tallied a stunning $227 billion in sales. But outside the U.S. borders, Wal-Mart's performance has not been quite as impressive. Through November of 2002, the company's 1,227 stores outside the U.S. counted $38 billion in sales. While the number is certainly impressive, Wal-Mart has occasionally found it difficult to export its successful retail paradigm.

Wal-Mart has been highly profitable in markets that are geographically close to the U.S., such as Canada, and Mexico, and that are culturally similar to the domestic market, such as the United Kingdom. But it has struggled in significant markets, such as Argentina, Brazil, and Germany. In these latter countries, Wal-Mart has incurred huge losses and tallied consistently poor same-store sales comparisons. And it is too early to say whether its efforts to expand into China have borne fruit.

ILLUSTRATIONS BY CHRIS MCALLISTER

CHART 1:
SOURCES OF COMPETITIVE ADVANTAGE

Why is it so difficult for a retailer like Wal-Mart, which is universally recognized as one of the world's shrewdest merchants, to replicate its domestic success in overseas markets? And what lessons can other retailers learn from Wal-Mart's expansion overseas? As shown in **Chart 1**, retailers typically distinguish themselves from their domestic competition through seven main sources of competitive advantage including: Inputs, Operation, Offering, Brand, and Access. It's hard enough to replicate one of these sources in a new climate, especially one where you are going up against established competitors. But to pull off all of them – which Wal-Mart needs to do to in order to dominate foreign consumer markets as it does the U.S. – is extremely difficult. And when retailers fail to replicate these sources of competitive advantage overseas, their performance in the new markets can be mediocre.

Superior Inputs

When retailers expand overseas, one of the most crucial issues to resolve is how to get the right products from suppliers at the right price and at the right time. In the U.S., established retailers have powerful leverage over suppliers that they can use to obtain products at the lowest costs. And because Wal-Mart is such a large customer of so many suppliers, it can demand and receive the best prices. This ability is what accounts for Wal-Mart's higher profit margins and its ability to pass along value to customers in the form of low prices. But in overseas markets, in which a new retailer's presence is still relatively miniscule, it is a different story. Overseas suppliers may know of Wal-Mart, but they may not have a record of doing business with the company. As a result, a recent arrival usually does not start with significant leverage power over suppliers.

Because local suppliers may not be familiar with the new entrant, they may refuse to comply with its demands on product quality and delivery speed. Local suppliers may see little reasons to change their operations to accommodate a new entrant with low order volume. Wal-Mart's operation in Brazil and Argentina provides a perfect example. After eight years in these large South American countries, Wal-Mart is the sixth-largest player, with 11 stores in Argentina and 22 in Brazil. As such, Wal-Mart has far less leverage over local suppliers compared with that enjoyed by the market leader, Carrefour, which has been operating in those countries for more than three decades.

Wal-Mart also faces a similar challenge in Germany, where its 94 stores give it between two percent and four percent of the local market. Recently, a Mercer Consulting retail specialist noted that Wal-Mart must increase its share of the German retail market to at least ten percent before it can exert power over local suppliers. And until it does, Wal-Mart may find it difficult to compete with German retailers for superior inputs.

Superior Operation

For retailers in general, and for Wal-Mart in particular, building and maintaining an efficient operation is another source of low costs, and hence competitive advantage. Operation here is defined as the logistical distribution network that facilitates goods flow from manufacturers to retail customers. The company's logistics and inventory control systems, which Wal-Mart built to service far-flung stores from its rural Arkansas base, have long been the envy of the retail industry, and of plenty of other industries.

A new entrant can either buy an existing distribution network or build one from scratch. When entering a developed country, it is generally easier to buy than to build. First, local players in a developed country usually have efficient logistical networks and sophisticated operations. Second, a new entrant can use an acquisition to avoid dealing with heavy regulations that commonly exist in developed markets, which often hinder a new entrant's efforts to build from scratch. And so in entering Western European countries, such as the U.K. and Germany, Wal-Mart acquired local players – but with different results.

In the U.K., Wal-Mart's 1999 acquisition of ASDA proved successful. It was immediately profitable and made Wal-Mart the third largest mass merchandiser in the U.K., with 258 stores. The deal worked for two reasons. First, ASDA, like Wal-Mart, had an efficient distribution network strategy. Second, before the acquisition, ASDA followed pricing and promotional strategies that were similar to those of Wal-Mart. The ASDA acquisition was so successful that Wal-Mart was reluctant to implement new changes. In fact, according to *BusinessWeek*, Wal-Mart learned a few lessons from ASDA in food merchandising and staff incentive programs.

In Germany, however, Wal-Mart's acquisitions of Wertkauf (1998) and Interspar (1999) were less successful because Wal-Mart had to integrate two companies with different logistical distribution schemes. According to the *Financial Times*, local suppliers initially were so confused with the combined networks that in the first few years of operation, Wal-Mart stores in Germany suffered many stock-outs. Needless to say, integration issues play crucial roles in determining the success of an acquisition.

"In Germany...Wal-Mart had to integrate two companies with different logistical distribution schemes...local suppliers initially were so confused with the combined networks that in the first few years of operation, Wal-Mart stores in Germany suffered many stock-outs."

When entering a developing country, by contrast, it is generally better to build from scratch for two reasons. First, local players in developing countries usually do not have efficient distribution networks. This means a new entrant has to create a new distribution network to meet its needs. Second, regulations in developing markets are usually not as restrictive as those in developed countries. In China, however, Wal-Mart built its logistical distribution network from scratch because most Chinese retailers are either owned by, or affiliated with, the government, and their distribution networks are mostly inefficient. In addition, Chinese geographic and demographic patterns resemble those of the United States, which makes it possible to replicate the scale of U.S. operations. In a recent interview with *Newsweek*, Wal-Mart International CEO John Menzer said that Wal-Mart's Chinese operations had the potential to grow from 25 stores today to 3,000 by 2028.

There's a third alternative for entering markets. Instead of an outright buy or build strategy, a new entrant can also choose a local joint venture partner. This choice is particularly desirable if a new entrant has little international experience, little local market expertise, or wants to limit its risk exposure. The drawback is that the new entrant may have to compromise on fundamental issues ranging from store name to merchandising mix. In 1991, Wal-Mart picked Mexico as the first international market to enter. It chose the Mexican discount supermarket chain Cifra as its joint-venture partner, and Cifra's local market expertise greatly compensated for Wal-Mart's lack of international experience. More than a decade later, Wal-Mart's 595-store joint-venture operation in Mexico is profitable. The company is now even starting to use the Wal-Mart name in its newly opened store units rather than the local Aurrera, Bodega, and Suburbia store names.

Superior Offering

Superior product offering is a critical element of retailers' success.

"A retailer can only provide superior product offerings if it has immediate knowledge of its customers' desires and needs."

Wal-Mart is distinguished by its ability to offer thousands of products – including brand names – at low prices. But because a new retailer who expands into new overseas markets often lacks superior inputs, operation or both, the new entrant may often lack superior product offering. As a result, the value proposition may differ across geography. In the U.S., Wal-Mart can offer the greatest value relative to all its competitors because of its dominant position over suppliers. In Argentina and Brazil however, Wal-Mart's product offerings are generally priced higher than those of Carrefour. That means Wal-Mart has to differentiate itself from the competition in South America based on other factors.

Of course, a retailer can only provide superior product offerings if it has an intimate knowledge of its customers' desires and needs. Frequently, however, global retailers fail to conduct the due diligence necessary to gain such knowledge. As a result, new retailers often carry product offerings that do not meet local tastes. According to an article in *The New York Times*, when Wal-Mart first opened its doors in Argentina in 1995, its stores carried the 110-volt appliances commonly found in the U.S. – even though the local voltage standard in Argentina is 220-volt. Wal-Mart's first stores also carried merchandise favored by U.S. consumers, but that did not appeal to local Argentine tastes. After a period of trials and errors, as Wal-Mart began to imitate local competitors' product offering, its sales in Argentina and Brazil improved.

Wal-Mart learned from its mistakes in Argentina when entering the Chinese market. Wal-Mart's Chinese stores are stocked with local delicacies like barbecued pigeons, live frogs, fish, and snakes – a far cry from what you'd see in a Wal-Mart in Denver, Colorado. The aisles are made wider and checkout counters shorter to accommodate Chinese customers' habits of making more frequent shopping trips per week but buying smaller quantities per trip. On average, Chinese customers shop groceries on a daily basis while U.S. customers shop at Wal-Mart about two times a week. Wal-Mart also adjusts its shopping bags to fit the needs of Chinese shoppers who mostly still travel by motorcycles or bicycles. In Korea, where real estate is expensive, Wal-Mart builds multi-level stores – four levels for parking and three for shopping – as opposed to the single-level sprawling warehouse format commonly found in the U.S.

Superior Brand

The final ingredient of a successful international retailer is the brand. Branding creates special relationships between products and customers. It adds special meanings to products beyond their functionality. Coca-Cola means refreshing drinks; Sony signifies high-quality consumer electronics; Gap stands for comfortable casual clothing; and Wal-Mart means value shopping and everyday low price (EDLP). For any company, whether it's a service provider like UPS, or Coke, or McDonald's, it's the ultimate achievement to have your brand recognized on a global basis. Creating a global retail brand, however, can be challenging because retailers generally don't have a tangible product to represent what the brand is all about – the way that a Sony VCR represents high quality consumer electronics for the Sony brand. To create branding relationships with customers, a retailer is highly dependent on the overall shopping experience, which is influenced by factors such as pricing, merchandise mix, store atmosphere, and customer service friendliness.

The more crowded a segment is, the harder it is for a new entrant to uniquely position its brand. According to *The Economist*, 30 percent of the German retail industry is dominated by local deep discounters; and a price cut by one retailer is quickly matched by competitors. In this competitive environment, Wal-Mart's everyday low price message did not revolutionize the industry the way it did in the U.S. and the U.K. It is difficult for Wal-Mart to differentiate itself and to uniquely position its brand in Germany as a value and everyday low price brand. Wal-Mart faces a similar challenge in Argentina and Brazil, where the company has five direct competitors with more-entrenched brands. By contrast, in the U.S. market, Wal-Mart only faces one or two direct competitors. In such crowded markets as Germany, Argentina, and Brazil, a new entrant like Wal-Mart has to find alternative ways to uniquely position its brand.

Another aspect of branding that retailers must consider when expanding overseas is whether to use the original American name or adopt a local name. In most cases, the first option seems to be the most popular among retailers because it allows for building global brand awareness. The second option, however, may resonate well with local consumers and may somewhat alleviate anti-Americanism that exists in many foreign countries. Either way, there is no clear-cut evidence that one choice affects profitability more than the other.

"Wal-Mart's Chinese stores are stocked with local delicacies like barbecued pigeons, live frogs, fish, and snakes – a far cry from what you'd see in a Wal-Mart in Denver, Colorado."

There is no noticeable difference in results whether a new entrant uses its original American name or a new local name in a new overseas market. But one thing is clear: the new entrant must build its brand in that new market. For when all else is equal (pricing, product offering, shopping atmosphere, customer service), the store brand is the only thing that differentiates a new entrant from competitors.

Superior Access

Finally, a retailer's survival is highly dependent on its access strategy. With the exception of upscale retailers, most retailers wish to expand to as many store locations as possible because widespread store locations make it easier for customers to reach its stores and create a feeling of familiarity. In addition to familiarity, having numerous stores in a particular country increases economies of scale. It spreads retailers' fixed costs across a larger base and enhances the retailers' leverage power over suppliers. In overseas markets like China, Wal-Mart builds not only large supercenters, but also smaller neighborhood markets to take advantage of high consumer traffics in urban centers.

Exporting to "the five key" sources of competitive advantage is a must for a retailer wishing to enter a foreign market. While missing one or some of these elements does not mean a new retailer cannot reach profitability in new markets, it will prevent the new entrant from achieving its full profitability potential.

From Coca-Cola to Starbucks, from McDonald's to Polo, many U.S. companies have excelled in taking successful domestic brands and operating systems, and exporting them overseas. Wal-Mart, which has had such tremendous success in the domestic market, has faced some obstacles in its international efforts. But as it learns from mistakes and from its encounters with different retailing and business cultures, the retailing giant based in rural Arkansas will surely continue to expand its presence throughout the globe.

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IT'S A SMALL WORLD AFTER ALL?

By **Jonathan Heathcote** and **Fabrizio Perri**

In recent years, the economies of the United States and its largest trading partners have increasingly marched to their own drummers – even as trade and financial integration have increased. It may sound like a paradox, but it's not.

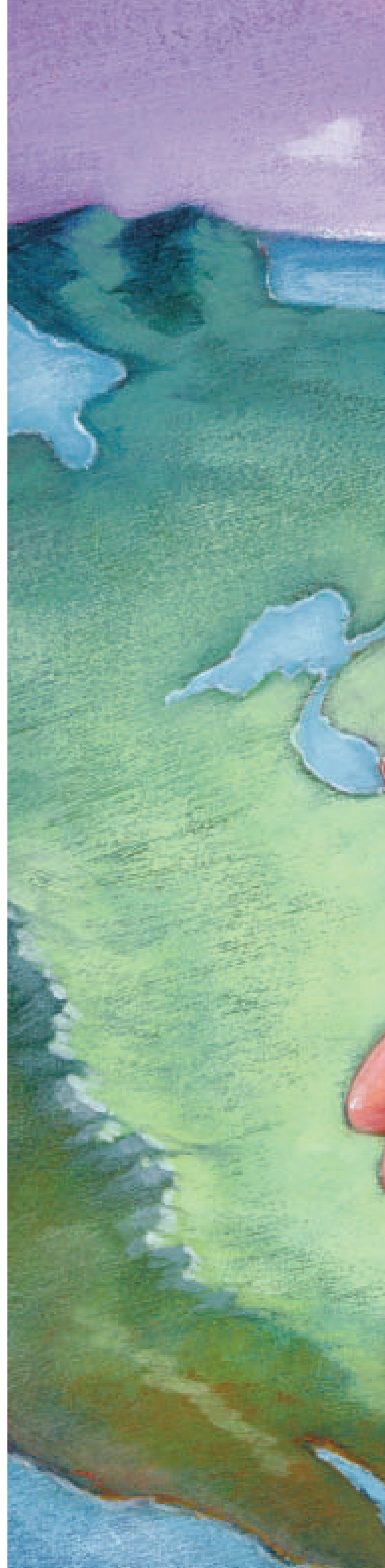
In recent years, the United States economy has increasingly danced to its own tune. Between 1972 and 1986 the business cycles of the U.S., on the one hand, and an aggregate of Europe, Canada, and Japan, on the other, were rather close. But in more recent years, in a trend we've dubbed real regionalization, the paths of these developed economies have diverged. All the major world economies went, synchronously, through a deep recession in 1973, a recovery in the mid- 1970s and another recession in the early 1980s. In the 1990s, by contrast, the U.S. experienced robust growth, Europe was mixed, while Japan and Asia experienced their worst post-war decade.

At the same time though, trade in international financial assets – or financial globalization – has sharply increased, with Americans holding far more direct investment and equity in foreign markets, and foreigners investing more in the U.S. markets.

Does one trend have anything to do with the other? Does financial globalization help explain real regionalization? Or vice versa? Thus far, very little research has addressed the effects of growth in foreign asset holdings on business cycle dynamics. By constructing models of how economies function, and then running experiments, we set out to answer these questions.

Going Separate Ways

The divergence among economies in the post-Bretton Woods period – 1972-2000 – can be seen in the decline in cross-regional correlations in business cycle frequency fluctu-



ILLUSTRATIONS BY CHRIS MCALLISTER

Table 1

International Correlation of Macroenomic Variables Between the U.S. and the Rest of the World

	GDP	Consumption	Investment	Employment
Period 1, 72Q1-86Q2	0.76	0.51	0.63	0.66
Period 2, 86Q3-00Q4	0.26	0.13	-0.07	0.03

ations in factors such as Gross Domestic Product, consumption, investment, and employment between the U.S. and an aggregate of the rest of the world (comprising Europe, Japan, and Canada) (*see Table 1*). The fact that the correlations of all four variables have declined markedly between the two periods stands as compelling evidence of real regionalization.

While the declines might be simply due to a decline in the correlation of outside shocks – like the worldwide oil shocks in the 1970s – the relatively large falls in the correlations of investment and employment suggest a change in the asset market structure. In particular, the development of international financial markets increases the opportunities for specialization in production in different countries. After all, when capital moves more freely around the globe to pursue investment opportunities, economies are less likely to move in sync.

Trading Places

To measure financial globalization, we examined data on foreign direct investment and purchases of foreign equity. For U.S. assets, the key measure is the sum of the U.S. foreign direct investment (FDI) position and the equity part of the stock of portfolio investment abroad, relative to the U.S. capital stock. We focused on U.S. holdings of assets in Western Europe plus Canada and Japan, and these countries' holdings of U.S. assets. And the data show that U.S. holdings of foreign stocks have grown strongly since the mid-1980s, while the stocks of FDI and foreign-owned equity in the U.S. have risen steadily over the entire period. Between 1972 and 1999, United States gross holdings of FDI and equity in this group of countries rose from four to 23 percent of the U.S. capital stock. The observed growth in diversification appears to be robust to a wider definition of the rest of the world, to broader classes of assets, and to alternative valuation methods.

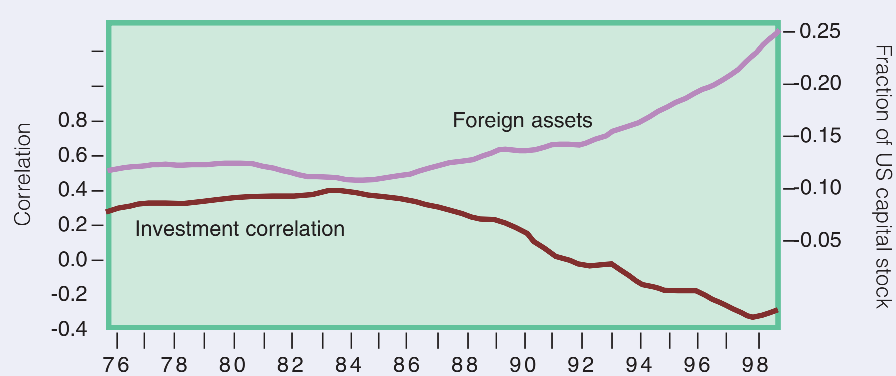
For their part, Europe, Canada, and Japan jointly account for almost all foreign holdings of U.S. assets, and for the lion's share of U.S. asset holdings abroad – although other countries are attracting an increasing share of U.S. equity portfolio investment. Growth in diversification generally appears smaller when stock market capitalization – and not capital stock replacement cost estimates – is used as a denominator. But even in this case we find strong growth in the stocks of U.S. equity portfolio investment abroad and foreign direct investment in the U.S. Comparing the U.S. with the Europe/Canada/Japan aggregate, for example, U.S. holdings of foreign securities averaged 1.1 percent of total non-U.S. developed economies market capitalization over the first half of the sample, and 5.5 percent in the second half (**see Figure 2**).

There's more evidence that links together financial globalization and real regionalization. **Figure 1** displays the evolution of correlation of business cycles and of international financial integration in the last 40 years. The picture shows that until the mid-1980s the correlation of business cycles (left scale) was quite high and stable while the share of foreign assets over the total value of U.S. assets (right scale) was stable and quite low (around five percent). Since the mid-1980s, the correlation of business cycles has markedly declined and the share of foreign assets has markedly increased.

The Story

Why should real regionalization and financial globalization be related? Our story is summarized in **Figure 2**. The driving forces are the shocks that shape both business cycles and portfolio decisions. These include oil shocks, technology

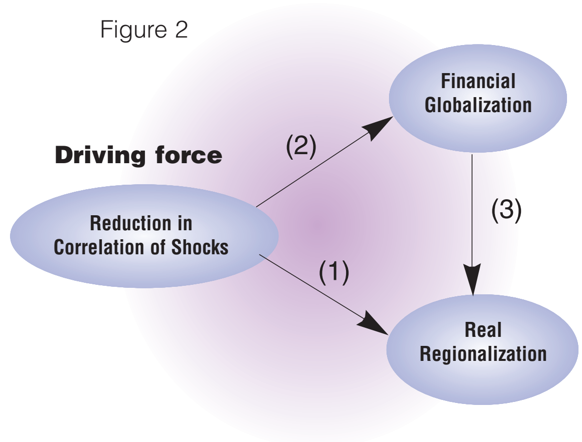
Figure 1 **Financial globalization and real regionalization**



Foreign assets are stocks of US FDI and equity investments in Europe, Canada, and Japan. Investment correlation is the correlation between US investment and investment in Europe, Canada, and Japan over the previous 58 quarters.

shocks, policy shocks, and other types of disturbances that affect a country's macroeconomic performance. We label them "productivity shocks." Assume that the correlation of these shocks has declined over time. This fact obviously leads to less correlated business cycles (**Arrow 1**). The reduction of the correlation also reduces the correlation of returns to capital; the simple logic of risk reduction through diversification implies that when returns to capital are less correlated it is more convenient to hold an internationally diversified portfolio. And thus financial globalization arises (**Arrow 2**). The final step is the link from financial globalization to business cycle (**Arrow 3**). When people hold internationally diversified portfolios, capital can easily flow from one country to another. Thus, in response to a small positive shock, say in the U.S., capital flows in from Europe and from Japan. These flows amplify the boom in U.S. and induce a recession in Japan and Europe, thus making business cycles even less correlated.

Figure 2



A Model Economy

To test our story about the relationship between real regionalization and financial globalization, we used artificial (computer simulated) economies. The modeling framework we employed was developed by David Backus, Patrick Kehoe, and Finn Kydland in 1994. Using a technique developed by Robert Solow in the 1960s we constructed a series for the productivity shocks hitting the U.S. and the rest of the world and we showed that the correlation of these shocks has indeed declined. We then plugged in the process for shocks into the model economies and ran tests upon them.

The tests we did were geared at answering two questions. First, can a fall in the correlation of productivity shocks account for the magnitude of the observed increase in diversification? And second, is increased diversification important in accounting for the magnitude of the observed decline in business cycle correlations?

Regarding the first question, the model economies predict that, in response to the fall in shock correlation, the amount of foreign assets held by domestic consumers should increase from 5.5 percent to 15 percent of total asset holdings. This suggests that the correlation of shocks is a quantitatively important factor in determining the extent of international diversification.

Regarding the second question, the models show that both the fall in the correlation of productivity shocks and the resulting endogenous growth in international asset trade are essential elements needed to account for most of the observed changes in the international business cycle.

Implications

A fall in the correlation of macroeconomic shocks has increased equilibrium diversification by increasing the potential gains from international asset trade. This increased portfolio diversification has left asset holders less exposed to country-specific risk, and the flow of capital to its most productive location is increasingly unhindered by restrictions on international borrowing and lending. The combination of less correlated shocks and the resulting deepening of international asset markets can account for the observed changes in the international real business cycle.

This coincidence of real regionalization and financial globalization has larger implications. It says that while the world may be coming together financially, we should be ready to see it growing apart economically. This is not necessarily a bad thing as households, by holding an internationally diversified portfolio, can diversify away the risk specific to their country of residence.

It also sheds light on the causes of the recent trend toward recent financial integration. Our explanation relies principally on the correlation of macroeconomic shocks that we view as an important determinant of the gain from international diversification.

Some researchers instead have focused on the diffusion of information technology as a leading cause. But this explanation is difficult to reconcile with evidence from the Gold Standard years. Then, although information technology was obviously not very well developed, international financial integration was, by some measures, as high as it is today. And it is interesting to note that business cycle correlations in those years also appear to be low. That suggests that our explanation might work for that period too.

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EXCESS CAPACITY

Cleaning up the mess of the telecommunications glut will require making some hard choices. The sooner we get started, the better.

By **Lawrence J. White**

The telecommunications industry – a great engine of growth in the 1990s – today faces serious financial difficulties. Major bankruptcies have occurred; more may well follow.

In retrospect, it's easy to see where the industry went wrong. The massive expansion of fiber-optic cable capacity and of cable's complementary components was accompanied by rapid technological progress that greatly expanded the economic capacity of that fiber-optic cable and those components. Meanwhile, growth in demand for telecommunications services turned out to be substantially lower than was forecast. These conditions were aggravated by a significant slowing of the U.S. economy in 2001 and 2002. The revelations of corporate governance and accounting misrepresentation problems that cropped up at several telecommunications companies have further exacerbated an already difficult situation.

As a result, a great deal of capacity, representing hundreds of billions of dollars of investment, stands idle. Global Crossing, WorldCom, and Adelphia have already declared bankruptcy, and the industry isn't out of the woods yet.

There are no magical, painless solutions to these difficulties. But the telecommunications industry is a key component of the U.S. economy, a contributor to national security, and a source of innovation. So as policy markers and investors grapple with how to deal with the fallout, and how to prevent further damage, there are important principles that both the public and private sectors can and should be following.

With All Deliberate Speed

First, all parties involved must acknowledge and recognize the losses and pain – and move on.

Massive losses always accompany a large and expensive increase in effective capacity that is not matched by an equivalent expansion in demand. Those losses must be absorbed by someone. In the first instance, the owner-shareholders of the companies that made the ill-fated investments will absorb the losses. Following them will be the lenders and creditors to those companies.

All things considered, it is better for these losses to be realized and absorbed sooner rather than later. Why? The more rapidly losses are recognized, the faster can companies and markets recognize the true prospective marginal costs of using these facilities for prospective services. And that will encourage lower prices, expanded demand, greater utilization, and overall greater economic efficiency.

Delaying this process can only put off the pain and the agony, not avoid it. And delay will mean inefficient decisions in the interim. To be sure, no manager of a public company likes to see the equity of his shareholders wiped out. But investors do not "deserve" a return on their investments. In a market economy, investors undertake investments that carry risks. Often, investments are successful, and investors

prosper. Sometimes, investments are unsuccessful, and investors lose. This is the way a market economy should function. To prop up losing investors in such situations is to institute a policy of privatizing gains and socializing losses, which is a recipe for inefficient investment decisions and inequitable outcomes.

The absorption of losses already has involved a number of sizable bankruptcies, which have been painful but unavoidable. What must be remembered is that these bankruptcies are the recognition of the changed climate and provide the processes whereby losses are absorbed by owners and creditors – thus setting the stage for the sector to move on. Bankruptcies need not mean the shuttering of a company. If the products and services of the company and its brand name reputation are sufficiently desirable, a prospective owner, freed from some or most of the prior debt and contractual obligations, can find the operation of a more-or-less intact company worthwhile. Even when a company must be liquidated, its equipment will find its way into other hands, unless its economic value is zero. In all instances, speed of resolution is imperative.

"The more rapidly losses are recognized, the faster can companies and markets recognize the true prospective marginal costs of using these facilities for prospective services."

Further, it is important that employees, suppliers, and customers of companies operating under bankruptcy protection receive resolution of their uncertainties, so that they too can move on. The same is true with respect to companies that are tottering on the edge of Chapter 11. After all, lenders, suppliers and customers are frequently loathe to enter transactions with companies that may be heading into bankruptcy. Once again, speed of resolution is important.

Bankruptcy is surely not an enjoyable experience for those who go through it; and it is not a perfect process. But it provides resolution, and an orderly mechanism for the settlement of claims.

Accurate Historical Parallels

Many observers have drawn historical parallels between today's telecommunications glut and the over-capacity of the railroad industry in the late nineteenth century. The parallels are valid. In the 1880s and 1890s, a large amount of capacity had been built. But demand for freight and passenger service did not expand sufficiently to absorb that capacity at economic prices in many markets. As a result, the affected companies went into bankruptcy; surviving railroads emerged; and the rail sector became the core of passenger and freight transportation for the next half century. The infrastructure and routes laid down in the late 19th century remain central to freight transportation in the U.S. in the early 21st century.

There are at least two more recent examples of the importance of rapid disposition of excess capacity. The first centers on the savings and loan (S&L) crisis of the late 1980s. It is now widely recognized that this debacle, and the parallel failure of almost 1,500 commercial banks, was largely the result of excessive investment in commercial real estate in the early and mid 1980s, combined with inadequate safety-and-soundness regulation. This excessive investment was driven by overly optimistic economic projections for the Sunbelt and elsewhere, much of it based on the expectations of the favorable effects of a high price for petroleum for the Southwestern economy and the favorable effects of the Economic Recovery Tax Act of 1981 for the economy at large. The excessively optimistic investments were funded by S&Ls and banks that were not subject to sufficient safety-and-soundness regulation by state and federal authorities. When the consequences of the excessively optimistic expectations first became apparent around 1985-1986, "see-through office buildings" became a common phrase in Sunbelt cities.

By early 1986 it was quite clear that much of Sunbelt commercial real estate was over-priced and uneconomic at those prices, and that hundreds of S&Ls that had financed those projects were insolvent. Nevertheless, there were strong political pressures on federal regulators and on Congress to proceed slowly in taking any action that would pressure financial institutions to recognize and absorb the losses. Advocates against action frequently argued that, given time, conditions would turn around on their own. Real estate market participants feared that acknowledging losses and selling uneconomic commercial real estate to buyers who might put those properties to better use would cause prices to fall further.

This was not good advice. Rapid action in recognizing losses was the best course of action in dealing with the S&L insolvencies and in dealing with the commercial real estate overhang. In both cases, the markets weren't fooled into believing that problems were not present. And the delayed action with respect to insolvent S&Ls meant that the owners and managers of those insolvent S&Ls might take risky and uneconomic actions in efforts at resurrection. Delayed action with respect to commercial real estate meant a continued overhang of uncertainty about prices and uses.

Though the clean-up of the S&L problem took longer than it should have, it eventually did proceed in an expeditious fashion. Similarly, the Resolution Trust Corporation (RTC) moved swiftly to deal with the commercial real estate that it inherited from insolvent S&Ls. Rapid action in both dimensions helped both sectors emerge sooner and stronger.

A second example involves learning from others' errors, specifically

those of the Japanese. For more than a decade, Japan has moved very tentatively in dealing with the difficulties of its banking sector. Once the Japanese stock market and real estate bubble burst in the early 1990s, the appropriate actions for the government of Japan would have been to force Japan's banks to deal quickly with the bad loans and other uneconomic investments on their books and to recognize their losses. The government could have helped insolvent banks by injecting public funds to protect depositors – but not bank owners – and by finding new owners who would inject fresh capital into the banks. Japan could thereby have established a rejuvenated banking system that could perform its role in making new loans to the rest of the economy.

Instead, the government of Japan has taken few such actions. Banks, which were largely unwilling to force companies into bankruptcy, have been allowed to keep vast sums of non-performing loans on their books. When the government did act, its actions have been too little and too late. As a consequence, the Japanese banking industry remains saddled with bad loans on which it has yet fully to recognize the losses, the banks remain moribund and reluctant to lend, and the Japanese economy has remained mired in economic stagnation for over a decade.

Serial Bankruptcies?

One specter raised by opponents to revived companies is that these companies' ability to reduce their costs by renegotiating debt and other contracts will lead to aggressive pricing and then to a cascade of other bankruptcies. But this argument ignores the fact that companies will stay intact only if their creditors believe that the intact entity has more value than the liquidated assets. Also, even if a bankrupt company were liquidated, its equipment would be sold at low levels that then become the basis for low product prices. Finally, it ignores the reality that industries such as telecommunications are characterized by high fixed costs and low marginal costs, which is likely to yield aggressive pricing so long as customers see competitive firms' offerings as near-commodities.

Sound Antitrust Principles

As they formulate responses to the current telecommunications crisis, policymakers should also continue to follow sound antitrust principles. The resolution of the telecommunications industry's current overcapacity surely warrants some consolidation. But that doesn't mean that exceptions should be made to good antitrust policy. The Horizontal Merger Guidelines of the U.S. Department of Justice and the Federal Trade Commission provide the right antitrust guidance for permitting efficient combinations that will also avoid the creation of market power. They should be followed – even in a time of crisis.

The "excuse" of financial difficulties in the telecommunications sector should not be used as a route for allowing firms to exercise market power. After all, the slack antitrust standards that have sometimes been the norm in other regulated industries, such as for railroad and airline mergers, have not had salutary consequences.

Encouraging Innovation

Finally, as we come to grips with the fallout of the telecommunications glut, we should continue to encourage and foster innovation. Indeed, we should not delay efficiency-increasing developments in spectrum allocation and usage. Improvements in the allocation and usage of the electromagnetic spectrum continue to be possible – partly through improved technologies, and partly through reforms in how the spectrum is regulated and deregulated. Improvements ought not to be delayed because of any concerns about spill-over effects on the capacity utilization of fiber-optic cable. Efficiency improvements in the way that spectrum is allocated and used should always be welcomed, regardless of how and when they occur.

In this regard, spectrum auctions have been and continue to be a good start at improving efficiency. But they are only a start. Auctions would affect far too little of the spectrum. Instead, the effort to "propertyze" the spectrum – to treat it as property in a manner that is analogous to how real estate is treated – is the right way to proceed. Only then can markets do their job in increasing the efficiency with which the spectrum is used.

Times of financial crises are often watershed epochs. This is likely to be true for telecommunications. Good public policy could steer us through the turmoil and allow us to emerge fairly rapidly with a more efficient telecommunications sector. Poor public policy could leave us in a quagmire of continuing uncertainty and poor performance. Political leadership in Washington will be crucial in determining the path.

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Standard Fare

By **Daniel Gross**

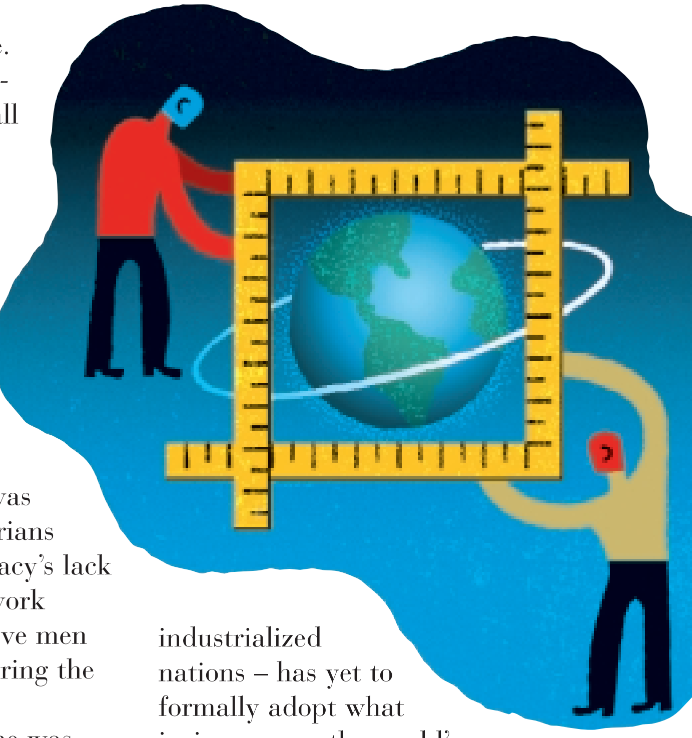

ILLUSTRATION BY TIMOTHY COOK

The International Organization of Standards (ISO), based in bucolic Geneva, Switzerland, rarely attracts the attention of slick business magazines and television networks. But perhaps it should. After all, industrial and commercial standards stand at the center of our increasingly global system of trade, manufacturing, and exchange.

The ISO was founded in February, 1947, as engineers and scientists forged a new force for international harmony. The first ISO standard was published in 1951 – "a standard reference temperature for industrial length measurement." More standards are added each year. The 813 issued in 2001 brought the total to 13,544, covering everything from cinematography to cryogenic vessels.

Some, of course, are more useful than others. An ISO standard on smart-card thickness allows a tourist to use the same ATM machine in Beijing, Brussels, or Boston. More broadly, industrial standards permit a can of Coca-Cola to look, feel, and taste the same in Red Square as it does in Blue Bell, Pennsylvania.

The story of standards starts with the railroads. Early 19th century railroads were designed to connect one town to another. But you could only haul goods over two different lines if the rails were laid down with the same gauge. So in 1846 the British government smartly decreed all railroads should be laid down precisely four feet, eight and one half inches apart. This distance became the so-called standard gauge in the U.S., which, nonetheless failed to impose uniform standards. Throughout the South, for example, five-foot gauge was prevalent. And some historians theorize that the Confederacy's lack of a standardized rail network hampered its ability to move men and materiel efficiently during the Civil War.

In the 19th century, time was generally kept locally, and dictated by the sun. The result: at 10:00 a.m. in Philadelphia, it might be 9:48 a.m. in Pittsburgh. But since trains had the ability to travel far enough, and fast enough, to confuse people, U.S. railroads in 1883 divided the nation into four time zones. It took another 35 years for Congress to codify the railroads' practice for the broader public with the Standard Time Act of 1918.

Of course, the U.S. has remained aloof from some nearly universal standards. The metric system was first developed in France in the late 18th century. But more than two centuries after its creation, the United States – alone among industrialized nations – has yet to formally adopt what is, in essence, the world's operating system.

The fact that we use feet while most of our trading partners use meters highlights the occasionally astonishing degree to which our affairs are still not governed by global standards. Despite the advent of the Euro, currencies remain stubbornly diverse. And in Britain, drivers persist in keeping to the left-hand side of the car. Indeed, as the global marketplace becomes more tightly integrated, significant pockets of the world continue to hew to their own standards.

DANIEL GROSS *is editor of* STERN*business.*

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