

This free ebook is the companion to *Strategic Capitalism*,
which is available wherever books are sold.

Strategic Capitalism— The Way Back to Greatness

**American CEOs Map Out the Route
to America's Economic Revival**

Edited and with an Introduction

by Richard D'Aveni

www.richarddaveni.com

Introduction

The most frequently voiced criticism of business school academics is that they spend too much time in their academic cocoons and not enough time talking to business leaders. Equally often voiced is the criticism of executives that they spend too much time dealing with the nitty-gritty of running a company and meeting quarterly targets and not enough time surveying and understanding the bigger picture.

In my experience, both criticisms are ill founded.

Over the last five years, I have been carrying out research into how to fix America's capitalist system to enable it to win in a remarkably more competitive world—how to restore the nation's finances, reinvent the nation's capitalist system, reseize the initiative against rivals that seek to diminish us, and remake the global economic world order for economic gain.

To keep my research pragmatic and balanced, I enlisted the help of numerous CEOs of multibillion-dollar American firms that were experienced in dealing with China or its business entities, as well as with issues that are currently holding back the growth of the U.S. economy. I talked to them about their experiences and what

they thought needs to happen to revive America's economy and to position it for the future.

Their words of insight and wisdom were too useful and too important to be lost between the covers of a much bigger and more discursive book, *Strategic Capitalism: The New Economic Strategy for Winning the Capitalist Cold War*. So, I have collected them in this e-book. I believe their views are vitally important and need to be heard by American political and corporate leaders. They offer advice directly, unfiltered by me, to the leaders of the United States.

The wisdom and considered opinions of these CEOs are proof that the best business leaders think long and hard about the big long-term issues facing their organizations.

Sometimes the CEOs disagree with my premises and with the conclusions I have drawn from my analyses. That is to be expected. I started with the goal of making the nation, its economy, and all its socioeconomic classes stronger. CEOs' goals may be different, as their primary task (according to many economists) is to maximize shareholders' wealth. But the CEOs reveal that they worry about the same issues that have been keeping me awake at night, and, to my delight, many of them were in agreement with the solutions or general strategies that I propose.

Some of the CEOs offer different solutions, but all of them are patriots and think about the nation they are part of. The statement that CEOs embrace only shareholder wealth maximization as a goal oversimplifies the interests of the CEOs that I know. Profit is important to them, but it is not their only motivation, as you will see when reading their views.

The CEOs' insights are often powerful thought provokers. After all, they stand on the front lines of capitalism, creating markets, jobs, and wealth. In addition, it is important to note that in the debate over the future of global capitalism, the most influential advice that national leaders will get will come from CEOs of large firms. I am sure you will agree that their commentary enriches the debate over capitalism and whether the U.S. economy needs a more explicit strategy.

Hypercompetition Between Nations

My research proves that the need is great.

Let me map out why I believe that we face a turning point in American history—a time that requires reinvention. Even as the job market picks up temporarily, we are warned of a “new normal,” an economy in which good jobs are disappearing overseas, average wages are depressed by foreign competition, growth is tepid, careers are unstable, and there are fewer opportunities. We are dependent on foreign imports for survival. Even the loss of America’s world position as leader of the global economy is projected.

The forces underlying the new normal have two sources: the United States and China. Today we face a crisis in our ability to compete, particularly with China. China has emerged from a meager capitalist adolescence to vibrant adulthood. It has mastered manufacturing so quickly that even companies as American as Apple now make almost everything they sell in Chinese plants. China has acted so aggressively to build its manufacturing enterprises that it has taken more than 2 million American jobs in the last decade. It has gained such speed that, if current growth rates continue, its economy will take the top place from the United States before 2030. Meanwhile, we have spent a decade distracted by wars and terrorism.

China is what a rival might call a “hypercompetitor.” It has a new system of capitalism that disrupts America’s system—some would say even undermines it. It has many countries on the run in industry after industry, often with hard-boiled business practices that most developed countries would not accept if China were not so large.

But China is also what an optimist—a sporting person—might call a “worthy competitor.” It is challenging all comers to raise their game. As far as the United States is concerned, it is doing the American people a favor. It is delivering an economic kick in the pants, and that kick is about to get the wheels of American reinvention turning.

The way back to greatness for the United States begins with strategic capitalism. And it must begin now. The CEO suggestions contained in this e-book provide lots of food for thought about how America can revive its economy and regain its economic greatness.

Richard D'Aveni

Richard D'Aveni is the Bakala Professor of Strategy at the Tuck School of Business, Dartmouth College. He holds a PhD from Columbia University's Graduate School of Business, and he is also an attorney and a CPA. He has been listed as one of the top strategy thinkers in the world by the London Times, Forbes, The Times of India, CNN.com, and the Harvard Business Review, as one of the top management thinkers in the world based on the biannual rankings of the Thinkers50 in 2007, 2009, and 2011. In addition, he was named one of the seven most influential strategic theorists in the world by the Corporate Executive Board. D'Aveni has received many other awards for his work, including the prestigious AT Kearny Award, and he was named a Fellow of the World Economic Forum in Davos, Switzerland. He is the author of the global bestseller Hypercompetition, and his latest book is Strategic Capitalism: The New Economic Strategy for Winning the Capitalist Cold War (2012, McGraw-Hill). Professor D'Aveni may be reached at 100 Tuck Hall, Dartmouth College, Hanover, NH 03755, or richard.daveni@dartmouth.edu.

Needed: A National Energy Policy That Fosters Innovation

*By Michael Morris, Chairman and Former
Chief Executive Officer, American Electric Power*

Throughout the 105-year history of American Electric Power, leadership in pioneering new technologies for generating and transmitting electricity has been the company's hallmark. AEP has consistently demonstrated that innovation drives investment and growth, not only for our company, but for the entire United States.

Historically, innovation and operational excellence have ensured that our customers and our nation are competitive in global markets, largely thanks to reliable, affordable electricity from all American fuel sources.

Today, however, innovation in the U.S. electric utility industry is being stifled through overregulation by a myriad of federal and state agencies. As just one example, our plan to build a 765,000-volt transmission line through southern West Virginia and Virginia required 16 years for completion, including 14 years to secure the necessary permits. Such a project in China would require less than 2 years.

America needs a consistent and coherent national energy policy that has geographic flexibility and allows our nation to take full advantage of its indigenous energy resources.

It needs an energy policy that removes barriers and provides incentives for the innovation we need if we are to keep pace in the global economy.

China's rapid growth is spurring the development of new technologies, some of which are being created as the result of strong public-private partnerships. If we hope to mirror China's success, America needs a wider application of public-private linkages that advance technology development, such as our recent partnership with the U.S. Department of Energy demonstrating carbon capture and storage technology at our Mountaineer Plant in West Virginia.

America must learn from China's aggressive development strategies and adopt a national energy policy, coupled with regulatory reform, to foster new technology if we hope to retain our position as a global economic leader.

Michael G. Morris joined Ohio-based American Electric Power in 2004 as its chairman, president, and CEO. He retired as CEO in November 2011, but continues to serve the company as chairman of the board. One of the largest electric utility companies in the United States, AEP serves 5.3 million customers in 11 states, from Michigan to Texas. The company owns nearly 38,000 megawatts of generating capacity, and its 39,000-mile transmission network is the largest in the nation. AEP is well known for pioneering many technological advances in the generation and transmission of electricity. A past chairman of the Edison Electric Institute and the Institute of Nuclear Power Operations, Mr. Morris has received a host of awards and accolades, including the 2011 United States Energy Award and the Horatio Alger Award.

Economic Power Is Shifting to the Emerging Countries:

We Need Stronger Presidential Leadership
and a National Strategy to Reverse This Trend

*By Peter Nicholas, Cofounder and Chairman,
Boston Scientific Corporation*

For the past decade or more, the global economy has been profoundly influenced by macro forces created by China, India, and Brazil. There is little historical context that policy makers can use to assess the current and future impact of these forces, and it is impossible to project their future magnitude. These forces are, however, undeniable and exponentially increasing. Their significance must be included in the calculus associated with our own national industrial policies and strategies.

America is no longer the island it once was, and it is critical that America understands two implications of these macro forces:

- *Economic power and manufacturing jobs are shifting from the United States to the emerging markets.* The American economy is slowly rebalancing to reflect the increasing economic impact of the emerging markets and populations of China, India, and Brazil. Their emergence as consumer nations and sovereign buyers of America's debt has masked the social and economic impact of the changes in our own country as we have swung from a manufacturing-based to a service-based economy and manufacturing jobs have moved

offshore. These changes may be irreversible unless this nation's leadership steps in to stop the shift.

- *U.S. dependence on foreign suppliers affects our security and our economic success.* The increasing cost of foreign energy and non-U.S.-sourced commodities has been draining reserves from our country, creating national security issues, exaggerating an already unsustainable trade balance, and acting to accelerate the movement of American jobs offshore.

On top of these underlying and overarching negative and destabilizing trends, the financial crisis of 2008 has weakened the U.S. economy, and we have yet to successfully recover. This crisis was worsened by a slowdown of the world economy. The global decline was only temporarily slowed by the resurgence of growth in Europe, which is now seen as having been somewhat illusory. The continued strength and growth of the Chinese economy is affecting the U.S. economy, even if this growth has recently become soft. As if all this were not enough, the current venomous political debate around our national debt has illuminated a crisis of leadership. One can only hope that the failure of Congress and the president to resolve this important matter will finally awaken the American public to reality and the new normal of a failing government.

We are living beyond our means as a nation, spending far more than we bring in. Unemployment stands at around 9 percent, with many of the lost jobs gone forever. GDP growth has slowed to around 1 percent. Presidential leadership in Washington is perceived to be virtually nonexistent, and Congress is suffering from a deep paralysis.

In my view, to stop our economic decline, there are three important governing principles that our leaders must reaffirm, together with the American people:

- First, we have to resolve to live within our means—something that may look relatively easy to do on paper, but that in the end requires decisions that are politically unpalatable.

- Second, we must accept the principle that we are simply not going to downsize ourselves to solvency, nor are we going to tax ourselves to a balanced budget. Both of these strategies undermine the current efforts to stimulate our lagging economy and in the long term only exacerbate our current economic malaise.
- Third, we must acknowledge together that government does not create jobs, private enterprise does. Governments merely take money from the private sector (through taxes) and transfer jobs to the government sector. Bigger and more intrusive government is not the answer.

Yes, we can tinker around the edges of our national spending, reform entitlements, and revise and restructure our tax code. But the most powerful and effective long-term answer to deal with unemployment and eliminate the crippling U.S. deficits is economic growth. We must restore 3 percent plus real and durable long-term GDP growth.

It is my belief that only through the design and execution of a successful national growth strategy will we find solutions to our challenges. We cannot underestimate the importance of the macro forces that are shifting power to the east and the budgetary problems that we face. Today, they not only threaten our economy but also put the historical underpinnings of our global leadership at risk. If the president and Congress do not show the courage and the political will to do what must be done, our continuing trajectory toward second-class status in the world is assured.

In my view, leadership is crucial at this moment in time. Here are some leadership principles that the U.S. president should consider if he or she is to provide the transformational leadership required to reverse America's current long-term trajectory:

- *Step up and be inspirational.* Draw all Americans into a shared vision of what is possible. Embrace strategies at all levels that rekindle the spirit of individual responsibility

and work ethic and that promote our system of capitalism and free enterprise in order to free the American spirit and unleash the energy and genius of the American people. Reject rhetoric that divides and seek the more powerful common ground that brings us together as one people—one team.

- *Be a visionary.* Unshackle the free enterprise system and work to create a positive and empowering long-term business environment that provides certainty with respect to the rules of the game.
- *Articulate an action plan.* Create a probusiness industrial policy that supports the values of our free enterprise system, encourages long-term investment strategies to do what that system does best, and finally understands and communicates to the American people how this contributes to the American dream.
- *Improve the speed and quality of government decision making.* Ruthlessly go after and reduce or eliminate bureaucracy in every corner, as Mayor Bloomberg is doing in New York City and as successful companies are doing every day.
- *Grow the pie in the long run.* Reduce corporate taxes, level the global playing field, create and support bilateral trade agreements, and encourage long-term investments (5- to 10-year term) through favorable tax preferences.
- *Communicate a clear and consistent message of hope to job creators.* Send a clear and unambiguous message to American businesses at all levels that the government is on their side. Become messianic about this, and lead the charge to root out impediments that handicap our free enterprise system and disadvantage American corporations in a global world.

In sum, it is really all about stimulating long-term growth. I believe that achieving this objective will provide the wherewithal to successfully address all the macro forces and challenges facing America today. That is the most fundamental leadership challenge.

As cofounder and chairman of the board of Massachusetts-based Boston Scientific Corporation, Pete Nicholas has built an approximately \$8 billion company dedicated to the development, commercialization, manufacturing, and marketing of minimally invasive medical devices intended to treat heart disease and other major medical disorders. Its 13,000-plus products, made in a dozen factories worldwide, include defibrillators, catheters, coronary and urethral stents, pacemakers, biopsy forceps and needles, and urethral slings. Boston Scientific makes medical supplies and devices used to diagnose and treat conditions in a variety of medical fields, including cardiovascular products and cardiac rhythm management, as well as devices used for gynecology and urology, endoscopy, and pain management. Under the leadership of Pete Nicholas, Boston Scientific has grown from a start-up company to become one of the world's largest medical device companies, with operations in more than 100 countries.

We Need an Even Playing Field. We Need to Be More Competitive.

And We Need These Now.

*By Michael T. Dan, Recently Retired Chairman,
President, and CEO of The Brink's Company*

The rise of China as a global economic power is one of the single greatest events in our lifetime. In just a few years, we have seen hundreds of millions of people lifted out of poverty—a process that creates hope and leads to peace and enduring prosperity. Some see China as a threat to our economy, but, while there is some truth to this, it's important to understand the new opportunities that China's ascension creates for the United States and the world.

China is now the second largest economy. With a rapidly expanding middle class, it is quickly becoming a nation of consumers. The Chinese public's appetite for goods and growth is causing commodity prices and the value of imports to rise. China joined the World Trade Organization in December 2001. We now need China to relax its import restrictions and open trade with the rest of the world. This will create higher demand for goods, particularly higher-value goods, and help the former manufacturing prowess of the United States and Europe to reinvigorate itself.

We can't, however, do this by adopting a defensive position. We must hold our place as the greatest economic power in the world; we must set the example and trust in the power of capitalism to compel compliance. Globally, China should play fair regarding limits on raw materials exports. In July 2011, the WTO ruled that

China's restrictions on rare earth elements (RREs) were illegal, as they increased raw materials prices and created a supply monopoly that gave the country an unfair advantage in the global competition for advanced technologies, such as smartphones, electric and hybrid vehicles, weapons, fiber optics, and other products that rely on RREs. How China will react to this decision remains to be seen, but we must hold our ground and support the WTO in the enforcement of international trade rules.

We also have an opportunity to learn from China. For example, we know that the Chinese elementary school education system is superior to ours. Our system is broken. It's within our power to change that. The children aren't the problem. They want to learn and are capable of so much more. We need to fix the *way* we teach our children and young adults—especially in urban America. We've conducted the research; we know what works, and we know what it will cost. We can learn from elementary school experts in China and other countries, much as generations of Chinese students have come to the United States to learn from the experts at our universities and take that learning back to their home country. We now need to make the tough choices, implement change, and do it quickly. We can't afford to lose generations of children.

China has been and continues to be a competitive threat, and as China expands its inroads as a producer of technology, we are likely to see an increase in the tension of the commercial relationship between China and the United States. However, competition is what makes us better, both in business and as a culture. Competition breeds efficiency and compels innovation. With free trade between China and other nations and continued globalization, this competition will foster new opportunities and the creation of wealth—and that creates a winning situation for everyone.

As retired chairman, president, and CEO of the Virginia-based The Brink's Company, Michael Dan ran a \$3.1 billion business until November of 2011. Mr. Dan serves on the board of directors of the Principal Financial Group. He is also a member of the Business

Roundtable and the Bretton Woods Committee. Founded in 1859, Brink's is the premier leader in security-related services for banks, retailers, and a variety of other commercial and governmental customers. Brink's serves thousands of customers in more than 100 countries with solutions such as armored car transportation, money processing, long-distance transport of valuables, vaulting, and other secure logistics innovations. Brink's global leadership is founded on a heritage of trust and a reputation as the most reliable name in the industry. In most years, a small number of Brink's employees die in the service of their customers. Few other companies can say that.

“We Do Not Have to Be Number One to Become a Stronger America”

*By Patrick M. Prevost, President and
Chief Executive Officer, Cabot Corporation*

The challenge isn't competing against China. It's about creating a stronger America.

America should not be consumed with trying to remain the world's number one economy. For every one American, there are four to five Chinese. On an absolute basis, China will have a bigger economy.

My view is that America should get its own house in order, rather than blame China for America's declining economy. America needs a better economy. To achieve it, the United States must increase the quality of its labor pool, create greater efficiencies in the manufacturing environment—and direct its strengthened capabilities to a cause that the country can rally behind.

America's freedom and democracy are two competitive advantages that endure over time. America is a great place to do business because it has a marketplace in which the best people and ideas win. The United States must do everything it can to attract the world's most skilled people in math, science, and engineering. To achieve this goal, I believe the United States must continue to provide the best possible education, attract highly skilled foreign talent, and give these people a green card with their diploma.

In manufacturing, America will not be able to compete with China's low-cost labor force. However, the United States can

achieve far greater efficiency and productivity than it has today. To do so, the United States needs to make significant investments in technology and innovation for manufacturing industries. Federal and state governments should be offering significant incentives in these areas.

America also must shift public sentiment about what it means to work in a manufacturing environment. Over the past several decades, as manufacturing jobs have become increasingly low-tech, our best and brightest students no longer want to work there. America must make it attractive for all young people to work in manufacturing again. Just as the United States has a “Teach for America” program that sends bright students into inner-city and rural schools, the country needs the same kind of program for manufacturing. The federal government should encourage alliances between corporations and universities, and technology institutes where students would develop practical skills through on-the-job training.

Finally, America needs something to rally behind. I suggest that the United States finally get serious about creating an aggressive, technology-driven energy policy. This will create more high-tech, highly skilled jobs. It will also promote the development and use of energy-efficient materials in the building and construction industry, enhance the production and transportation of electricity from efficient and clean sources, and develop a credible alternative energy program.

America is best when it is focused on coming together to achieve great things. The challenge to explore space in the 1960s was a terrific example of this principle. Improving technical education, attracting and retaining the best students, investing in manufacturing efficiency, and finally having a high-tech energy policy could dramatically shift America’s global competitiveness over the coming years.

As president and CEO of Massachusetts-based Cabot Corporation, Patrick M. Prevost runs a \$3 billion specialty chemicals and

performance materials company. Mr. Prevost is a member of the board of directors of General Cable Corporation, a global leader in copper, aluminum, and fiber optic wire and cable products. He is also a member of the board of directors of the American Chemistry Council, a trade association representing the business of chemistry at the global, national, and state levels. Cabot Corporation operates in four segments: core, performance, specialty fluids, and new business. The company is the world's top producer of carbon black, a reinforcing and pigmenting agent used in tires, inks, cables, and coatings. Cabot is also a global leader as a maker of fumed metal oxides such as fumed silica and fumed alumina, which are used as anticaking, thickening, and reinforcing agents in adhesives and coatings. Its other products include inkjet colorants and specialty fluids for gas and oil drilling. Cabot operates worldwide, with combined sales to China and Japan adding up to almost 30 percent of the company's total business. Cabot has 36 manufacturing facilities located in the United States and 20 other countries. During its more than 125-year history, Cabot has earned a reputation for producing high-quality materials with an unwavering respect for sustainability and safety.

An Open Letter to the Political Leaders of America

Leading by Reminding Us Who We Are

*By George S. Barrett, Chairman and
Chief Executive Officer, Cardinal Health, Inc.*

No doubt others have written to you about the national debt, regulatory environment, tax reform, healthcare, energy policy, trade barriers, and military strategy—all areas that require bold actions. I write to you about another issue that requires your strong leadership and is necessary for tackling many of these areas and getting Americans back to work: our national ethos.

Lead by reminding us who we are and how we got here. Help us restore our national identity, coupled with actions that support it. This will be a difficult task given our extraordinary times—and it is at these times of stress that we are most likely to forget who we are.

Our young nation has been a place to escape from the tyranny of homes left behind, but also a place of unbounded optimism and opportunity. This patchwork quilt of a nation has been stitched together by a core belief that if you work hard, you can improve your position in life. This has nurtured a society in which class divisions are fluid. This is not to say that we don't suffer from an increasing and distressing economic gap between those who have

and those who don't. But it is also true that people from around the world still want to come here for the promise of a better life.

While our nation has demonstrated a unique capacity to unite in times of crisis, we have also shown a tendency to undermine this attribute when under the strain of an impending crisis—highlighting our differences, rather than celebrating the potential for them to disappear. In these moments, it may be tempting to regard immigrants as “job stealers,” rather than as contributors to those ideas that lead to opportunity—to rail against those less fortunate who “live off the welfare system,” and to demonize those who have achieved economic success as “fat cats.” This does not help us tackle our future.

We must be strong as a nation to resist behaviors which give fanaticism a voice, because the rhetoric of class hatred and nativism is the fanatic's best friend. We see this poisoning our political system. Forcefully reject partisan behavior which demands blind adherence to orthodoxy and requires support of positions that represent the extreme, but not most Americans. Let the American people know that you will not govern by historical party doctrines, and take actions that demonstrate this. It will not make the ideologues happy, but it is necessary.

Finally, recognize that the politics of blame discourages bold risk taking and innovation which will be critical to generating economic growth and creating jobs.

Help us find our better side during this time of stress. We do remember what that better side felt like, and we want it back again.

As chairman and CEO of Ohio-based Cardinal Health, George Barrett runs a \$103 billion company that improves the cost-effectiveness of health care. As one of the world's largest distribution companies, Cardinal Health provides pharmaceutical and medical products to more than 60,000 laboratory, pharmacy, hospital, and ambulatory-care sites each day. The company is also a leading

manufacturer of medical and surgical products, including gloves, surgical apparel, and fluid management products, and operates the nation's largest network of radiopharmacies that dispense products aiding in the early diagnosis and treatment of disease. As the business behind healthcare, Cardinal Health equips healthcare providers with the tools, processes, and systems that enable them to focus on their patients.

Review Preferential Trade Pacts and Police Violations of WTO Rules

*By Fernando Aguirre, Chairman and Chief Executive Officer,
Chiquita Brands International*

As free-trade agreements (FTAs) multiply across the globe, a significant number of these arrangements outside the United States are falling short of WTO standards, discriminating against U.S. interests, and diverting trade. To prevent U.S. exports from being compromised by the growing “spaghetti bowl” of illegal trade preferences, the United States will need to insist that these illegitimate FTAs be reformed.

Chiquita Brands has had firsthand experience with preferential trade pacts that ignore WTO rules. The still-unsettled WTO banana case was largely about this issue. For years, the EU has relied on preferential arrangements to justify illegal quotas, licenses, and punitive tariffs that favor African, Caribbean, and Pacific (ACP) bananas and, intermittently, Latin American bananas as well. Between 1993 and 2009, the WTO struck down five different EU preference arrangements because they distorted sourcing patterns and raised costs for Chiquita and other banana service suppliers. According to the WTO, the harm to our company from just one of the five arrangements (1998–2001) came to \$191.4 million.

Even after agreeing in 2009 to stop its banana illegalities, the EU’s new generation of banana preference agreements still bears a striking resemblance to prior ones. Competitive ACP bananas are still given more than a \$3.00 per box tariff preference over

Latin American bananas under arrangements that the EU admits are not FTAs. Moreover, the EU's new FTAs with several Latin American countries subject bananas to discriminatory volume caps and export licenses that look no different from measures that the WTO has already found violate U.S. trading interests.

The race to close "FTAs" at any cost has moved well beyond Europe. Scores of foreign trade agreements with and among Asia-Pacific countries, including more than 15 with China, are already in effect or being negotiated.

With hundreds of FTAs now dominating world trade, U.S. exports can expand only if these arrangements do not restrict or punish trade with America. I urge the president and the U.S. Trade Representative to help safeguard U.S. jobs and businesses by working with our foreign trading partners to ensure that illegal preferences masquerading as FTAs be brought into strict compliance with WTO rules.

Fernando Aguirre is chairman and CEO of Chiquita Brands International, a publicly held company, where he assumed the leadership role in January 2004. The company has \$3.5 billion in revenues and sells products in more than 70 countries, using the Chiquita brand on bananas, healthy snacks, and smoothies, and also Fresh Express salads in North America. Mr. Aguirre also serves on the boards of Aetna Inc. and Levi Strauss & Co. He is on the board of Duke University's Fuqua School of Business Center on Leadership and Ethics. He joined the Young Presidents' Organization (YPO) in 1991 and is a member of the YPO's Intercontinental Chapter as well as being a member of the World Presidents' Organization. In 2001, Aguirre helped form an advisory board to the Marshall School of Business at the University of Southern California, serving as its first chairman for three years. Most recently, Aguirre became the first Hispanic CEO to participate in the CBS hit reality television series Undercover Boss. In 2011 he was recognized as one of the top 100 "Influential" by HispanicBusiness magazine, and was also honored with the Hispanic Heritage Leadership Award by the National Football League.

China Is Changing the Rules of Global Competition

By Dinesh C. Paliwal, Chairman, President, and Chief Executive Officer, Harman International Industries, Inc.

Growing consumerism and a rapidly increasing appetite for modern living in the BRIC countries, and in particular China, call for radical new thinking in Washington and in the nation's boardrooms. In my view, it's not too late for America to be the architect of this new economic order and create a more strategic form of capitalism. After all, Americans invented capitalism in the past century and exported it to Europe.

The first step for American corporations in addressing China's emerging economic strength is to understand the global playing fields and their new rules. America's CEOs must learn firsthand what is driving this change and its long-term implications. In its simplest form, it's hypercompetition. To combat this successfully, we will have to understand the new written and unwritten rules guiding global trade. It is perhaps more important than ever to understand brand power and cost competitiveness in this new, more competitive environment. Although U.S. companies are justifiably proud of their innovation skills and some well-known brands, none of us are immune to having to learn new practices for hyperinnovation, operational excellence, and marketing from companies that serve global markets.

The second step is that, while on the ground abroad, any U.S. company with growth aspirations must also consider the opportunities of directly serving this outsized economic powerhouse (China). An on-the-ground presence in China offers real-time intelligence on emerging trends and the opportunity to differentiate respected U.S. brands from upstart domestic goods. The potential volume leverage is obvious, especially when the value chain incorporates cost-effective Western partnerships and emerging-market skills.

For many multinational suppliers, their presence in China will grow to supporting existing Western partners. Major global automakers and electronics and consumer goods providers were among the first to recognize the China phenomenon, responding with resources on the ground. These global brands need competent and trusted business leaders and partners.

Finally, as for the role of government, tariffs and trade restrictions are not the answer. These will serve only to impede free trade, spur retaliation, and probably increase the cost of many imported goods that Americans have come to crave. America must put in place new growth initiatives, such as significant incentives and subsidies to build new world-class facilities for R&D, engineering, and manufacturing, and more liberal immigration policies for knowledge workers and top-of-class graduates for higher studies in the United States. America should also reduce the corporate tax on industrial corporations (excluding financial institutions) to attract capital flow and investment in the U.S. economy. More favorable tax treatment of profits earned abroad will help ensure that U.S. manufacturers also help fund the differentiation as they repatriate the proceeds of these activities.

As chairman, president, and CEO of Connecticut-based Harman International Industries, Inc., Dinesh Paliwal leads a \$4 billion international audio and infotainment equipment company with a \$14.5 billion backlog. The company designs, manufactures, and markets electronic equipment for the car, the home, theaters,

concert halls, and large venues such as Yankee Stadium, as well as branded electronics for audiophiles, audio professionals, recording studios, cinemas, and many famous touring performers. The company maintains major operations in the Americas, Europe, and Asia. From 2010 to 2011, Harman's revenue growth was a robust 11 percent (compared to the industry average of 5.9 percent). Harman is known for its innovation, including the world's first stereo receiver and the world's first concert hall loudspeaker. In 2009, Harman became the only company to win a second prestigious Technical Grammy Award (a feat also accomplished by Thomas Edison).

The Need for Unity and a New American Strategy

*By Salvatore D. Fazzolari, Chairman, President,
and Chief Executive Officer, Harsco Corporation*

Walt Disney once said, “All our dreams can come true, if we have the courage to pursue them.” For the United States to deal effectively with the emergence of strong global competition, great leadership and the courage to think differently will be imperative. Without these two critical elements, we will see the United States continue to decline in economic power. Moreover, the change needs to be audacious in scope and bold in execution. I see two interlinked parts.

First, we need to establish a true partnership among the government, the people, and business. One has only to look at China and also Singapore to see the positive benefits of such a partnership. This alignment is critical to the long-term economic viability and health of our nation. It needs to be built on mutual trust and respect, with the interest of the country first. Having seen this firsthand in my travels overseas, aligning the interests of citizens with those of the business community and government can provide a powerful competitive advantage to the United States. Yet this can come about only through great leadership that is willing to boldly change the course.

The second critical element is that a strategic road map needs to be developed for the United States that incorporates policy reforms,

economic reforms, and goals that are aligned with the long-term interest of the nation. Having a sound strategic road map that is executed by the aforementioned partnership is the best solution to dealing with any global economic threat. This road map needs to include energy independence, infrastructure development, substantive reduction in regulations, fiscal discipline and debt reduction, and corporate tax reform. It is imperative that the nation address all of these elements if we are to remain competitive and great.

The solution to the emerging global economic threats is clear. Great leadership, the courage to lead and think differently, an audacious road map, and a partnership of government, people, and business can reverse the U.S. decline and position the country once again for growth and greatness. Our strategic road map should be measured against key performance metrics. Moreover, the American people should be given a report card each year as part of the president's State of the Union address, detailing the progress that is being made, and also where the nation is falling short.

History has clearly shown that greatness can be achieved only when a country perfectly blends strong economic growth and military strength with an enlightened and aligned population that is supportive of its leadership. The great Italian Renaissance master Michelangelo once said, "The greatest danger for most of us is not that our aim is too high and we miss it, but that it is too low and we reach it." We need to once again aim for the stars!

As chairman, president, and CEO of Pennsylvania-based Harsco Corporation, Salvatore Fazzolari leads a \$3 billion diversified industrial services and engineered products company that traces its industrial roots to 1853. It operates in more than 50 countries worldwide, from the Americas to China, serving industries that are fundamental to global infrastructure development and economic growth, including the metals, construction, railway, and energy industries. Staunchly committed to business integrity and consistent reward to its shareholders, Harsco is proud to have paid a dividend every year since 1939.

An American Competitiveness Agenda

*By David M. Cote, Chairman and
Chief Executive Officer, Honeywell Corporation*

In the last 20 years, the global economy has gone from one billion active participants to about four billion today. That is a good dynamic because now there are four times as many people in the world who have been given incentives by market principles to think about how to make the world better and more productive. At the same time, it means that we have to be more competitive. We can't just talk about winning the Olympics 20 years ago. We need to win the Olympics today and 20 years from now. We need an American Competitiveness Agenda.

It begins with recognizing that the participation of countries and regions like China, India, Eastern Europe, and Brazil in the global economy, increasingly using and supporting free-market principles, is a good thing for the United States, and the world. But that doesn't mean that there aren't challenges. I've been asked before whether we should view China as a partner, a competitor, a customer, or a supplier. To which my response is: yes, all of these. It means that we need a more thoughtful, comprehensive, and nuanced approach that doesn't just categorize China as "good" or "bad." I liken our position vis-à-vis China to the way the U.K. probably viewed the United States a hundred years ago. We had substantially more people and were taking the right actions to support economic growth. Today, China has four times the people we have in the United States, and it is doing the right things. Some will argue that China's government system is unsustainable, so this can't continue. The response has to be, (1) the Chinese system has

shown a real ability to evolve as it has grown, so it's reasonable to assume that it will continue to do so, and (2) do we really want to have a strategy that's predicated on the other guy's making an error? Getting the mindset right is an important backdrop for the following six recommended actions in our American Competitiveness Agenda. The *first* is to permanently resolve our national debt problem. We are on the path to becoming a bankrupt entitlement society. Resolution requires entitlement reform and tax reform to create a simpler, more globally competitive system.

The *second* is the development of an energy policy that comprises both generation and efficiency. Strong GDP growth requires low-cost, sustainable power. Our efficiency opportunity is huge, and we should encourage all forms of generation with appropriate clean standards. Lower-cost power both strengthens economic growth and increases consumer purchasing power through reduced fuel costs.

The *third* is infrastructure investment, defined broadly—not just roads and ports, but also air traffic management, broadband, and any other investments that improve communications and logistics. It's estimated that currently, emerging economies invest 9 percent of their GDP in infrastructure, Europe 5 percent, and the United States 2 percent.

The *fourth* is math and science education. We need more engineers. They are generally the source of innovation that leads to productivity, which leads to improved standards of living and competitiveness. Of the more than 4 million first university science and engineering degrees awarded in 2006, more than 900,000, or about 21 percent, went to Chinese students. Only 11 percent, or roughly 480,000, went to students in the United States—and that's with only one-third of China's age-eligible people (compared with 68 percent in the United States) going on to college. When that equalizes, China will graduate about three million scientists and engineers annually to our, say, 500,000. We need to graduate more engineers, and we need a more open immigration policy for engineers.

We should also review how we educate high school students. We seem to have a more elitist view of how to educate kids who aren't that partial to schoolwork. The German apprentice system does better at providing a usable education to those kids who don't want to go on to college.

The *fifth* is further pursuit of free-trade agreements. Economics is not a zero-sum game. Historically, trading societies flourish. We are lagging many other countries, and it is hurting us. Commercial ties are a great way to build peaceful relationships.

The *sixth* is tort reform. One of the biggest concerns for foreign investors that are considering investment in the United States is the outrageous outcomes that are possible in our legal system.

We have many strengths in the United States, but we also need to recognize that other countries are evolving to become more competitive. This new global competitiveness is a good phenomenon for us and the world. We must evolve too, recognizing that our environment is changing. As Darwin observed, it's the most flexible who survive. We have a lot to do—but it's very doable.

As chairman and CEO of New Jersey-based Honeywell, David Cote leads a Fortune 100, \$37 billion diversified technology and manufacturing company serving customers worldwide with aerospace products and services; control technologies for buildings, homes, and industry; turbochargers; and performance materials and technologies. The company's 130,000 employees, including more than 20,000 scientists and engineers, are focused on developing innovative products and solutions that help Honeywell's customers—and their customers—improve their performance and productivity. Under Mr. Cote's leadership, Honeywell has delivered strong performance in sales growth, earnings per share, segment profit, and cash flow. In 2010, Mr. Cote was named by President Barack Obama to serve on the bipartisan National Commission on Fiscal Responsibility and Reform. He was named cochair of the U.S.-India CEO Forum by President Obama in 2009, and has

served on the forum since July 2005. Cote received the Corporate Social Responsibility Award from the Foreign Policy Association in 2007 and the Distinguished Achievement Award from B'nai B'rith International in 2011.

Balancing the Budget: Government Investment Versus Spending

*By Gregory T. Lucier, Chairman and
Chief Executive Officer, Life Technologies, Inc.*

In 2011, the vitriolic debates over raising the debt ceiling and balancing the budget largely ignored the central challenge of budget cutting: distinguishing spending from investment. Across-the-board cuts that treat all government spending equally are absurd. Government must retain the programs that will actually fuel our future rather than deplete it. The right investments will create innovation, economic growth, jobs, and revenue. Without growth, no amount of taxation will solve our problems.

When the government invests well in innovation, the returns are exponential. The investment in the space program brought more than three generations of innovation, creating much of what we take for granted today. A 2008 economic impact study by NASA found that the space agency accounted for \$4.1 billion in economic output for Florida, 40,802 jobs, and \$2.1 billion in income, and that is just for one state. China is sending men to the moon while we are drastically reducing our investment in space exploration.

The recent investment of \$3.8 billion in the Human Genome Project returned more than \$800 billion in economic impact and created more than 300,000 well-paying jobs in 13 years. This new investment opportunity is at the forefront of changing the entire way we will deal with disease, energy, and starvation—and this industry is still in its infancy. And at the front of the line, China has the largest sequencing capability in the world, while the United States gets mired in slow-moving bureaucracy.

The U.S. government must change its mindset to one of investment in innovation, supporting U.S. businesses to be competitive on the global stage. For the moment, the Chinese have created a thriving business environment through a centrally planned economy that is outrunning everyone else's.

Take a look at one of their most intriguing programs—China's Thousand Talents Program, an initiative by the Communist Party of China's Central Committee. It aims to recruit top overseas scientists and talents back to China to lead China's national innovation program. This is one of the programs that the Chinese government has put in place to stimulate domestic innovation in various industries.

China has a clear vision of the technologies it wants to build for future growth and a domestic market so attractive that its ability to leverage national value from market access is unprecedented. In other words, it has clear goals and the ability to meet them.

What should the United States do? Here are some of my suggestions:

- *Invest in innovation.* The government must become an engine for innovation, with a mindset toward investing rather than spending. It needs to invest in key technologies and platforms—clean tech, genomics, and nanotechnology—using mechanisms that support the convergence of scientific disciplines and engineering. With the use of semiconductors in new disciplines, such as biology, we are seeing rapid advancement from the introduction of chip-based semiconductor sequencing. It will transform how we address and treat disease. Soon every hospital will have a sequencing center full of clinical genomic diagnostics. Imagine that you enter the hospital as a patient on Monday and, because of genetic sequencing, your doctor will be able to have your treatment plan on Tuesday. No more waiting weeks and months to begin effective treatments. These types of innovation will spur job growth and return the country to a leadership position.

- *Preserve the strengths of our venture capital and investment capital sectors.* They are and will remain more nimble than any central planner. We need to stop making capitalism seem like such an anathema; rather, it is an economic force that drives prosperity.
- *Use every lever available to create a level playing field for U.S. firms in China.* Promote trade policies to protect our industries and drive innovation. The speed at which the government addresses trade issues must be advanced at a far more rapid pace. There are thousands of jobs that could be created with a far more assertive trade policy.
- *Keep their best and brightest here.* Enact the “Staple to Greencard” program that grants visas to PhDs (and possibly MAs) upon graduation from a U.S. university.

The economic warfare China is engaging in through communist capitalism is extraordinarily seductive, and poses great risks to U.S. firms and the U.S. economy. But democratic capitalism works to its fullest potential when nimble and motivated capital markets and investors build upon consistent strategic federal investments in basic research, in a tax environment with internationally competitive corporate tax rates. Finding that balance in the midst of serious and important deficit reduction is the core challenge facing our political leaders. Their success or failure will do much to determine our economic future.

As chairman and CEO of California-based Life Technologies, Inc., Gregory Lucier runs a \$3.6 billion global biotechnology tools company serving customers in more than 160 countries. Its systems, consumables, and services enable researchers to accelerate scientific exploration. Life Technologies’ customers do their work across the biological spectrum, working to advance personalized medicine, regenerative science, molecular diagnostics, agricultural and environmental research, and twenty-first-century forensics. Life Technologies has a rapidly growing intellectual property estate of approximately 4,000 patents and exclusive licenses.

Managing the Interests of the U.S. Market and Workers with Opportunities in China

*By John M. Stropki, Chairman, President,
and Chief Executive Officer, Lincoln Electric Holdings, Inc.*

Through the vision of our founder, John C. Lincoln, and a work culture shaped by his brother James, Lincoln Electric has withstood the test of time—and global competition. At Lincoln, we believe that “The Actual is Limited, but the Possible is Immense.” This belief—and the commitment of our employees to it—has yielded an industrial powerhouse nearing \$3 billion in annual sales.

Our company continues to strengthen and expand its product portfolio offerings and widen its distribution in global markets. In 2001, 71 percent of Lincoln’s sales were in North America. Today, more than half of our sales are to international markets. The North American market hasn’t shrunk. In fact, it has grown at approximately 7 percent CAGR over this time, including 2009, the year of the “Great Recession,” and remains our largest and most important market in terms of sales, profitability, and market share. However, the fastest growth has occurred outside North America, and our global strategy has tracked this market expansion.

As Lincoln expands internationally, we are still focused on enhancing and growing our U.S. production through workforce development, productivity improvement, and significant capital investments to better serve domestic demand and increasing exports of our high-technology products around the globe.

We have also remained true to the many competitive advantages within our U.S. business, such as retaining our dedicated, highly skilled, and productive workforce. We continue to generate huge competitive advantages in our U.S. operations through our long-embedded culture and human resources programs, including our guaranteed employment policy (no layoffs since the 1940s), Lincoln's Advisory Board, and other tenets of our business model.

For example, Lincoln's Advisory Board, established in 1914 and made up of elected representatives from the workforce, meets with me twice a month to discuss an open agenda of items ranging from workloads and employee issues to Lincoln's stock price. We maintain an open-door policy and promote from within when- and wherever possible. My own 40-plus-year career at Lincoln is an example of that. We are one of the few industrial companies in the United States with an active, successful piecework system. Lincoln's profit-sharing program, which has been in place since 1934, is a merit-based incentive for individuals and teams. Our guaranteed employment policy, in force for more than 60 years and reviewed annually by the Lincoln Electric board of directors, guarantees that employees who have three years of continuous service and who are meeting the company's high performance standards will not be laid off as a result of economic conditions beyond their control.

Managing and balancing this system is not easy. It requires the highest level of cooperation, an unyielding commitment of both management and the workforce, and, most important, trust between the two to make it work.

Our system generates positive results in both good times and bad. For example, during the 2009 downturn, we applied all the tools available under our system to preserve the jobs of our U.S.-based employees and to focus on improving our company's prospects for the future. When we had to cut back work schedules, we reassigned our production people to various research and development teams. *But there were no layoffs.* Through this massive effort, capturing the ingenuity and flexibility of our people, we introduced more than 108 new products to the market over a nine-month period.

To remain competitive, we continue to make significant investments in our Cleveland, Ohio-based operations. Over the last 10 years alone, we have made capital investments of approximately \$250 million. We adopted Six Sigma ahead of most of our competitors, and we have trained more than 160 black belts throughout every department. We led the industry in achieving ISO 14001 certification. And we continue to sharpen our award-winning customer service to be even more responsive to our customer and end-user base.

Lincoln's U.S. workforce is acutely aware that our global growth strategy is tied to preserving jobs in Cleveland. A good example is our exports program for China. The second-largest economy in the world offers great market growth potential based on its population size, geographic mass, and the overall infrastructure and societal needs of a large and rapidly growing middle class. Our sprawling, 1.5 million-square-foot plant in Cleveland exports a high percentage of Lincoln's high-end welding equipment to China, which is used to help build and improve the country's infrastructure, such as bridges, commercial construction, pipelines, and other energy-related projects. These exports were in excess of \$170 million over the past five years, making up a very significant portion of our total global exports.

Our growing exports program, which was awarded the President's E Award and the Ohio Governor's Large Business Exporter Award for export excellence, is a testament to the productivity and dedication of this U.S. workforce.

China is also the largest and fastest-growing market for the arc welding equipment and consumables we manufacture around the world. The industrial space where we participate in China is very fragmented, and for a U.S.-based manufacturing company like Lincoln, this has resulted in market growth opportunities within the country as well as for exports out of our U.S. operations. So, while we have invested in our Cleveland operations both to cover our domestic market and for exports, we have taken similar actions to build up our China business and plants to address this growing market. We now have five plants in China and a workforce of

more than 2,500 people. Our Chinese operations are primarily for that market and are not focused on imports back into the United States at this time.

As chairman, president, and CEO of Ohio-based Lincoln Electric Holdings, Inc., John M. Stropki runs the world's leading arc welding and cutting products design and manufacturing firm, with \$3 billion in revenues. Mr. Stropki is only the seventh person to fill the chairman's role since the company was founded in 1895. The company has more than 40 operations in 19 countries, with sales offices and distribution throughout more than 160 countries. Mr. Stropki started at Lincoln Electric working in the factory of its Cleveland operations during summers while an engineering student at Purdue University. Under Mr. Stropki's guidance, Lincoln has experienced significant growth. He has driven change throughout the organization by implementing more efficient manufacturing processes, championing the development of innovative new welding solutions for Lincoln's customers and end users, and pursuing a global growth strategy. He is a recipient of Purdue University's 1998 Outstanding Industrial Engineer Award, and in 2011, he was honored as International Executive of the Year by the Marriott School of Management at Brigham Young University. Lincoln's business model and workplace practices are taught and studied at the best business schools all over the world, including Dartmouth, Harvard, and INSEAD, to name just a few.

Healing Healthcare:

Real Reform Requires Improving Healthcare Delivery and Operational Excellence

*By John H. Hammergren, Chairman, President,
and Chief Executive Officer, McKesson Corporation*

Healthcare issues continue to dominate Washington's attention. No matter which party is in power and how it views issues such as the solvency of Medicare and Medicaid, insurance mandates, or the government's role in providing healthcare, the debates rage on. But these debates have surprisingly little impact on some of the central issues of healthcare: quality and cost. These two goals of the healthcare system are shaped much more by what happens in the private sector than by what laws are on the books.

From my perspective, the prescription is straightforward: if you want to make American healthcare stronger, focus on the health of our healthcare businesses. Get the private sector into better shape, and the choices facing the public sector will look a lot simpler.

The central reality of American healthcare is that the institutions that deliver it—from one-person medical practices to major urban hospitals—are businesses. We have nearly 6,000 hospitals, 670,000 physicians, 2.9 million nurses, 56,000 pharmacies, and 1,200 life- and health-insurance companies. Every one of them faces the same kinds of fiscal, operational, and competitive concerns as any other business. And like other businesses, they serve their customers best when they themselves are thriving.

Look at the difference that healthy businesses make. Seattle Children's Hospital implemented technology and improved operational practices to cut costs per patient by 3.7 percent, saving \$23 million while improving patient satisfaction scores in the process. Aetna applied evidence-based medical data in its partnership with US Oncology and saw a 35 percent reduction in costs with improved patient outcomes. A study at a hospital in New York showed that reducing the number of steps that nurses take during a shift can cut hours by 40 percent and save \$1.14 million annually. Amplify these small improvements across thousands of providers, hospitals, and other healthcare organizations, and we will accrue impressive gains.

These thriving businesses have a lot in common with successful companies in other spheres of the economy. They use resources effectively and efficiently both to improve their bottom line and to strengthen their ability to provide high-quality products and services. Disciplined leadership and visionary planning turn intractable problems into exciting opportunities. Moreover, partnering with the right entities and programs—including government programs—can also help healthcare businesses achieve “good business health.” “Meaningful use,” for example, is a coordinated set of regulations established by the American Recovery and Reinvestment Act of 2009. It was propagated to provide incentives for the creation of a private and secure twenty-first-century electronic health information system, and it is emblematic of how healthcare businesses can work with others to drive effective use of technology to reduce costs and improve quality.

Unfortunately, too many organizations in healthcare are in poor health and showing discouraging vital signs. Like chronically ill patients, these businesses function at less than optimal performance. Their conditions may have many causes—inadequate technology, poorly designed workflow, a stifling culture, a lack of leadership, a history of bad incentives—but the institutional illnesses that result are increased costs and diminished quality of care. Many of the challenges provoking such drama in the political sphere are really symptoms of this deeper sickness.

So what can be done? There's no silver bullet that will solve the problem quickly and easily. But thriving businesses like those I've mentioned have shown us the path to better health. Just as we've learned that only 16 extra minutes of exercise a day separates children with normal body weight from those who are obese, experience shows that healthcare organizations can make a major impact by instituting what seem like minor changes, such as adjusting work processes to reduce paperwork and removing redundant or wasteful steps.

It's no secret that the healthcare sector lags the rest of the economy dramatically when it comes to IT adoption—where else do you still see so many handwritten forms and bulging files of paper? The good news is that every hard-to-read prescription and crosshatched scheduling book represents an opportunity to improve both patient care and the bottom line, and medical facilities nationwide—from the largest hospitals to rural clinics—are beginning to embrace IT.

Smart medical practices have figured out processes for managing schedules that make it easier for patients to see a doctor when they need to, while reducing missed appointments and other hidden costs. Well-run hospitals use sophisticated pharmacy management systems to prevent medical errors that cause patient suffering and dramatic cost increases. Forward-looking leaders across the healthcare system are exploring collaborations to eliminate duplicative testing and to improve the quality of care.

These are business challenges, and they require business solutions. Leaders in most industries understand that audacious goals may be exciting, but operational excellence drives success. Our industry has plenty of examples of what it takes to thrive; the success stories range from the largest, most technologically sophisticated healthcare systems in the world to small primary-care practices. From enormous new players like Walmart or Target to independent pharmacies that have been family-owned for generations, companies are working in innovative ways and breaching traditional barriers to provide quality healthcare. They provide better care to their patients. This, in turn, allows them to reap

financial rewards and invest in continuous business and clinical improvements. It's a virtuous cycle that leads to better health for all.

As chairman, president, and CEO of the California-based McKesson Corporation, John H. Hammergren runs a \$112 billion firm. Under his leadership, McKesson has expanded into many new markets, advanced to number 15 on the Fortune 500, and been named the Most Admired Healthcare Wholesaler by Fortune magazine. McKesson partners with payers, hospitals, physicians' offices, pharmacies, pharmaceutical companies, and others across the spectrum of care to improve their financial, operational, and clinical performance with solutions that include pharmaceutical and medical-surgical supply management, healthcare information technology, and business and clinical services. Mr. Hammergren is a member of the Business Council and the Business Roundtable. He also served as chairman of the Healthcare Leadership Council.

Strengthening America While Trading with China

By J. Erik Fyrwald, Chairman, President, and Chief Executive Officer, Nalco Company

I made my first trip to China in 1990. Leaving the tiny, worn-out airport in Beijing, I was amazed to see almost no cars, an incredible number of bicycles, and dilapidated residential and commercial buildings. The environment was clearly not a consideration, as our Chinese competitors were not even using basic wastewater treatment technologies, but instead were dumping polluted effluent directly into rivers. However, it was clear even then that China's large population, commitment to education, strong work ethic, and economic development would pay off over time.

When I travel to China these days, it is hard to imagine that this is the same country as it was 21 years ago. Today, the airports are the most modern in the world, the highways are filled with new cars, the high-speed trains have surpassed even Japanese and European standards (and are way ahead of anything in the United States), and the buildings include many modern marvels that would bring pride to any country. It is also incredible to see how far Chinese companies have come in terms of scale, productivity, and technology—and they are making important strides in implementing leading environmental technologies. As this extraordinary progress continues, China's relationship with the United States, and its leadership role globally, will continue to shift as well.

The United States should develop a respect-based, strengthened bilateral partnership—with particular attention to the critical

importance that China places on water, energy, and food security. To make this happen, we need to:

- Make sure that cross-border senior government, academic, corporate, and other relationships are stronger than those with any other country, and that they can survive changes in individual leaders.
- Expand foreign language—particularly Mandarin—training in U.S. schools, starting in first grade or earlier. In China, English proficiency is a university graduation requirement, with coursework beginning in elementary school.
- Promote business and tourism exchanges to ensure that both China and the United States are familiar and comfortable to normal citizens of both countries, rather than foreign and scary. One opportunity here is to expand H-1B visa availability for highly talented individuals from China (and elsewhere) to work here. We should also encourage U.S. students to spend semesters in China. We need to know China. We also need China to know and value America.
- Help China in its new commitment to “green growth.” Today, 320 million people in rural China—more people than in the entire United States—lack regular access to safe drinking water. With China’s modernization comes the demand of everyday Chinese to live in a better environment. U.S.-based companies can play an important role in helping to achieve that goal, increasing the link between the two countries.
- Allow mergers and acquisitions to cross borders across more elements of our economy. We want China to be invested in the health of the U.S. economy, and for more reasons than buying U.S. debt because of our lack of fiscal discipline. We should also encourage more investment in China by U.S.-based global companies.
- Increase our relative tax competitiveness. For business, the United States is one of the least attractive tax jurisdictions. As U.S. dominance of world economic conditions continues to

shrink, it is crucial to ensure that tax parity helps the United States remain an attractive part of a global business base.

- Consistently push for a level playing field on environmental and related policies in trade agreements, but with clear recognition that overtly protectionist policies inhibit U.S. companies. Frequently, China and others have filled the gap when the United States has sanctioned particular countries, seeing opportunities to cheaply improve their energy and food security.
- Continue to encourage policies that support manufacturing in the United States, preventing unnecessary job shifts to China that add to the tension and misunderstanding between our countries. If our industry is highly competitive and productive, we will not allow temporary wage differences to cause our skilled labor to migrate offshore temporarily, only to be reimported to the United States a few years later.

While the United States is today the world's largest economy, it is not too soon to start treating China as a critical partner in global leadership. We can help each other and make the world a better place. It is wrong to think that China's rise will precipitate a U.S. decline—we can strengthen together. Better to build that partnership today than wait until we are just one of many options for China to partner with in the future.

As chairman, president, and CEO of Illinois-based Nalco Company, J. Erik Fyrwald ran a greater than \$4.5 billion company operating in 150 countries. Nalco was the world's largest sustainability services company, focused on industrial water, energy, and air applications. Nalco solutions help customers reduce energy, water, and other natural resource consumption; enhance air quality; minimize environmental releases; and improve productivity and end products while boosting the bottom line. Nalco serves nearly 50,000 customer locations. As of December 1, 2011, Nalco became a wholly owned subsidiary of Ecolab, creating an

\$11 billion firm operating in 160 countries that is now the global leader in water, hygiene, and energy services. Ecolab paid \$8.1 billion (including debt) for Nalco, representing a 34 percent premium over the traded value of the stock. Mr. Fyrwald was appointed president of Ecolab.

Countries Do Compete: The United States Needs a National Strategy to Leverage Technology and Drive Economic Growth

*By Bill Nuti, Chairman and
Chief Executive Officer, NCR Corporation*

Modern information and communication technologies (ICT) not only have “flattened the world” and brought people closer together, but have created opportunities for countries to achieve economic growth by attracting foreign investment and talent. Governments around the globe are developing strategies designed to entice companies, win contracts, and create jobs.

At a time when global economic competition has become more intense than ever, the United States has been slow to embrace the concept that we are in a global economic—and innovation—competition with other nations. Three dozen countries have now created national innovation strategies designed specifically to link science, technology, and innovation with economic growth. As a result, more companies—and jobs—are moving to China and other Asian countries. According to the Department of Labor, manufacturing employment in the United States has declined 40 percent since 1979, from 19.6 million workers to 11.8 million today.

The United States can no longer take the approach that “countries don’t compete” and must create an innovation policy agenda that addresses the massive change that ICT technologies are having on the global economy. The implementation of a long-term,

comprehensive national strategy to harness business, political, educational, and scientific resources is critical. A national program must begin with a renewed emphasis on public-private partnerships, as well as tax credits that provide incentives for companies to invent the next generation of products here in the United States.

According to the International Student Assessment, the United States ranks low on the list of access to tomorrow's talent. Partnering with universities to help reform our education and workforce training systems to ensure that Americans are qualified for the jobs of tomorrow will be crucial.

A good example of this collaborative process is NCR's partnership with Georgia Tech, as part of the state's Quick Start program. Not only do Georgia's programs fund training and recruitment, but state personnel and local universities have provided NCR with customized services ranging from company orientation and advanced manufacturing technology training to productivity enhancement.

Working together through the state's Quick Start program, we have created new jobs by insourcing and onshoring manufacturing. We have also established innovative training programs that will create a competitive advantage on a global basis.

The next step is to make the R&D tax credit permanent and more generous. Currently, more and more companies are conducting R&D outside of the United States because of the benefits and incentives that they are receiving from other countries. Increasing these tax credits and making them permanent will level the playing field. This will encourage firms to again invest in R&D, allowing us to regain a leadership position and stimulate our economy with more job opportunities.

- The Information Technology Innovation Foundation (ITIF) estimates that if the United States expanded its R&D tax credit from 12 to 20 percent (and made it permanent), the credit would lead to the creation of 162,000 jobs in the near term. This is a \$90 billion increase in GDP and 3,850 new patents, and the credit would pay for itself in increased tax revenues.

- U.S. R&D tax credits spur approximately \$2 in private R&D spending for every dollar they cost the government.

When business acumen and drive are integrated with high-quality education and innovative research, it propels both our technology industries and broader national interests forward.

As chairman and CEO of Georgia-based NCR Corporation, William (Bill) Nuti runs a \$5.5 billion global technology company, described by one reporter as a “self-service technology giant,” revolutionizing the way people connect, interact, and transact with business. NCR’s enterprisewide solutions and services are driving consumer experience innovations and productivity gains for companies in the financial services, retail, hospitality, travel, entertainment, and telecom and technology services industries. With 23,000 employees in more than 120 countries, NCR enables more than 300 million transactions every single day. Mr. Nuti is highly respected for his transformational leadership skills and acclaimed for his vision and expertise in repositioning companies for profitable and sustained growth. He is an established enterprise and business policy leader in Washington, DC, where he is often invited to speak on Capitol Hill. He has also founded a CEO policy forum on tax reform and competitiveness and was invited to speak at the White House Forum on Strategy for American Innovation. He is a member of the Georgia Institute of Technology advisory board, a Long Island University trustee, and a member of the Sprint Nextel Corporation board of directors.

“We Are Already in a Trade War with China, and We Are Losing Badly.”

*By Daniel R. DiMicco, Chairman and
Chief Executive Officer, Nucor Corporation*

To remain economically competitive with other countries, particularly China, we need to deal with reality.

First, our leaders must realize that we are already in a trade war with China, and we are losing badly. Failing to address China’s protectionist trade practices has cost us millions of manufacturing jobs and devastated our middle class. We need to vigorously enforce our trade laws. This does not require a new program. We simply need to enforce the rules of existing trade agreements.

Critics will argue that this is protectionist, but there is nothing protectionist about holding other countries to their agreements. President Reagan understood this when he said, “To make the international trading system work, all must abide by the rules.”

Second, America needs a national manufacturing strategy. Our economic competitors have one. We must correct the mistake we made in believing that a service-based economy could replace a manufacturing-based one as the country’s wealth creation engine. Manufacturing used to account for more than 30 percent of our GDP; today it has dropped to 9.9 percent. We need a strategy to get manufacturing back to 20 percent of GDP.

Finally, we must invest in our nation’s infrastructure. Investments that the United States made during and after World War II fueled our economic growth in the second half of the twentieth

century. Much of that infrastructure is reaching the end of its useful life, and new investments are required.

A creative way to fund these investments would be to allow companies to repatriate overseas earnings, estimated at more than \$1 trillion, tax free by putting that money into infrastructure bonds. Each \$1 billion spent on infrastructure creates 35,000 jobs. Then, over time, multinationals would be able to draw that money back.

Remaining economically competitive requires focusing on three basic fundamentals: fighting unfair trade practices, boosting manufacturing, and improving infrastructure.

As chairman and CEO of North Carolina-based Nucor Corporation, Dan DiMicco runs a \$15.8 billion Fortune 200 steel company. Mr. DiMicco is a member of the board of directors of Duke Energy, the American Iron & Steel Institute, and the World Steel Association. He also served for several years on the United States Manufacturing Council. Nucor is North America's largest steel manufacturer and largest recycler, recycling one ton of steel every two seconds. It operates more than 200 facilities, primarily in the United States and Canada. Through the David J. Joseph Company, Nucor is also one of the leading scrap companies in the United States. Nucor is best known for its breakthrough technological firsts in minimill steel production, electric arc furnaces, thin slab casting for flat rolled steel, and thin strip casting for coiled steel. In 2010, the Harvard Business Review named Mr. DiMicco one of its 100 Best Performing CEOs in the World.

The China Conundrum

*By Steve Angel, Chairman, President,
and Chief Executive Officer, Praxair, Inc.*

China is a conundrum for most U.S. companies. It is hypercompetitive, ever-changing, and opaque from the perspective of the government's true intentions toward the role of U.S. companies in economic development. Nevertheless, it is simply too large to ignore.

The key strategic questions are: how do you play China, and what defines winning in China for your company.

It is interesting that many companies talk about market potential and growth rates, but very few talk about profitability and return on their investment. Perhaps there aren't many companies doing business in China that are earning a satisfactory return on their investment.

We all want a level playing field, but we can't wait for that to happen to get into the game. The important thing is to figure out what we need to do to be successful in China, and then get on with it.

The world is likely to become more competitive, and China, because of its size and growth rates, will continue to be the most competitive market on the planet. It stands to reason that if you can win in China, you can win anywhere. Competing in China forces you to improve every aspect of your business, and that makes you a much stronger global competitor.

The flip side of the argument is that if you opt out of China because of IP concerns, government intervention, high inflation,

retention issues, currency risk, or low ROIs, you run the risk that a Chinese company, or another global multinational corporation that has succeeded in China, will carry that momentum outside of China.

To solve this conundrum, our government should facilitate economic integration between China and the United States so that U.S. firms can be profitable and grow in China. Americans should not be Sinophobic when a Chinese company wants to bring capital investment and jobs to U.S. soil. Moreover, for many U.S.-based corporations, growth outside the United States means an increase in jobs in our country to support that growth. Though this is perhaps a long shot, the ultimate goal between our two countries should be a free-trade agreement. In the meantime, the U.S. government must do everything it can to create a level playing field.

Most important, we should have faith in the ability of Americans and American corporations to compete globally, even in China. U.S. management systems and practices are second to none in the world. As my industry has proven, our ability to drive productivity over the last decade, while other developed countries have remained stagnant or lost productivity, is a testament to our manufacturing prowess. And, our education system is second to none. Educating foreign students in the United States and then forcing them to return to their home countries after receiving the benefit of the best education in the world makes no sense.

Clearly, U.S. multinational corporations have proven to be nimble and adaptable in determining what they need to do to win in China and other emerging economies around the world. The U.S. government must also do its part to help American corporations get access to and fair treatment in all of the emerging markets.

Steve Angel is chairman, president, and CEO of Praxair, Inc., an \$11 billion industrial gases company with 26,000 employees operating in 50 countries. Mr. Angel has been with Praxair for 10 years, and during his 5 years as CEO, Praxair's total shareholder return has doubled compared to a loss of 2 percent for the S&P

500 index. Prior to joining Praxair in 2001, Mr. Angel spent 22 years in a variety of management positions with General Electric. He is a director on the boards of PPG Industries and the U.S.-China Business Council and is a member of the Business Roundtable, the Business Council, and the U.S.-Brazil CEO Forum. Praxair is the largest industrial gases company in North and South America and one of the largest worldwide. The company produces, sells, and distributes atmospheric, process, and specialty gases and high-performance surface coatings. Praxair products, services, and technologies are making our planet more productive by bringing efficiency and environmental benefits to a wide variety of industries, including aerospace, chemicals, electronics, energy, food and beverage, healthcare, manufacturing, metals, and others.

We've Got to Get American Students Hooked on STEM

By Jim Goodnight, CEO, SAS

From mobile apps to social media to analytics, software technology is ubiquitous. SAS is a software and analytics company. Our software technology sifts enormous amounts of data and gives decision makers the means to think strategically and be proactive. In running this business, one of my biggest concerns is people—the supply of highly knowledgeable and skilled software programmers and other professionals needed to run the business and create competitive advantage for SAS.

I am deeply concerned by the dearth of graduates with the expertise to analyze and understand data, and to succeed in other engineering and technology professions as well. Looking across the educational spectrum, there is a serious lack of students embracing science, technology, engineering, and math (STEM) subjects. While I was an easy sell, today's students must be enticed and convinced to begin training early for STEM careers.

The importance of STEM education to American competitiveness can't be overstated. Engineers, scientists, technologists, and mathematicians . . . these are the people that make the breakthroughs that change the world. America's position as the leader in innovation isn't just threatened; we've relinquished it.

In K–12 education, the United States ranks behind 16 other developed nations in science and behind 24 other developed nations in math. This gap creates a shortage of qualified professionals in the STEM careers—jobs that are at the very heart of innovation. According to the National Science Board, of the 4 million science and engineering undergraduate degrees earned worldwide in 2006, students in China earned 21 percent and European Union students earned 19 percent. America? Only 11 percent. In the United States,

about 5 percent of all bachelor's degrees are in engineering, compared to 20 percent in Asia. By 2014, about 2 million jobs will be created in STEM-related fields, according to the *Wall Street Journal*. Where will qualified American talent come from to meet those demands? What can we do to address this challenge?

We must inspire the imaginations of our nation's students and teachers and ensure that all students have access to more advanced coursework, especially in mathematics. That includes bringing:

- *Technology into the classroom.* One-to-one laptop programs, smart boards, and other teaching and learning technologies are important. But the United States needs more. Cloud computing, wired and wireless networking, and asset and data security are key to successfully deploying education technology.
- *Excellence to online curricula.* An online textbook is still just text. Educational websites vary widely in content quality and engagement. Effective online curricula must be interactive and multimedia, and they must promote twenty-first-century skills such as critical thinking, problem solving, creativity, and collaboration. To be most effective, online curricula must be reinforced by teachers and their lesson plans.
- *Greater student access to advanced math coursework.* Eighth-grade Algebra I is a gateway course to STEM education. Analysis of student test data can predict which students are likely to succeed in that course. With the right resources, we can increase the number of students taking Algebra I in middle school and put more of them on a course to a STEM career.

Equally important are policies that support the funding and growth of STEM education from K–12 through higher education. I implore policy makers to make these programs top priority. They are critical to keeping America not just as the leader in analytics, but the global leader in technology and innovation.

As CEO of North Carolina-based SAS, Jim Goodnight runs a \$2.725 billion company that is the leader in business analytics software and services, as well as the largest independent vendor in the business intelligence market. SAS is also a mainstay on Fortune magazine's 100 Best Companies to Work For list in the United States, having been ranked every year since the list's 1998 inception. Under the leadership of Jim Goodnight, SAS helps customers at more than 55,000 sites improve performance and deliver value by making better decisions faster. SAS serves nearly all industries with its cutting-edge analytical products and services, including cloud and high-performance computing and in-database processing, and taking full advantage of the value hidden in unstructured data.

Aligning with China

*By Christopher J. Kearney, Chairman, President,
and Chief Executive Officer, SPX Corporation*

In our company, we never viewed China as a threat. We viewed it as an enormous opportunity. We embraced it. We also recognized that, to be successful, we had to concentrate on growing our presence in emerging markets around the world where the fundamental needs were most apparent and the growth opportunity most compelling. China was at the top of that list. We had to be there, or we risked losing that market to other global competitors.

We staffed our China organization with experienced people who understood the end markets and knew how China worked. Our leadership organization was staffed largely with Chinese nationals, and our growth was almost entirely organic. Our initial success was in power infrastructure. We owned a critical technology that China needed if it was to solve the challenges associated with cooling new power plants. Most recently, we entered into a strategic joint venture with Shanghai Electric Group to expand the marketing of our infrastructure products and increase our power sector presence in the region. We believe Shanghai Electric's strong relationships among utilities, power plant builders, and the engineering procurement companies that play a critical role in awarding power project contracts will help us compete more effectively for future infrastructure project opportunities in China moving forward.

Our other businesses in China have also flourished in recent years. In fact, our food and beverage business, which provides

engineered systems and components for processed food plants and dairies, is now our largest business in China. Our vehicle diagnostics and essential tools business is a global market leader, and has been developing a vehicle service network in China that increasingly resembles the dealer service networks in the developed markets of the world.

From 2005 through 2010, our revenues in the emerging markets of the world doubled, from \$600 million to \$1.2 billion. In 2010, sales into China represented more than 40 percent of our emerging market revenue and 10 percent of our total company revenue. We now have 13 manufacturing facilities and more than 3,000 employees in China. Our profitability there is commensurate with our profitability in developed markets. Our workforce in China is among the most dedicated and loyal in the world. Although certain concerns over intellectual property protection are legitimate and must be carefully evaluated, this issue has not prevented us from moving forward. Rather, the competitive nature of doing business in China has caused us to raise our game, sharpen our focus, and appreciate the speed at which the world moves.

So what is the message here? How can an American company's success in China be good for American workers and the American economy? The message may be counterintuitive, but consider this: the world has become a much smaller place than it was 20 years or 50 years ago. Businesses of all scales, whether they realize it or not, compete with China and other emerging markets. We understood that, if our company was going to succeed, we had to compete and win globally. That meant competing successfully in China and in the other important emerging markets of the world.

Competing in those markets sharpens our game and makes us better. It drives innovation. Those successes translate to other markets and create opportunities, including here at home. Our ability to be successful in markets that are growing (China) helps sustain us while other markets remain challenged (the United States).

We do not view China as a threat. It is an opportunity. Every company's circumstances may be different; every challenge may be

unique. Figure out how to position your company for success in China, and then go do it. China will be a dominant player in the world economy forever going forward.

As chairman, president, and CEO of North Carolina-based SPX Corporation, Christopher J. Kearney runs a \$6 billion, Fortune 500 multiindustry manufacturing leader with operations in more than 35 countries. He currently serves on the board of directors of Nucor Corporation. SPX has evolved from a parts supplier to the early automotive industry to its present status as a leading global manufacturer of diverse solutions serving the power and energy, food and beverage, vehicle and transit, infrastructure, and industrial processes industries, as well as many others. Under the leadership of Mr. Kearney, SPX narrowed the scope of its acquisition strategy. The company completed a number of key acquisitions that expanded its global footprint and reflect the company's increased focus on three strategic end markets: global infrastructure, diagnostic tools, and process equipment.