

# MANUFACTURING & TECHNOLOGY NEWS

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## The Free Trade Debacle: Domestic Manufacturers Vs. Multinationals

*POLITICIANS DON'T UNDERSTAND  
Textile Maker Copland Industries  
Says Multinationals Are Killing  
The U.S. Economy*

The federal government no longer represents the interest of U.S. manufacturing companies and their workers, instead siding with the Communist Chinese government that is putting hundreds of thousands of Americans out of good paying jobs, according to James Copland, chairman of Copland Industries/Copland Fabrics of Burlington, N.C. "The U.S. government's policy is creating millions of jobs all right, but it is creating them in the People's Republic of China and Vietnam at the expense of hardworking Americans here at home," Copland told a congressional hearing. "Our country should be ashamed — totally ashamed — of what our government has done to working people in America."

The U.S. government recognized problems with the communist Soviet Union, "but for some reason it fails to see it with China," Copland told a hearing of the House Science Committee's subcommittee on oversight and investigations on May 22. U.S. government free trade and manufacturing policies are the reason for the current economic slump and the gloomy attitude Americans have about their economic prospects. U.S. manufacturing "is in the midst of a crisis unprecedented since the Great Depression," Copland said.

"Deeply flawed U.S. trade policy toward domestic manufacturing is the single most important root cause of the illness. Every American deserves the right to provide for his family, to own a home and to educate his kids, but our flawed manufacturing and trade policies are taking this away," Copland told members of Congress. "Our

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*AMERICANS ARE MISINFORMED:  
Caterpillar, Deere & NAM  
Say Multinationals Are Saving  
The U.S. Economy*

The free-trade policies of the past 30 years are receiving unjustified negative and misleading criticism that needs to be countered by the multinational companies, according to a panel of multinational company CEOs at a conference sponsored by the U.S. Department of Commerce. These companies are employing thousands of Americans who are direct beneficiaries of the trade agreements, and their story is not being told.

Large manufacturing companies operating on a global scale have failed to articulate "a win/win situation" associated with free trade, "thus leading to the conundrum we find ourselves — in that the data is good but consensus behind trade has evaporated," said John Engler, president of the National Association of Manufacturers, who presided over the Commerce Department panel on free trade agreements at the 2008 National Summit on American Competitiveness held in Chicago on May 22. "How do we get the story told?"

Engler's question was directed at James Owens, chairman and CEO of Caterpillar, who replied: "That's a mystifying thing to me. Trade has been demagogued in the political arena to a very disconcerting extent of late." With only 5 percent of the world's population "if the United States takes a reversal of course inward and [becomes] protectionist in the next administration I think it will be one of the most tragic political mistakes in our history, at least since the '30s," said the Caterpillar CEO.

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# As Federal Government Reduces R&D Investment, States Must Fill The Breach

Massachusetts and Maryland are the two best states in the country for support of science and technology. West Virginia and Mississippi ranked in last place, according to the Milken Institute's latest "State Technology and Science Index; Enduring Lessons for the Intangible Economy."

With the federal government reducing its spending on research and development, the states need to step into the breach. If they don't, they risk losing employment not only to states that have embraced a high-tech, high-wage economy, but countries and regions "that are making huge investments in technology and science," says Milken. "Increasingly the main threats to any state's position in the intangible economy emanate from abroad, particularly from China, India, Singapore and other developing countries in Asia. The Scandinavian countries are also rivals in particular high-tech fields. The nation as a whole is on the cusp of losing vast amounts of intellectual capital overseas, even as manufacturing jobs continue to dwindle. Many expatriates are returning to their native countries, drawn by expanded business opportunities at home."

State economies will suffer as international graduate students stop enrolling in U.S. universities, especially in the physical sciences, computer science and engineering. "This was an unintended consequence of post-9/11 restrictions on student visas that were instituted in the name of national security," says the study. "Other leading universities around the world are successfully competing for top talent, recognizing that this situation presents them with an opportunity to attract the most gifted students. The overseas brain drain will force states to more effectively utilize their existing assets and compete to draw both human and financial capital from other states. This challenge becomes even more complex in the face of diminishing federal and private funds to help foster growing businesses."

The states on the bottom of the science and technology rankings have a lot to learn from those at the top and those that are rapidly moving up the list. North Dakota had the highest level of improvement due to increased state investments in biodiesel, cellulosic ethanol, clean coal technology and wind power.

"When comparing performance in the 2004 and 2008 editions of the 'State Technology and Science Index,' the most troubling picture emerges in Ohio, which tumbled 12 spots down to 36th place overall," says the study. "The cause of this slippage is complex and extensive. Ohio has long been a hub of traditional manufacturing and industry, but as those jobs continue to disappear, a new approach is needed...Ohio will need to continue to shift its focus away from assembly-

line work to the creation of high-skill, value-added niche products in order to successfully compete in the new knowledge economy."

Ohio has also been hit hard by the battle over the state's electricity regulatory system, which has proven to be a "costly drag on the economy, as companies choose to base themselves in more friendly states." The

battle has also deterred international investment "at a moment when Ohioans need jobs."

California is also struggling to deal with the new global competition for knowledge resources. It has started a \$49.7-billion "Strategic Growth Plan" aimed at improving the educational system, but it faces a massive budget deficit that could lead to major cuts in education. "It remains to be seen whether the state can navigate this budget crisis without damaging its long-term goals for education and training the knowledge workers of the future," says the study.

The top 10 states in the Milken index are Massachusetts, Maryland, Colorado, California, Washington, Virginia, Connecticut, Utah, New Hampshire and Rhode Island. The bottom 10: South Dakota, South Carolina, Wyoming, Alaska, Nevada, Louisiana, Kentucky, Arkansas, West Virginia and, in last place, Mississippi.

The 59-page report is located at <http://www.milkeninstitute.org/pdf/StateTechScienceIndex.pdf>.

## *Venture Capitalists Invest In Manufacturing Company*

A Naples-Fla.-based company that has engineered a process that takes used tires and creates an ultra-fine rubber powder has secured \$34.5 million from a group of venture capital firms to scale up its manufacturing plant.

Index Ventures and Kleiner Perkins Caufield and Byers led the investment into Lehigh Technologies Inc., to fund the company's continued growth. Its powders from recycled rubber are being used to replace virgin materials in auto parts, building materials, carpeting, paints, coatings, plastics, consumer products, rubber goods, tires and a number of other industrial products.

"This is our first pure-play greentech investment," said Neil Rimer, partner and co-founder of Index Ventures. "We selected Lehigh because the company solves a major environmental problem with a product that offers a compelling value proposition to large users of natural and synthetic rubber."

A total of 300 million tires are scrapped each year in the United States, accounting for about 6 billion pounds of rubber. Lehigh's plant is producing 100 million pounds of rubber powder per year. Right now, about 30 million tires currently on U.S. roads are using Lehigh powder. The global market for recycled rubber powder is projected to exceed four billion pounds per year. "We see this as a truly global opportunity and are impressed by the scalability of Lehigh's operations," said Rimer.

## To Revive Mfg., Bank Proposes Carbon Tax On Chinese Imports

Imposing a carbon tax on Chinese imports would lead to a resurgence of the U.S. manufacturing industry, according to a report from Canada's largest banking firm, CIBC World Markets. A carbon tariff on imported goods, "may be the only way developed nations will be able to achieve real cuts in global greenhouse gases," says the firm.

The United States and other developed nations are rejecting carbon reduction programs because China and India would be exempt, providing their companies with an unfair advantage.

"As OECD countries begin to tax their own economies by charging growing fees on CO<sub>2</sub> emissions, their tolerance of the carbon practices of its trading partners will diminish rapidly," says Jeff Rubin, chief economist and chief strategist at CIBC World Markets. "Particularly when the painful cuts made by North America, Western Europe and a handful of other OECD economies are dwarfed by the emission trail spewing from China and the rest of the developing world."

Other than moral suasion, which is likely to fall on deaf ears, "the OECD's only leverage is through trade access," Rubin argues. "The response is likely to involve a carbon tariff — an equalizing force that will tax the implicit subsidies on the carbon content of imports that come from carbon non-compliant countries."

China is now the world's largest emitter of carbon, producing more than 21 percent of the global total, and 90 percent of the 6 billion metric tonnes of growth of carbon emissions since 2000 are from China.

A cap-and-trade system in the United States would reduce carbon emissions in the U.S. by 10 percent, but would reduce U.S. GDP by 0.6 percentage points. Such a system will make U.S. manufacturers less competitive against Chinese companies, which produces one-third more carbon emissions per unit of energy consumed.

By slapping a \$45 per tonne cost onto CO<sub>2</sub> emissions, a tariff would raise roughly \$55 billion a year from Chinese exports to the U.S.," says CIBC. Such a tariff would increase consumer price inflation by 0.6

percentage points. "At some point, however, the inflationary impact might be mitigated as either domestic production replaces some Chinese imports or sourcing is shifted to a less egregious emitter than China," says CIBC. Given the overall energy inefficiency of the Chinese economy, a carbon tariff, coupled with triple digit oil prices, could redefine the meaning of Chinese competitiveness. "For many industries, what will count is how energy efficient they are, and how carbon efficient they are in their use of energy. On both counts, China and the rest of the developing world are hugely disadvantaged. As a result, China's wage advantage would be lost for many energy-intensive industries, some of which will then look to return home to North America."

Rubin says Chinese exporters of chemical products, with their "astronomical" energy intensity

factor, will be the first to see their businesses migrating back. "In fact, chemical exports from China to the U.S. are already slowing down notably, with shipments in the past two years rising by only half the pace seen in the first half of the decade."

Next would be non-metallic mineral products (cement, glass, lime, etc), with energy intensity 130 percent higher than the Chinese industrial average, along with printing, primary metal manufacturing and machinery industries.

"With OECD's carbon tolerance diminishing with every tonne of CO<sub>2</sub> spread into the atmosphere by non-OECD countries, environmentalism will soon become a significant barrier to trade," says Rubin. "A carbon tariff imposed by the U.S. on emissions embodied in Chinese exports would not only abolish the implicit subsidies on the carbon content currently enjoyed by Chinese exports, but it would be large enough to start reversing current trade and offshoring patterns."

The CIBC report is available at [http://research.cibcwm.com/economic\\_public/download/smar08.pdf](http://research.cibcwm.com/economic_public/download/smar08.pdf).

## High-Impact Firms Drive Growth

"High impact" firms make up less than 5 percent of all companies in the United States, but they account for nearly all new jobs and growth in the economy, according to the Small Business Administration's Office of Advocacy. These firms are distributed throughout every industrial sector, had fewer than 20 employees and average 25-years in age. "They are not predominantly high tech, and they exist in every region of the country," says Brian Headd, an economist with the SBA.

By comparison, low-impact firms with more than 500 employees account for nearly all job losses in the economy. "Low-impact firms do not grow on average," says the SBA study "High-Impact Firms: Gazelles Revisited."

Local economic development officials should use the findings to their advantage. These agencies "would benefit from recognizing the value of cultivating high-growth firms versus trying to increase entrepreneurship overall or trying to attract relocating companies when utilizing their resources," says the SBA.

High-impact firms with more than 500 employees average \$286,000 in revenue per employee, compared to low-impact firms of \$204,000 per employee. High-impact firms with between 20 and 499 employees average revenue of \$225,000 per employee, versus \$116,000 for low-impact firms. And high-impact firms with fewer than 20 employees average revenue of \$99,000 per employee, compared to \$86,000 for low-impact firms with the same number of workers.

States with the highest ratios of high-impact firms are Alaska (2.76 percent of all companies); Arizona (2.57 percent); Wyoming (2.55 percent);

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## Domestic Manufacturer... (Continued from one)

Constitutional preamble says 'a government of the people, by the people and for the people.' We have forgotten about the words 'for the people.'

Copland's company is competing against Chinese companies that don't have to pay workman's comp or provide workers with unemployment insurance; that don't have to deal with EPA or OSHA regulations; that pay no overtime, provide few benefits and abide by no child labor laws; and that receive untold government subsidies and benefit from a currency that is at least 30 percent undervalued. "This is an impossible task," said Copland. "No manufacturer can compete when your competition is a foreign government determined to spend whatever it takes to force you out of the market, and the U.S. government does nothing about it."

While Congress and the Bush administration rattle on about the importance of free trade agreements and refuse to adopt anything resembling a pro-American manufacturing policy, millions of Americans' lives are in economic turmoil. "Their jobs are being moved overseas and they can't get other jobs," said Copland. "Don't think there are high-tech jobs available for those folks, because there aren't. They are being shipped to China and India too. If those who were laid off are lucky, they have landed jobs flipping hamburgers or as a greeter at some retail store. People are angry now, and when they connect the dots — and they are going to connect them — they are going to know where to focus their anger."

Copland Industries/Copland Fabrics makes man-made fiber curtains, draperies and blinds. Since 2001, U.S. imports of these products from China have increased by 6,912 percent, from 845,000 kilograms to 59 million kilograms in 2007. This surge of Chinese imports "has been like a nightmare [that] we have had to face," said Copland.

China accounted for almost 107 percent of the total U.S. growth in imports for curtains and draperies between 2001 and 2007, "meaning

the rest of the world actually lost U.S. import market share," Copland noted. China now holds 90 percent of the U.S. market for man-made curtains compared to 7.8 percent market share in 2001. "The total market today is 98 percent offshore goods," Copland said. "A flood of imports from China in products like the ones for which we used to make fabric is one of the main reasons why my home town of Burlington has lost nearly 40 percent of its manufacturing jobs since 2001." Chinese finished curtain prices sold in the United States are less than Copland Industries' cost of materials.

Copland Industries has stayed in business by "picking up the pieces when our competition goes out of business," said Copland. "We pick up a piece and, believe you me, just as soon as you get into it, here come the Chinese again. We look constantly for something that the Chinese are not doing, that they haven't focused on yet. We are looking constantly for something that may have some natural barrier to them coming over here, but remember, everybody in our industry is doing the same thing, everybody. There have been 550,000 jobs lost in my industry since 2001 alone." Copland Industries has reduced employment from 1,000 to less than 300.

Hundreds of mills have been closed in the Carolinas due to the surge of imports from China. "There are small towns where stores are closed with weeds growing up around them," said Copland. "But you know it is really bad when you see the churches closing. Someone needs to think about the hard working people and what is happening to them. The big multinational companies, the importers and big retailers have exactly what they want. They couldn't have written a book and had it more perfect for their world: buy at the China price, sell at the U.S. price and don't worry about whether the average American has a job or he or she can make ends meet. Their world is not what is good for America.

"I will tell you that if this thing doesn't stop there will be no survivors. We will not have any manufacturing in the United States. When these plants are closed down, they are closed. If you don't run the equipment and keep it up, it deteriorates to nothing, but the equipment is being sold. Pakistan is buying the equipment. People are selling it for five cents on the dollar.

*"You know it is really bad when you see the churches closing. Someone needs to think about the hard working people and what is happening to them."*

Nobody wants it. And let me tell you what is happening to the buildings themselves. I was just down in Joanna, South Carolina, a huge mill down there has been closed for five years. They are tearing down the mills. Why? Because they are going to sell the bricks, guys. They are going to sell the beams. So don't think that you are going to be able to say, 'Oh, boy, as soon as this thing is over, here we come back, it is going to be regeneration.' "

Copland told the politicians that they don't understand how profoundly the economy is being impacted by Chinese imports. Politicians talk about the sagging U.S. economy and home foreclosures, "but what they haven't realized yet is that people don't have any money," said Copland. "The reason they don't have any money is because they have lost their jobs or they now have jobs making a fraction of what their pay was before their jobs were exported. If people had their manufacturing jobs, they wouldn't have the economic

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## Domestic Manufacturer...

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problems and financial problems we now have.”

Fifty million Americans are without health insurance because so many good jobs that provide health care have been exported due to “our flawed trade agreements,” Copland told the subcommittee. As long as the federal government refuses to adopt a manufacturing policy, “the United States will have much more difficulty ameliorating the pain an economic recession will inflict on its citizenry in a timely manner.”

U.S. government officials talk glowingly about the Central America Free Trade Agreement (CAFTA), but CAFTA is causing the loss of thousands of U.S. jobs, Copland told the Congress. “It sounded like a good idea, everybody is going to be okay, but they left a loophole — and it’s the loopholes that get us so many times. The negotiators don’t even know that the loopholes are there because they are some political appointee that hasn’t done it but for about three or six months or they have been out of college for about a year, and they don’t even know the loopholes are there. If they do know, woe be to them. Let me tell you something” Copland said: “They had a deal in [CAFTA] to where they could take the pocketing for trousers — that doesn’t sound like much. But pocketing is a 180-million-yard business in the United States. They had it in the agreement and then said, ‘Well, you know, we are going to make an exception on pocketing and we are going to let these Central American countries make this stuff out of Chinese cloth.’ The Dominican Republic wanted that. They gave it to them. We pointed it out and said, ‘Look, you are going to destroy the industry.’ ‘Oh, no, don’t worry, we are going to fix it, we are going to fix it.’ That was three-plus years ago, folks. It hasn’t been fixed. There has been nothing done. Let me tell you the end result of that thing. Eighty percent of the market is gone, and it is gone folks. Haines Finishing Company in Winston-Salem closed down 75 percent of its business. Allis Manufacturing Company closed down four plants in South Carolina. Mount Vernon lost 70 million yards worth of business and closed plants in Rome, Georgia, and in Texas.

“We have got to start paying attention to what we are doing with these trade agreements. We have to get some people who know what they are doing with these trade agreements. We are being out negotiated. We better start paying attention to what we are doing because let me tell you something, we are exporting the wealth of this country as fast as we can export it. It is going offshore. We are going to pay one tremendous price in this country.”

## Tourism Benefits From Falling Dollar

The sinking U.S. dollar is providing a boost to the U.S. tourism industry. International travel to the United States increased by 15 percent during the first quarter of 2008 to 11.4 million visitors, and visitor spending rose by 20 percent. In March, 4.7 million international visitors came to the United States, an increase of 19 percent over March 2007. Those visitors spent a record \$11.4 billion, according to the U.S. International Trade Administration.

Visitation from Canada was up 26 percent for the month of March to 1,979,108, while travel from Mexico was up 31 percent to 671,392. Arrivals from the United Kingdom (401,629) were up by 3 percent in March.

“Visitation from other top Western European markets all increased by double-digits for the month of March 2008,” says ITA. Visitors from Germany (163,336) were up 20 percent; from France (72,398) up 11 percent; and from Italy (49,997) up by 36 percent in March, compared to the year before.

Visitors increased from the Netherlands (37,821 up 17 percent), Spain (57,157 up 48 percent) and Sweden (37,783 up 25 percent).

But not as many people were coming to America from the Middle East. Travel from that region during the month of March decreased 9.2 percent to 43,835 visitors. The report is located at <http://www.tinet.ita.doc.gov/view/m-2008-I-001/index.html>.

## Automation Group Broadens Its Appeal

The Open Modular Architecture Control users’ group has adopted a new name in an effort to broaden its appeal to more manufacturing companies. The group, based in Research Triangle Park, is now known as the Organization for Manufacturing Automation and Control (OMAC). It is “dedicated to supporting the machine automation and operational needs of manufacturing.” The group is undertaking a corporate membership drive. “As the new name implies, the potential membership base has dramatically increased to include a broader audience,” says OMAC, located on the Web at [www.omac.org](http://www.omac.org).

## Forecast For Global Energy Consumption

World energy consumption should increase by 50 percent between 2005 and 2030, “driven by robust economic growth and expanding populations in the world’s developing countries,” according to the latest projections from the Department of Energy’s Energy Information Administration.

Coal’s share of world energy use “has increased sharply over the past few years, and without significant changes in existing laws and policies, particularly those related to greenhouse gas emissions, robust growth is likely to continue,” says EIA in its latest “International Energy Outlook 2008.” Coal accounted for 27 percent of world energy use in 2005, up from 24 percent in 2002, due mostly to increased use in China. Coal consumption in China has nearly doubled since 2000. Coal use is projected to increase by 2 percent per year between 2005 and 2030.

Nuclear generating capacity is projected to increase from 374 gigawatts in 2005 to 498 gigawatts in 2030. China is projected to add 45 gigawatts of net nuclear capacity by 2030, followed by India at 17 gigawatts, Russia at 18 gigawatts and the United States at 15 gigawatts. Renewable energy use is expected to increase by 2.1 percent per year between 2005 and 2030.

EIA’s projections historically have been very close to reality. The report is located at <http://www.eia.doe.gov/oiaf/ieo/index.html>.

# Multinationals... *(Continued from page one)*

Only one speaker of 22 during the day-long competitiveness summit raised any issues regarding unfair trade practices by foreign competitors, and that was Michael Porter of the Harvard Business School. The taxpayer-supported conference did not have any representatives presenting from the labor or domestic manufacturing communities.

Later in the panel discussion on free trade agreements, Engler returned to the theme of the public and politicians not understanding the benefits of the system as it now exists. "I think the data is compelling, the case can be proven with statistics and data. How do we get back on offense?"

Owens relayed a meeting he had at the Business Roundtable with

three unnamed Democratic congressional representatives who support the Colombia Free Trade Agreement. "They said, 'What you corporate executives don't realize is that at least certain segments of American society have declared war on trade, and you're still trying to win the argument on the basis of logic, statistics, economics [and] facts, and it isn't working very well.' When you look at the polls in the country you see that the vast majority of the American public thinks that we're worse off because of trade and, clearly, all the statistics won't support that," said Owens.

"Our politicians are essentially playing for votes. As a business leader who spends a fair bit of time talking to people in Washington and trying to encourage them to support

global competitiveness and international engagement, I can tell you a lot of congressmen and senators say, 'I understand, but the people back home, the people voting for me, are vehemently opposed to trade. It's a hard sell back home.'"

One way of dealing with the misinformed masses is by having the Bush administration and Congress agree to a more robust trade adjustment assistance program aimed at retraining displaced workers, Owens suggested. Even the "arch conservative" Business Roundtable has "recognized we need to do things to be sure American workers have the opportunity to be retrained and employable," said Owens. "I think as American companies we have to get out and do a better job of helping the American public understand that we can compete and win in the global marketplace and it's vitally important to our country. We will not be a great country in 20 years if we go the protectionist route."

Caterpillar's overseas sales accounted for 63 percent of its business. "I tell people if you want to protect me and help me by sheltering me from [foreign] competition, I can sell you a lower-grade tractor at a higher price. If you like that you ought to like protectionism."

Owens said the North American Free Trade Agreement, which was criticized by the Democratic presidential hopefuls in the industrial Midwest, "has been spectacularly good for North America since that agreement was signed." The United States, Canada and Mexico "have enjoyed dramatic GDP growth and acceleration of GDP growth. Real wages in the United States are half a percent higher during the period since NAFTA was signed in 1993. These are facts that people can get to," said Owens. "It's really disappointing how far our political rhetoric has deteriorated and how we're flirting with danger when we think about turning protectionist."

Rick Goings, CEO of Tupperware, said Mexico blew it by not taking a long-term view of its economic potential after NAFTA was signed in 1993. NAFTA had a positive "short-

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## NAM President: Labor Movement Uses Trade Issue To Attract Members

The United States labor movement should be backing a strong free-trade agenda for the benefit of its members, but labor has strategically positioned itself to be on the wrong side of the issue, according to John Engler, president of the National Association of Manufacturers. Engler has an inkling as to why that is.

"It strikes me that [with] labor having been around politics a long time, that there are other agendas underway here — such as winning political power to do things like card check and other kinds of agenda items," Engler told the 2008 Summit on American Competitiveness in Chicago organized by the U.S. Department of Commerce. "It is hard to believe that even the labor leaders truly believe that trade is bad, but trade maybe simply is a convenient issue to tee up to achieve political power to do other things."

Unionization has declined to less than 8 percent of the private-sector workforce, Engler pointed out. Labor leaders are using the anti-trade sentiments "to bring other members in" to the labor movement, particularly "as dues revenues dry up for unions themselves."

Engler asked the CEOs of Caterpillar and John Deere whether the union leaders in their companies would provide vocal support for the free-trade agenda, given that exports are good for Caterpillar's employees. "Is there anything that we — we being the greater business community — could be saying to labor...in your respective companies to help them balance the conversation some? Are they able to do that? Can a local [labor] president speak up for the company, not for the union?"

Caterpillar CEO Jim Owens wasn't willing to tackle the question. "We had our share of challenges with organized labor in the union, but at Caterpillar, we're absolutely focused on employees and creating a terrific team effort," he said. "We tried to give a tremendous amount of emphasis to your point, governor, to our employees in places like Aurora, Decatur and East Peoria here in the state of Illinois...I leave it to them to challenge the organized labor leadership, which is vehemently opposed to trade agreements, which if they were to get the trade agreements blocked or turned inward, would cost them their jobs..."

Robert Lane, CEO of Deere & Co. replied: "We're doing the same thing."

## Multinationals...

(Continued from page six)

term effect," but Mexican President Vicente Fox "didn't do a real good job of ramping up the skill base," said Goings. "When all of a sudden the borders opened and all these [jobs] were created for assembly and sending [products] back to the United States, they didn't invest what they needed to in building the skill base of Mexican workers. So you go down there now and what are they complaining about? Losing their jobs to China. All you have to do is follow Nike's pattern over the last 25 years: Korea, China, Vietnam. You just keep following

that low labor cost — you just keep following that dragon. Unless you build in these countries an infrastructure and a skill base, they may have a short-term advantage, but it won't last."

Mathew Slaughter, professor of international economics at the Tuck School of Business at Dartmouth, said there is a "wealth of information" supporting the current system of free trade, "and it's not just kind of fancy models that [are] put together — the companies' stories are so compelling."

Slaughter said that economists "can't reach a conclusion" on most any subject, but that "there is one issue that almost to a person every

economist agrees on: that's the benefit the United States and other countries get from having open borders and a regime of free trade and investment." Slaughter, a member of President Bush's Council of Economic Advisors from 2005 to 2007, added that there is an "irony" that economists "to a person believe that free trade is great but that we have this political dynamic right now that's quite different from that. There is a wealth of evidence that academics have put together to show the benefits that global engagement generated for countries like the United States."

Thanks to trade, U.S. national income is about \$1 trillion higher "than otherwise if we hadn't had the trade investments over the past four years," said Slaughter. "So the average American family, the benefits related to that foreign investment are really important. It's [more] choice in consumer variety. It's the good jobs at good wages. We know that the best companies in America are globally engaged companies. Companies involved in exporting and related to that foreign investment tend to do more capital investment, more investment in people, more research and development. The bottom line is for families supported by those companies, they have higher paychecks. So we have a lot of great stories from our companies and the data are just very, very clear in the large benefits that get generated for the U.S. overall."

None of the panelists mentioned the U.S. trade deficit.

Owens said politicians need to have the candor to tell the American public "that the competition needs to be looked at as something to embrace. To have competition can be fun. That doesn't mean it's easy, but I think we need to take it on."

He also said that most of Caterpillar's U.S. suppliers "are against trade," and that if the United States Congress does not ratify the pending Free Trade Agreement with Korea, that those companies and their employees will suffer the consequences. "It won't kill Caterpillar because we're manufacturing in that theater and developing suppliers in that theater," he said. "We'll be okay."

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## Porter: Unfair Trade Plays A Role In Declining U.S. Competitiveness

Harvard Prof. Michael Porter was the only speaker among 22 presenters during the day-long "Competitiveness Summit" sponsored by the U.S. Department of Commerce to raise concerns about trade. He said that China's trade practices need to be confronted, but that the United States has lost its moral authority to do so.

One of the most important exports from the United States is intellectual property in the form of advanced services, knowledge, ideas and software. China's almost complete disregard for intellectual property protection has become "a threat to us," said Porter. "We're buying their goods, but [China] isn't buying the intellectual property." It is costing the United States economy tens of billions of dollars.

Two-thirds of the software being used in China today that was produced in the United States was stolen. "I'm on the board of another large company — I won't name them," said Porter. "Our major competitor is Chinese and their local government in their town built their factory for them for free. Oh, I'm sure they called it a loan, but it's not a loan. They don't have to pay anything, okay? The thing that scares me about China is not that we can't compete, but that the international trading system now is not working for an economy like ours."

China is using its unfair trade regime to hoard hundreds of billions of dollars of capital while the United States experiences a savings "crisis," said Porter. "We have other countries with really more capital than they know what to do with and what are they doing? They're pouring it into all kinds of assets that we are not really making."

The U.S. has stopped investing in its infrastructure because it is "starved for capital." The United States has to borrow rather than save "partly because of distortions of the international trade system are piling up capital" in countries that are cheating. "That's what actually concerns me, not our...free-enterprise mindset but that the system has kind of fallen out of alignment with the kind of economy that we have become and I think that puts us at some risk," said Porter.

The United States should be reestablishing itself as a leader in the international trading system to deal with this situation, but "we really lost our influence, we lost our clout, we lost our moral authority, we lost our capacity to actually nudge countries into open trade in advanced services, to tackling fundamentally intellectual property protection. We've made all kinds of mistakes. The U.S. hasn't really had the strategy or the focus or the moral authority to lead in terms of the international economy and the shape it takes," said Porter.

## Multinationals...

(Continued from page six)

But exports from the United States to the Korean market will be impacted, along with the companies providing “the components that go in my tractors that go to Asia today,” he added.

Engler explained what this meant to American suppliers, many of whom are his own members: “So the impact on the supplier base is interesting,” he responded. “If you [Caterpillar] have to relocate the manufacturing, many suppliers aren’t global themselves and they can’t — they won’t — come [to those new manufacturing locations] or you’ll have new suppliers in those other markets, which means, then, that they [U.S. suppliers] have more competitors in the future, even for back here, I presume.”

Americans only have to look at the experience of East Germany prior to the fall of the Berlin Wall to see the results of a protectionist economy, said Rick Goings. It is costing Germany a trillion dollars to reintegrated East Germany into the global economy because protectionism “beat creativity out of the East German economy, the culture — no reinvestment in plant and equipment,” he said. The short-term protectionist/isolationist sentiments of U.S. politicians needing to get elected in regions that are suffering from trade dislocation are hurting the long-term economic growth potential of the country, he added.

Engler was curious as to whether the high corporate tax rate in the United States was stopping U.S. multinationals from repatriating profits they earned in their overseas operations. “How much does that law by itself actually mask some of the benefits of trade and liberalization?” he asked.

Owens said the tax “is absolutely crazy.” Caterpillar has about half of its production capacity and employees outside the United States. “Today, if China gives a tax holiday for encouraging investment, and a U.S. company invests there, we get a duty break temporarily, but when we bring the money back to the United States, we top it up to the U.S. corporate tax rate,” he said. “Whereas our Japanese and European competitors, they’re not taxed universally. They’re taxed where they sell and earn the profit. So that encourages all American multinationals who earn money abroad to keep the money abroad which means they’re likely to do more R&D abroad to spend the money instead of bringing it

back home and doing the R&D on our own shores.”

Treasury Sec. Paulson has tried to address the high corporate tax issue by bringing in academic tax experts from all political persuasions, all of whom agree “we’d be far better off to change the tax law,” said Owens. “But I don’t think the populist sentiment is going to let it happen. Facts and data don’t seem to matter here.”

The United States can no longer just think it will be a dominant power with its current investment, tax and trade strategies, said Engler. “We’re out of sync on all this stuff and it’s not a shared view that we actually have to compete. We’re resting on yesterday’s glory.”

## Small Business Firms Fuel Trade Growth

Small companies have a lot to gain from free trade and recent protectionist sentiments have no “rational foundation,” says a report from the Small Business & Entrepreneurship Council, based in Oakton, Va. “The U.S. economy cannot grow and small firms cannot create jobs and flourish without trade and access to global markets,” says SBE Council president Karen Kerrigan.

The group’s report, “Trade, the Economy and Small Business,” points out that small- and medium-sized companies account for 99 percent of the growth in exporting firms in recent years; that growth in real total trade accounted for 49 percent of real GDP growth from 2000 to 2007, and that U.S. exports have more than doubled as a share of GDP since 1960. There have been “tremendous economic benefits [resulting] from NAFTA, including a 236 percent increase in U.S. goods exports to Mexico from 1992 to 2007, compared to inflation running at 39 percent over the same period,” says the study.

“The politics of trade is getting ugly,” says SBE Council chief economist Raymond Keating. “Delaying the vote on the Colombia trade accord, talk of reworking NAFTA, allowing trade promotion authority to lapse, for example, have nothing to do with sound economics. Instead, it’s all about feeding economic ignorance and pandering to special interests.”

The 12-page report, “Trade, the Economy and Small Business,” is located at <http://www.sbecouncil.org/>. The 15-year-old group has 70,000 members.

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# As Money For Young Researchers Dries Up, They Give Up

Fewer young researchers able to push beyond the envelope of known science and technology are receiving funding, and they are spending more time writing grants than doing research, according to the American Academy of Arts and Sciences. The United States science enterprise has veered off course and is funding too many old researchers, says the academy, created in 1780. It is essential for the United States to invest in young scientists "and transformative research in order to sustain its ability to compete in the new global environment," according to a 69-page study entitled "Investing in Early-Career Scientists and High-Risk, High-Reward Research."

"Today's early-career faculty will be responsible for our country's future science and technology discoveries and for the education of our future Ph.D.-level scientists and engineers," says the study. "Yet they face greater obstacles than their more senior colleagues in securing research grants to inaugurate what should be one of the most productive stages of their careers. Time spent submitting repeated grant applications is a distraction for the research endeavor itself and poorly utilizes the potential of this highly creative resource."

Young researchers are being discouraged to push the boundaries of knowledge by "conservative thinking in agencies and during peer review" of grants written by them. Young researchers are not taking risks. " 'Don't put it in your grants unless you know it will work' too often guides early-career and established researchers," says the Academy.

It's tough to get a research grant. The average age of a first-time awardee of a grant from the National Institutes of Health is 42.4, "and rising," says the academy. In 2007, the funding rate for first-time grant applicants was 18.5 percent, compared to established investigators, which was 26.1 percent.

"The odds of getting started successfully seem to be diminishing even as the U.S. needs for fresh ideas that can advance the nation's future leadership and its prosperity in a more competitive world are growing," says the report.

It's also tough for first-time awardees at the National Science Foundation. Funding rates at NSF "have decreased for all investigators, while the funding rate for new investigators is significantly below that of previously funded investigators," says the report. Funding rates for new investigators fell from 22 percent in 2000 to a lowly 15 percent in 2006, while funding rates for established investigators fell from 36 percent in 2000 to 26 percent in 2006.

"One-half of new investigators never again receive NSF funding after their initial award," the academy notes. "For new investigators who received awards in 1995 and 2000, 50 percent or fewer still had NSF funding three years after the initial award, with three years being the typical length of NSF grants. Four years later, only 40 percent still held NSF funding." Most new investigators "do not secure a second grant to sustain their research."

New investigators spend more time submitting proposals than older investigators. They submit double the number of proposals than those submitted by older investigators. "From 1997 to 2006, new investigators accounted for 40 percent of proposals received even though they accounted for only 22 to 24 percent of the principal investigators submitting

proposals," says the report.

If they do get an NSF grant, it is "still too small to sustain a single researcher's laboratory equipment, students and staff," says the study. "Multiple awards from several sources remain the norm."

The NSF is also not making awards for "transformational" research. "Historically, the DOD, the DOE and industrial laboratories of the past have taken a longer-term view of science funding than the NSF," says the academy. "As a result, the longer-term scientific research support needed to develop the maser, the laser and the transistor did not come from NSF funding but from ONR, the Air Force Office of Scientific Research and AT&T. Quantum mechanics, a seemingly abstract field without apparent practical application, was necessary before we could invent the transistor and laser that led to computers and the Internet...In the past two decades, research directed to longer-term missions has greatly diminished in industry, DOD and DOE. The U.S. research and development portfolio must include the support of long-term potentially transformative research that will be needed to establish the scientific foundations for the next new industry."

The group recommends that government research agencies initiate "transformative" research programs that allow for submission of short and focused grant applications that place a premium on innovation. Agencies should provide fast-track seed money to evaluate novel ideas, and they should be open to providing funding for up to six years and can be renewed for up to 11 years. Government grant reviewers should also evaluate grant proposals with an eye toward innovation and creativity. Government R&D program managers need to be leaders in their respective fields of endeavor. They need resources to do their jobs, attend conferences and interact with members of their scientific communities.

The stress on the peer-review system caused by the surge of grant applications from desperate researchers needs to be relieved. "Over a five-year period when the proposal volume increased [at the NSF] by about 50 percent, the number of reviewers increased by only 15 percent," says the study. The vast majority of reviewers say they are taking less time to provide thorough reviews of grant applications. Grant application volume doubled at the NIH between 1998 and 2006.

Universities need to step into the breach by paying their faculty more, so as to relieve the government of the burden of support. Universities also need to start funding new facilities and programs, says the academy.

The 69-page report is located at <http://www.amacad.org/arisefolder/ariseReport.pdf>.

# KPMG: China Destined To Be No. 1 Investment Destination

The United States will soon be displaced by China as the world's largest recipient of corporate investment, according to KPMG. India is also expected to become a global manufacturing powerhouse, with money flowing into new plants and equipment.

In a survey of corporate investment executives working for 311 of the largest multinational companies and in 10 private equity and sovereign wealth funds, KPMG found there to be a "shift in balance of global economic power...[The] United States [will] give way to China in investment and influence."

Within five years, China will overtake the United States as the world's largest recipient of corporate investment "and should become the most influential country in IT and telecom, industrial products and mining," says KPMG.

India will experience the largest growth in its share of foreign investment and "should become the world leader for investment in manufacturing," says the accounting firm. Europe will continue to be an attractive place for investment.

"China should receive significant investments in 2013/2014 from 24 percent of corporates surveyed, up from 17 percent this year," says KPMG. "Russia can expect investments from 19 percent in five years, up from 12 percent this year, and Brazil can expect investments from 14 percent, up from 10 percent. India's share of investments is estimated to rise by 8 percent to 18 percent, the largest increase recorded and driven mainly by a major increase in investment in manufacturing."

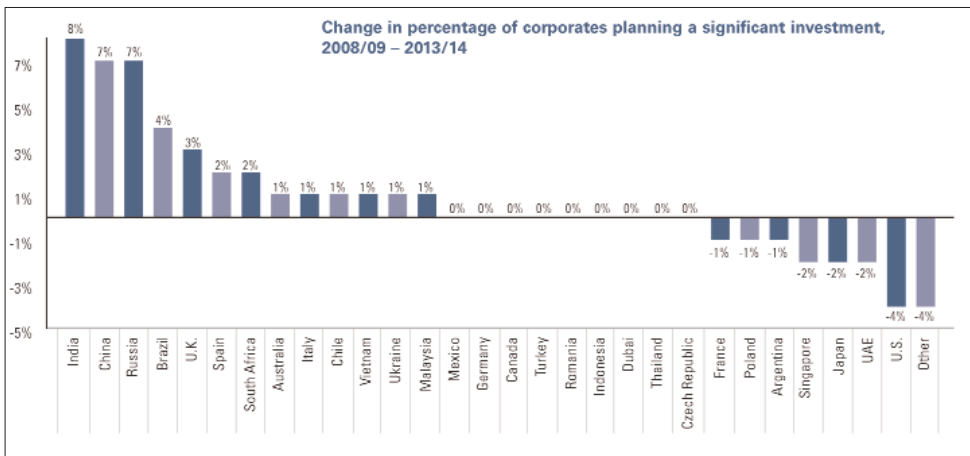
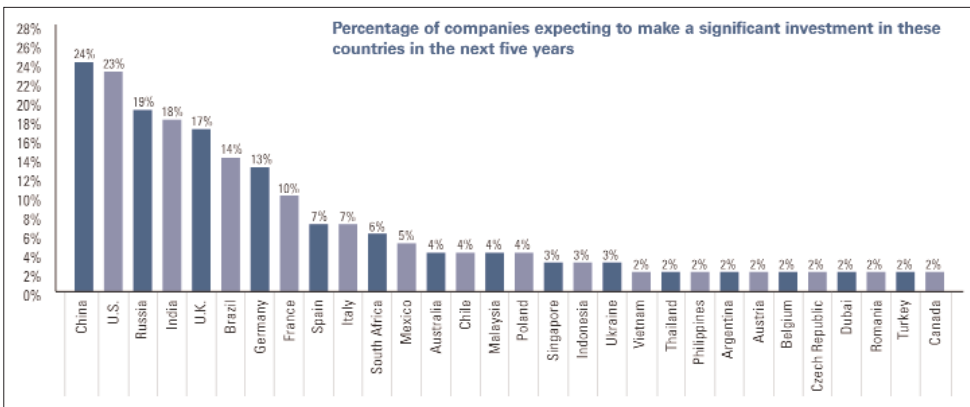
The United States is in last place among countries in the measurement of change in percentage of corporate plans for investment between 2008 and 2014, with a 4.5-percent drop, as compared to China leading the world with a 7 percent gain, followed by Russia (also at 7 percent), Brazil (4 percent) and the United Kingdom (3 percent).

Commenting on the survey, Sue Bonney, head of tax for KPMG in London, said the next

five years will see a return "to more normal patterns of investment, after a period when the U.S. has had a disproportionately high share of global investment funds. But a return to the

market conditions of, say, 2003 does not explain the shift in influence that these strategists expect towards Brazil, Russia, China and India. This looks like the beginning of a fundamental change in the balance of economic power."

The 28-page study, Global Corporate Capital Flows, 2008/09 to 2103/14, A Study of the Investment Intentions of Companies in 15 Countries Around the World," go to [http://www.kpmg.com/SiteCollection/Documents/Global\\_Corporate\\_Capital\\_Flows.pdf](http://www.kpmg.com/SiteCollection/Documents/Global_Corporate_Capital_Flows.pdf).



## High-Impact Firms Fuel Growth... (From page three)

South Carolina (2.54 percent); North Dakota (2.48 percent); Virginia (2.47 percent); and Pennsylvania (2.45 percent). California, the high-tech capital of the U.S., is in 39th place (with 2.17 percent of firms classified as high-impact). New York is in last place at 1.92 percent. Twenty-two percent of high-impact firms are located in rural areas.

Las Vegas, Nev., had the highest percentage of birth rates among firms, followed by Atlanta, Ga.; Austin, Tex.; Phoenix, Ariz.; Colorado Springs, Colo.; Raleigh, N.C.; and Fort Collins, Colo. Among the cities with the lowest rates of births of new firms were Harrisonburg, Penn.; Pittsburgh, Penn.; York, Penn.; Erie, Penn.; Dubuque, Iowa; Lancaster, Penn.; Johnstown, Penn.; Altoona, Penn.; Scranton, Penn.; and, in last place, Williamsport, Penn.

Don't look to the 92-page report for any insight into the common attributes of "high-impact" companies. "Given the available data, the authors were unable to determine what factors drove firms to become high-impact or how to identify which firms would become high-impact," says the SBA.

The report is located at <http://www.sba.gov/advo/research/rs328tot.pdf>.