

THE PAULSON INSTITUTE

FDI for US Manufacturing Program

Summer 2014 Newsletter

An integral part of The Paulson Institute’s program on cross-border investment, our “FDI for US Manufacturing” program aims to support America’s established and emerging manufacturing sectors, sustain innovation, and create jobs in the United States.

The Paulson Institute is a nonprofit organization with unique convening power in the United States and China. Over the past year, we have launched a suite of programs and activities aimed at further encouraging trade and facilitating investment in both directions, including job-creating Chinese direct investment in US manufacturing. We are working with both large and smaller firms in the United States and China to examine the changing economics and technology of manufacturing and to develop creative business models that might guide economically rational and politically realistic investments. We are also applying these insights to public policy by working with US governors and their teams to help them position their states ahead of industrial and business trends. Our goal is to help them maximize competitiveness and support job growth in their states. A separate program of research aims to draw lessons learned from past investments through an extensive series of business case studies.



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The Institute’s initiatives are taking a hard look at successes—and failures. The Institute is strictly a nonprofit, but we aim to help investors, in the public interest, as they seek to come together in sensible ways, while also looking for creative ways to overcome institutional and informational barriers to investment in both China and the United States. The Paulson Institute does not participate in any investments. But through our sector-by-sector approach—focused initially on agribusiness, and now also on manufacturing—the Institute has begun to highlight, particularly through its research, commercially “invest-able” opportunities and to convene relevant players from industry, the capital markets, government, and academia.

New Partnership with Ten Great Lakes Governors and Premiers

On April 25, 2014 at Shedd Aquarium in Chicago, The Paulson Institute launched a major new initiative with The Council of Great Lakes Governors, a group that encompasses the governors of Illinois, Indiana, Ohio, Michigan, Minnesota, New York, Pennsylvania, and Wisconsin, and the premiers of Ontario and Québec.

The partnership’s goal is to help support the governors and their teams as they work to strategically attract foreign direct investments in regional manufacturing. Specifically, the initiative aims to help attract Chinese and other foreign investment to sustain and create jobs in this backbone of our regional economy.

Michigan Governor Rick Snyder, Co-Chair of the Council of Great Lakes Governors, said, “The Great Lakes Governors and Premiers are committed to competing and prospering in the global economy. This partnership will help foster continued growth in the Great Lakes region by creating and sustaining jobs.”



Illinois Governor Pat Quinn, Co-Chair of the Council of Great Lakes Governors, said, “By working together, we can help our region seize the opportunities that the new global economy presents. Our manufacturers have shown they are among the best in the world, and this new initiative will help improve their access to capital in order to compete.”

“Unlike bond holdings, which can be bought or sold through a quick paper transaction, direct investments involve people, plants and other assets. They are, in this sense, a vote of confidence in another country’s economic system,” said Hank Paulson, chairman of The Paulson Institute. “At a moment of considerable transition in the world economy, many emerging economies hold substantial foreign exchange reserves but are also beginning to seek productive direct investments. This includes countries like China, whose companies, for example, have begun to expand their direct investments,

including greenfield investments, in the United States, Canada, and other advanced industrial economies.”

In coming months, the Institute aims to pilot a small handful of initiatives in some of the Great Lakes states.

Paulson Institute to Hold its Next “American Competitiveness Dialogue” in Michigan

The Council of Great Lakes Governors and The Paulson Institute will jointly host several “Competitiveness Dialogues” around the Great Lakes region in 2014 and 2015. The Institute hosted its first “American competitiveness” event in 2013 in Nebraska, featuring Governor Dave Heineman and focusing on agribusiness. The kickoff of our series of manufacturing forums will be held in Detroit on July 21, 2014, featuring Michigan Governor Rick Snyder and Paulson Institute chairman Hank Paulson. This two will discuss and focus attention on challenges and opportunities inherent in foreign investment in regional manufacturing.

Further dialogues will be held in coming months with a variety of speakers and technical experts. Discussions will focus on the changing North American manufacturing economy, technological innovation in various manufacturing-related industries and segments,

Chinese and Asian industrial dynamics, global trade in manufactured goods and related services, and the future of manufacturing-related research and development (R&D), including how to connect Great Lakes/St. Lawrence-based R&D and innovation to foreign deployment opportunities while opening overseas markets.



Photo: Flickr/Andrea_44

Thinking Through Future Investment Models: “R&D+D” (Connecting US R&D with Chinese Deployment)

The United States today remains a global leader in innovation and risky ventures. But China is increasingly becoming the arena in which such technologies reach scale and commercial viability rapidly. In mobile technology, for example, the adoption rate of existing technologies is simply astonishing. China’s scale often means that the cost of new technologies can be driven down quickly.

Early-stage innovations, particularly university spin-offs, need capital to bridge the “valley of death” to achieve successful development and deployment. And in some areas in the United States, there appears to be a dearth of funding for critical but less glamorous basic research, upon which applied innovation may flourish. For those doing R&D in the Great Lakes region, for example, China’s willingness to invest in pilot projects, demonstrations, and proof-of-concept efforts—and then to accelerate the commercialization of proven technologies in the China market—offers potential investment-related opportunities.

Obviously, intellectual property (IP) ownership and protection is sensitive in all industries where China is concerned. Yet Chinese investors are actively looking to invest in the US innovation engine, especially in areas linked to needs in the China market. The Institute is working with partners on an array of R&D+D models that attempt to capture these opportunities without sacrificing America’s innovation edge and protect intellectual property.

Some Creative Linkages:

- An “R&D for licensing” arrangement, through which US/Canadian labs or research entities retain the IP ownership to anything developed via the investment. For its part, the Chinese/foreign investor obtains a license to use, deploy, or sell that technology in China. For example, state agencies or investment advisory councils could serve as “brokers” by linking land grant and other universities (or firms) to Chinese investors focused on innovation.
- A “joint IP development and ownership” arrangement, through which Chinese/foreign investors own the IP jointly with the US/Canadian innovator. One example of how this is already being done comes from Purdue University in Indiana, which is actively trying to attract Chinese funding for innovative life sciences R&D, an area closely connected to demand-side developments in China.

Case Studies on Manufacturing-Related Investment

The Paulson Institute's Investment Case Studies are part of a broader series of "Paulson Papers on Investment." These business case papers look backward, drawing lessons from past successes and failures of Chinese direct investment in the United States. Paulson Institute cases attempt to reconstruct a detailed analytical history of the motivations and actions of parties to a given investment, and then to draw conclusions and lessons. They are written on the basis of the public record, personal interviews with participants, industry analysis, and journalistic accounts and aim to reflect a best reconstruction of the case.

In recent months, the Institute has published two extensively researched manufacturing-related investment case studies, with several more forthcoming throughout the summer.



China Drives Into America's Auto Parts Industry

www.paulsoninstitute.org/media/108077/paulson_papers_on_investment_nexteer_english.pdf

This case provides a detailed account of how a Chinese consortium acquired Nexteer, a technologically advanced auto parts company in Saginaw, Michigan. The case illustrates:

- How the impulse to acquire advanced technology motivates Chinese investors yet also creates synergies between Chinese corporate and government goals.
- How a Chinese buyer can work effectively with US labor unions and US sellers to keep jobs in the United States.
- How a Chinese buyer can adroitly navigate the political shoals upon which some Chinese acquisitions in the United States have foundered.



A Chinese Aluminum Company's Learning Curve in the US Market

www.paulsoninstitute.org/media/114229/Paulson%20Paper%20on%20Investment_Nanshan_English.pdf

This case study of Nanshan Group's investment in Lafayette, Indiana, offers an opportunity to examine another type of Chinese investment: greenfield investment that creates both jobs and economic growth. This paper documents Nanshan's expansion into the US market, rationale behind the investment decision, and provided a preliminary discussion of the new plant's business outlook. The case study illustrates:

- How a decision to enter high-end overseas market segments to generate higher returns can drive a Chinese company to proactively improve its products and competitiveness in the home market.
- How retaining US workers and professionals helps a Chinese business assimilate training and human capital practices to apply in China. One lesson of the Nanshan case is that a focus on human capital can become an important component of the lessons learned from a US deal.
- How investing in a physical plant in the United States is merely a first step. Chinese investors must eventually grapple with post-project management, the need to sustain services, and the importance of making continuous investments in innovation if they are to compete and prosper in the United States.

Tianjin Pipe (forthcoming)

In one of the biggest manufacturing direct investments by a Chinese company to date, Tianjin Pipe Corp America has set up shop in the city of Gregory in southern Texas. How did a major local state-owned enterprise find its way to southern Texas? Tianjin Pipe, one of the biggest producers of seamless steel pipes in China, hopes to capitalize on the oil and gas boom in Texas by supplying pipes from its \$1 billion-plus manufacturing plant. With limited oil production and the glacial pace of shale gas development in China, the revival of the US energy boom is proving to be an attractive market for Tianjin Pipe.



Suntech (forthcoming)

Once the darling of the Chinese solar industry, Suntech's sudden collapse also led to the failure of what could have been a successful investment in Arizona. The company entered the US market hoping to be closer to its American customer base, and even received stimulus funds from the American Recovery and Reinvestment Act in the process. But the volatility in the Chinese domestic solar industry and growing trade tensions between China and the United States and European Union eventually derailed the company's run in the Arizona sun.



Other Forthcoming Manufacturing-Related Papers

The Institute will publish a paper this summer by Joanna Lewis of Georgetown University in its series of "Paulson Policy Memoranda." The paper focuses on the nexus of US-China collaboration in cleantech and the often-contentious issue of intellectual property (IP) protection. With both countries investing heavily in, and offering political support for, clean energy technologies, cooperation in this realm makes much sense. But a more comprehensive and creative IP regime is needed to offer credible protection to the fruits of joint development and innovation. Does the existing US-China Clean Energy Research Center (CERC) offer a novel IP model that can move collaboration forward? Lewis' paper explores the CERC's potential and challenges.



Workshops on the Future of Manufacturing

First Workshop: Beijing, June 2013

The Paulson Institute convened a workshop in Beijing to explore issues related to the future of manufacturing, with a focus on cross-border investment and the changing relationship between production and innovation. The management consultancy McKinsey & Company joined to provide analysis and frame the facts and issues for discussion.

The goals of the workshop were twofold: (1) to discuss the major trends that will determine the future of global manufacturing, and (2) to identify potential opportunities for cross-border manufacturing partnerships between Chinese, American, and global firms, and new tie-ups between innovation and production in the changing global economy.



This Beijing workshop was the first of several planned events that will include Chinese, American, and global CEOs and thought-leaders. The Paulson Institute and McKinsey aim to identify areas where a serious commercial case for cross-border investment exists, including for Chinese investment in the United States, and where the underlying economics (and politics) are supportive. These programs also look at constraints and obstacles. By discussing and then developing potential investment models, the goal is to help firms in the United

States and China identify trends, scope opportunities, and fashion creative and future-oriented partnerships.

Hank Paulson, chairman of the Paulson Institute, moderated the June 5 Beijing workshop, which was attended by, among others, Liu Chuanzhi, founder and chairman of computer-maker Lenovo and its parent, Legend Group; Lu Guanqiu, founder and chairman of auto parts conglomerate Wanxiang Group; Tang Xiuguo, co-founder and president of heavy equipment manufacturer Sany Group; Edward Tian, founder and chairman of China Broadband Capital Partners; John Zhao, CEO of Hony Capital; Fang Fenglei, chairman of Hopu Capital and chairman of Goldman Sachs Gaohua

Securities; Du Lijun, assistant to the chairman of diversified aluminum conglomerate Nanshan Group and president of Nanshan America; Zheng Li, professor and head of the department of industrial engineering at Tsinghua University; and Liang Huijiang, head of international finance at China Development Bank. The McKinsey team included senior professionals from the firm's offices in Cleveland, Chicago, Shanghai, and Hong Kong.

Second Workshop: Chicago, October 2013

The Paulson Institute convened a second workshop in Chicago to advance the Institute's initiative on the future of manufacturing, with a focus on cross-border investment and the changing relationship between production and innovation. The management consultancy McKinsey & Company again joined to provide analysis and frame the facts and issues for discussion.

The goals of this latest workshop were three fold: (1) to use our previous discussion with Chinese CEOs and investors as a springboard to invigorate a discussion with major US companies about the current state and future needs of American manufacturing; (2) to "road test" initial investment models with workshop participants to determine what makes sense and what will not work; and (3) to incorporate new ideas and critiques into the development of more robust investment models that will work for investors and companies on both sides.



As part of its initiative on the future of manufacturing, The Paulson Institute aims to identify areas where a serious commercial case for cross-border investment exists, including for Chinese investment in the United States, and where the underlying economics and politics are supportive. This work also examines constraints and obstacles. The end goal in conducting these discussions and then developing potential investment models is to help firms in the United States and China identify trends, scope opportunities, and fashion creative and future-oriented partnerships. Future workshops will likely take place around the country.

Hank Paulson, chairman of The Paulson Institute, moderated the workshop, which was attended by, among others, Michael Cadigan, General Manager of the IBM Microelectronics, Systems and Technology Group; Chip Hills, Vice President, Apple Inc.;

Carol Williams, Executive Vice President Manufacturing & Engineering, Supply Chain and Environmental, Health and Safety (EH&S) Operations, The Dow Chemical Company; Carl-Martin Lindahl, Vice President, Corporate Strategy & Business Development, Whirlpool Corporation; Du Lijun, President, Nanshan America; Pin Ni, President, Wanxiang America Corporation; Don Hillebrand, Director, Center for Transportation Research, Division Director, Energy Systems, Argonne National Laboratory. The McKinsey team included senior professionals and directors from its New Jersey, Washington, DC, and Chicago offices.

The Paulson Institute's Program on Cross-Border Investment

There are compelling incentives for the United States and China to increase direct investment, including prospective Chinese investment in the United States. US FDI stock in China was roughly \$60 billion in 2010. Yet Chinese FDI stock in the United States has hovered around just \$5 billion. For China, investing in the United States offers the opportunity to diversify risk from domestic markets while moving up the value-chain into higher-margin industries. For the United States, meanwhile, leveraging Chinese capital could, in some sectors, help to create and sustain American jobs.

As a nonprofit institution, The Paulson Institute does not “do deals” or participate in any investments. But by building out a sector by sector approach—launched in 2012 through our US-China agribusiness program—the Institute has begun through its research to highlight commercially real and “invest-able” opportunities, and to convene relevant players from industry, the capital markets, government, and academia. The Institute’s goal is to focus on specific and promising sectors rather than treating the question of “investment” abstractly.

We are developing nonprofit programs and publishing investment studies in the public interest in an effort to identify tangible opportunities where a serious commercial case for investment exists and the underlying economics (and politics) are supportive. We are looking, too, at constraints and obstacles—in other words, areas where investment opportunities are much talked about by Chinese and Americans in the abstract but are not anchored in underlying economics or a realistic investment case. Ultimately, we are attempting to highlight concrete lessons from specific successes—and failures. The Institute’s aim is to help develop sensible investment models that reflect economic and political realities in both countries.

The Paulson Institute currently has three investment-related programs:

1. US-China Agribusiness Program:

The Institute’s agribusiness programs aim to support America’s dynamic agriculture sector, which needs new sources of investment to sustain innovation and create jobs. These programs include:

- A US-China Agricultural Investment Experts Group, comprised of some of the leading names in American agribusiness. The group advises on and brainstorms ideas, and examines potential investment models in the sector.

- An agribusiness-related investment workshop bringing key players and companies together. The Institute held the first workshop in Beijing in December 2012, with future sessions rotating between China and the United States.
- Commissioned studies and reports on investment opportunities in US-China agribusiness and bioenergy.

2. US-China Manufacturing Program:

In June 2013, the Institute, in partnership with McKinsey & Company, launched a program on the major trends that will determine the future of global manufacturing. We aim to identify mutually beneficial manufacturing partnerships, including those that might support job growth in the United States, that reflect these underlying economic dynamics. The Institute's principal programs include:

- Papers that the Institute is co-developing with partners.
- Workshops in Beijing, California, and Chicago with Chinese, American, and global CEOs and thought leaders.

3. Case Study Program:

The Institute is publishing in-depth historical case studies of past Chinese direct investments in the United States, examining investment structures and economic, political, business, and investment rationales to draw lessons learned.

About The Paulson Institute

The Paulson Institute, an independent center located at the University of Chicago, is a non-partisan institution that promotes sustainable economic growth and a cleaner environment around the world. Established in 2011 by Henry M. Paulson, Jr., former US Secretary of the Treasury and chairman and chief executive of Goldman Sachs, the Institute is committed to the principle that today's most pressing economic and environmental challenges can be solved only if leading countries work in complementary ways.

For this reason, the Institute's initial focus is the United States and China—the world's largest economies, energy consumers, and carbon emitters. Major economic and environmental challenges can be dealt with more efficiently and effectively if the United States and China work in tandem.

Our Objectives

Specifically, The Paulson Institute fosters international engagement to achieve three objectives:

- To increase economic activity—including Chinese investment in the United States—that leads to the creation of jobs.
- To support urban growth, including the promotion of better environmental policies.
- To encourage responsible executive leadership and best business practices on issues of international concern.

Our Programs

The Institute's programs foster engagement among government policymakers, corporate executives, and leading international experts on economics, business, energy, and the environment. We are both a think and "do" tank that facilitates the sharing of real-world experiences and the implementation of practical solutions.

Institute programs and initiatives are focused in five areas: sustainable urbanization, cross-border investment, executive leadership and entrepreneurship, conservation, and policy outreach and economic research. The Institute also provides fellowships for students at the University of Chicago and works with the university to provide a platform for distinguished thinkers from around the world to convey their ideas.

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