VOLUME 33, NUMBER 3, MAY 2012

REVITALIZING MANUFACTURING

MAKING MONEY AT MAKING THINGS

A LOOK AT THE U.S.
GOVERNMENT'S RENEWED
INTEREST IN MANUFACTURING



THIS ISSUE / Revitalizing Manufacturing



Scott Parker
Vice President
Chief Operating Officer

sparker@gray.com

The health of manufacturing is key to economic recovery in the United States. But while many of us who work in, and for, this industry have never questioned this notion, it has taken a recession and a subsequent upswing in manufacturing jobs to get the attention of those who develop our country's economic policies.

This issue of the *GrayWay* discusses America's renewed interest in revitalizing manufacturing, and the new government policies and programs that have resulted. Additionally, we offer expert opinions on the role government should play in increasing the pool of qualified candidates needed to fill manufacturing's ever-increasing demand for STEM professionals, and what tax reforms are needed to create a "best-case-scenario" business environment for manufacturers competing in today's global marketplace.





MAKING MONEY AT MAKING THINGS

A LOOK AT THE U.S. GOVERNMENT'S RENEWED INTEREST IN MANUFACTURING

CONTENTS

- 2 REDISCOVERING MANUFACTURING
 U.S. Government Creating New Policies
 to Support America's Rebounding
 Manufacturing Industry
- 4 ALLEVIATING THE BURDEN

 NAM's Recommendations for

 Improving America's Tax Environment
- 6 GROWING INNOVATION
 Strategies to Stimulate Growth in
 Science and Engineering
- 8 GRAY...WE'RE BUILDING
 Caterpillar Inc.
 Athens, Ga.
- 9 **GRAY MATTER**Believing in Manufacturing
- 10 MAKE YOUR VOICE HEARD Advocacy Resources for U.S. Manufacturers



REDISCOVERING MANUFACTURING

U.S. GOVERNMENT CREATING NEW POLICIES TO SUPPORT AMERICA'S REBOUNDING MANUFACTURING INDUSTRY

MANUFACTURING has been in the news a lot lately, and for good reason. As the United States continues its uphill climb toward economic vitality, job growth in the manufacturing industry is turning the heads of politicians and their advisors.

The surprising growth streak is the largest since 1995, and economists across the nation are crediting manufacturing with leading America's economic recovery. The result: a more concerted effort by the federal government to develop a true



Bruce Katz

federal manufacturing policy. Proponents of manufacturing think it's about time.

Like Bruce Katz, vice president of the Brookings Institution and founding director of the Brookings Metropolitan Policy Program, a group that counsels decision makers in the public, corporate, and civic sectors

with policy ideas for improving the health and prosperity of cities and metropolitan areas. Katz says that the renewed interest of government to support manufacturing was born out of the country's recent recession.

"I think for the last 30 years, frankly, both political parties decided that the U.S. somehow would be a post-industrial economy where we would generate ideas but produce everything offshore, and I think that's a recipe for long-term economic decline," Katz explained. "The silver lining to this recession is that we actually rediscovered the importance of manufacturing because it—and exports—are leading the recovery. The recession was a wake-up call, and not just for national leaders but for state and metropolitan leaders as well."

In 2011, the Obama administration established the Advanced Manufacturing Partnership, one of the first signs the federal government had taken notice of manufacturing's impact on the recovery. Shortly thereafter, a new Cabinet-level Office of Manufacturing Policy was established, co-chaired by Commerce Department Secretary John Bryson and Director of the National Economic Council Gene Sperling. This move marked the first time in the country's history such a group has been led by people with this level of influence. Katz says it's too early to tell how the establishment of these offices will impact manufacturing, but it's a step in the right direction.

"I think this is absolutely essential, not just for there to be an office, but more importantly, for the president to talk about it consistently and persistently," said Katz.

But, in an election year focused on economic policy, many wonder if the sudden emphasis on manufacturing is political rhetoric or if there is real momentum toward establishing a strong federal manufacturing policy. If the latter is true, others wonder if a Republican-elected president could slow this momentum. Katz says no matter who wins the 2012 election, he expects cuts in government spending to be significant.

"There is no doubt in my mind that either Obama or Romney will scale back the national government by major proportions," began Katz. "The question is whether they will do that even remotely smartly and strategically. At a minimum, you want to have this really high-end, advanced R&D funding maintained. And, I would hope that we would maintain funding for manufacturing-extension applied technology centers."

If funding for manufacturing policies and programs is cut, or if decisions are thwarted due to partisan conflict, Katz says it will be up to states and metropolitan areas to compensate.

"If the federal government remains in partisan gridlock, how much slack will the states have to make up?" questioned Katz. "If I'm a betting

person, I would say that the states and metro areas are going to have to do more rather than less."

Two examples of metropolitan areas that Katz says are "best practice" examples for supporting advanced manufacturing are Northeast Ohio and Chicago. Both recently completed metropolitan business plans that build on their regional strengths in advanced manufacturing. In Northeast Ohio, regional leaders launched PRISM, the Partnership for Regional Innovation Services to Manufacturers initiative. The goal of PRISM is to help small and medium-sized manufacturers in old commodities industries, like steel and automotive, to reinvent their products and business models to take advantage of growth opportunities in emerging markets like bioscience, healthcare, and clean energy. Katz says this group brings together higher education institutions, regional economic development organizations, and Ohio's Edison Technology Centers to provide market research and business consulting services, increase firms' access to capital and talent, and foster stronger relationships within growing industry clusters.

In Chicago, Mayor Rahm Emanuel oversaw the completion of a regional business plan, where one of the primary goals was to make Chicago a leading hub of advanced manufacturing. Katz says this strategy is aimed at accelerating growth in the advanced manufacturing industries in which Chicago specializes, to help low-growth legacy manufacturers repurpose assets and adopt advanced technologies, and expand workforce training programs to meet the needs of the regional labor market.

"States and the federal government should align with these metro plans," explained Katz. "The federal government should lead where it must, and set a strong, clear national platform for productive and innovative growth in areas such as budget, trade, taxes, and immigration, but then get out of the way to let the states and metros innovate."



Secretary John Bryson speaking in Washington, D.C.

Alleviating the Burden

NAM's Recommendations for Improving America's Tax Environment

Competition in the global marketplace has never been more fierce. As our global trading partners continue to increase productivity and improve international trade policies, the cost of doing business in the U.S. continues to place a burden on American manufacturers, due in part to our country's stringent tax environment.

According to the National Association of Manufacturers (NAM), the U.S. has the highest corporate tax rate among the major industrial nations. What's more, 70 percent of manufacturers pay income taxes at individual rates, so as taxes on individuals increase, so too do taxes on manufacturers.

To further complicate matters, manufacturers must continually keep up with ever-changing and unpredictable tax codes. Carolyn Lee, senior director of tax policy for NAM, says this leads to a large amount of uncertainty for manufacturers, and it's up to the U.S. government to help alleviate this burden.



Carolyn Lee

"Providing certainty on the tax side can mean real jobs in the future," explained Lee. "Take, for example, a business that is looking to plan for the future. If they know the impact taxes will have on their budgets, they can plan for expansions and retention of existing jobs." Earlier this year, NAM developed four goals for economic growth as a blueprint for government to ensure the U.S. provides the best possible business climate for manufacturers. Included in this blueprint are recommendations for improving the tax environment. Lee says one of NAM's biggest priorities in this regard is lowering the corporate tax rate.

"The corporate tax rate matters when companies are looking to make an investment," Lee began. "While there are a lot of incentives and a lot of things to reduce your taxes, when you just look at the basics and compare our corporate tax rate to that of other countries, we don't score well."

Lee says NAM's specific recommendation is to reduce the corporate tax rate to 25 percent or lower, while ensuring manufacturers don't experience a substantial increase in their taxes because of base broadening, or ending some of the deductions and credits in the tax code in order to create a lower rate.



OTHER TAX REFORMS RECOMMENDED BY NAM INCLUDE:

- Reducing taxation on foreign income of U.S.-based businesses by moving from a worldwide tax system to a territorial system that is structured to enhance competitiveness, not raise additional revenue.
- Instituting permanent lower income tax rates for individuals and small businesses to increase resources with which they make capital investments in order for them to expand their businesses and create jobs.
- Instituting permanent lower tax rates on investment income to encourage savings.
- Instituting permanent lower tax rates on estates to protect family-owned manufacturing businesses and prevent double taxation.
- ► For more information on NAM's goals for economic growth, visit www.nam.org and click on Manufacturing Renaissance under the Issues tab.
- ▶ For an expanded version of this article, visit www.gray.com/news/blog.

Growing Innovation

Strategies to Stimulate Growth in Science and Engineering Since the early days of the Industrial Revolution, the American manufacturing industry has rightfully earned a reputation as the world's leading center of innovation. In fact, today, manufacturing is responsible for some 90 percent of all patents issued in the United States. But as manufacturing continues to become more and more advanced, an industry once dominated by lower-skilled laborers is now desperate for workers trained in the fields of science, technology, engineering, and math (STEM).

According to the President's Council of Advisors on Science and Technology, around one million more professionals will be needed to fill STEM jobs over the next decade. To meet this demand, the U.S. will need to increase STEM-degreed graduates by some 34 percent—an unlikely feat given the U.S. is graduating fewer and fewer STEM professionals each year.

The question that remains is what can be done to ensure manufacturers are equipped with the right workforce not only in the near future, but for years to come?





Douglas Woods

Douglas Woods is president of AMT—The Association For Manufacturing Technology, an organization that represents and promotes U.S.-based manufacturing technology and those who design, build, sell, and service this technology. He says the perception of typical manufacturing jobs must

change in order for our young people to gain interest in pursuing STEM degrees.

"For years, a part of the problem has been that people in the U.S. have had this mindset that if you wanted to have a career and make a lot of money, engineering wasn't really the route to do that," Woods began. "So we had an increasing number of people getting financial, marketing services, or liberal arts degrees, as opposed to getting into engineering."

But Woods believes it's today's innovators and engineers who are bringing in the most money, and many young people are missing a real opportunity to follow suit.

"If you take a look at the people who are becoming millionaires, more and more of those are from a technical, engineering, and manufacturing background as much as they are bankers, doctors, and attorneys," explained Woods.

Changing perception isn't easy, however, so the question of how to fill STEM jobs lingers. Bruce Katz is vice president of the Brookings Institution and offers counsel to the public and private sectors on such issues. He says there are several actions the federal government should take to strengthen

Manufacturing is responsible for some 90 percent of all patents issued in the United States.

STEM education, thus increasing the pool of qualified candidates for these types of jobs. These include:

- Increasing investments in community colleges, which are responsible for a large share of workforce training.
- Continuing to invest in workforce training programs, and work with state and local governments to develop a demand-driven workforce system that helps develop skills employers demand.
- Increasing the number of highly skilled foreign workers that may be employed by U.S. firms through the H1-B visa program.

Katz says, although the subject is not without controversy, reforming immigration laws could play a large role in retaining foreign students who come to the U.S. to study at the world's best colleges and universities.

"I think what our country forgets is that over the next 50 years of increasing global competition, the U.S. would be well served by having this diverse demographic base," Katz said. "It is really our calling card in the world, both because it enables us to replace an aging workforce, but it also enables us to have trading relationships with literally every country in the world because we have people from every country in the world here. No other country has that."



GRAY... WE'RE BUILDING

CATERPILLAR INC.

Athens, Ga.



The 308E mini hydraulic excavator will be the first machine built in the Athens facility. (PRNewsFoto/Caterpillar Inc.)

Caterpillar Inc. has chosen Gray to design and build a 1,000,000 s.f. manufacturing facility near Athens, Ga.

This state-of-the-art plant, which will manufacture small track-type tractors and mini hydraulic excavators, will be designed using sustainable concepts that align with Caterpillar's corporate sustainability model. The \$200-million facility is expected to directly employ 1,400 people once it is fully operational. In addition to the 1,400 people working in the new facility near Athens, Caterpillar estimates another 2,800 full-time jobs will be created in the United States among suppliers and at other non-Caterpillar companies that will support the new facility.

Gray recently completed an 850,000 s.f. design-build manufacturing plant for Caterpillar in Winston-Salem, N.C. This facility manufactures surface mining truck axles.



BELIEVING IN **MANUFACTURING**

Manufacturing in America is a complicated business. Companies can have the best products available today, but without the right regulatory environment, even the most innovative businesses can fail. Entrepreneurial manufacturers would help boost the economy with the development of a solid manufacturing policy. One that promotes and nurtures the business of manufacturing without overregulating it. One that encourages innovation, reduces taxation, and creates a labor

pool that is ready to take on the challenges of advanced manufacturing jobs.

At Gray, we have long understood the importance of a strong U.S. manufacturing industry. In fact, our survival and the survival of countless other businesses across various industries, depends on it. One of the projects that put our name on the map over 40 years ago was for Eaton Corporation, a truck parts and transmission manufacturer in Glasgow, Ky. Since then, we have been involved in building plants for hundreds of manufacturers across the country, and are proud to have played even a small role in creating the success and prosperity these companies have contributed to the U.S. economy.

Stephen Gray President and Chief Executive Officer

MAKE YOUR VOICE HEARD

Advocacy Resources for U.S. Manufacturers

Manufacturers in the U.S. can turn to a wide variety of organizations for assistance.

NATIONAL ASSOCIATION OF MANUFACTURERS

HEADQUARTERS

Washington, DC

Toll Free: (800) 814-8468 Phone: (202) 637-3000 E-mail: manufacturing@nam.org

www.nam.org

REGIONAL OFFICES

Georgia

Phone: (404) 609-9826 E-mail: atlanta@nam.org

Illinois

Phone: (773) 243-8300 E-mail: chicago@nam.org

Michigan

Phone: (586) 323-9001 E-mail: detroit@nam.org

Minnesota

Phone: (651) 917-2131 E-mail: stpaul@nam.org

New England

Phone: (603) 568-5537 E-mail: newengland@nam.org

New Jersey

Phone: (973) 299-6400 E-mail: parsippany@nam.org

Pennsylvania

Phone: (724) 773-0225 E-mail: freedom@nam.org

Texas

Phone: (936) 448-6456 E-mail: houston@nam.org

U.S. CHAMBER OF COMMERCE

Washington, DC

Main Number: (202) 659-6000 Customer Service: (800) 638-6582 www.uschamber.com

THE MANUFACTURERS
ALLIANCE FOR PRODUCTIVITY
& INNOVATION

Arlington, Va.

Phone: (703) 841-9000 www.mapi.net

INFORMATION TECHNOLOGY & INNOVATION FOUNDATION

Washington, DC

Phone: (202) 449-1351 E-mail: mail@itif.org www.itif.org

BROOKINGS METROPOLITAN POLICY PROGRAM

Washington, DC

Main Number: (202) 797-6100 www.brookings.edu/metro



10 Quality Street Lexington, KY 40507-1450, USA T 859.281.5000

Alabama, California, Kentucky, North Carolina and Tokyo, Japan

www.gray.com