PITTSBURGH
The Rest Of The Story

by Eric Lotke
with Seth Extein, Jonathan Flack and Lila Kalick
America's economy is now struggling to recover from the Great Recession. But even when the economy was said to be humming, it did not work for most Americans. Wages were stagnant or declining and the costs of basics – health care, housing, college – were soaring. Growth was built on unsustainable debt, as the country borrowed $2 billion a day from abroad and Americans spent more than they earned. Wall Street captured fully 40 percent of the country’s profits.

President Obama has stated that we can't go back to the old economy, and shouldn't want to. We must make more, sell more and consume less. The question is: What is our economic strategy in a global economy?

“The fight for American manufacturing is the fight for America's future,” Obama has declared. That fight will require a fundamentally different economic strategy, one that will ensure a sustained prosperity that is widely shared, one that will leave the American dream within reach of those who work hard.

Making It In America is a new project sponsored by the Institute for America's Future in conjunction with its sister organization, the Campaign for America's Future, to expand these discussions from small groups of experts into a broad public debate. Through conferences, papers and an aggressive effort to engage the press and the blogosphere, IAF and CAF will seek to further explore and debate America's global economic strategy, with an emphasis on reviving manufacturing as a key element in the new economy.

We invite you to join an open discussion between bloggers, industry and union leaders, economists, policy experts and legislators exploring what it will take to make this happen.

For information on the project, contact us at makingit@ourfuture.org.
No one has to remind us that the United States is in its deepest economic downturn since the Depression. Official unemployment is almost 10 percent, without including those who are working reduced hours or have given up looking. More stores are shuttered everyday, foreclosures are still on the rise, and states struggle to balance their budgets. Only Wall Street seems to be recovering.

The U.S. cannot afford to return to the economy that has collapsed, one built on asset bubbles and busts, one that favors finance over manufacture and speculation over investment. Now is the time for a new economic strategy that focuses on sustained and balanced growth, founded on making America once more a center of manufacturing and innovation. President Obama understands we can’t go back to the old economy. In his address earlier this year at Georgetown University, he painted a bold vision for a new future:

“…. where sustained economic growth creates good jobs and rising incomes; a future where prosperity is fueled not by excessive debt, or reckless speculation, or fleeting profits, but is instead built by skilled, productive workers, by sound investments that will spread opportunity at home and allow this nation to lead the world in the technologies and the innovation and discoveries that will shape the 21st century.”

But what will it take to get to this new economy?

The city of Pittsburgh is often given as an example of successful transition from the old to the new economy. And Pittsburgh has indeed transitioned skillfully, with a combination of public investment and private innovation. But success is only half the story. This report tells the full story of Pittsburgh, crediting the success and seeking lessons from the limitations.

Pittsburgh is famous for its rise and fall. Strategically located where the Monongahela and Allegheny rivers meet to form the Ohio, Pittsburgh grew into an industrial superpower. Pittsburgh turned iron and coal into steel and glass, and moved goods throughout the growing United States. Industrialists Andrew Carnegie, Andrew Mellon, and Charles Schwab built their fortunes in Pittsburgh. In the early 1900s, U.S. Steel, headquartered in Pittsburgh, became the world’s largest corporation and largest steel producer, producing two-thirds of America’s steel and nearly one-third of the world’s.

It didn’t last, of course. By the 1970s, the U.S. steel industry was struggling. Foreign competitors with lower labor costs, lower environmental standards and government subsidies had an advantage. Coal and iron ore processing became costly and inefficient. Oil prices, inflation and interest rates ran high. Pittsburgh’s outsized manufacturing base and by-then outdated equipment struggled to survive. At the end of 1979, U.S. Steel suffered the largest quarterly loss — $561.7 million — that U.S. corporations had ever seen. The decline in steel rippled through the local economy. Unemployed steelworkers stopped buying other goods, or they moved elsewhere looking for work.

In the 1990s, the city reinvented itself. The story often told is one of transition from heavy industry to a new post-industrial age, with a high-end service economy built around health care and higher education. Grant-funded research led to entrepreneurial opportunity in software and biotechnology. The University of Pittsburgh Medical Center replaced U.S. Steel as the region’s largest employer. Pittsburgh built the world’s first Gold LEED-certified convention center. Once a giant consumer of dirty energy, Pittsburgh positioned itself for leadership in the new energy economy.

The good news is true enough, although many problems are far from solved. But it is only half of the story. Behind the good news are two unseen parts of the story.
First, manufacturing did not disappear entirely. In addition to steel, Pittsburgh industry diversified into products ranging from advanced metal alloys to surgical implants and sophisticated robotics. With roughly 100,000 workers, or 10 percent of the area workforce, manufacturing remains a vital part of the regional economy. Manufacturing jobs are generally unionized, so they pay well and generate economic activity beyond the company payroll.

Second, these changes didn’t happen automatically. This wasn’t an unstructured evolution from gills to lungs. It was the result of deliberate plans, of partnerships between government and private industry to achieve shared goals. It involved public investment in infrastructure, private and government subsidies, and express plans to “pick winners” and support them until they gained a lead. It is a story of industrial planning, a piece that has been missing from our national economic equation for the last 30 years.

Manufacturing: Why It Matters

Manufacturing is important because mathematics is important. Just as people can’t spend more than they earn, a country can’t consume more than it produces. Not forever.

Some people say that the U.S. should specialize in fields in which it has a “comparative advantage” — high-end services, financial trade and telecommunications. That’s good as far as it goes, but Ralph Gomory, formerly the senior vice president for science and technology at IBM, puts it in its place:

Ignored in all these discussions is the obvious fact that when you don’t make for yourself the things you need, you will have to trade for them. If you have to import cars and all sorts of manufactured goods, you will be importing on a large scale; to trade for them you will need to create additional goods or services that you can export on an equally large scale.

Currently, the United States imports $840 billion more goods yearly than it exports. We can’t make up that deficit with specialty items. Indeed, the bulk of our high-end service exports — education, financial and insurance services, telecommunications, and all other business, professional, technical and assorted services — total $233 billion. And we import $153 billion of such services, generating a surplus of only $80 billion. That $80 billion surplus in high-end services isn’t big enough to offset the $840 billion deficit in goods. We have a deficit of $84 billion just in kitchen appliances.

Moreover, it’s not as if the United States stands alone — or will always stand alone — to provide those high-end services. The process of outsourcing services has started already. Services ranging

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### High-end services

- Education
- Financial services
- Insurance services
- Telecommunications
- Other business, professional, technical and assorted services

$80 billion surplus

### Kitchen appliances

$84 billion deficit
from diagnostic radiology to call centers for 1-800 numbers are moving to India. We need a long-
term, sustainable way to earn (at least) as much as we spend. As President Obama has stated, we can’t
go back to an economy where the financial sector is capturing 40 percent of corporate profits.7

Manufacturing is key. Today, manufacturing generates nearly 12 percent of U.S. gross domestic
product and 60 percent of our exports; it also employs 14 million people and accounts for 70 percent
of U.S. research and development.8 This can’t be allowed simply to disappear.

What’s holding back American manufacturing is not obsolescence. These are not dirty old industries
that economic evolution will naturally replace with high-end services in America and low-wage
workers in other countries. What holds back American manufacturing are deliberate trade policies
and policy decisions that can be made differently.

- The Italian government bailed out Fiat during the global economic downturn on the
  condition that manufacturing remain in Italy.9
- The U.S. government supported General Motors despite plans to outsource more
  production to China and Mexico.10

Modest “Buy American” provisions in the U.S. stimulus bill in early 2009 led to cries of
“protectionism” and domestic and international protest.11 Meanwhile:

- China requires that at least 80 percent of the equipment in its own solar power plants
  be made in China, and 70 percent domestic content for wind turbines installed in China.
  China exports more than 95 percent of its solar energy products to the United
  States and Europe.12
- Canada negotiated exceptions to World Trade Organization agreements for
  government procurement of steel, coal and motor vehicle production for all
  provinces and sectors.13
- The European Union negotiated WTO exclusions for drinking water,
  energy, transportation, and communications.14

This isn’t about the ethics of Chinese exclusion or American freedom. It’s
about the real world, which isn’t always fair. Other countries, implementing
national strategies, are racing ahead of us.

**How Pittsburgh Coped**

Pittsburgh didn’t just mourn the loss of big steel and Chinese subsidies, and
spend all its money betting on football games. The city took control of its fate.

Public and private interests came together to form the Regional Economic
Revitalization Initiative, designed to create new, high-value jobs in innovative
industries. The Allegheny Conference, which ultimately coordinated the effort,
including the Pittsburgh mayor, the Allegheny county commissioner and the
Greater Pittsburgh Chamber of Commerce. Labor unions, nonprofits and other community leaders
were key.

The group formed some broad initiatives:

- A collaborative economic strategy for the region that built on Pittsburgh’s mature industrial
  infrastructure as well as skills in metals, biomedical research, and computer technology;
• A strategic investment partnership to provide capital, tax plans, and reconcile the needs of business and labor.

Meanwhile, government invested in local infrastructure and mass transit to revive the backbone of the local economy. State leadership directed economic development grants to Allegheny County. As part of an economic stimulus package for the state, Governor Ed Rendell steered public money toward transportation infrastructure, office and research space, and health care. The new LEED-certified convention center, which will host the G-20 this fall, is a joint venture between government, philanthropic, and corporate groups in the region.

At the same time, government and industry leaders came together with a development plan that connected local universities with public funds for technology research. Education and health care — “eds and meds” — became cornerstone sectors in the new economy. The public University of Pittsburgh and the private Carnegie Mellon University became hubs for research, talent, and collaboration that supported industry and economic activity throughout the region.

**Manufacturing Still**

Manufacturing didn’t disappear from Pittsburgh. It became one part of the diversified economy. Employing roughly 100,000 workers or 10 percent of the area workforce, manufacturing remains a vital part of the regional economy.

The manufacture of steel grew and transitioned into the manufacture of specialty metals and sophisticated alloys. Allegheny Technologies Incorporated manufactures titanium, hafnium, tungsten, and cobalt. With 9,600 full-time employees and $5.3 billion revenues in 2008, the company forges custom fittings for the defense, aerospace, and nuclear energy industries. Over 300 other metals technology service firms provide steel production equipment, engineering services, parts, and supplies.

In different sections of town, Aerotech manufactures motion-control products to nanometer accuracy, Aceewire designs spring wires for customized applications, and Dawar Technologies creates transparent membrane sensors for touch-screen technologies. Medrad manufactures medical supplies ranging from MRI surface coils to disposable syringes. More than 30 robotics companies make Pittsburgh one of America’s major centers for robotic innovation. Carnegie Mellon’s Robotics Institute hosts the world’s only Ph.D. program in robotics.

Recognizing commercial opportunities of the future and accepting Pennsylvania Governor Ed Rendell’s invitation to go green, Pittsburgh is becoming one of the country’s leaders in the

**A Missed Opportunity**

The Spanish Gamesa Corporation specializes in sustainable energy production, particularly wind turbines. In 2006, recognizing market opportunities in the United States and responding to state and local financial incentives, Gamesa opened a wind turbine plant outside of Pittsburgh. Since that time, Gamesa has opened two additional manufacturing plants in Pennsylvania, investing over $175 million and creating over 1,000 new jobs.

Then Gamesa hit two problems. First, the economic downturn reduced demand for its products and capital for financing. Gamesa had to lay off workers around the state.

Second, Gamesa hit problems in the supply chain, the life blood of manufacturing. Roughly 8,000 parts are needed to assemble a wind turbine — ranging from turbine generators and electrical components to gearboxes and ball bearings. Although Gamesa chose one of America’s premier manufacturing locations, supplies were hard to find. Gamesa had to purchase ball bearings from China and gearboxes from Spain, which created logistical problems. Three-quarters of material costs were paid in Euros.

Gamesa would rather buy parts locally and in dollars. “You get more competitive the more local you go,” explains Jim Buddelmeyer, Gamesa’s vice president of purchasing.

But Gamesa can’t buy the parts locally. They aren’t being made in America.
manufacture of green building products. Local businesses are developing technology and design to promote the use of sunlight, natural air flow, and other energy-efficient means for lighting, heating and air conditioning. Pittsburgh’s green building products industry has over 450 manufacturers and employs more than 13,000 people. Pittsburgh ranks eighth in U.S. cities with the most LEED-certified buildings, including the convention center.

Yet manufacturing in Pittsburgh has limits. Pittsburgh is competing against steel manufactured in China with devalued currency and government subsidies, as well as lower environmental standards and deeply suppressed labor rights. Local companies regularly run into restrictions in international trade or disadvantages that international competition does not experience in America. Pittsburgh may be a success story of local innovation and government cooperation — but there are limits to what a city, or even a state, can do on its own. Pittsburgh needs the national equivalent of what the Regional Economic Revitalization Initiative did in the city and what Governor Rendell did in the state: create a strategic plan to retain and support high-paying, goods-producing jobs.

Lessons Learned

We can start with the sunny side. Left for dead in the 1980s, Pittsburgh went on to win more than just football games. It remains a manufacturing hub and an economic force in the region.

But we need to admit that all is not perfect in Pittsburgh. The overall population has been shrinking, especially among youth, who perceive better opportunity elsewhere. Manufacturing has not been decimated, but still the sector lost a quarter of its workforce over the last 10 years. Many manufacturing jobs were replaced by high-end jobs in education or medicine. But many were replaced by waiters and hotel clerks — jobs that never paid as well and proved even more vulnerable in the recent downturn. Some manufacturing jobs were never replaced at all.

Pittsburgh boosters also need to admit that Pittsburgh had advantages other places lack. The manufacturing base provided underlying infrastructure that could be used for other purposes; the history of unionization gave workers the benefits of collective bargaining; and past accumulations of wealth created a university and philanthropic pool that could cover start-up costs of transition. The state government was a step ahead in creating investments and tax subsidies to support emerging industries, especially energy. Pittsburgh was able to use these assets to help turn the corner.

That said, Pittsburgh has much to teach us. It has done better than similarly situated cities such as Detroit, Cincinnati or Milwaukee. The key was coordination among stakeholders, government leadership at the state and local levels, and industrial policy with targets and goals. Other cities, as well as the federal government, can benefit from this example. Indeed, Pittsburgh alone cannot compete with China. States and cities left to themselves too often compete against each other in a race to the bottom. The federal government needs to figure out where, when and how it can help.

The G-20 in Pittsburgh: Why It Matters, What to Ask

At first, the Washington press corps chuckled when President Obama proposed that the next G-20 meeting be in Pittsburgh. “What,” asked Derek Thompson, blogging for The Atlantic, “was downtown Baltimore booked?” The G-20 countries collectively represent 85 percent of the world economy, and the previous two meetings were in Washington and London. The choice of Pittsburgh seemed ironic, if not humorous.
But the reason soon became clear. Even Thompson felt a need — prodded by Atlantic readers — to correct himself: “[N]ot only has the city manifestly emerged from its rusty reputation as a tech leader, but also that very reemergence would seem to make Pittsburgh not an ironic choice for a G-20 meeting, but an appropriate one.”

White House spokesman Robert Gibbs put it this way: “[Pittsburgh] has seen its share of economic woes in the past, but because of foresight and investment is now renewed, giving birth to renewed industries that are creating the jobs of the future.” Pittsburgh’s mayor bragged, “We’re especially proud that Pittsburgh was chosen because of our status as a symbol of economic transformation, as well as our leadership in the green movement.”

Like much about Pittsburgh, his statement is true. But half the story is missing.

The Pittsburgh story is not just about rebirth but about industrial planning. Pittsburgh is not a story of “every-company-for-itself” competition — but it is one of coordination, collaboration, and government subsidies. To the degree that Pittsburgh’s renewal is incomplete, it’s often a story of unfair competition against subsidized competitors overseas.

In the old days, the interests of the American people and American business were aligned. What was good for General Motors really was good for the country. But no more. In an era of multinational corporations, global financial markets and portable production, the interests of people and business aren’t necessarily in alignment.

America’s traditional economy of research, innovation and manufacture has been replaced by an economy of production overseas and debt-driven consumption at home. It isn’t sustainable. No other country operates this way. We need to do better. And the American government needs to help bring the interests of business and the people back into alignment. Without real change, President Obama’s vision will remain just that — a vision.
Endnotes


13 Exception provisions from Canadian WTO agreement on government procurements: www.wto.org/english/tratop_E/gproc_e/cannote.doc

14 Exception provisions from European Union WTO agreement on government procurements: www.wto.org/english/tratop_E/gproc_e/ecgene.doc


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The Institute for America’s Future is a center of nonpartisan research and education. Its mission is to equip Americans with the tools and information needed to drive issues into the national debate, challenge failed conservative policies and build support for the progressive vision of a government that is on the side of working people. To achieve our mission, IAF spearheads the development of a compelling progressive economic agenda and message—which makes clear what progressives stand for, articulates the philosophy and values underlying these policies, and frames and argues for them in new ways that will resonate with the majority of average Americans. IAF also regularly convenes and educates progressive leaders, organizations, candidates, opinion-makers, and activists to encourage and facilitate their adoption and use of a common economic agenda and message so that our collective voices echo powerfully. Finally, IAF acts as an incubator of national campaigns in which progressives join together to form policies that advance economic prosperity and opportunity for lower- and middle-income Americans.