The urgent need to boost American economic growth while reducing the U.S. trade deficit makes it imperative to rebuild America’s manufacturing sector. Capital and labor that were diverted during the bubble years into unproductive, inflated assets in the housing and stock markets need to be shifted into the production of tradable goods to be exported or substituted for imports. A successful policy to reinvigorate U.S. manufacturing will require intelligent public policy in a number of areas, from lowering the costs of doing business in the United States through infrastructure investment and tax reform to addressing the mercantilist practices of some U.S. trading partners.

Central to any strategy for industrial revitalization in America must be expanding the access to credit of American manufacturing firms, particularly small and medium-sized firms. In the medium term, this requires the creation of a comprehensive federal and state manufacturing credit system modeled on the successful farm credit system of the last century, which modernized American agriculture and turned high-tech U.S. agribusiness into a leading export industry. In the short term, as a down payment on the goal of modernizing American manufacturing, Congress should build on successful precedents in infrastructure investment and other areas and create a new category of “Made in America Bonds.” Modeled on the Build America Bonds program created by the American Recovery and Reinvestment Act of 2009 (ARRA), Made in America Bonds would be a new class of tax credit bonds that could be issued by states, local governments and other authorized entities to encourage the establishment or expansion of manufacturing in the United States.
Made in America Bonds

A comprehensive strategy for revitalizing American manufacturing requires coordinated policies in a number of areas, including trade, currency, infrastructure, energy, and taxes, as well as education and immigration reforms that encourage the expansion of the workforce with appropriate skills. One of the most important factors in growing an economic sector is reducing the cost of credit for businesses in that sector. In the twentieth century, the federal government put a thumb on the scale in credit markets to help out farms and homeowners. In the twenty-first century, the federal government needs to do the same for American manufacturing.

The first step in a new national manufacturing strategy should be the creation of Made in America Bonds (MABs). Made in America Bonds would be a new class of municipal bonds that could be authorized by states, local governments or other entities that are allowed to issue municipal bonds under state and federal laws. While traditional municipal bonds are tax-exempt, in recent years a new generation of tax credit bonds has become increasingly popular and successful: in 2009, taxable bonds comprised 20.7 percent of all municipal bonds, up from a previous high of 10.7 percent in 2003.

Here’s how a tax credit bond works: Tax credit bonds take advantage of the fact that taxable municipal bonds, in order to attract investors, must pay a higher yield than tax-exempt bonds, to compensate for the fact that the bondholder must pay federal taxes on their returns. A tax credit bond is a taxable bond in which part or all of the interest on the bond can be deducted from federal taxes by the bondholder, who may be an individual or an institution. In form, the tax credit for a tax credit bond is a “tax expenditure” like many other tax breaks for individuals and institutions in the federal tax code. In effect, however, the tax credit is a subsidy to state and local governments and issuers on the part of the federal government. In a period of public concern about high federal deficits, tax credit bonds have political appeal because the federal tax subsidy takes the form of a tax expenditure and therefore does not add to the federal deficit, although the revenue shortfall caused by the

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Needed: Manufacturing-Led Growth

A flourishing U.S. manufacturing sector is essential not only for putting the U.S. economy on a sustainable path leading out of the present Great Recession, but also for the long term growth of the American and global economies.

Manufacturing has the greatest multiplier effect. Every dollar in final sales in manufacturing products supports $1.37 in other sectors of the economy. By contrast, the financial services sector generates only about 50 cents for every dollar of activity.

Manufacturing is the greatest source of innovation. Manufacturers are responsible for more than 70 percent of all business R&D, which ultimately benefits other manufacturing and non-manufacturing activity.

Manufacturing productivity growth drives American productivity growth. Between 1997 and 2005, multifactor labor productivity in manufacturing grew at an average rate of 4.6 percent per year. This was 60 percent greater than in the private, non-farm economy as a whole.

Manufacturing is critical to other higher value-added sectors of the economy. The maintenance of a strong and vibrant manufacturing sector is essential to other high value-added sectors of the economy, including design, telecommunications, and finance.

Manufacturing provides good wages and benefits. On average, manufacturing employees earned 23 percent more than workers in other parts of the economy.

Manufacturing provides diversified employment. On average, non-college-educated workers in manufacturing made $1.38 per hour (or 9.2 percent) more than similar workers in the rest of the economy in 2006-07.
tax credit must be made up by tax increases or spending cuts elsewhere.

**Made in America Bonds as Private Activity Bonds**

Precedents for Made in America Bonds can be found in the two classes of Recovery Zone Bonds (RZBs) created by ARRA. Recovery Zone Bonds are tax credit bonds that state and local governments can use in designated areas that have been particularly hard-hit by the global economic crisis. Recovery Zone Bonds come in the form of both tax credit and tax-exempt bonds. The tax credit version, Recovery Zone Economic Development Bonds (RZEDBs), can be used only for public purposes by public entities. The tax-exempt Recovery Zone Facility Bonds (RZFBs) can be used by state and local governments and other entities to provide direct aid to particular private businesses.

Recovery Zone Facility Bonds belong to a class of tax-exempt municipal bonds known as “private activity bonds,” which are a subset of “industrial revenue bonds” issued by state and local governments and public entities. The procedure by which a government entity issues a private activity bond is similar to that by which it would issue bonds to finance a public project like school buildings or streets or water utilities. However, instead of using the money for a public enterprise, the state or local government subsidizes a private enterprise like a manufacturer. Usually the private company, rather than the issuer of the bond, repays the lender.

During the Golden Age of American industrial capitalism from the 1950s to the 1980s, the federal government allowed a wide range of state and local industrial revenue bond programs (used for direct aid to manufacturing companies and other productive private enterprises) to be exempt from federal taxation. In the 1980s, a combination of deficit hawks

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**Tax Credit Bonds: The Precedents**

The most important precedents for Made in America Bonds are Build America Bonds (BABs). Created by the ARRA in February 2009, Build America Bonds are a new class of municipal tax credit bond that can be used by state and local issuing authorities to raise funds for infrastructure investment. Since the program came online, BABs have raised more than $71.5 billion for state and local infrastructure projects. President Obama’s 2011 budget calls for the popular program to be extended indefinitely.

There are a number of other tax credit bonds introduced or revised in the Recovery Act:

- **Recovery Zone Economic Development Bonds (RZEDBs):** Specialty BABs (capped at $10 billion) offering an enhanced federal subsidy for public projects targeting designated recovery zones (areas facing severe financial distress)
- **Recovery Zone Facility Bonds (RZFBs):** Traditional tax-exempt private activity bonds (capped at $15 billion) for capital expenditures by businesses in recovery zones
- **New Clean Renewable Energy Bonds (CREBs):** Pay 70 percent of the interest (capped at $2.4 billion) for renewable energy facilities investments
- **Qualified Energy Conservation Bonds (QECBs):** Pay 70 percent of the interest (capped at $3.2 billion) for public energy conservation projects
- **Qualified Zone Academy Bonds (QZABs):** Pay 100 percent of the interest (capped at $1.2 billion) for public school renovation, equipment purchases, curriculum development, and personnel training
- **Qualified School Construction Bonds (QSCBs):** Pay 100 percent of the interest (capped at $1.2 billion) for new construction or rehabilitation of public school facilities

In addition to these, there are several older tax credit bond programs for natural disaster recovery efforts, including Midwestern Tax Credit Bonds and Gulf Opportunity Zone Bonds.
who sought to raise federal revenue by reducing tax expenditures and “good government” reformers on the left and right suspicious of “corporate welfare” succeeded in drastically restricting the ability of state and local governments to use municipal bonds to help companies. Today only a narrow range of activities and limited dollar amounts are exempted from federal taxation in the form of small-issue “qualified private activity bonds” sold by municipal governments.

While correlation is not causation, the fact that American manufacturing flourished when the federal government allowed state and local governments wide latitude in using tax-favored municipal bonds to help private manufacturers, and declined during the period when such aid to private concerns was frowned upon, is suggestive. And the U.S. is the only leading industrial nation that views direct aid by the central government and its sub-units to national manufacturing firms to be evidence of moral and political corruption, rather than sound public policy in a competitive global economy. If the federal government can rescue and reorganize the U.S. car industry in the interest of preserving manufacturing, as it rightly did, then it is time to rethink Reagan-era restrictions on the ability of state and local governments to issue federally-favored municipal bonds as part of public-private partnerships to encourage manufacturing in the U.S. Renewing American manufacturing may require liberalizing the federal laws governing qualified private activity bonds and allowing tax credit bonds like the proposed Made in America Bonds to be used as private activity/industrial revenue bonds.

**Made in America Bonds: The Details**

The concept of Made in America Bonds is more important than the details, which would inevitably reflect compromises in Congress if the proposal were enacted into law. The basic features of Made in America Bonds should be as follows:

**The Tax Credit.** Like the holders of similar tax credit bonds, the owners of new Made in America Bonds would enjoy a tax credit on a portion of the interest paid by the issuer, be it a state or local government or state-chartered public enterprise. Build America Bonds subsidize interest payments at 35 percent, while other tax credit bond programs include subsidies ranging from 70 percent (New CREBs) to 100 percent (QZABs).

**Volume Caps.** In order to limit revenue losses to the federal government, the new Made in America Bonds, like similar tax credit bonds, would be issued with a volume cap. Following criteria established by Congress, the Secretary of the Treasury could allocate the volume cap among the states on the basis of population or other factors.

**How Made in America Bonds Can Be Used.** Municipal governments should be allowed to use Made in America Bonds in a variety of creative and innovative ways, as long as the result is the promotion of new investment in manufacturing in their jurisdictions. MABs could be used to capitalize state manufacturing investment banks, which could subsidize manufacturing companies through loans, grants or other means. In addition, state and local governments could use the proceeds from MABs to capitalize the regional, cooperative banks of the federal manufacturing credit system we have proposed elsewhere.³ States and cities could also use some of their MABs as private activity bonds, directly aiding particular manufacturing corporations in creative public-private partnerships, as described above. If it is legitimate for tax-exempt municipal bonds, in the form of qualified private activity bonds, to subsidize private manufacturing, then it should be equally legitimate to aid manufacturing enterprises with the help of tax credit bonds.
Avoiding Temptation

Made in America Bonds could be a vital part of a larger, comprehensive strategy of American industrial revitalization. But a potentially helpful program could go awry, if the states or Congress were to succumb to several potential temptations.

The states must not be allowed to succumb to the temptation to use federally-subsidized Made in America Bonds as part of beggar-thy-neighbor strategies to rob other states of industries. As early as the 1920s, some states specialized in “smokestack chasing,” often using direct subsidies as well as anti-labor laws and low taxes to lure textile companies and other manufacturers to the South from New England. In recent decades, some states have used state-level industrial policies to create a low-wage, non-union automobile industry workforce that it has rented to transplanted Japanese and German multinationals backed by their own governments and seeking to undermine the U.S. automobile industry.

State and local governments should be allowed to issue Made in America Bonds only if they forgo beggar-thy-neighbor economic development strategies. In addition, states could be forbidden to issue Made in America Bonds for projects which they simultaneously seek to finance through certain kinds of proscribed subsidies or tax breaks.

In addition to making the availability of Made in America Bonds contingent on constructive behavior by state and local governments, Congress itself must resist temptation—the temptation to try to expand the purpose of Made in America Bonds beyond promoting American manufacturing to achieving additional social and economic objectives. Under pressure from special interest groups, Congress might be lobbied to load Made in America Bonds with one well-intentioned but extraneous requirement after another. But if the program is overloaded with too many conflicting purposes, it is likely to fail to achieve its original purpose of encouraging the expansion of the domestic tradable goods sector.

Structuring Made in America Bonds: What to Avoid

Here is a partial and not exclusive list of requirements that should not be attached to the proposed Made in America Bonds:

- Businesses benefiting from programs financed by Made in America Bonds should be required to create jobs in the U.S. But there should not be a requirement that businesses funded directly or indirectly by Made in America Bonds create a fixed number of jobs.
- There should not be a requirement that portions of Made in America Bond revenues be allocated to green industry companies. There are already abundant federal subsidies for green industry, including two distinct renewable energy industry tax credit bonds, New CREBs and QECBs.
- There should not be a requirement that state and local governments use Made in America Bonds to favor only small businesses instead of big businesses. Numerous existing federal programs already promote small business.
- There should not be a requirement that Made in America Bonds be used to generate jobs and investment in particular areas of high poverty or high unemployment. There are already adequate federal, state and local programs designed to achieve this particular goal, from federal Recovery Zone tax credit bonds to state and local Enterprise Zone initiatives.

A Down Payment on American Economic Renewal

Made in America Bonds are only part of a long-term U.S. manufacturing strategy, which cannot succeed unless it also includes trade and currency policies in
the national interest, pro-growth tax reform, pro-growth education reform, pro-growth immigration reform, and policies to keep the resource inputs for domestic manufacturing—including energy—inexpensive, abundant and free from excessive volatility in price and supply. But Made in America Bonds can serve as a down payment on more comprehensive reform to come.

The stimulus bill helped to encourage greater investment in American infrastructure by creating Build America Bonds. By creating Made in America Bonds, Congress can accelerate the long process of shifting from an unsustainable economy based on debt-fuelled asset inflation in housing and finance to a productive economy in which a renewed and expanded U.S. manufacturing sector acts as an engine of growth for America and the world.

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2 Lind, ibid.