CSG RESEARCH INFRASTRUCTURE GUIDELINES

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Executive summary:
A lot has been written about what a new Federal infrastructure plan might look like, and "might" is the key word, because there is such uncertainty as to what the Administration or Congress will agree on once actual policymaking begins. In this first of many anticipated discussions of the topic, we provide a set of "guidelines" as to policy issues that lawmakers need to consider when developing any plan to increase infrastructure investment. These include:

1. The bond markets have worked extraordinarily well as a "sort and selection mechanism" for a large number of infrastructure projects for decades.
2. The efficiency of the tax-exemption as a way of disbursing financial support for projects remains vastly greater than certain critics would suggest.
3. It is essential to identify why, and how much, state and local spending on infrastructure has lagged.
4. State and local officials generally have a good sense as to what type of projects will have the greatest economic impact in their jurisdictions.
5. Any new infrastructure plan needs to take into account the great variety of different structures and strategies for paying for the annual costs associated state and local projects, including debt service and operating expenses.
6. The vast distinction between replacement of old facilities, major maintenance on existing facilities and creation of new projects needs to be identified and considered carefully.
7. While America's mood, in general, remains very anti-tax, some state and local governments have raised new funds for infrastructure maintenance and development, while in other cases voters have approved large new projects in bond referendums.
8. Handing over funding to state and local issuers through a national infrastructure bank is unlikely to generate an optimal outcome.
9. Regional Infrastructure Banks may have some merit, if partnered with state and locals.
10. Successful existing Federal programs need to be re-funded ahead of new schemes.
11. Public/private participation teams should be encouraged, but not in ways which generate high private profit and limited state and local benefit.
12. Reconsider Build America Bonds, as a "teammate" to the existing tax-exempt market.
13. Perhaps most importantly, do not break what already works. That, we would argue, includes the tax-exempt bond market.

Finally, lawmakers need to get a lot clearer regarding the goals of any infrastructure spending program. To be sure, more spending is needed, and in some cases, achieving this goal will require significant additional Federal financial support. However, that support needs to be incremental over successful existing structures, not a replacement for them.

Creating New Infrastructure Spending Plans: As You Seek to Reinvent the Wheel, Don't Break the Axles

A lot has been written about a new Federal infrastructure plan might look like, and "might" is the key word, because there is such uncertainty as to what the Administration or Congress will agree on once actual policymaking begins.

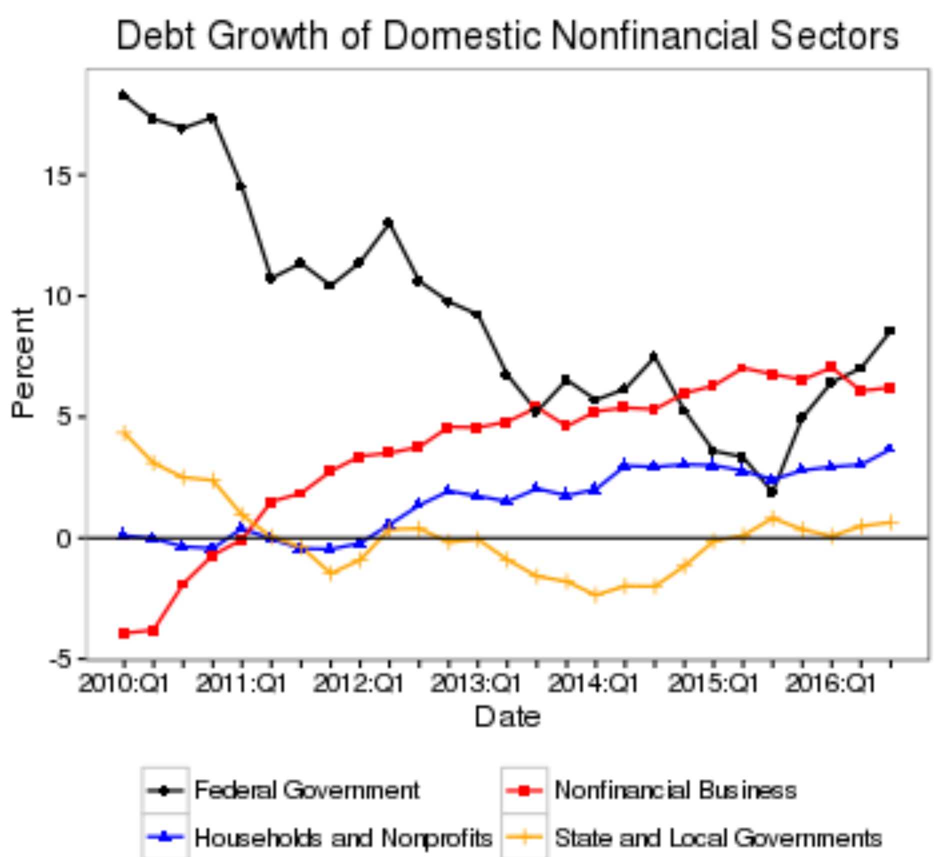
We know of one potential proposal: authored by Trump Advisors, Wilbur Ross and Peter Navarro, that is solely focused tax credits. There are massive questions with that approach, not the least of which is that it appears to lean heavily on private sector ownership of infrastructure projects. Will state and local governments accept that approach and enthusiastically support private ownership and leveraged profits? It is doubtful. Another concern is that it appears to generate its own definitions of "infrastructure," which do not necessarily jibe with that which state and local governments or infrastructure policy experts might use. The plan, for example, focuses heavily on energy transportation as a form of infrastructure. It also leans heavily on so-called "dynamic scoring" as a way to reduce the cost of the tax credits—i.e., it assumes that much of the tax credit cost will be recouped in the form of higher economic growth and more infrastructure-related jobs than would exist if other methods were used to enhance spending on infrastructure. Why, we ask, would these other methods not also be assumed to generate additional jobs and growth, possibly at a lower cost than a tax credit scheme? If access to the municipal bond market were to be gutted, would assumed tax revenues be adjusted downward? We also note that a tax credit-based strategy in conjunction with private ownership simply won't work for the vast number of projects that are not self-supporting on a revenue basis. Do these projects, many of which are extraordinarily important, simply not share in whatever plan for support and/or subsidization gets enacted? From a policy viewpoint, that outcome would certainly seem unwise and ineffective. And, it is not clear what sources would be used to fund a tax credit structure, or whether it would fully carry over from one Federal budget to the next. The fact that payments to issuers on Build America Bonds got cut under sequestration does not give us a warm and fuzzy feeling about Congressional commitment to tax credit structures over time. What one Congress legislates can be undone or diluted in a future Congress. Nothing is ironclad.

In this first of many anticipated discussions of the topic, we provide a handful of "guidelines" as to policy issues that lawmakers need to consider when developing any plan to increase infrastructure investment.

Guideline #1. The bond markets have worked extraordinarily well as a "sort and selection mechanism" for a vast majority of infrastructure projects. Whether through tax-exempt municipals or through direct-pay BABs in 2009-10 as a source of financial support for infrastructure projects, the bond market has helped sort and select among potential projects in a variety of ways, including: a) helping governments pick projects that they were willing to pay their share of project costs over time; and b) through the ratings process, identifying projects for which there was sufficient financial responsibility to assure that budgets would include repayment of project costs. Any new strategy which includes subsidies that are intended to induce greater infrastructure construction activity still needs to avail itself of this sort-and-selection mechanism, without which project selection tends to be haphazard, sluggish and not well distributed among competing potential recipients of such subsidies.

Guideline # 2. The efficiency of the tax-exemption as a way of disbursing financial support for projects remains vastly greater than certain critics would suggest. We refer the reader to our report for the 2013 Brandeis Municipal Conference, "The Battle to Preserve the Tax Exemption: A Framework for Analysis" for a more detailed discussion of this important topic. We shall return to it over time, but do not wish to get into greater details in this brief discussion of infrastructure "guidelines." A key point incorporated in our entire thesis, however, is that new schemes which start of by damaging existing funding structures leave state and local governments in a hole relative to what they can already accomplish. A significant portion of any new spending plan that damages or supersedes the municipal bond market, then, would simply be needed just to get back to where we are now.

Guideline # 3. It is essential to identify why, and how much, state and local spending on infrastructure has lagged. We know for certain, for example, that state and local borrowing for new projects has virtually collapsed: new-money issuance in the municipal market, adjusted for inflation, was roughly half in 2011-15 of what it had been in 2001-10. This pattern, relative to borrowing in other sectors, shows up well in a recent Fed graph:



Percentages are four-quarter moving averages.
Source: Financial Accounts of the United States (December 8, 2016)

The comparison is striking. On a net basis, state and local governments haven't borrowed a nickel since the beginning of 2010, while borrowing in other non-financial sectors of the U.S. economy has continued to pile up. There are many reasons why, but if the new Administration and Congress wants to increase spending on infrastructure, they need to figure out a way to make state and local governments more enthusiastic about participating. It should be noted that this collapse in the state and local role has occurred in spite of enthusiastic responses by taxpayers to most of the proposed projects that are submitted for approval in statewide elections. So what is holding things back? Out of dozens of reasons, roughly 5 stand out:

- Extremely fiscally conservative leadership in many states. We hesitate to get political here, but the reality is that Republican gubernatorial and legislative dominance in such a large proportion of states jibes with promises to severely limit spending growth—even if that spending growth is needed to fund essential infrastructure projects that would increase economic competitiveness. In addition, the fact remains that taxpayers in many states and localities are extremely resistant to approval of sources of financing for projects, even where they approve issuance of debt under bond referendums.

- Severe limits on taxpayer willingness to fund additional spending through new taxes or fees, despite willingness to approve financing of such projects. Funding and financing have to be recognized as two different issues—and new sources of funding need to be identified and approved.

- Diminished debt capacity in the aftermath of the great recession.

- Extremely limited support from or partnership with the Federal government. The severely limited willingness by Congress to add any permanent revenues to the Federal Highway Trust Fund is an excellent example—see below.

- Last, but far from least, direct competition between rapidly growing unfunded pension liabilities and debt capacity will diminish state and local capacity to fund infrastructure at the state and/or local level in many states and cities. See, for example, local governments in Texas, where both Dallas and Houston are very close to the top of the national list in terms of unfunded pension liabilities that will inevitably crowd out need infrastructure projects.

The bottom line is that any Federal program that expects to support economic growth by repairing and rebuilding infrastructure needs to take into account the need to incentivize state and local governments—but especially states—to participate by identifying and pledging the revenue sources necessary to get projects off the drawing board. It would also need to provide sufficient financial support to make any such projects financially viable in an era of severely diminished budget capacity.

Guideline #4. State and local officials generally have a good sense as to what type of projects will have the greatest economic impact. In the 2015 Boston University/Menino Survey of Cities, they stated that: "Aging and underfunded physical infrastructure weighs most heavily on the minds of mayors, who identify it as the most pressing challenge they face. Their list of needs is long, but specific "big ticket" priorities include mass transit, roads, and water, wastewater and stormwater infrastructure. While mayors most often must partner with state and federal governments to address these priorities, they express limited confidence in the ability of either to adequately help them solve their challenges." We continue to worry about any Federal program that starts off by telling state and local governments what kinds of infrastructure they need to build, and then reduces support for projects that are politically unattractive at the Federal level. Mass transit comes to mind—many cities prioritize it in their list of needs, but Congressional and Administration support under the incoming regime is likely to be severely lacking, or even a net negative.

Guideline #5. Any new infrastructure plan needs to take into account the great variety of different structures and strategies for paying for the annual costs associated state and local projects, including debt service and operating expenses. Some classes of projects, but clearly not all, are paid for by user fees or charges that could be increased in return for increased reliability, convenience, efficiency, time-saving or other utility. In addition, rates in some cases can be structured to charge more in times of peak demand or for use above certain levels, much as some energy and water suppliers and electronically tolled roads do now. User fees generally pass muster with libertarian and conservative groups that argue that services should be paid for by the consumer and not the general public, but there are vast numbers of projects that are simply not supportable by user fees—local roads and bridges, for example. In other cases, roads and bridges are ideal targets for use of user fees, especially as the technology for account for usage continues to improve. Other classes of infrastructure where user pricing flexibility and financing opportunities may exist may include commuter mass transportation; water and especially sewer; industrial waste treatment facilities; publicly owned electric power generation, transmission, and distribution; gas distribution; airport terminals; and port facilities.

Guideline #6. The vast distinction between replacement of old facilities, major maintenance on existing facilities, and creation of new projects needs to be identified and considered carefully. Clearly, a very substantial proportion of the needed spending on infrastructure relates to the first two categories: replacement of obsolete facilities, and major maintenance on existing facilities, not creation of new projects. The first category includes disparate projects, such as replacement of functionally obsolete bridges, but it also includes facilities such as 100-year-old water mains. So, even within this single category, some projects may be "tollable," (e.g., the replacement for the Tappan Zee Bridge), while others are simply a portion of an existing facility without its own revenue source (e.g., old wooden water mains or lead-filled water pipes). In the second category, there are vast number of facilities that need to get major enhancements before they become functionally obsolete. (e.g., local roads and many water/wastewater facilities). In the third category, there are also projects that simply fit within an existing system (e.g.. school buildings) and those that represent independent, new projects. Although there is limited data, we suspect that the proportion of spending that needs to be focused on the "sexiest" category, and the one most amenable to direct private sector involvement—a portion of the first category, and a portion of the third category—is actually not where the most money needs to be spent to make our infrastructure modern and competitive.

Guideline #7. While America's mood in general remains anti-tax, some state and local governments have raised new funds for infrastructure maintenance and development, while in other cases voters have approved large new projects in bond referendums. Nineteen states and the District of Columbia have increased gasoline taxes since 2013 (source: NCSL) and overall water rates have been increased 30% in seven years. In addition, approval of new projects in state referenda has been extremely strong. Our point is that there *does* appear to be unused infrastructure financing support capacity in a significant number of state and local governments. The right kind of Federal incentives, in the form of subsidies, might bring more of it to fruition —but the form needs to be very carefully thought out.

Guideline #8. Handing over funding to state and local issuers through a national infrastructure bank is unlikely to generate an optimal outcome. Establishing a federal infrastructure bank further concentrates decision-making in Washington and away from the state and local officials who make infrastructure decisions under current law. And if the lessons learned in the handling of the Fannie Mae and Freddie Mac debacles provide any guidance it is that the federal government has a history of financial incompetence. Recent infrastructure bank proposals have relied on a continuing flow of congressional appropriations to keep them afloat with, potentially, taxpayers on the hook if things don't work out. Additionally, when the Federal government foots a too-big portion of the bill through an infrastructure bank, state and local governments may take a John Dillinger approach, accepting funding from such a bank because "that is where the money is." Finally, approval and appropriation of moneys coming largely from a Federal source can be extraordinarily slow. We harken back to water projects approved by the Army Corps of Engineers or the Bureau of Reclamation that only got funded decades later, or not at all.

Guideline #9. Regional Infrastructure Banks may have some merit, if partnered with state and local governments. We are not suggesting the elimination of state banks, or the overlay of another layer of bureaucracy, but there are some who believe that for large, regional projects, states should be able to team up, and regional banks may be one way to do this. We tend to agree.

Guideline #10. Successful existing Federal programs need to be re-funded ahead of new schemes. These include, in particular, the Federal Highway Trust Fund, which has successfully partnered with state and local governments, but which remains woefully underfunded. We would include public and (most) private activity municipal bond (PAB) programs in this category as well.

Bumps in the road on most federal highways don't come just from cracking concrete but from shortfalls in funding of the Highway Trust Fund (HTF). The Congressional Budget Office (CBO) projects that tax and user fee proceeds from 2016 to 2020 will be $206.9 billion or $1.4 billion less than forecast in March 2016. And even with the injection of $70 billion in federal funds made possible by the passage of the FAST Act in December 2015, the CBO projects that HTF revenues will not be sufficient to sustain highway and transit programs by the time the FAST Act expires in 2020. Alternative funding sources—such as hiking the federal gas tax or implementing a vehicle miles travelled tax—have been met with significant political resistance from federal lawmakers. Beyond highways, federal funding mechanisms for other infrastructure meet similar opposition. The Passenger Facility Charge (PFC) has been used for nearly three decades to fund improvements to safety, security, and expansion of our nation's commercial airports. In 2000, Congress placed a cap of $4.50 on the PFC, but did not index it for inflation or provide for incremental increases in the facility charge. PFCs currently fund about 30% of airport capital investment, but that percentage will continue to dwindle if the PFC is not raised.

Guideline #11. Public/private participation teams should be encouraged, but not in ways that generate high private profit and limited state and local benefit. In this era of rapid private sector technological enhancement, we expect private companies to play an increased role in creating key infrastructure projects, either through Public-Private Partnerships (in some cases) or through other strategies which leave ownership of infrastructure projects in the hands of state and local governments. Strategies that cede ownership and large amounts of profit to the private sector, such as the tax credit structure noted above, are unlikely to be as cost effective from a state or local viewpoint as those that maintain a key governmental role in ownership. Nor are they likely to be as efficient as use of the tax-exempt market in conjunction with public ownership, but with enhanced private sector involvement.

Guideline #12. Reconsider Build America Bonds as a "teammate" to the existing tax-exempt market. We recognize the political animus to this structure, but as Barron's noted in a recent cover story, the structure can be a highly effective complement for (not replacement of) the tax-exempt municipal bond market as a way to support state and local projects. During the Great Recession, Build America Bonds served as the great equalizer for municipalities allowing them to offer bonds to the taxable market without paying out more interest than on tax-exempt bonds. More than $150 billion of BABs were issued and the taxable nature of the bonds opened-up the market to nontraditional investors, such as pension funds and insurance companies as well as foreign investors. The resulting market expansion insured issuers a steady flow of investor demand for state and local debt and produced significant savings for states and municipalities because the net borrowing costs for Build America Bonds were comparable to or lower than rates in the tax-exempt market. The key question here, especially in an era of potential impending tax reform, is the proper subsidy rate for any renewed use of this funding technique. 35% was clearly too high, but it may take some time to identify the proper subsidy rate as marginal tax rates for corporations and individuals undergo potential change.

Guideline #13. Perhaps most importantly, do not break what already works. That, we would argue, includes the tax-exempt bond market. In the early 1800s, New York issued the first revenue bond to build a canal. More than 200 years and millions of infrastructure projects later, the market for municipal bonds is strong with $3.7 trillion of bonds outstanding and an average of $400 billion of bonds issued annually. Yes, there are alternative financing mechanisms to municipal bonds that could be used for infrastructure construction—P3s and bank loans, for instance—but each suffers from increased complexity, increased borrowing/funding costs, and, in the case of P3s, the need to generate a guaranteed rate of return. Most importantly, small issuers are at a distinct disadvantage in using alternative sources of capital as the size of their issuances does not garner the interest and favorable borrowing rates that are offered to larger municipalities. In short, while there may be ways to strengthen and sharpen the operations of the municipal market through the incorporation of alternative sources of financing, the simple fact is there is no viable substitute to municipal bonds.

Finally, lawmakers need to get a lot clearer regarding the goals of any infrastructure spending program. Clearly, a key goal is simply to incentivize state and local governments to take on additional projects within their existing budgetary, policy and political framework. It would seem that to accomplish it, aggregate subsidies for many projects will have to be greater than those provided simply by the tax-exemption or through BABs. Indeed, subsidies that can be provided simply through reduction of the cost of borrowing, whether through the tax-exemption or a BABs-like structure, have been insufficient to get a significant proportion of projects off the sidelines, for reasons discussed in **Guideline #3 above**. So, if the Federal Government wants to supercharge aggregate infrastructure spending, it will need to spend out of its own budget in ways that help economic growth and limit the state and local component of costs. How this can be done effectively is far from clear, at this point. And if it is done through budgetary strategies that severely damage the tax-exempt market, then the net benefit for infrastructure would have to be reduced to account for the cost of this damage.

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