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Part I: 2020: The Good, the Bad, and the Ugly

Public Budgeting in 2020: Return to Equilibrium, or Continued Mismatch between Demands and Resources?

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Public budgeting in 2010 is dominated, at all levels of government, by continuing high demands for government services and large budget deficits. Looking ahead to 2020, these struggles are likely to continue. The federal government's 10-year budget outlook is bleak, and its longer-term outlook is even more dismal, driven by growth in health care costs. State and local government budgets will slowly recover from the effects of the recent recession, but will continue to have structural problems. Each of the three major revenue sources—income, sales, and property taxes—are candidates for reform. On the spending side, health care and education will dominate at the state and local level, while controlling entitlement spending is the main federal challenge. Government also will face continued pressures to finance and maintain infrastructure, appropriately staff the budget function, and make good on promises of more transparent and accountable government.

The defining characteristic of public budgeting is that it involves a continual struggle between the demands placed on government to respond to societal problems and the desires of citizens and the capacity of governments to finance those responses. As we write this in 2010, all levels of government in the United States are working to meet this challenge. The federal government has been forced to take unprecedented and costly steps to shore up the economy and to respond to the difficulties faced by state and local governments and citizens. These state and local governments, despite the influx of revenues from the national government, are faced with substantial deficits, driven by the erosion of state and local tax bases in the face of the "Great Recession."

In this context, it is difficult to know what to make of an assignment to speculate about public budgeting 10 years from now. We are humbled by the realization that anyone who was writing 10 years ago about public budgeting in 2010 might have missed a lot, as in 2000,

- The federal budget was in its third consecutive year of surplus, with no warning that by the end of the decade, it would have annual deficits in excess of $1 trillion.
- State and local revenues and expenditures were expanding, with no particular hint of the economic troubles of late 2001, much less the upheaval of 2008 and 2009.

On the other hand, many of the same issues dominated the debate then as now. We were being warned that the retirement of the baby boomers would force us to confront promises that had been made but could not be afforded. Education finance was at the top of the agenda, particularly as it relates to the relative roles of the various levels of government in setting policies and paying for them. The tax system was viewed as too complicated, and perhaps in danger of eroding because (in particular) of the difficulty of collecting sales taxes on remote purchases. And we were trying to come to grips with the age-old challenge of trying to understand the relationship between the choices that government makes and the performance implications of those choices.

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As we look toward 2020, therefore, we cannot know precisely what budgeting challenges will face the United States. Indeed, the major risk of any enterprise such as this is that we will leave out something that becomes *the* story in 2020, just as a similar speculation in 2000 would have omitted the collapse of the financial system, led by the housing market, as the major factor underlying the budgetary environment in 2010. These caveats aside, we cannot talk about everything, so we have chosen to focus on seven issues that surely will continue to be at the center of budgeting 10 years from now (this is, perhaps, another way of saying that they are problems that we will not have solved by then). In each of these seven cases, we will talk about current conditions as well as the likely continued salience of each of these phenomena:

1. The fiscal health of the federal government, particularly in light of unprecedented deficits
2. The struggles of state and local governments to balance their budgets in both the short run and the longer run
3. Pressures on spending at all levels of government, particularly focused on two areas—health care spending, which affects all levels of government, and education spending, the effects of which are felt primarily at the state and local level
4. Concerns about revenue structure and reliance on various sources, particularly intergovernmental revenues and sales tax revenues, which are particularly threatened by various factors
5. The problems created by the need to deal with (and finance) changes to an aging infrastructure
6. The influence of financial and performance data on budgeting decisions
7. Institutional and organizational responses to the management of the finance and budgeting function

The Outlook for the Federal Budget

Fiscal year 2009 saw the federal budget reach its highest deficit, both in dollar terms and as a percentage of the economy, since World War II. In fact, the fiscal year 2009 deficit of $1.4 trillion—9.9 percent of gross domestic product (GDP)—was almost $1 trillion higher than the $459 billion deficit—3.2 percent of GDP—from one year earlier (CBO 2010a, 8, 126). It dwarfed the previous postwar deficit of 6 percent of GDP, which occurred in 1983 (CBO 2010a, 126). This rapid deficit increase came about primarily because of the federal government's efforts to rescue the economy from collapse. Among the more costly additions to the fiscal year 2009 deficit were the $91 billion rescue of Fannie Mae and Freddie Mac and the $152 billion in outlays for the Troubled Asset Relief Program (CBO 2010a, 3). In addition, federal revenues, as a result of the economic downturn, declined substantially. In fact, total revenues dropped by more than $400 billion between fiscal year 2008 and fiscal year 2009 (CBO 2010a, 126).

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Going forward, the key question is whether these large deficits are a temporary phenomenon and will decrease to manageable levels, or disappear entirely, on their own. Neither history nor current projections should provide much hope that this will occur. The federal government has developed a structural deficit problem that has persisted for more than half a century. This pattern has resulted in only five budget surpluses since 1960—in fiscal years 1969, 1998, 1999, 2000, and 2001 (OMB 2010b, 22).

Recent projections by both the Congressional Budget Office and the Office of Management and Budget underscore the magnitude of the challenge. As indicated in table 1, under the Congressional Budget Office baseline (adjusted for the extension of the George W. Bush tax cuts and the "fixing" of the Alternative Minimum Tax, neither of which is included in the "official" baseline), the deficit would decline to approximately 6 percent of GDP (twice its prerecession level) by 2012, and remain there in 2020. Under the policies of the Barack Obama administration (*if* they are adopted and *if* the administration's estimates of their effects are accurate), the deficit would be reduced to 4.4 percent of GDP by 2020.

The State and Local Fiscal Outlook

The states have many of the same significant fiscal pressures facing the federal government, such as increased demand for spending and an expectation that revenues will grow more slowly than average for the foreseeable future. In addition, because all but Vermont have legal requirements to balance their budgets, the states do not have the luxury of running significant operating deficits that allow them to avoid spending cuts and tax increases (NASBO 2008). In the last few decades, state spending has grown an average of 5.6 percent annually, but in the last two years, it has seen an average 3.8 percent outright decline. Revenue has similarly declined significantly. For example, the Rockefeller Institute found that state revenue showed the worst decline in nearly 50 years for the first three quarters of 2009 (Boyd and Dadayan 2010). Volatility in state revenue is also a problem. Data on revenues show significant increases in some years and significant decreases in other years. There is every reason to expect this volatile revenue pattern for states to continue. By the time 2020 arrives, states and localities likely will have had several years with higher than average growth and several with large percentage declines.

Table 1 Baseline Deficits and the Obama Budget, 2010–2015, 2020 (billions of dollars)

	2010	2011	2012	2013	2014	2015	2020
CBO baseline forecast	–1,349	–980	–650	–539	–475	–480	–687
Effect of ext. tax cuts, AMT	10	–200	–298	–336	–389	–422	–700
Adjusted CBO baseline	–1,359	–1,180	–948	–875	–864	–902	–1,387
Deficit/GDP ratio in adjusted baseline	9.8%	7.6%	5.9%	5.6%	5.3%	5.3%	6.0%
Deficits, Obama budget	–1,556	–1,267	–828	–727	–706	–752	–1,003
Deficit/GDP ratio	10.7%	8.5%	5.3%	4.4%	4.0%	4.1%	4.4%
Gross domestic product	14,595	14,992	15,730	16,676	17,606	18,421	22,544

Sources: Congressional Budget Office (2010a, 8,16–17); Office of Management and Budget (2010a, 146, 149). Adjustments to CBO baseline by author.

In addition, overall state revenue and spending likely will be lower than in previous decades during the period from 2010 to 2020. Recent analysis by Professor Don Boyd (2010), a senior fellow at the Rockefeller Institute, found that in "normal recovery tax revenue can take 3–5 years to reattain prior peak." Because economists predict that this will be a slow-growth economic recovery, states' revenue recovery is expected to take even longer. The "lag" between the end of the recession and the time when state revenue begins to improve can be significant. There are many reasons for this. For example, employment growth is expected to lag 18 months or more from the end of the recession, and taxpayers' payments on investment income (such as capital gains) also lag. Also, states will suffer a drop off in federal revenue, as the $246 billion that they are receiving as part of the 2008 stimulus package (American Recovery and Reinvestment Act of 2009, P.L. 111-5) will mostly end in 2011.

At the same time that revenue growth will be sluggish, pressures for spending will be as intense for the next 10 years for states as they will be for the federal government. In the case of states, demands for more spending on health care, prisons, transportation, and other services are expected to grow dramatically. There is also little expectation that the political pressure to avoid major tax increases will change. Rising costs for health care, increases in Medicaid enrollment, larger prison populations, infrastructure needs, and pressures to maintain spending on K–12 and university education are expected to accelerate, particularly after the dramatic cuts of the last three fiscal years. Between pensions and retiree health care obligations, state governments had at least $1 trillion in unfunded liabilities at the end of fiscal year 2008 (Pew Center on the States 2010).

State officials should not overlook the fact that they will have to make policy choices over the next 10 years that will determine the level of fiscal pain and structural imbalance their states will face. With the federal and state revenue situation looking to be tight over the next 10 years, by 2020, states will have varying levels of structural soundness based on the financial management decisions they make between now and that time. Because continued volatility and slower average revenue growth will surely continue into 2020, states that prepare for downturns with responsible management of their finances through avoidance of significant future liabilities will be best equipped to weather the tough fiscal situation and the inevitable downturns. Variation in the level of pain that citizens feel at the state and local level will be dependent on how the states behave with regard to financial management and what responsible mechanisms they put in place in the next few years.

There are a variety of actions that states can begin taking to ensure structural financial soundness into 2020. However, the choices are often politically difficult and painful. One key action is to prevent above-average revenue from being spent as part of base operating budgets. Base operations include ongoing program expenditures such as employee salaries, while the one-time expenses would be funds necessary at once for items such as vehicles, buildings, or information technology upgrades. States' behavior can be similar to individuals who have a significant financial windfall in a particular year and behave financially as if the same income level will last for future years. There are numerous ways in which states can avoid spending at above-average revenue levels. Cash can be used for capital infrastructure instead of debt, mechanisms requiring one-time revenue to be locked up from annual spending in the base. In Massachusetts, legislation was passed to do just that by ensuring that higher than average capital gains revenue is not spent as part of the state base budget during good times. Surplus capital gains revenues will be required to be deposited in the state's budget stabilization fund, with 5 percent of that surplus set aside for unfunded retiree health benefit liabilities (Patrick 2010).

States can take a variety of other measures to reduce their vulnerability to the expected volatile boom/bust revenue cycle they will likely face between now and 2020. Building up rainy day funds and other reserves will be necessary to help prevent severe budget cuts or significant tax increases during the next downturn. Restrictions on the use of rainy day funds should be made more flexible to encourage their buildup and eventual use in difficult fiscal times or for natural disasters. Incentives need to be developed to encourage responsible financial management, such as putting money in underfunded pension systems, in the states and localities. Because elected officials have not demonstrated a desire to make some of the hardest choices, incentives should be built in to statutes and even state constitutions to force responsible financial management.

Local governments similarly face a difficult fiscal situation. The recession and housing bust has not spared many localities. Budget shortfalls are expected to reach as much as $83 billion by 2012 in cities alone (Hoene 2009). These governments face an uncertain fiscal future over the next 10 years, for a number of reasons. First, property tax revenues, on which many local governments rely heavily, are threatened by a continued weak housing market in many regions. Second, revenue from the federal government through the stimulus legislation will end primarily in 2011 just as it will for states, and states are cutting other local aid. Third, localities are facing the same pressures for increased spending on services that other levels of government are facing. Another challenge will be to ensure that wealthier local communities do not attempt to avoid being part of larger more economically troubled local governments.

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Pressures on Spending

The pressures on spending at all levels of government cover a great many substantive areas. At the federal level, for example, more than $1 trillion has been spent on the wars in Iraq and Afghanistan since fiscal year 2001 (CBO 2010a, 7). At the state and local level, corrections expenditures have risen sharply over the past 20 years, and one in every 100 adult male is now incarcerated (Pew Center on the States 2008). Looking toward the future, however, two areas of expenditure that have dominated spending (and spending growth) seem destined to continue to do so. The first is health spending. The second is education spending, in particular elementary and secondary education.

Health

In the case of health spending, the growth of government spending is just a symptom of the larger phenomenon of the growth of health care spending in the overall economy. At the time of the Bill Clinton health care proposal in 1993, one in every seven dollars in the U.S. economy was spent on health care; by 2010, that number was one in six. If health care reform fails to reduce health care costs, it is projected that 20 percent of all spending in the economy will be health related by 2020, and one-third by 2040 (CBO 2007). While the Obama administration was successful in enacting a comprehensive health care reform in 2010, it remains an open question whether—and by how much—this reform will reduce health care spending. The Congressional Budget Office suggests that, although the deficit will decrease in the first 10 years as a result of the bill, this results from health spending increases combined with tax increases and other spending reductions. For the second 10 years, CBO suggests that health care spending may decrease as a result of the legislation (Elmendorf 2010). From a government perspective, three components of health care spending stand out—Medicare, Medicaid, and costs associated with retiree health coverage.

Medicare. Already a substantial driver of growth in the federal budget, Medicare spending was boosted even more in 2003 with the passage of an expensive ($400–$500 billion over 10 years) prescription drug benefit. Overall spending for Medicare, estimated at $528 billion (3.6 percent of GDP) in 2010, is projected to top $1 trillion (3.9 percent of GDP) by 2020. This is driven, in part, by demographics: while Medicare had 46 million beneficiaries in 2010, that number is projected to increase to 61 million by 2020 (CBO 2010a, 48, 54).

Medicaid. Medicaid experiences some of the same cost drivers as Medicare, but it has two major differences from its companion federal health program. First, its caseload is driven not by age demographics, but by income demographics. Second, it is a program that is shared between the states and the federal government. This means that its growth has consequences across levels of government. At the state level, Medicaid expenditures represented 10 percent of general fund expenditures and 11 percent of all expenditures in 1985; by 2008, those figures were 16 percent and 21 percent, respectively (NASBO 1987, 2009). The federal share has risen temporarily because of the assistance granted by the federal government as part of the American Recovery and Reinvestment Act of 2009, but the pressures on state budgets from Medicaid will return by fiscal year 2012.

Retiree health. State and local governments have only begun, in the past couple of years, to come to grips with the substantial costs associated with relatively generous health benefits offered to retired civil servants. The recognition of these costs has been accelerated by the Governmental Accounting Standards Board's requirement that states and localities disclose the accrued liability associated with retiree health. Implicit in this is the expectation on the part of the bond rating agencies that these governments will develop some plan to fund the liability (GASB n.d.). A study done for the Pew Center on the States estimated the nationwide liability at $587 billion in 2008, of which $555 billion (95 percent) was unfunded (Pew Center on the States 2010, 4).

What all three of these have in common is that they are driven by the rising cost of health care. And, left unchecked, these health care costs will continue to rise, becoming an even greater threat to budgets at all levels of government in 2020 than they are today. Regardless of one's view of the specifics of the health care reform, there is substantial agreement that getting health care costs under control is crucial to getting government budgetary costs under control, and that the failure to do so carries substantial threats in terms of the overall economy.

Education

One out of every three dollars spent at the state and local levels is for education. At the state level, higher education spending is a significant portion of this, but elementary and secondary education dominate across both levels. While certainly there are issues of higher education finance (including student loan policy, the relative role of tuition and state financing, and infrastructure requirements) that will continue to dominate into the next decade, elementary and secondary education is likely to occupy a more ubiquitous role, and therefore it is the focus of our discussion here.

According to Springer, Houck, and Guthrie, the United States "is one of only a handful of nations that rely upon a decentralized administrative and financing model rather than a national or central government system" (2008, 6) of elementary and secondary education. In fact, it was not until the latter part of the 1900s that the federal government had any role at all, and states and localities continue to bear the brunt of the responsibility for financing education. Landmark federal laws, such as the 1965 Elementary and Secondary Education Act and its reauthorization in 2001, better known as the No Child Left Behind Act, asserted a federal role by providing funds for state and local governments, often in exchange for meeting some federal policy requirement.

Even more important than the evolving federal role has been the increasing primacy of state governments in financing local education. In 1920, 83 percent of all revenues for local education were raised locally, with virtually all of the remainder from the states. By 2006, state revenues accounted for almost 47 percent of all funds for local education, with 44 percent raised locally, and 9 percent from the federal government. These overall figures, however, mask a great deal of variation in the state share of education financing, from a low of less than 30 percent in Nevada to 90 percent in Hawaii (Duncombe 2010).

Early in the last century, state appropriations for education followed a "flat grant" model. That is, states allocated a flat amount to each community regardless of the number of school-aged children or the capacity of that community to raise funds locally. This method eventually gave way to the "foundation" concept, whereby the number of students and the capacity of local districts to raise sufficient property tax revenue to guarantee some minimum level of education funding were included as factors affecting the level of state aid (Springer, Houck, and Guthrie 2008, 9–10).

Modern education finance, however, has been greatly influenced by a search for equity. State courts, beginning with the landmark *Serrano v. Priest* legislation in California in the 1970s, began to rule that financing systems violated state constitutions, in particular because poor students received unequal treatment as a result of the disparities in local capacity to finance education. This focus on equity had a substantial effect on state funding for education, as efforts increased to use state financing to equalize resources across school districts. This occurred despite the fact that there is no consensus suggesting any clear relationship between funding and educational outcomes (Hanushek 1989). Beginning with a Kentucky Supreme Court decision in *Rose v. Council for Better Education* in 1989, however, the debate about school financing switched to a different concept, called *adequacy* (Springer, Houck, and Guthrie 2008, 11–13). Under the notion of adequacy, the focus shifts from "input equity" to "outcome equity" (Baker and Green 2008, 209). In other words, the question is not how to equalize per pupil spending, but how to provide resources that will result in equalization of (or at least the guarantee of some minimum) educational outcomes.

The outcome measurement system is typified by the No Child Left Behind Act at the national level. In reality, however, many states had state-level accountability systems in place even before that legislation. Outcome measurement in education, as elsewhere, is a quagmire. While test scores have been used measures of achievement, they have been challenged as inadequate, or even misleading, measures of student achievement. Further, states and localities have argues that the federal government (in the No Child Left Behind Act and elsewhere) has pushed adherence to national standards without adequate resources necessary to meet those standards; they are hoping for a different approach from the Obama administration. Finally, there are nascent efforts under way to increase the role of merit in teacher compensation, which will necessitate a more nuanced understanding of the relationship between what teachers do and what students learn.

The overall demands for education spending will be driven by factors such as demographics, teacher unionization, and immigration. According to the National Council on Education Statistics, enrollments of students in elementary and secondary education are projected to increase from 49.3 million to 53.9 million between 2006 and 2018, an increase of 9 percent. However, this masks a great deal of variation among states. Eight states, exclusively in the South and West, are projected to experience growth in excess of 20 percent, with Arizona leading the way at 42.2 percent. On the other hand, there are eight other states, mostly in the Northeast, projected to lose at least 5 percent of their student population over this period (Hussar and Bailey 2009).

Beyond the sheer level of funds devoted to education, however, it is the relationship between funding and student performance that seems more likely to be the topic of debate, discussion, and policy over the next 10 years. There is no question that debates about education will continue to focus on the types of questions that have been raised concerning the overall financing and accountability systems, including the following:

- What is the appropriate federal role in state and local education, given the relatively small amount of money provided by the federal government but the substantial policy influence that this money can bring? The Obama administration, for example, has advocated the replacement of the No Child Left Behind Act with another regime. What will it look like?
- How can we develop a more sophisticated understanding of the reasons for, and the role of financing in, the equality of educational outcomes?
- What role does compensation play in attracting better-quality teachers, and can the compensation for teachers expand the use of merit as a basis for that compensation?

As long as education spending represents a large portion of overall state and local budgets, debates about education *are* debates about funding—the amount, the distribution across levels of government, and the effect.

The Revenue Side of the Budget

There is nothing like a good (or bad) recession to highlight the vulnerabilities of government revenue systems. Each of the three major revenue sources demonstrates structural problems that are in need of fixing in order to better meet common standards of an effective revenue system—primarily adequacy, equity, and efficiency.

Income Tax

The federal income tax dominates, as most state and local income tax systems conform to the federal system. There are four big problems with the income tax as it is currently implemented in the United States. First, it is vulnerable to economic downturns because of its rate structure on the individual side and its tax base (corporate profits) on the corporate side. Second, while the Tax Reform Act of 1986 represented a laudable attempt at base broadening, this has been eroded since then, and there are a great many exclusions from income on policy grounds, creating a great many economic distortions. Third (and related), it can be immensely complicated for many taxpayers, largely because of efforts to adjust taxation to individual taxpayer conditions; there is little transparency in terms of the relationship between who pays taxes and who benefits from the public services financed by them. To make matters worse, the Alternative Minimum Tax (AMT) effectively requires many taxpayers to compute their tax liability twice. Fourth, because it is a tax on all income, it tends to discourage saving and investment.

All of these factors together cry out for a system that is less prone to cyclical variation, has a broader base, is easier to comply with, and encourages saving and investment. Given the budgetary problems of the federal government, we are almost certain to see substantial changes in the income tax between now and 2020. In addition, the increasing scope of the AMT, which affected fewer than 5 million tax returns in 2009 but is projected to affect 35 million by 2019, will spur attention to changes in the tax code (CBO 2010b).

Sales Tax

There are two broad problems with the sales tax. First, it is regressive, in that lower-income people pay a higher percentage of their income in tax than higher-income people. This particular problem has been mitigated somewhat by the exclusion of some "necessities" (e.g., food and prescription drugs) from the tax base. In fact, because it is a tax on consumption, many economists favor the sales tax over a broad-based income tax, as it does not discourage saving. The more recent problem with the sales tax results from the increasing volume of sales transactions that are conducted over the Internet. These transactions are not exempt from taxation, but rather are subject to a taxpayer-generated "use tax"; this use tax is difficult (perhaps nearly impossible) to collect as a voluntary transaction absent reporting of retail sales transactions to taxing authorities. Retailers are required to collect sales tax provided that they have a physical presence (or nexus) in the state in which the taxpayer making the purchase resides (Reddick and Coggburn 2007). Bruce, Fox, and Luna (2009) estimated that state governments stood to lose in excess of $50 billion in sales tax revenue on Internet sales between 2007 and 2012. This represents almost 25 percent of all Internet sales tax liabilities over this period, and almost 4 percent of all sales tax collections by 2012.

Because of these revenue losses, there seems to be little question that the sales tax is in for a major overhaul, at least in its form of collection, by 2020. It seems likely that some change—probably assisted by technology—that requires remote sellers to collect taxes at the point of sale—will be necessary in order for the sales tax to remain a viable source of revenue in the Internet age. A notable proposal to do just this resulted from the Streamlined Sales Tax Project, which sought to make state sales tax administration more uniform and thus easier for remote sellers to comply with (Reddick and Coggburn 2007). In addition to these two problems, the sales tax also does not apply to services in most states, which diminishes its productivity as a revenue source.

Property Tax

Even before the most recent housing-driven financial crisis, the property tax was fraught with problems, mostly related to two factors. The first, and the longest-standing, is the problem of doing accurate and equitable assessments. The second, more recent problem has to do with the property tax limitation movement that began in 1978 in California and, with the Taxpayer Bill of Rights and tea party movements, is alive and well today. While tax limitations are popular, demands for public services continue unabated. Given the likely reduction in federal and state aid throughout the next decade, already cash-strapped local governments likely will have no choice but to move further away from the property tax by supplementing that revenue source with other sources of revenue. This has already happened to some extent. Despite the rapid rise in property values across much of the country, local own-source revenue from the property tax declined from 48 percent in 1992 to 44.4 percent in 2007. The lost property tax revenue was largely replaced by user charges and sales tax revenue (U.S. Census Bureau 1994, 2009).

Putting all of these factors together, the U.S. revenue system in 2020 is likely to have the following characteristics:

- Less national government assistance to state and local governments, and substantial pressure (perhaps with the exception of education) for states to provide less assistance to localities
- An increase in federal income tax revenues, but not (if history is any guide) a tax reform along the lines of those recommended by economists
- Some update of the sales tax system at the state level to account for what otherwise would threaten the sales tax with near extinction as a result of the substantial increase in remote sales
- A further increase in the percentage of revenues coming to local governments from revenue sources other than the property tax

Financing an Aging Infrastructure

The older America becomes, the more need there is to maintain its infrastructure, and this will be particularly true over the next 10 years. State and local governments play an important role in financing and administering the building and maintenance of infrastructure. Roads, bridges, university buildings, prisons, and numerous other capital infrastructure are built by states. Added to this state-funded infrastructure are the school buildings, city streets, and utility infrastructure built and financed at the local level. To the extent that the tight future fiscal situation over the next few years hampers the ability of these governments to keep up with rising infrastructure needs, this mismatch will be an expanding problem.

Each year, states issue more debt to build more new infrastructure. State debt increases year over year and increased by 4.8 percent in 2008 to $416 billion (Moody's 2009). This means that, by 2020, there will be more infrastructure to maintain, and therefore the need for funds cover the costs of maintenance will increase, in addition to the need for funds for more infrastructure. In transportation alone, the infrastructure funding needs are significant. According to a National Surface Transportation Policy and Revenue Commission study released in 2008, "Estimates indicate that the U.S. needs to invest at least $225 billion annually for the next 50 years to upgrade our existing transportation network to a good state of repair and to build the more advanced facilities we will require to remain competitive. We are spending less than 40 percent of this amount today" (4). In addition, as stated earlier, states and localities will have less revenue overall. And funds currently allocated specifically for infrastructure, most notably the gas tax, will shrink. The National Surface Transportation Infrastructure Financing Commission, which has called for a 10 cent per gallon increase, recently stated that relying on a gasoline tax is "not sustainable in the long term and is likely to erode more quickly than previously thought" (National Surface Transportation Infrastructure Financing Commission 2009, 7).

By 2020, states and localities are going to be facing tough choices as to whether to build new and maintain existing infrastructure at the expense of funds for other important state functions. Not only will sluggish transportation and other revenue growth limit the ability of states to finance infrastructure, but also other state services will be demanding funds—state government needs will be competing against each other.

As a result, governments by 2020 will increasingly turn to creative financing arrangements—especially public–private partnerships. While they are controversial in some quarters, public–private partnerships will grow in number simply because many elected officials will otherwise have to cut budgets or raise taxes to maintain and build infrastructure. There are a variety of public–private arrangements. Many involve contracting with private entities to provide services such as incarcerating state prisoners or maintaining state technology. The more controversial "P3s" work by having a private entity provide the up-front cash to the state or locality, thereby financing the project. The private entity makes a profit over time from a revenue source—such as tolls—from the project. By 2020, we can expect to see P3s in the education arena, as well as in transportation, water and wastewater services, real property development, public safety, public parks and facilities, and information technology (National Council on Public–Private Partnerships 2002).

In addition to P3s, state and local governments will also be seeking other "privatization" of public functions. Strategies such as the use of private sector organizations and nonprofits to deliver state services will be employed to avoid permanent costly government services. Outsourcing will also become more common among governments, as they will want to have projects done without bringing on lots of new employees who are permanent, costly, and difficult to get rid of either for political or contractual reasons. Therefore, budget offices in 2020 should expect to be dealing much more with oversight of contracts and contract management. The need for expertise in the contract management area for state and local governments will increase dramatically by 2020.

The desire to avoid hiring permanent employees will lead to increased outsourcing and use of private sector firms for completion of projects. The management of these contracts will be critical for state and local governments. State employees will need to have some contract management expertise. While specific contracts will be managed by the various agencies and departments of state and local governments, there will be an important role for the budget offices to provide oversight; therefore, the budget offices will need some resources and expertise in the contract management area. This will be critical as they analyze budget requests with significant funds going to private companies under contract with the state or locality. They will have to make budget recommendations to governors, mayors, and others on whether to fully fund the amounts requested for the contracts.

The Role of Financial and Performance Data

Over the next 10 years, performance information and financial data increasingly will be brought together to make decisions about where funding should be targeted. Also, the access of all citizens to detailed state financial and budget information will continue to improve. Various citizens groups have been calling for transparency in government, such as the conservative consortium called the Sunlight Foundation. Even the president has responded with his "Memorandum on Transparency in Government," issued the day after he was inaugurated, calling for more open and available government records and data. This transparency and the availability of government information has been growing over the years. For example, websites such as Kansas's KanView (http://www.kansas.gov/KanView/) provide citizens and governments with an online database of revenues and expenditures for the state. At the federal level, Recovery.gov provides all citizens with access to information on how stimulus funds are being spent. At the national level, the Obama administration has pledged to bring more transparency and accountability into government, which would build on the advances made by the two previous presidents, who were closely associated with reforms such as the Government Performance and Results Act and the Program Assessment Rating Tool (Joyce 2008; OMB 2010a).

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Performance management is becoming recognized as an important approach that needs to be adopted by governments. The goal of the use of performance information in government is to focus the organization's resources and efforts toward achieving specific results that will make the most difference to citizens. A recent report of the National Performance Management Advisory Commission (2009) states that "[p]erformance management builds a culture of continuous improvement in which organizations are motivated to find and apply interventions that offer the best results for the least amount of money." The commission further stated that "when credible information is produced and made available in a usable form, it becomes much easier to establish accountability throughout the organization" and provide improved results to the public. Improving the state and local government's capacity to achieve results and report those results in a transparent manner to the citizens can be extremely beneficial. This should greatly assist decision makers as they make their recommendations on budgets. The report also notes that numerous efforts at both the state and local level have taken place in recent years to develop models of using performance information to inform financial management and budgeting decisions. There is no need to re-create these models of performance management, only the need to further refine them and make their use practical for policy makers and public managers (National Performance Management Advisory Commission 2010).

There will continue to be enormous pressure and incentives to increase data collection throughout the decade leading up to 2020. The pressure of various groups to have transparency in government and to show all spending and collect more performance data will lead to more data, and information technology improvements will lead to better data organization and interpretation. Increased analysis as to how much things costs will improve with better data and improved access to data. This measurement will improve budget decision making. There are already examples of the use of this in the administrative area. Departments of motor vehicles are measuring wait times, and the National Association of State Auditors Comptrollers and Treasurers has developed pilot project to cost out accounting and other administrative functions (Howard and Kilmartin 2006). Knowing how much government actions cost as well as what results are being provided by government services will be important in an era of tighter funding. In a limited resources environment, there is heightened relevance of both performance and financial measures, as well as reports for citizens, elected officials, and policy makers in order to make informed decisions.

Institutional and Organizational Changes

Current trends in budget and finance offices across the country will have an impact on budgeting as an institution by 2020. Over the next 10 years, state and local governments will have fewer direct staff than they do now. Budget offices are already doing more with less. For example, Virginia's Department of Planning and Budget had 74 employees in 1999 and now has 58 (NASBO 1999, 2008). Advances in technology have had something to do with this shrinkage—there is no longer need for word processors, for example—but budget cuts over the years have had an impact on the numbers. Administrative functions are always cut in a downturn and rarely are the budget offices fully restored to their original size.

In addition, financial management functions are being consolidated. In Michigan, the audit function and other financial management activities have been merged into the budget office (Granholm 2008). Human resources functions have been consolidated in Minnesota, with the budget office under one commissioner (Pawlenty 2009). As a result, there will be fewer staff directly assigned to budgeting as a function. In 2020, employees in these consolidated and restructured finance departments in states will be cross-trained and, by necessity, will take on different functions.

The single challenge that all U.S. governments will have in common, especially in the first half of the next decade, will be the struggle to control deficits and debt. . . . The national government must lead here. A brighter 2020 can only be realized if dramatic and painful changes are made to revenues and expenditures that put the country on a more fiscally sustainable path.

Even as budget offices are downsized and the fiscal situation is tight, budget offices are more influential than ever, and will continue to be so. During the severe recession of 2007–2009, the change has become evident. The need for centralized financial control and oversight by staff with the "big picture" perspective of all of state government has proved critical when determining where to cut services. Governors and senior officials will need to rely on the central state budget office to ensure that the silos of state government are looked at together and that the state is functioning toward the same goals. Tight funding for a lot of projects and functions will require this broader perspective. Over the next 10 years, this trend should continue. State officials will need to think strategically and look at government as whole rather than focusing on the silos of agencies and departments. These trends will certainly be more pronounced by 2020. Expect lean but more influential budget offices by the end of this decade.

All of these developments would lead one to expect that governments will be looking to hire critical thinkers and analysts who are knowledgeable in financial and performance, accounting, and auditing. In addition, employees who are well versed in contracts and negotiation will add enormous value to budget offices in the future, as presumably more privatization and outsourcing will occur. This will require schools of public policy and public administration to attend to identifying and teaching the skills necessary to carry out these responsibilities.

Conclusion

Because everything that governments do ultimately relies on financial resources, and because there will always be many more demands for the use of those resources than there is money to spend, budgeting in any era is, first and foremost, a story of scarcity. While the "Great Recession" highlighted particular vulnerabilities and exacerbated problems that already existed, many of these problems will persist between now and 2020, hopefully in less severe forms.

The single challenge that all U.S. governments will have in common, especially in the first half of the next decade, will be the struggle to control deficits and debt. The massive spending undertaken by the U.S. government will necessitate revenue and spending actions to rein in large federal budget deficits. The necessary federal spending reductions will trickle down to the state and local level, making the mismatch even more acute. The demands for state and local infrastructure will create even more spending pressure. The national government must lead here. A brighter 2020 can only be realized if dramatic and painful changes are made to revenues and expenditures that put the country on a more fiscally sustainable path. While the United States may not ever become Greece, it seems clear that both citizens *and* the government need to come to terms with the basic structural problems facing many government budgets. We cannot continue indefinitely to obtain more from government than we are willing to pay without the resulting debt leading to a further economic decline for the United States.

The fiscal challenges facing all levels of government will foster changes related to the type of information needed, and the way in which governments organize to make decisions. At the national level, the Obama administration is following the lead of its two predecessors in attempting to increase attention to performance considerations in making budget decisions. There is ample evidence to suggest that many state and local governments have already progressed further than the federal government in this regard, but the emphasis on performance management and budgeting should continue throughout the next decade. If more progress can be made in integrating performance data and budget decisions, more effective use can be made of what are bound to be increasingly scarce resources.

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