

The Rube Goldberg Machine of Budget Implementation, or Is There a Structural Deficit in the New York City Budget?

DANIEL W. WILLIAMS AND JOSEPH ONOCHIE

This paper examines the case of continuous budgeting both preadoption and postadoption in New York City and considers matters of forecast bias, rebudgeting, and the belief that New York City remains in structural deficit which has been cited as a continuing source of concern since New York City's 1970s fiscal crisis. The asserted structural deficit is a rationale for reducing spending in the prebudget and postbudget adoption periods. Williams (2012), shows that New York City's revenue forecasts are biased to underestimation, exacerbating over longer horizons. This paper examines expenditure estimates, reductions and within-year modifications over the first decade of the twenty-first century. If there is a structural deficit, expenditures would exceed revenues in forecasts by more than offsetting forecast biases. However, there are other reasons expenditures may exceed revenues in forecasts. Late term increases in expenditure estimates suggest deliberate choices, which cannot be termed "structural." Expenditure changes follow changing revenue particularly in the postadoption period. This rebudgeting practice does not reflect fiscal stress; it is part of a complex method of producing a surreptitious budget stabilization fund, reallocations favored by the mayor, and possibly shifting of the budget towards capital uses with little broad public discussion. These observed effects are somewhat consistent with effective financial management, but are nontransparent and inconsistent with democratic participation. Policy recommendations aim at restoring transparency and democratic oversight.

INTRODUCTION

Dougherty, Klase, and Song (2003) show that small communities in West Virginia find unappropriated funds during the fiscal year (FY) and spend them. Anessi-Pessina, Sicilia, and

Daniel W. Williams, Baruch College, One Bernard Baruch Way, D901 New York, NY 10010. He can be reached at daniel.williams@baruch.cuny.edu

Joseph Onochie, Baruch College, One Bernard Baruch Way, B10-225, New York, NY 10010. He can be reached at joseph.onochie@baruch.cuny.edu

Steccolini (2012) argue that for local governments in Italy budgeting is continuous throughout implementation. They link these practices with incrementalism, organizational characteristics, political variables, financial conditions and the external environment, but provide little insight into the process. Discussion of continuous budgeting in developing nations is common both for recent periods (Lindelov 2002; Tarschys 2002; Fretes-Cibils, Giugale, and Somensatto 2008; Küblböck and Vogl 2010; de Jong 2011) and the more distant past (Caiden and Wildavsky 1974; Caiden 1981; Wildavsky 1983; Schick 1988; Omolehinwa and Roe 1989; Peterson 1994).

This paper examines the case of preadoption and postadoption continuous budgeting in New York City and considers matters of structural deficits, forecast bias, and rebudgeting.¹ New York experienced a fiscal crisis in the 1970s (Alcaly and Mermelstein 1977; Shefter 1992), which is associated with current account deficits beginning in the early 1960s (Gramlich 1976).² It is widely accepted that New York has had a structural deficit ever since (Shefter 1992; Rohatyn 1994; Levy 1996; Cooper 2004; Chen and Barbaro 2008). Miller and Smith (2011) find that New York weathered the 2007–2009 recession well; however, they show that the city anticipates out-year deficits, the hallmark of a structural deficit, in the 2010–2014 financial plan.³

Forsythe (2004) says that a budget is in structural balance when recurring revenue balances with recurring expenditures. Hou (2006) identifies three kinds of budget balance or deficits: structural, cyclical, and managerial. A structural balance reflects continuing adequacy of revenues to cover expenditures; a structural deficit reflects a long-term shortfall. However, revenues rise and fall with the business cycle. If the political decision cycle is shorter than the business cycle, rising revenues can lead to political decisions to reduce revenue (tax reductions) or to grow government activity too rapidly, which can lead to cash flow deficits in the trough of the cycle. A cash flow deficit can become a structural deficit if the recurring revenue becomes inadequate to maintain recurring expenditures over the cycle. To avoid cyclical deficits jurisdictions use budget stabilization funds (Navin and Navin 1997; Hou 2003, 2004; Grizzle 2010). Managerial deficits result from poor financial management or deliberate spending in excess of revenue Hou (2006).

1. By budget, New York City is the second largest municipal government in the world, behind only Tokyo.

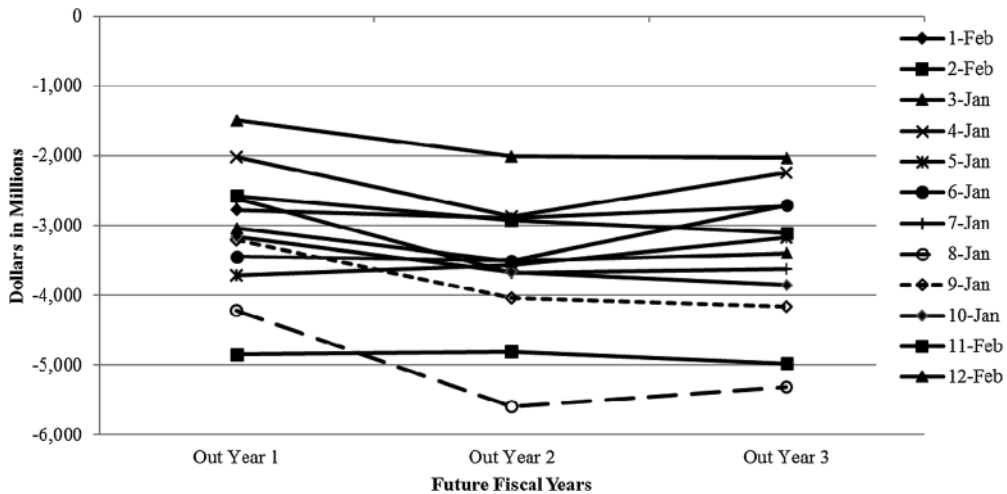
2. The fiscal crisis led to the enactment of the *New York State Financial Emergency Act for The City of New York*, which act includes two passages related to this research:

“For the fiscal year ending June thirtieth, nineteen hundred eighty-two, and for each fiscal year thereafter, the city’s budget covering all expenditures other than capital items shall be prepared and balanced so that the results thereof would not show a deficit when reported in accordance with generally accepted accounting principles and would permit comparison of the budget with the report of actual financial results prepared in accordance with generally accepted accounting principles.... All projections of revenues and expenditures contained in a financial plan shall be based on reasonable and appropriate assumptions and methods of estimation.”

(McK. Unconsol. Laws §§ 5410 a, 5410 d.).

3. This paper does not examine additional structural issues raised in other postemployment benefit (OPEB) literature, or any other device that may involve variance with GAAP reporting. It is about New York City revenue forecasting, acknowledged expenses and structural issues with particular emphasis on recent historical practices. It does not concern New York State or other state practices as discussed in the report of the State Budget Crisis Task Force (Ravitch et al. 2012). This paper makes no recommendations with respect to that report.

FIGURE 1
Out Year “Gap to Close” (Estimated Deficit) in January and February Presentations for
FY 2002–FY 2013



Source: New York City budget documents online at <http://www.nyc.gov/html/omb/html/publications/publications.shtml>. Compiled by the authors.

Forsythe (2004) warns against counting short-term revenue actions against recurring revenue needs, regardless of how well they address the current year, because the recurring expenditures may result in shortfalls in subsequent years. Thus, to address any structural deficit—“gap” between revenue and expenses—the jurisdiction must either increase recurring revenue or reduce recurring expenses. In recent political climate, the focus has been on expenditures.

Figure 1 shows⁴ the city reported out-year budget deficits for the entire first decade of the twenty-first century, continuing into 2012. Such chronic out-year deficits are consistent with Hou’s description of a structural deficit. However, Williams (2012) shows that in the second and third out-years, the New York City revenue forecast reflects an approximately 10 and 14 percent underestimation bias.⁵ Bias may explain a large part of the deficits shown in Figure 1.

Forecast Bias

Burkhead (1956) found that revenue forecasts reflect an underestimation bias. Forecast bias is thought to reflect political influence, not just technical success (Bretschneider et al. 1989;

4. Information similar to that examined in Figure 1 is released in February, May, June, and November of each year (the actual month varies), except that reports posted at source URLs do not include May through November of 2001. Only the February data are shown in Figure 1. The current and budget years are always shown in balance. The yearly November release has no proposed budget, so the current year is followed by the first out-year. All posted budget tables between February 2001 and May 2012 show budget deficits for all out-years. Amounts vary.

5. Turetsky (2013a) describes the mechanics of intentional forecast bias in a blog post from the Independent Budget Office.

Bretschneider and Gorr 1992; Klay and Grizzle 1992; Blackley and DeBoer 1993; Heinemann 2006). Rodgers and Joyce (1996) argue that forecast bias legitimately produces a “cushion” to hedge against risk. If the cushion results in a year-end surplus, it may serve as a surreptitious budget stabilization fund. Sometimes, budgeters may misrepresent costs to convince decision makers to adopt programs (Jones and Euske 1991); however, Dougherty, Klase and Song (2003, 488) show that similar practices produce usable surpluses averaging 7.8 percent.⁶ These surpluses provide “flexibility,” which can help with unexpected events, or provide for broader executive discretion than intended under legislative oversight. Levine, Rubin, and Wolohojian (1981, 626) show that “flexibility” can be produced with distressed budgets through “overcutting followed by addbacks.” Anessi-Pessina, Sicilia, and Steccolini (2012) show similar practices produce a 4.4 percent rise in the expense budget and a 16.4 percent rise in the capital budget in Italian municipalities.

Rebudgeting

To use surpluses generated through underestimation, jurisdictions engage in rebudgeting (Forrester and Mullins 1992). Rebudgeting can occur at many levels and consists of making budget modifications: moving appropriations from one object code to another, one work unit to another, one department to another, and so forth. Either the jurisdiction’s general laws or appropriation law authorize and control its budget modification process. If the jurisdiction appropriates at program or department level, then modifications at lower levels, such as work unit and object code levels, may be governed by administrative regulations. The most significant budget modifications recognize new money. These do not move money from place to place within the budget; they provide for additional appropriation.

New York City’s Charter requires the mayor to notify city council of budget modifications permitting council to disapprove (Sullivan 1988). However, the mayor can withdraw modifications to prohibit council from changing the allocations within them (Council of City of N.Y. v. Giuliani 1994), thereby blocking any independent ability to allocate new funds recognized after the beginning of the year.⁷ In part, this paper examines the effect of mid-year appropriations and mid-year reallocation of funds within the New York City budget.

In the developing world, mid-year appropriating has long been associated with budgets in distress (Caiden and Wildavsky 1974; Caiden 1981; Wildavsky 1983; Schick 1988; Omolehinwa and Roe 1989; Peterson 1994; Tarschys 2002). It is also associated with ineffective budget practices (Lauth 2002), “dilatatory procedures” used to manage uncertainty

6. Computed from Table 2, page 488.

7. The New York City Charter and practice allocate budget power to the mayor, council, controller, borough presidents, Independent Budget Office, community boards, of which there are 59, and so forth. In practice, the controlling factor is that the Charter is understood to authorize the mayor to authoritatively estimate all revenues except property tax. Also, there are roughly \$400 million in Member Items (discretionary earmarks), which, although less than 1 percent of the budget, receive outsized attention; in comparison, mayoral earmarks (although not called that) can individually cost about \$100 million, such as the \$100 million for the winner and \$15 million for each of several runner-ups in the Bloomberg science education center competition. The borough presidents

(Premchand 1998, 84) and lack of transparency (Ramkumar 2009). In this paper, evidence of rebudgeting is examined. One explanation is that the budget is in distress due to a structural deficit. An alternate explanation is that the practice is associated with accessing a “cushion” not appropriated at the beginning of the FY. More recent literature argues that it is an ordinary practice not a symptom of dysfunctional budgeting (Anessi-Pessina, Sicilia, and Steccolini 2012). These theories can be summarized as:

- Hypothesis 1: New York City has an ongoing structural deficit.
- Hypothesis 2: New York City has a “cushion” created by underforecasting and appropriated subsequent to the beginning of the FY.
- Hypothesis 2a: New York City has a surreptitious budget stabilization fund.

Method and Sources

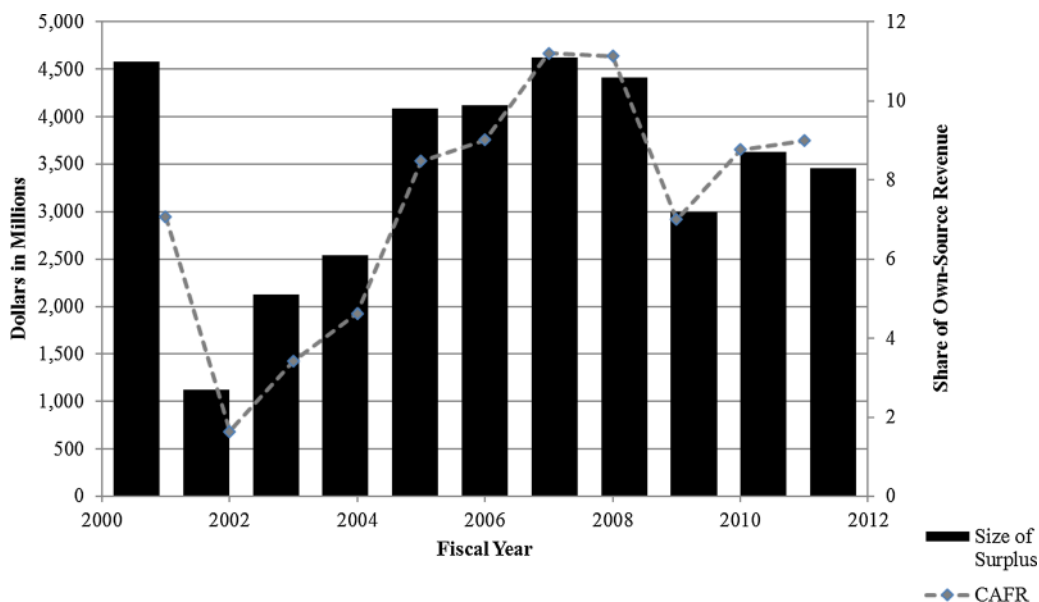
The data⁸ for this paper are extracted from the Comprehensive Annual Financial Reports (CAFRs) for FY 2001 through 2011, principally in Tables G2 and G4 for each year; spreadsheets posted on the Independent Budget Office (IBO) website; the New York City Council legislative database and numerous New York City Office of Management and Budget (OMB) reports, too numerous to list. During each cycle, there are OMB documents supporting the adoption and implementation of the budget including: the November financial plan; the January financial plan, which updates the five years in the cycle by one year; the May executive budget; and the June adopted budget. The reports within each stage of the budget process differ somewhat from other stages, but may have such reports as the Summary, Mayor’s Message, Financial Plan, and other aggregated reports that examine the city or some aspect of the city as a whole. It is, in general, these city wide reports that are used for this study.⁹ A limitation that arises from using city wide reports is that the city’s prior categorization of budget reductions cannot be substantially

have a similar practice. The Charter (sections 225–258) provides for council review of a preliminary budget in January and review and approval of a final budget in May. Both processes involve hearings. The council can modify expenditure allocations; however, to preempt council power the mayor deliberately shorts favorite programs every year (Turetsky 2013b) and the allocation of Member Items is partly at the discretion of the council Speaker, who the mayor traditionally coopts. Section 107.b. of the Charter provides the mayor broad power to modify the budget after it is passed, but requires larger modifications and modifications between agencies to be referred to the council for disapproval. Section 107.d. provides similar authority to the council, but refers to “council appropriation,” not otherwise defined in the Charter, which appears to restrict the authority and is not frequently used.

8. Sources include: Comptroller <http://www.comptroller.nyc.gov/bureaus/acc/>; New York City Office of Management and Budget (OMB) <http://www.nyc.gov/html/omb/html/publications/publications.shtml> and <http://www.nyc.gov/html/records/rwg/omb/html/budpubs.html>; New York City Independent Budget Office (IBO) <http://www.ibo.nyc.ny.us/>; and New York City Council <http://legistar.council.nyc.gov/Legislation.aspx>; the last of these is dynamic, data regarding legislatively recognized budget modifications were accessed on 24 September 2012.

9. Some reports at the beginning of one cycle may be identical to those at the end of a previous cycle. These reports are in PDF files which must be extracted or reentered to be used. Many of the city’s budget documents are in secured PDF files. It would be prohibitive to convert the detailed data. New York City enacted an open data law in March 2012, which may benefit future research.

**FIGURE 2
CAFR Surplus**



Note: Size of Surplus—Surplus divided by all own source revenue (excluding federal, state and private grants).
Source: New York City Comprehensive Annual Financial Reports (CAFRs). Compiled by the authors.

disaggregated. A limitation that arises from using both CAFRs and OMB reports is that they do not always agree; where both are available, the CAFR is treated as true. OMB reports are shown as the information communicated to the public and the best available source when CAFRs are unavailable. Except where labeled as other funds, the financial data from the CAFR are General Fund (GF). Data from OMB are usually GF, but some reports are not adequately clear. This ambiguity particularly arises with debt service.

ANALYSIS

Figure 2 shows that New York City reports substantial retrospective surpluses. How is it that New York has a lasting large structural deficit yet recurrently experiences large surpluses?

$$\text{True Deficit} = \text{Forecast Deficit} - \text{Net Bias} \tag{1}$$

$$\text{Net Bias} = \text{Expenditure Bias} - \text{Revenue Bias} \tag{2}$$

Williams (2012) suggests a possible solution: if the forecasts are biased, the structural deficit could be an illusion. However, he addresses only revenue. As Equations 1 and 2 show, the true deficit is found by removing the net bias from the forecast, and to do that one must examine not only the revenue bias, but also any expenditure bias. The revenue bias is subtracted from the expenditure bias because a negative value revenue bias (where actual revenue is systematically more than forecast) decreases the deficit, while the opposite is true for an expenditure bias. Equation 2 may lead to an expectation that the expenditure bias is positive and the revenue bias is negative, but this is not required. The revenue bias is negative as shown in Williams (2012), but expenditure bias can be positive, negative, or nonexistent. The true deficit is determined by Equation 2 in any of these cases.¹⁰ This paper focuses on expenditures.

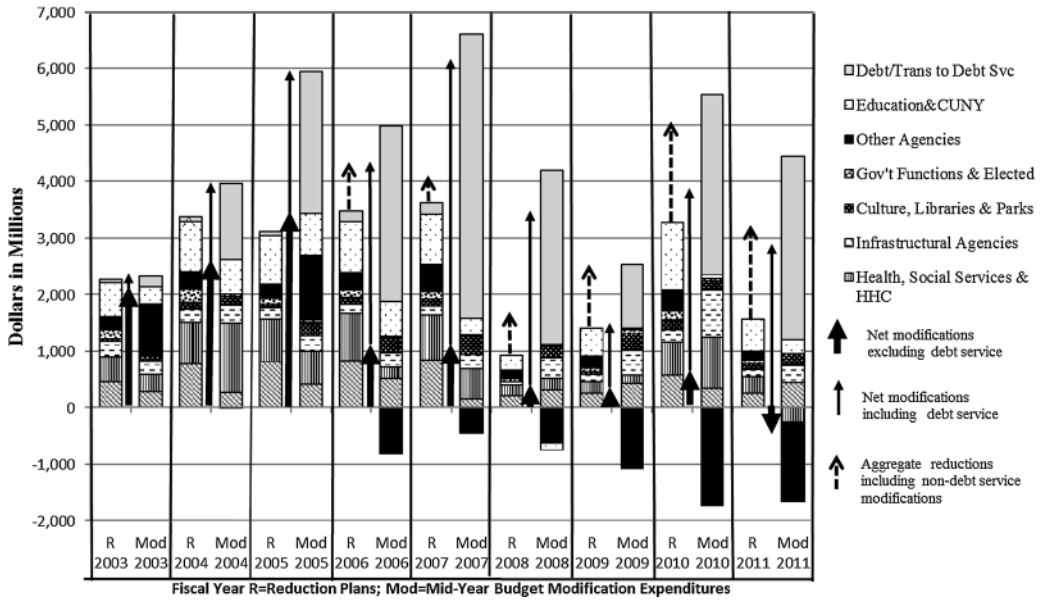
The implication of Figure 1 is that New York City's recurring expenditure exceeds recurring revenue. However, recurring expenditure is complex because commitments contain various components. Some, such as bond repayments and pension obligations, may require bankruptcy proceedings to avoid. Others, such as entitlement programs, may require time-consuming legislative and regulatory process before avoidance. Yet others, such as current staffing, can involve political turmoil. Softer areas may involve new or replacement staff, supplies, maintenance of capital goods, and implied growth of nonentitlements associated with population growth. Recurring expenditures, then, is not a single undivided type of expenditure, some parts are more flexible than others and may not reflect unchanging commitment.

Figure 3, to which this paper returns several times, shows paired columns. The first column in each pair is the cumulative budget reductions developed during 2002–2011. During this period, the city has reduced expenditures every year as part of cumulative budget development after the initial forecast. The categories¹¹ in Figure 3 are derived from categories in a budget reduction report labeled “Agency Program.” In most years, the largest shares of these reductions go to Education and CUNY (City University of New York); Health, Social

10. For example, the February 2002 forecast of FY 2006 shows a \$3.1 billion deficit, which may not be an actual deficit if the net bias is equal to or greater than \$3.1 billion. Part of that bias is the revenue bias, which could be \$3.1 billion or more. If it is more than \$3.1 billion, the expenditure forecast could be an underforecast, yet the net bias could still be equal to, or larger, than the deficit. If the revenue bias is smaller than \$3.1 billion, actual expenditures would have to be less than forecast for the net bias to cancel the deficit.

11. Category labels are: (1) Debt/Trans to Debt Service: Debt Service Savings from Capital Plan Reductions and Refundings; MAC Debt Service; (2) Education and CUNY: Education; City University of New York; (3) Other Agencies: 40 mostly small agencies and functions, some of which are: Board of Elections; Campaign Finance Board; Department of City Planning; Department of Investigation; Independent Budget Office; Landmarks Preservation Commission; Commission on Human Rights; Community Boards; Department of Information Technology and Telecommunications; Office of Emergency Management; and Pension Contributions; (4) Gov't Functions and Elected: Finance; Citywide Admin. Services; Procurement Savings; Fleet Reduction and the following elected officials: Office of the Mayor; Borough Presidents; Comptroller; Public Advocate; City Council; District Attorneys; All Other Elected; (5) Culture, Libraries and Parks: Parks and Recreation; Libraries; Cultural Affairs; (6) Infrastructural Agencies: Housing Preservation and Dev.; Environmental Protection; Sanitation; Transportation; (7) Health, Social Services and HHC: Admin. for Children's Services; Social Services; Homeless Services; Health and Mental Hygiene; Youth and Community Dev.; Aging; HHC; and (8) Public Safety: Police; Fire; Correction.

FIGURE 3
Reductions Plans and Budget Modifications (GF)

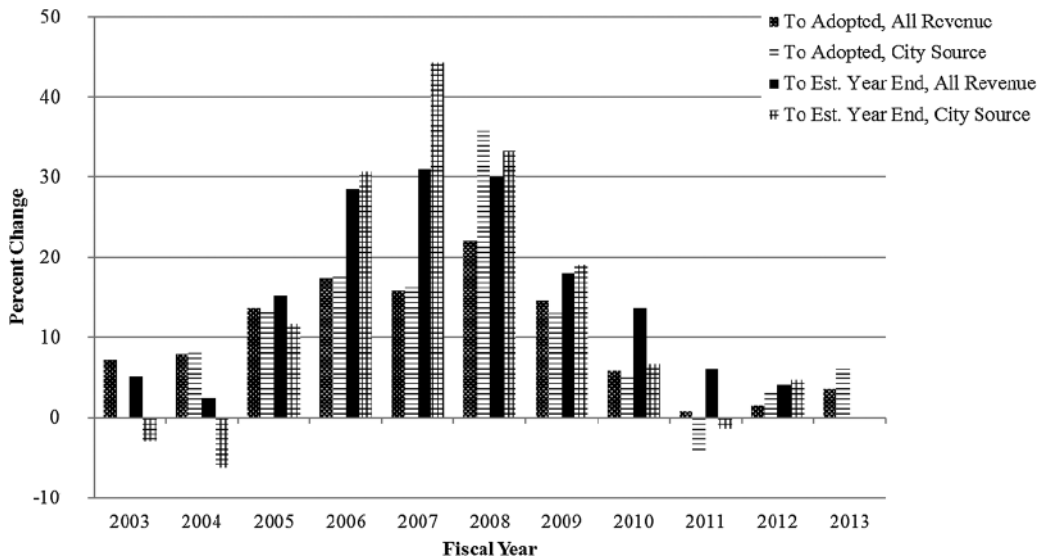


Source: New York City budget documents available at <http://www.nyc.gov/html/omb/html/publications/publications.shtml> and New York City Comprehensive Annual Financial Report. Compiled in this format by the authors. See Box 1 for category details.

Services and HHC (Health and Hospital Corporation); and Public Safety, which are also the largest components of the overall budget. In some years, the catchall “Other Agencies” receives a large reduction. The interpretation of these reductions is unclear. They are reported within a broader context that sometimes includes specific targeted levels of personnel reductions. Presumably, then, these reductions are permanent, that is, they reduce recurring expenditures, or at least they frequently include components that are permanent. In some years, the reductions are designated for an out-year, then as the out-year becomes the budget year, the cumulative value of reductions is shown; so again, there is some evidence of permanent reductions. However, there is no report or existing analysis that shows cumulative permanent reductions over the entire period.

Cumulative values are calculated by carefully examining many reports that follow no consistent pattern. The calculation of the preappropriation reduction values in Figure 3 (left column of each pair) is the sum of all reductions attributed to a FY after the first report of a forecast adjusted to remove duplicate reported amounts. Duplicate reports usually occur within a single budget cycle leading to an authoritative report, which is used. Amounts reported in different budget cycles or are otherwise clearly not components of the same reduction are added except where there is any explicit evidence that one amount communicates a change in a previously reported amount. These reduction amounts are not adjusted to account for other increases expenditures in the same

FIGURE 4
Change in Forecast from First Reported Forecast



Source: New York City budget documents online at <http://www.nyc.gov/html/omb/html/publications/publications.shtml>. Compiled by the authors.

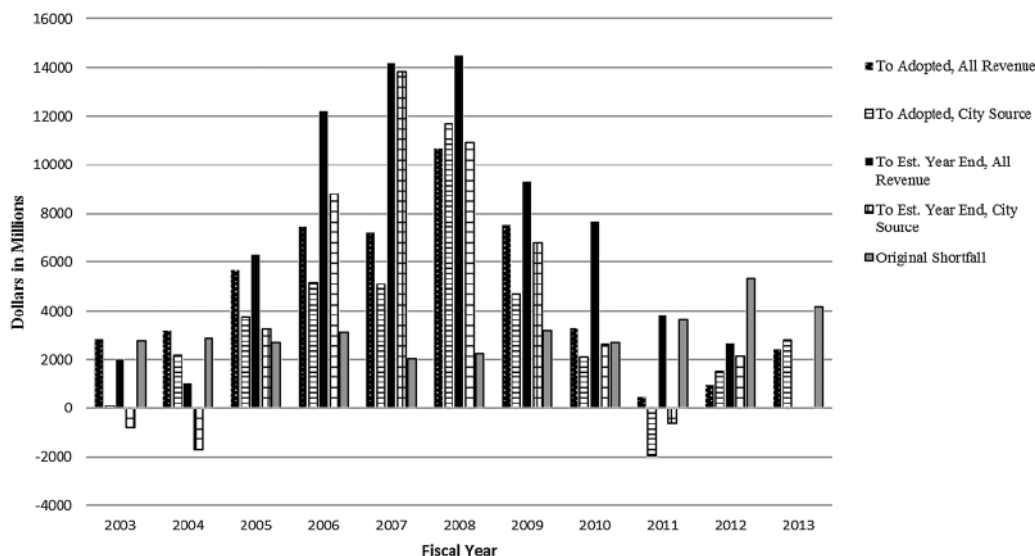
agencies that are not included in the city’s claim of reductions (those increases are captured in subsequent analysis).¹² Because reported reductions for a budget year may accumulate over several years, there is no direct relationship between the total amounts in Figure 3 and the anticipated shortfalls shown in Figure 1, that is, some reported shortfalls may already reflect some reductions. This may partly explain why reductions for some years exceed the highest reported anticipated shortfall; however, another reason could be that in the final year before the budget year, additional shortfalls may be identified and included in the reduction plan.

Figure 4 shows the change in forecasts between the first public forecast and the forecast included in the adopted budget just before the FY begins, and the change from the same first forecast through the estimated actuals 11 months into the FY. For FY 2005 through 2009, these changes were consistently above 10 percent, reaching over 40 percent nearly half—for city source revenue in the full span from first forecast to estimated actuals for 2007; and frequently exceeding \$5 billion, while reaching over \$14 billion in the broader “All Revenue” category for FY 2007 and 2008.¹³ The first report of a forecast is in January or February approximately three-and-a-half years before the beginning of a FY, for example, the first reported forecast for FY

12. The analysis focuses on the span beginning with the first forecast to fully examine all actions that contribute to the reconciliation between Figures 1 and 2.

13. Dollar amounts reported for Figure 4 are taken from equivalent values from Figure 5, proportions for Figure 5 are reported from underlying data, they are not shown in graphs.

FIGURE 5
Forecast Change Compared With Original Shortfall



Source: New York City budget documents online at <http://www.nyc.gov/html/omb/html/publications/publications.shtml>.

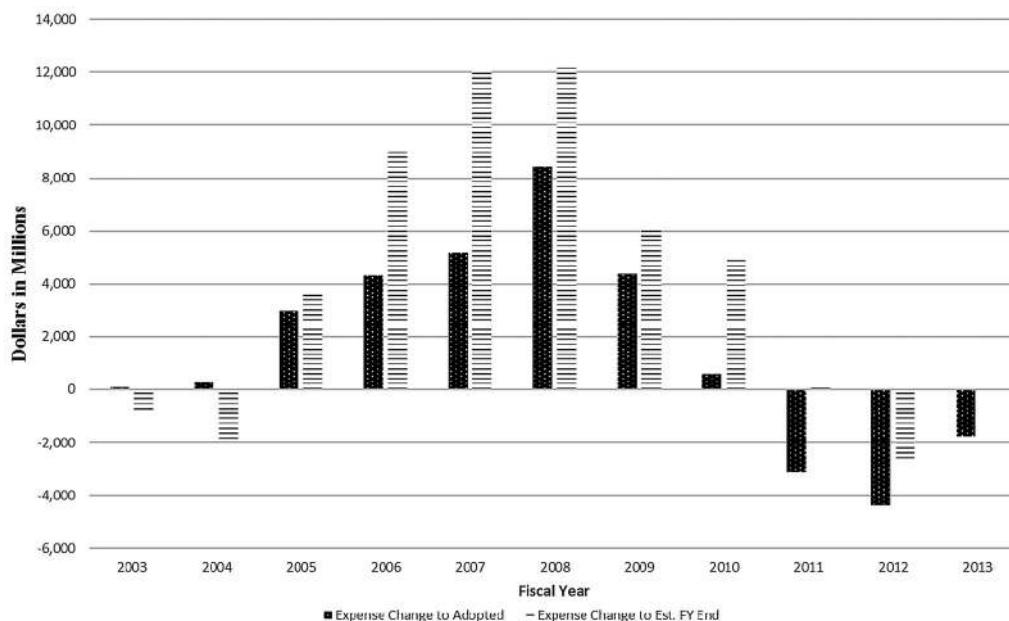
2006 is in February 2002.¹⁴ Both the entire city revenue and the city source only revenue are shown. Figure 5 compares the changes shown in Figure 4 with the shortfall estimated at the same time, shown as the last column in each group, and shows that the rise in the forecasted or actual revenue exceeded the original shortfall by a multiple of four in FY 2006, seven in FY 2007, more than six in 2008, and three in FYs 2009 and 2010. It also shows that much of this increase is found with the city’s own-source revenue.

Figure 6 shows that despite the reductions shown in Figure 3, for years after FY 2004 the city’s expenditure expectations rose as the revenue increased both before the beginning of the FY and during the execution year. However, as shown in Figure 7, the increase in expenditures is not in the “nondiscretionary” part of the budget.¹⁵ Except for 2007, where there is a trivial increase, the actual nondiscretionary expenditures are lower than originally estimated. Employment fell from 250,000 in 2001 to 240,000 in 2003, then rose to 280,000 in 2008 and 2009, declining to

14. For Figures 4–6, the first report is May 2001, then the next one is February 2002. February 2002 has the first Forecast for FY 2006, so for earlier years, the interval (“First” Forecast to June before FY) is shortened, rather than from the first forecast communicated to city council. City source revenue exclude state and federal transfers.

15. The terms “discretionary” and “nondiscretionary” are specified in New York City Budget reports. Typical nondiscretionary categories include: Pensions, Fringe Benefits, Debt Service, Medicaid, Re-estimate of Prior Year’s Expenses, General Reserve, and All Other; but may vary in some years. The source reports are not clear whether “debt service” is mandatory under-the-law transfers from the general fund to the debt service account or expenditures from the debt service account. Debt service cannot be excluded because not all reports show debt service separately. As debt service grows year to year, the inclusion does not affect the main point in the analysis.

FIGURE 6
Expense Estimate Change



Source: New York City budget documents online at <http://www.nyc.gov/html/omb/html/publications/publications.shtml>. Compiled by the authors.

270,000 by 2011; overall, this period reflects employment growth with fluctuation.¹⁶ The implication of employment growth and Figure 6 is that New York City’s budget grew as the city reported that it was reducing expenditures; however, Figure 7 eliminates the possibility that within-year growth was due to uncontrollable nondiscretionary factors.¹⁷

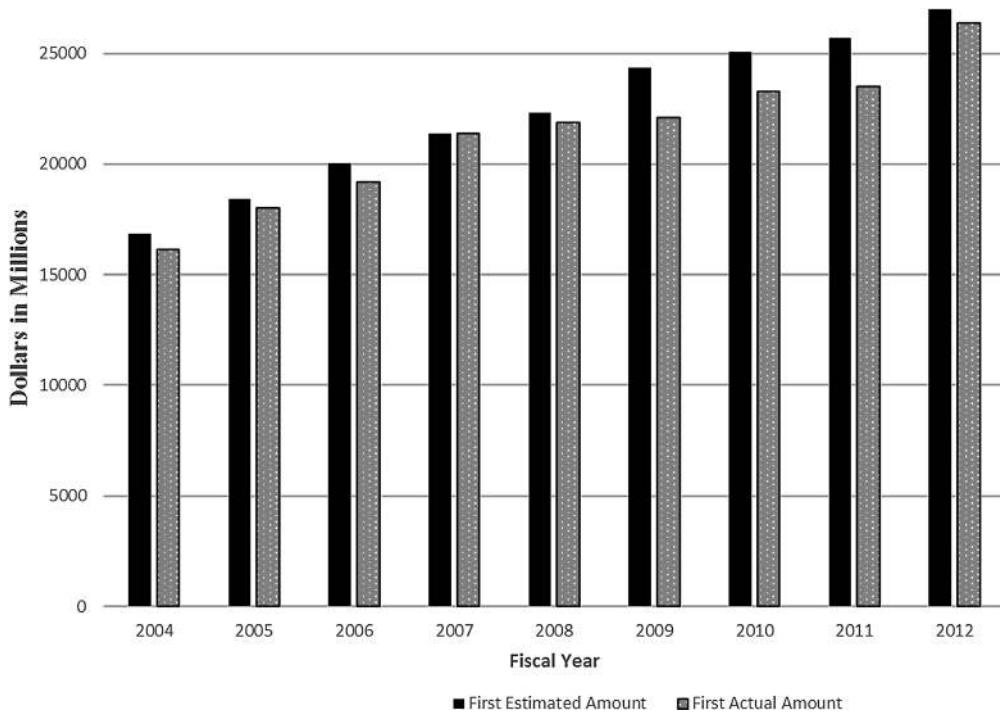
So far we have examined whether expenditures grow or decline as the budget progresses towards adoption. However, Figures 4–6 show that there is continued growth in the execution period.¹⁸ This growth is related to forecast bias and to rebudgeting. Returning to Figure 3, the right column of each pair shows the value of budget modifications. The budget modification data is drawn from CAFRs and are in no direct way related to left column reductions made in budget proposals before the beginning of the FY. These values are distributed across positive and negative changes, so the net values are demonstrated by the total height of the thick and thin

16. Source: New York City Independent Budget Office at <http://www.ibo.nyc.ny.us/>.

17. Between-year growth reflects some nondiscretionary pressure, but this pressure would not explain upward changes within fiscal years as the year approaches.

18. These data show that after the city experienced the impact of the 2007 recession and its continuing deleterious economic impact for several years, practices described here no longer exist at this time. It would be speculative to express what would happen as this period recedes into history.

FIGURE 7
Nondiscretionary Budget



Note: Date of First Estimated Amount and First Actual Amount varies by year.

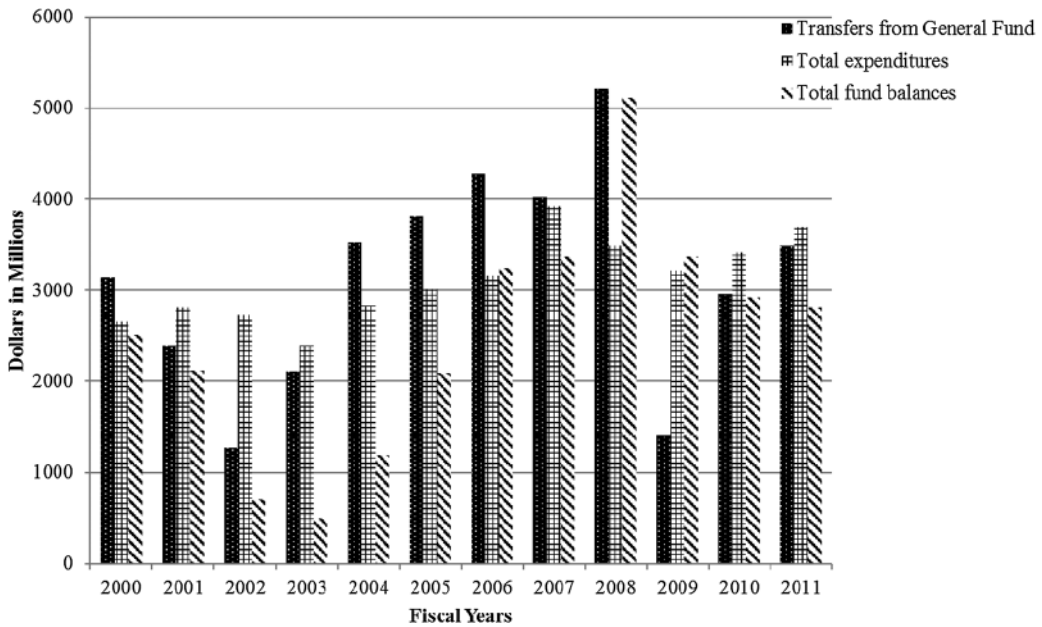
Source: New York City budget documents online at <http://www.nyc.gov/html/omb/html/publications/publications.shtml>.
Compiled by the authors.

arrows set between the two columns (we return to the thick arrow alone later); that value is positive in every year from 2001 through 2011, ranging from roughly \$1.5 billion in 2002 and 2009, to over \$6 billion in 2007. These positive total net budget modifications are consistent with Figures 4 and 5 results showing continued rise in revenue during the execution period.¹⁹

Moving to the right column, the largest share of the budget modifications goes to transfer to debt service. That transfer, known locally as the “surplus roll,” is said to be the only way the city can use FY surpluses (Forsythe 2006), but more will be said about that later in this paper. The right side of the paired columns shows that “Other Agencies” experienced a reduction in years after FY 2005. Where there are reductions in net expenditures during execution, these reductions could be used to meet shortfalls, if there were shortfalls; but in this chart they are shown to provide funds for increases in other categories. When considering the columns side-by-side (preappropriation reductions and postappropriation modifications), there is sizeable redistribu-

19. Figure 3 is based on estimated data. Figure 8 reflects audited financial data.

FIGURE 8
General Debt Service



Source: New York City Comprehensive Annual Financial Reports (CAFRs) Balance Statements and Changes in Fund Balances. Compiled by the authors.

tion of money between reductions and budget modifications in the execution period, with Debt Service as the beneficiary category. While there is no clear losing category in the early years, in the later years it is Other Agencies. An arrow is placed on top of the left column adding the reductions from the budget modifications to the reductions prior to the beginning of the FY in the left column of each pair.²⁰ The comparison shows that Education & CUNY, and Other Agencies contribute more to reductions than they receive in restorations after 2005. For other agencies the record is more mixed, except that Debt Service clearly receives a much larger share of postadoption increases than it contributes.

The net budget modifications excluding debt service are shown with the thicker arrows below the thin arrows between paired columns. Except for FY 2005, the net budget modifications after budget adoption, excluding transfer to debt service, are less than the reported reductions prior to the beginning of the FY. This result and the substantial size of the debt service transfers draws attention to them and the related topic of the capital budget.

20. The dollars related to this arrow are in Other Agencies with two exceptions, in FY 2008, about \$100 million is in Education and CUNY and in FY 2011 about \$250 million is in Health, Social Services and HHC.

Debt and Capital

As observed, when the city recognizes new money after the FY begins, a very large part of that money goes to debt service.²¹ However, debt service is not part of the GF. The amounts shown in these figures are transferred within the city to other funds, primarily to the debt service fund, but also to nonmajor funds associated with nonmajor debt accounts. Figure 8 shows GF transfers, expenditures, and fund balances in the debt service fund from 2000 to 2011. The time order of GF transfers and expenditures is not available from this figure, but can be inferred in some instances, such as with the 2008 balance which essentially matches the 2008 transfer, suggesting that the debt services transfer does not supply the funds for the 2008 debt service, instead it supplies a carryforward balance. That inference may be partly confirmed by the New York City Council legislative database, which shows no recognition of new funds (the source of the \$3 billion of the transfer according to Figure 3) in FY 2008 before May 2008. Likewise, the \$5 billion in FY 2007 was recognized partly in February, partly in April, and partly in June; which timeframe tends towards the period of the carryforward.²² Over the last decade 45 percent of the budget modifications recognizing new money are in the last month of the FY, while 75 percent are in the last quarter.²³ The actual debt service payments resulting from the transfers are lagged one year.

The last step in this analysis is to look at the other end of debt service, the use of debt. With a relatively small exception associated with the Transitional Finance Authority, bond issuances produce money for capital expenditures. Figure 9 shows capital expenditures during the first decade of the twenty-first century. Expenditures rose from just above \$4 billion in 2000, to more than \$10 billion in 2010, then fell to \$9 billion in 2011. The increase in capital expenditures before the drop off at the end was 119 percent. Debt financing held in the \$3–4 billion range over the earlier years and increased to the \$5–7 billion range beginning in 2008.

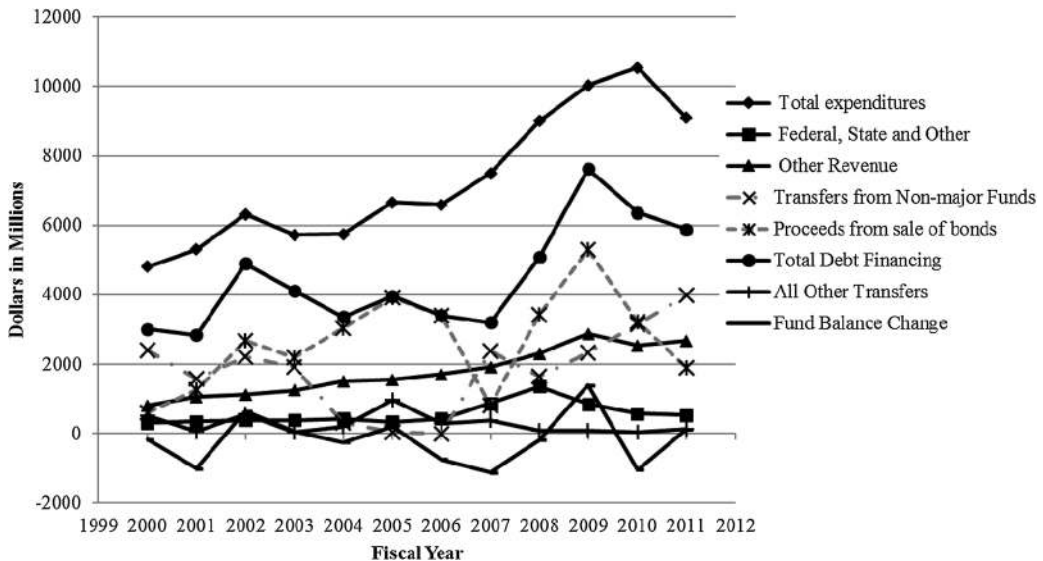
Figure 10 shows the city's capital commitment plan. A dotted vertical line shows the beginning of the FY and a solid vertical line shows the end. Afterwards, the timelines flatten out showing that the reports contain historical data. This figure is from reports labeled "City Funds," so state and federal grants and possibly other funds are excluded. Capital commitment rises over the decade from about \$4–6 billion in FYs 2002–2004 to \$9 billion in both FY 2008 and FY 2010, then dropping sharply to about \$5 billion in FY 2011. This decline is associated with the decline in flexibility as shown by the smaller upward adjustments in Figures 4–6, and the thick arrows in Figure 3, which indicate that for the later years funding of debt service through budget modifications is achieved through actual reductions in other city appropriation. Figure 10 shows that in the year leading up to the capital budget, the capital commitment plan becomes quite large peaking at the beginning of the FY, then drops back down to a more realistic level as the commitment is realized. This bubble of pressure appears to reflect \$5–7 billion in pent up

21. This section discusses an effect of this process that may partly reflect its purpose, but the city may also prefer to disguise the true revenue forecast to suppress expectations from service users, program administrators, and unions.

22. The reason that 2007, and possibly other years, have more transfers to debt service in Figure 3 than in Figure 8 is that some transfers to debt service in the earlier figures are reported as nonmajor funds in the CAFR.

23. Source: <http://legistar.council.nyc.gov/Legislation.aspx>.

FIGURE 9
Capital Projects



Note: Total Debt Financing = Transfers from Non-major Funds + Proceeds from sale of bonds.

Source: New York City Comprehensive Annual Financial Reports (CAFRs) Balance Statements and Changes in Fund Balances. Compiled by the authors.

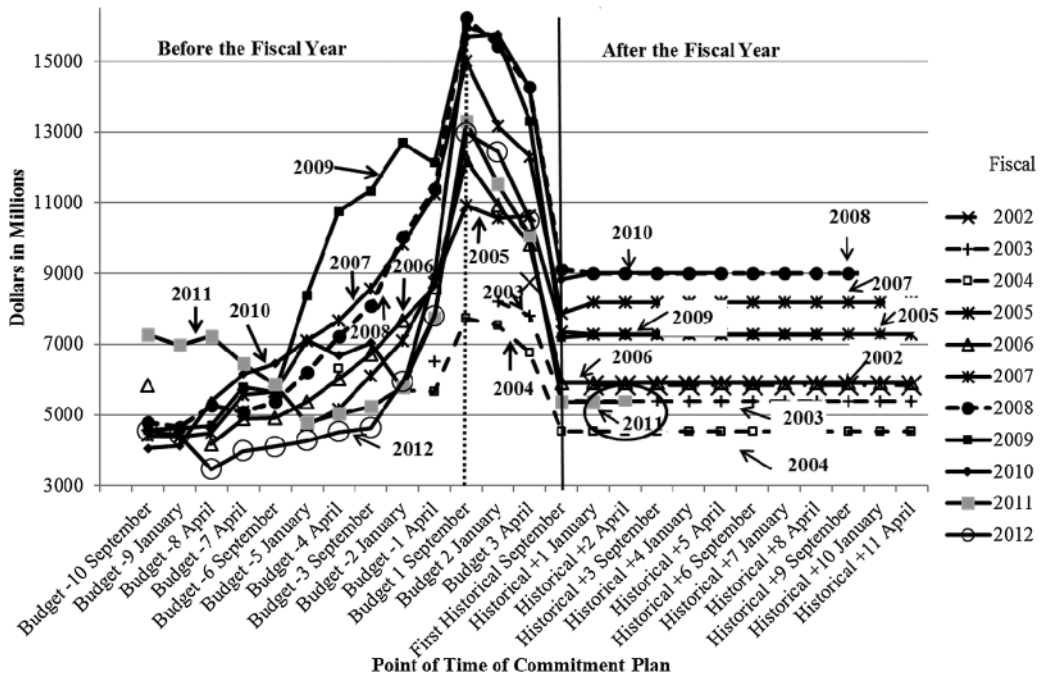
demand for capital expenditures, which is consistent with an IBO (2007) account of the capital budget. One cannot attribute the decade long rise in capital commitment and expenditures specifically to the recurrent surplus from end of year transfers to the debt service fund, but the evidence suggests that the end-of-the-period decline reflects the increasing risk within the debt service fund.²⁴

Reallocating money from expense to capital through this back door method²⁵ has complex implications. While political insiders, including both the mayor and informed council members, may be aware of the practice, the city residents are told that the city is saving money to avert fiscal exigencies (Cooper 2002; Kennedy 2003; Lipton 2003; McIntire 2005; Barbaro 2008; Chen 2011; Goldman 2012; Taylor 2012) rather than to provide for increased capital funding. The decision to transfer money from the expense budget to the capital budget is not communicated to the broader public. This distorts the public’s perception of budget choices. On the other hand, it is generally accepted that New York City’s infrastructure was in decline following the mid-1970s fiscal crisis (Ross and Trachte 1983; Shefter 1992). To the degree that this device has provided for infrastructure restoration, it appears functional. It also risks moral

24. It is possible, if capital expenditures are influenced by the availability of debt service funds, that the capital budget is procyclical, rather than the more reasonable countercyclical.

25. During the decade 2000–2010, city source revenue grew 65 percent, all source revenue grew 66 percent and capital expenditure grew 119 percent, so priorities changed.

FIGURE 10
Capital Commitment Plan, City Funds



Source: New York City budget documents online at <http://www.nyc.gov/html/omb/html/publications/publications.shtml>.
 Compiled by the authors.

hazard in that the prefunding of debt service may lead executive and legislative decision makers to think that there is money available that might as well be spent on capital projects. However, it may be easier to increase capital commitment, than it is to reduce capital outlays (Doulis 2013). So the perception that available debt services funds can be spent might create future fiscal stress as suggested by the sharp 2011 decline in capital spending. Overall, a more direct method of funding capital and debt service may be more compatible with public goals.

DISCUSSION

This paper examines the purported structural budget deficit as shown in Figure 1. Two reasons leading to skepticism are the large out-year revenue forecast biases reported by Williams (2012) and the actual retrospective surpluses reported in the CAFRs as shown in Figure 2. While Equations 1 and 2 suggest a straightforward comparison between expected out-year deficit and the net forecast bias—comprised of the revenue and expenditure forecast biases—such a comparison cannot be performed because of the nature of the budget preparation and postadoption rebudgeting practices. These practices show that expenditures rise with revenue.

Some practices both in the development stage and in the postadoption rebudgeting stage are associated with reallocating funds, rather than making reductions necessitated by structural shortfalls. This reallocation process occurs largely in the postadoption period and consequently is dominated by the mayor to an extraordinary extent (Council of City of N.Y. v. Giuliani 1994). The cycle of rebudgeting as described here, one in which discussion of shortfalls that never materialize lead to reductions that produce “found” money that is allocated to mayoral priorities outside of the period of public discussion, suggests a partial breakdown in democratic governance.

Yet, the data show that “found” money is used to fund debt service lagged one year. By lagging debt service one year, the city maintains a surreptitious budget stabilization fund. As Figures 4–6 show, this surreptitious budget stabilization fund likely smoothed the severity of the revenue downturn in 2009–2011. That the lagged debt service is used as a budget stabilization fund is partly confirmed by the downward adjustment in capital commitment in 2011. However, this confirmation also suggests that the funding of debt service through budget modifications is not simply a surreptitious budget stabilization fund; it also reflects a device for funding growth in the capital budget while minimizing this message to the broader public.

This discussion leads to policy recommendations for New York City. First, revise the Charter and controlling state law to permit an explicit budget stabilization fund. The main barrier to such a fund is the prevailing interpretation of the *New York State Financial Emergency Act for the City of New York (Financial Emergency Act)*, which requires that the proposed budget be in balance as if it were reported in accordance with generally accepted accounting principles (GAAP). Within this interpretation, end of year fund balances are not available for expenditure in the GF in subsequent years. Consequently, the city transfers the surplus funds to debt service, which is part of the capital budget process and treated as exempt from the GAAP requirement (Forsythe 2006). The GAAP requirement would not be particularly weakened if the city were to be explicitly authorized to appropriate a sum of money meeting reasonable criteria to a budget stabilization fund, with the further authority to transfer the money from the budget stabilization fund to the GF under carefully described conditions of fiscal exigency. The apparent barrier to seeking this authority from the state legislature is that it may not be desired by the mayor, who is the official who would normally seek such legislative change. There is available advice about such funds such as Hou (2006) or other recent articles (Hou 2003, 2004; Jordan 2006; Hou and Moynihan 2008); however, the evidence from this discussion suggests that in practice the city has effectively operated with a surreptitious fund of \$3–5 billion, so the most likely choice would be to convert an amount in this range to an explicit fund. The benefit of an explicit fund is transparency; the true forecast, or at least something close to the true forecast, can be disclosed without losing the ability to address financial downturns.

Second, the city should improve forecast and expenditure process transparency. Multi-billion dollar deficits that turn into multi-billion dollar surpluses that are in actuality neither are not transparent. The city should disclose its true forecast. If it is disclosing its true forecast and is failing so severely, it should improve its forecast. Whether the source of underestimation shown in Williams (2012) is poor forecasting or nonreporting of the true forecast, the city may not be in compliance with the *Financial Emergency Act* with respect to the use of reasonable and

appropriate assumptions and methods in forecasting. Also, the city should transfer funds to debt service in the year owed, not through a cunningly produced surplus from the prior year. The lack of transparency substantially reduces the public's ability to evaluate such claims as: "The gaps we are facing must be addressed," Budget Director Mark Page said in a letter to commissioners today. "We will once again need to curtail planned spending, and do so in a way that prioritizes and preserves necessary city services and quality of life" (Goldman 2012, no page number available). Such assertions and nontransparent processes allow the central budget authorities wide discretion, but at the cost of severely limiting democratic engagement in budgeting.

Third, the city charter should be revised to allow city council full decision making for revenue budget modifications. The current charter, as interpreted in *Council of the City of New York v. Giuliani* (1994), encourages the nontransparent processes described, which can have the effect of substantially disadvantaging democratic decision making.

CONCLUSION

Although the story is complex, the evidence does not support the view that there is a structural budget deficit in New York City.²⁶ The city likely did avoid a cash flow deficit during 2009–2011 by using its unofficial stabilization fund.²⁷ The city exhibits bias in its revenue forecast that leads to expenditure changes that follow the changing revenue particularly in the postadoption period. This rebudgeting practice does not reflect fiscal distress, rather it is part of a complex method of producing a surreptitious budget stabilization fund, reallocations favored by the mayor, and possibly shifting of the budget towards capital uses outside the March–June timeframe. These observed effects are somewhat consistent with effective financial management, but they are nontransparent and inconsistent with democratic participation in budgeting. Policy recommendations focus on restoring transparency and democratic oversight.

This case has shown the complex set of events both leading into and continuing past the appropriation event in New York City. Understanding the postappropriation activities is a necessary component to knowing what happens with a budget. Postappropriation continuous budgeting is common. More research is needed to determine patterns that may emerge by examining the actual practices in other jurisdictions.

ACKNOWLEDGMENT

The authors would like to acknowledge input from James Krauskopf and from the editors and reviewers.

26. This conclusion is not related to accounting issues that may or may not reflect unrevealed risks to which the city is exposed.

27. Some subsequent data suggest that the downturn may not yet be over in FY 2013. This avoided deficit reflects the cyclical concerns discussed by Hou (2006). There is nothing in the data to suggest that this cyclical deficit will not recover, so there remains no evidence of a structural deficit.

REFERENCES

- Alcaly, Roger E. and David Mermelstein. 1977. *The Fiscal Crisis of American Cities: Essays on the Political Economy of Urban America With Special Reference to New York. First Edition.* New York, NY: Vintage Books.
- Anessi-Pessina, Eugenio, Mariafrancesca Sicilia, and Ileana Steccolini. 2012. "Budgeting and Rebudgeting in Local Governments: Siamese Twins?" *Public Administration Review.* 72 (6): 875–884.
- Barbaro, Michael. 2008. "Mayor Staking His Popularity on Budget Fix." *New York Times*, November 15.
- Blackley, Paul R. and Larry DeBoer. 1993. "Bias in OMB's Economic Forecasts and Budget Proposals." *Public Choice.* 76 (3): 215–232.
- Bretschneider, Stuart I. and Wilpen Gorr. 1992. "Economic, Organizational, and Political Influences on Biases in Forecasting State Sales Tax Receipts." *International Journal of Forecasting.* 7 (4): 457–466.
- Bretschneider, Stuart I., Wilpen L. Gorr, Gloria A. Grizzle, and Earle Klay. 1989. "Political and Organizational Influences on the Accuracy of Forecasting State Government Revenues." *International Journal of Forecasting.* 5 (3): 307–319.
- Burkhead, Jesse. 1956. *Government Budgeting.* New York, NY: Wiley.
- Caiden, Naomi. 1981. "Public Budgeting Amidst Uncertainty and Instability." *Public Budgeting & Finance.* 1 (1): 6–19.
- Caiden, Naomi and Aaron B. Wildavsky. 1974. *Planning and Budgeting in Poor Countries, Comparative Studies in Behavioral Science.* New York, NY: Wiley.
- Chen, David W. 2011. "City Agencies Are Told to Cut Costs by \$2 Billion." *New York Times*, October 4.
- Chen, David W. and Michael Barbaro. 2008. "Bloomberg's Stewardship Is Mixed, Fiscal Experts Say." *New York Times*, October 2.
- Cooper, Michael. 2002. "City's Budget Gap Could Top \$6 Billion, Comptroller Says." *New York Times*, May 10.
- . 2004. "A Proposal for Few Cuts, No Layoffs and Even a Tax Rebate." *New York Times*, January 16.
- Council of City of N.Y. v. Giuliani 163 Misc.2d 681, 621, N.Y.S.2d, 1994. 832, LexisNexis Academic.
- de Jong, Niek. 2011. *Budgeting for Poverty Reduction in Bolivia: Has It Improved Since the Start of the PRS Process?* Rotterdam, the Netherlands: Erasmus University Centre for Contract Research and Business Support (ERBS).
- Dougherty, Michael John, Kenneth A. Klase, and Soo Geun Song. 2003. "Managerial Necessity and the Art of Creating Surpluses: The Budget-Execution Process in West Virginia Cities." *Public Administration Review.* 63 (4): 484–497.
- Doulis, Maria. 2013. How Much, and for What?: Citizens Budget Commission.
- Forrester, John P. and Daniel R. Mullins. 1992. "Rebudgeting: The Serial Nature of Municipal Budgetary Processes." *Public Administration Review.* 52 (5): 467–473.
- Forsythe, Dall W. 2004. *Memos to the Governor: An Introduction to State Budgeting. Second Edition.* Washington, D.C.: Georgetown University Press.
- . 2006. "Cyclical Budget Management in New York City." Paper presented at the annual meeting of the Public Budgeting and Finance Section of the Western Social Science Association, Phoenix, Arizona, April 20.
- Fretes-Cibils, Vicente, Marcelo Giugale, and Eduardo Somensatto. 2008. *Revisiting Ecuador's Economic and Social Agenda in an Evolving Landscape.* Washington, D.C.: World Bank Publications.
- Goldman, Henry. 2012. Bloomberg Asks NYC Agencies to Find \$2 Billion in Budget Savings. *Bloomberg.* Accessed September 26, 2012. <http://www.bloomberg.com/news/2012-09-14/bloomberg-asks-nyc-agencies-to-find-2-billion-in-budget-savings.html>

- Gramlich, Edward M. 1976. "The New York City Fiscal Crisis: What Happened and What Is to Be Done?" *The American Economic Review*. 66 (2): 415–429.
- Grizzle, Cleopatra. 2010. "The Impact of Budget Stabilization Funds on State General Obligation Bond Ratings." *Public Budgeting & Finance*. 30 (2): 95–111.
- Heinemann, Friedrich. 2006. "Planning or Propaganda? An Evaluation of Germany's Medium-Term Budgetary Planning." *FinanzArchiv/Public Finance Analysis*. 62 (4): 551–578.
- Hou, Yilin. 2003. "What Stabilizes State General Fund Expenditures in Downturn Years—Budget Stabilization Fund or General Fund Unreserved Undesignated Balance?" *Public Budgeting & Finance*. 23 (3): 64–91.
- . 2004. "Budget Stabilization Fund." *Public Administration and Public Policy. First Update Supplement*: 34–43.
- . 2006. "Budgeting for Fiscal Stability Over the Business Cycle: A Countercyclical Fiscal Policy and the Multiyear Perspective on Budgeting." *Public Administration Review*. 66 (5): 730–741.
- Hou, Yilin and Donald P. Moynihan. 2008. "The Case for Countercyclical Fiscal Capacity." *Journal of Public Administration Research and Theory: J-PART*. 18 (1): 139–159.
- Jones, L. R. and K. J. Euske. 1991. "Strategic Misrepresentation in Budgeting." *Journal of Public Administration Research and Theory: J-PART*. 1 (4): 437–460.
- Jordan, Meagan M. 2006. "Arkansas Revenue Stabilization Act: Stabilizing Programmatic Impact through Prioritized Revenue Distribution." *State & Local Government Review*. 38 (2): 104–111.
- Kennedy, Randy. 2003. "The Mayor's Fiscal Plan: The Breakdown; Schools, Clinics, Museums, Garbage ... the Cuts Are Spread Around." *New York Times*, April 17.
- Klay, William Earle and Gloria A. Grizzle. 1992. "Forecasting State Revenues: Expanding the Dimensions of Budgetary Forecasting Research." *Public Budgeting & Financial Management*. 4 (2): 381–405.
- Küblböck, Karin and Adolfo José Acevedo Vogl. 2010. "Notes on the Nicaraguan Budgeting Process and the Role of External Cooperation." In *ÖFSE Edition 16*. Vienna: Austrian Research Foundation for International Development—ÖFSE.
- Lauth, Thomas P. 2002. "The Midyear Appropriation in Georgia: A Threat to Comprehensiveness?" *State & Local Government Review*. 34 (3): 198–204.
- Levine, Charles H., Irene S. Rubin, and George G. Wolohojian. 1981. "Resource Scarcity and the Reform Model: The Management of Retrenchment in Cincinnati and Oakland." *Public Administration Review*. 41 (6): 619–628.
- Levy, Clifford J. 1996. "New York City Hears of Surplus, But Big Budget Gaps Lie Ahead." *New York Times*, December 11.
- Lindelov, Magnus. 2002. *Holding Governments to Account*. London: Save the Children.
- Lipton, Eric. 2003. "With Tightened Belt, New York Pulls Back from Fiscal Brink." *New York Times*, July 30.
- McIntire, Mike. 2005. "Mayor Looks to Cut Spending by \$750 Million Over 2 Years." *New York Times*, December 16.
- Miller, Lawrence J. and Daniel L. Smith. 2011. "The Great Recession's Impact on New York City's Budget." *Municipal Finance Journal*. 32 (1): 89–113.
- Navin, John C. and Leo J. Navin. 1997. "The Optimal Size of Countercyclical Budget Stabilization Funds: A Case Study of Ohio." *Public Budgeting & Finance*. 17 (2): 114–127.
- Omolehinwa, Eddy and Emery M. Roe. 1989. "Boom and Bust Budgeting: Repetitive Budgetary Processes in Nigeria, Kenya and Ghana." *Public Budgeting & Finance*. 9 (2): 43–65.
- Peterson, Stephen B. 1994. "Budgeting in Kenya: Practice and Prescription." *Public Budgeting & Finance*. 14 (3): 55–76.
- Premchand, A. 1998. "Umbrella Themes Obscure Real Problems: An Appraisal of Recent Efforts to Improve Financial Management." *Public Budgeting & Finance*. 18 (3): 72–88.
- Ramkumar, Vivek. 2009. "The State of Budget Transparency Worldwide." *International Journal of Government Financial Management*. IX (2): 1–14.

- Ravitch, Richard, Paul Volcker, Nicholas F. Brady, Califano, Joseph A. Jr. Phillip L. Clay, David Crane, Peter Goldmark, Richard P. Nathan, Alice M. Rivlin, Marc V. Shaw, and George P. Shultz. 2012. Report of the State Budget Crisis Task Force. New York.
- Rodgers, Robert and Philip Joyce. 1996. "The Effect of Underforecasting on the Accuracy of Revenue Forecasts by State Governments." *Public Administration Review*. 56 (1): 48–56.
- Rohatyn, Felix G. 1994. "A Leaner New York." *New York Times*, December 18.
- Ross, Robert and Kent Trachte. 1983. "Global Cities and Global Classes: The Peripheralization of Labor in New York City." *Review (Fernand Braudel Center)*. 6 (3): 393–431.
- Schick, Allen. 1988. "Micro-Budgetary Adaptations to Fiscal Stress in Industrialized Democracies." *Public Administration Review*. 48 (1): 523–533.
- Shefter, Martin. 1992. *Political Crisis/Fiscal Crisis: The Collapse and Revival of New York City*. New York City, NY: Columbia University Press.
- Sullivan, Eileen. 1988. "Charter Revision and New York City's Budgetary Process." *New York Law School Law Review*. 33: 569.
- Tang, Lawrence and Niblack Preston. 2007. "Does City Capital Spending Match the 10-Year Strategy?" In *Fiscal Brief*. New York, NY: Independent Budget Office.
- Tarschys, Daniel. 2002. "Time Horizons in Budgeting." *OECD Journal on Budgeting*. 2 (2): 77–104.
- Taylor, Kate. 2012. "Budget Cuts May Threaten City Programs for Children." *New York Times*, March 5.
- Turetsky, Doug. 2013a. *The City's Easiest Savings*. IBO Web Blog.
- . 2013b. *The Last (Budget) Dance?* IBO Web Blog. New York City, NY: The Independent Budget Office.
- Wildavsky, Aaron. 1983. "The Transformation of Budgetary Norms." *Australian Journal of Public Administration*. 42 (4): 421–432.
- Williams, Daniel W. 2012. "The Politics of Forecast Bias: Forecaster Effects and Other Effects in New York City Revenue Forecasting." *Public Budgeting & Finance*. 32 (4): 1–18.