No Magic Bullet: Constructing a Roadmap for Illinois Fiscal Sustainability

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"A budget tells us what we can't afford, but it doesn't keep us from buying it." (William Feather)

I. Introduction

For a 2-year period between the start of its 2016 fiscal year and the end of its 2017 fiscal year, Illinois state government operated without a full budget. Finally in early July 2017, the Illinois General Assembly passed both a spending plan and increases in the personal and corporate income tax rates over the governor's veto. The last two years have been chaotic and difficult for many Illinoisans. In the absence of a full budget, decisions about which state programs operated and which vendors got paid were determined by a hodgepodge of consent decrees, court orders, statutory requirements for continuing programs, and sometimes opaque priorities of executive officers (Dye, Merriman and Crosby, 2016).

The only full-year spending bills enacted in FY2016 and FY2017 were for elementary and secondary education to keep the public schools open (Civic Federation, 2017). A stopgap appropriations package signed on June 30, 2016 provided partial relief for human services, higher education and government agency operations, which had had little or no funding in FY2016, to cover some of their FY2016 expenses and the first half of FY2017 (Civic Federation, 2016). Although the nightmare of the budgetary impasse finally ended in early July 2017, Illinois' structural fiscal imbalance has not been resolved.

Many years of cumulative budget gaps and two years without a full state budget led to an enormous stack of unpaid bills, as shown in Figure 1. Unpaid bills peaked at more than \$16 billion in late calendar year 2017, but \$6 billion in borrowing has covered a portion of that backlog. Even with those payments, however, Illinois still had more than \$8 billion of unpaid bills in late January of 2018—a very high level by historical standards.

Even these huge figures understate the true magnitude of Illinois' unpaid bills. In addition, the recently enacted Debt Transparency Act (30 ILCS 105/9.08) allows the Illinois Comptroller to regularly report on invoices held in agencies but not yet forwarded to her office and therefore not yet included in unpaid bills. As of December 31, 2017, the Comptroller reported \$2.5 billion of such bills. The Comptroller also reported that "As of December 31, 2017, the overall aggregate of accrued and pending late interest penalties totaled approximately \$887 million,

not including the \$143 million in late payment interest paid by the state in calendar year 2017." (State of Illinois Comptroller's Office, January 2018)

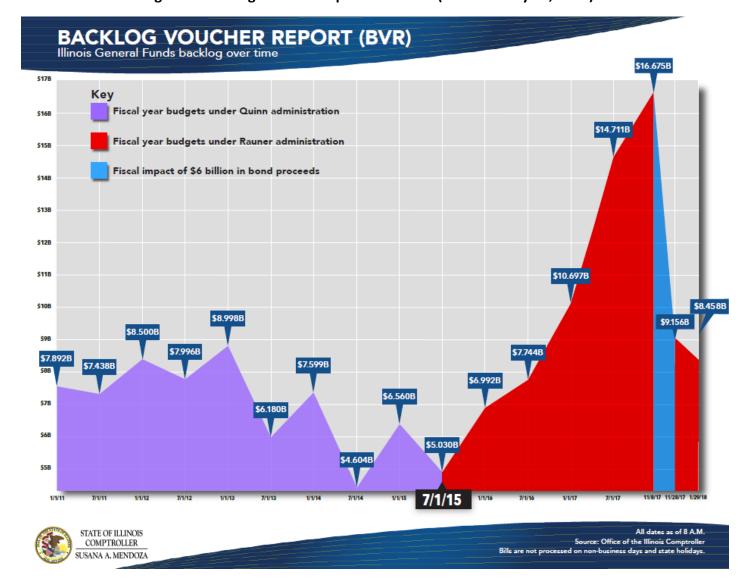


Figure 1: Backlog Voucher Report for Illinois (as of January 29, 2018)

Source: State of Illinois Comptroller's Office. Available at https://illinoiscomptroller.gov/.

Unsurprisingly, Illinois' long period of fiscal stress and recent political difficulties have led bond rating agency to advise caution with respect to State of Illinois debt. As noted by the Civic Committee of the Commercial Club of Chicago in its recent report on Illinois' fiscal condition (2017, p.10) "[a] state's credit rating serves as a useful proxy for evaluating its fiscal health and budgetary practices." As of early February 2018, all three of the major bond rating agencies

viewed purchase of State of Illinois general obligation debt as risky. Moody's and Standard & Poor's (S&P) gave Illinois the lowest possible non-junk rating for general obligation bonds. Fitch's rating was just one notch more positive. However, both Fitch and S&P hedged their ratings with a negative outlook, meaning that ratings might fall further. Moody's concluded the outlook was stable, meaning that it was unlikely to soon raise Illinois very low bond rating (State of Illinois Comptroller's Office, February 2018).

Despite these dismal fiscal conditions Illinois continues to have significant economic strengths. In a generally pessimistic analysis about Illinois' economic performance and fiscal challenges, Moody's recently noted that:

"Longer term, Illinois has a lot of what businesses need to thrive—talent, access to customers and capital, transportation hubs—but painful fiscal reforms are needed before it can fully capitalize on these strengths. Illinois' business climate outshines its regional rivals. Specifically, Illinois has a huge talent pool of highly skilled workers, world-class universities, more money for investment, and better transportation with an airport with direct connections around the globe. The state has these advantages because it has Chicago, the nation's third largest metro area. No neighboring state has a city even half as large. Illinois also offers businesses greater access to customers and capital than its neighbors." (Moody's, 2017)

Moody's emphasizes that Illinois has tremendous economic possibilities if it can overcome its fiscal challenges.

II. Current Fiscal Situation in Illinois

At the end of FY2017, there was broad agreement that Illinois' fiscal situation was dire.

The New York Times: "Susana A. Mendoza, the state comptroller, says the unpaid bills top \$15 billion and has warned leaders that she foresees 'unmanageable financial strains' starting in July." (Bosman and Davey, June 2017).

The Wall Street Journal: "Hospitals, doctors and dentists don't get paid for hundreds of millions of dollars of patient care. Social-service agencies help fewer people. Public universities and the towns that surround them suffer. The state's bond rating falls to

near junk status. People move out." (Mahtani and Belkin, June 2017)

Fox News: "Illinois' budget crisis has become so dire that the state is in danger of entering a financial 'death spiral', as a prominent ratings agency threatens to downgrade the state's credit score to 'junk' status." (Singman, June 2017)

CNBC: "'Even with a budget, it's likely that Illinois' finances [will] remain strained and vulnerable to unanticipated economic stress,' Standard and Poor's said in a recent credit report. S&P has given Illinois debt a Triple B-minus rating, one notch above junk status." (Schoen, July 2017)

We do not take issue with this conventional wisdom. Our data and methodology allow us to objectively quantify Illinois' fiscal distress to decompose elements of revenue and spending and provide objective historical context.

A detailed discussion of our data sources and methods is available at the following link—https://igpa.uillinois.edu/report/FFP Documentation Nov2016, but we provide a concise summary here. Our goal is to provide broad measures of the State of Illinois' net fiscal position during each fiscal year and then to understand the components of revenue and spending in a clear and consistent manner that avoids distortions due to accounting or administrative changes.

With the assistance of the State of Illinois Comptroller's Office, we have obtained detailed information about tens of thousands of state government spending and revenue categories from FY1998 through FY2017. Data covering the previous fiscal year is provided to us as of October of each year. For example, the Comptroller provides data on spending during the 2017 fiscal year (July 1, 2016 to June 30, 2017) as of October 2017. This provides information about spending and revenue that may lag the end of the fiscal year (e.g. invoices for work done in FY2017 but paid in FY2018).

We aggregate the Comptroller's data into a smaller number of revenue and spending categories in a consistent manner across all the years in our dataset. Importantly, our data aggregation does not differentiate between general funds and other funds. Instead, we construct "all funds" measures using fundamental, time-consistent criteria to include spending (or revenue) in any fund that supports a state function. Because of this, the frequent transfers of spending or revenue from the general funds to a special fund (and vice-versa) will not show up as changes in spending or revenue in our data. Also, we consistently define government functions rather than

programs so renaming or relabeling a revenue or expenditure will not show up as a disruption in our data.

Our measure of revenue focuses on sustainable revenue and excludes liquidity provided by borrowing or transfers obtained by spending down previously available account balances. In each year, we aggregate our data up to provide a measure of total spending, total revenue and the budget gap (total revenue minus total spending). Data for the period FY1998 to FY2017 is shown in Figure 2.

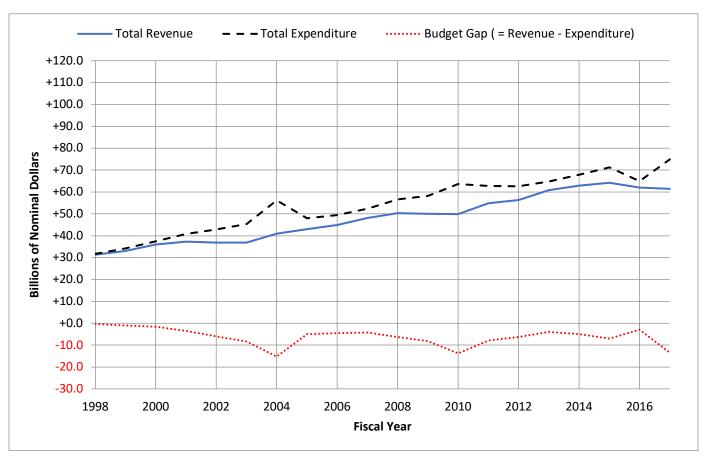


Figure 2: Illinois Revenue, Expenditure and Budget Gap (FY1998 – FY2017)

Source: Authors' calculation based on the data from the State of Illinois Comptroller's Office and Fiscal Futures Project.

The figure shows that total Illinois (nominal) spending has risen from near \$30 billion in FY1998 to more than \$70 billion in FY2017. Revenue was roughly equal to spending in FY1998 but has

lagged behind spending since FY2000, and the budget gap, shown in red dotted line in Figure 2, was \$13.5 billion in FY2017.

Several comments about Figure 2 are in order. Although there has been a clear trend toward increasing budget gaps, those gaps were particularly high in FY2004 and FY2010. The large budget gap in FY2004 is an artifact of the selling of \$10 billion of pension obligation bonds and the deposit of those funds to reduce unfunded liabilities in several state pension programs. Since we do not count borrowed funds as revenue but do count payments to the pension funds as spending, our data appropriately shows a large budget gap in FY2004. The large gap in FY2010 is a result of the slowing of revenue growth due to the nationwide Great Recession that began in 2008.

Also, notable in Figure 2 is a significant dip in spending in FY2016 (compared to FY2015), an associated decline in the FY2016 budget gap and a large rise in spending in FY2017, and a nearly unprecedented budget gap in that year. Of course, as discussed above, FY2016 and FY2017 were years marked by unusual budget turmoil without full-year appropriations for most spending categories and revenue barely sufficient to support even judicially mandated spending (Dye, Merriman and Crosby, 2016).

Figure 3 provides some information about the components of Illinois' FY2016 spending cuts. As shown in Figure 3, the biggest component (nearly one-third of all cuts) was in state employee healthcare. These cuts were nearly completely illusory because state employees were still covered by health insurance and undoubtedly continued to be treated by providers. The decline in that category of spending simply reflects Illinois' failure to reimburse providers on a timely basis. Several of the other spending categories that absorbed large cuts (human services, aging and corrections) may also simply reflect delayed payments. The very large cut in capital improvements (10 percent of the total) mostly reflects deferred spending rather than sustainable cuts.

The nearly \$10 billion jump in spending in FY2017 reflects, in part, spending that compensated for unsustainable cuts in FY2016.

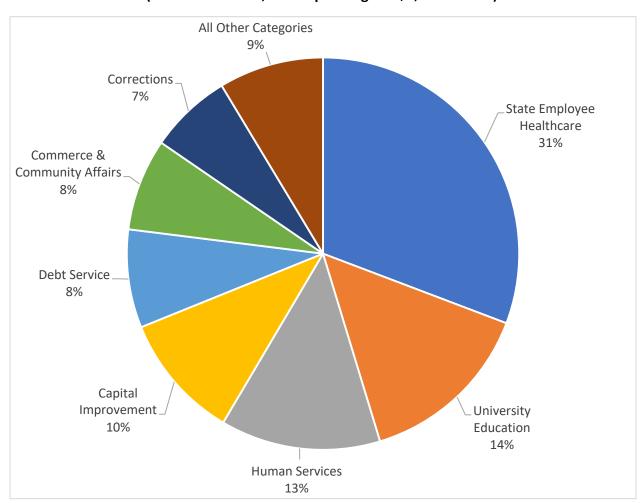


Figure 3: Proportion of Cuts in Spending by Category (FY2015 – FY2016, Total Spending Cut \$6,344 million)

Source: Authors' calculation based on the data from the State of Illinois Comptroller's Office and Fiscal Futures Project.

III. Causes of Illinois' Fiscal Imbalances and Paths to Fiscal Stability

How did Illinois get to this situation?

The most basic answer to this question is easily discernable in Table 1 below— spending has increased faster than revenue since 1998. As shown in Table 1, even if we restrict our attention to the period prior to the budgetary chaos of FY2016 and FY2017, the average annual growth rate of spending was 4.9 percent while the average annual growth rate of revenue was only 4.3 percent. This means that for each \$100 increase in spending, sustainable revenue grew only about \$88 (= \$100 * (4.3% / 4.9%)) leading to a constant struggle to maintain fiscal balance.

Table 1: Compound Annual Growth Rate of Illinois' All Funds Revenues and Spending (FY1998 – FY2015)

	Compound Annual Growth Rate (FY1998 – FY2015)		
Total Spending	4.9%		
Total Revenue	4.3%		

Source: Authors' calculation based on the data from the State of Illinois Comptroller's Office and Fiscal Futures Project.

A review of the growth rates of the components of total revenue and spending provides further insight. As shown in Table 2, Illinois' three major revenue sources, the personal and corporate income tax, sales tax, and federal Medicaid reimbursements accounted for about 61 percent of its total revenue in FY2015. Sales tax revenue grew quite slowly (only 2.6 percent per year) and income tax revenue grew more slowly than spending even though there was a significant increase in income tax rates beginning in FY2011. Federal reimbursements for Medicaid did grow faster than spending. However, this did nothing to reduce Illinois' fiscal stress because in most cases Medicaid revenue increases only when Illinois' own state-funded Medicaid spending increases. Most of Illinois' other revenue sources also grew more slowly than its spending.

Table 2: Key Categories of Illinois' All Funds Revenues in FY2015

Revenue Category	Amount (\$ millions)	Share of Revenue	Compound Annual Growth Rate (FY1998 – FY2015)
Individual Income Taxes	13,994	21.8%	4.8%
Sales Taxes	11,148	17.4%	2.6%
Federal Medicaid	10,491	16.3%	7.0%
Federal Other	6,212	9.7%	3.0%
Corporate Income Taxes	3,538	5.5%	4.7%
Receipts From Revenue Producing Activities	2,116	3.3%	6.5%
Federal Transportation	2,031	3.2%	5.4%
All Other Sources	2,018	3.1%	4.2%
Medical Provider Assessments	1,961	3.1%	7.8%
Motor Vehicle & Operators	1,539	2.4%	4.3%
Total Revenue	64,207	100.0%	4.3%

Source: Authors' calculation based on the data from the State of Illinois Comptroller's Office and Fiscal Futures Project.

Table 3 shows growth rates of the components of spending. Illinois' five largest spending categories are Medicaid, K-12 education, state pension contribution, revenue sharing with local governments and human services. Together these five categories accounted for 62.6 percent of total spending in FY2015. Of these five, K-12 education, local government revenue sharing and human services grew more slowly than total revenue. The relatively slow rate of spending growth on local government revenue sharing is, in fact, a symptom of the relatively slow rate of revenue growth since much of this spending category is simply an earmark of a share of state income and sales tax revenue.

Table 3: Key Categories of Illinois' All Funds Spending in FY2015

Expenditure Category	Amount (\$ millions)	Share of Spending	Compound Annual Growth Rate (FY1998 – FY2015)
Medicaid	16,914	23.7%	7.1%
K-12 Education	8,903	12.5%	3.4%
State Pension Contribution	6,719	9.4%	12.3%
Local Government Revenue Share	6,283	8.8%	3.5%
Human Services	5,854	8.2%	2.4%
Transportation	4,343	6.1%	4.8%
Debt Service	4,050	5.7%	7.3%
State Employee Healthcare	2,070	2.9%	7.5%
Toll Highway Authority	1,894	2.7%	10.1%
Corrections	1,380	1.9%	2.2%
University Education	1,308	1.8%	0.0%
Children & Family Services	1,118	1.6%	-0.8%
Other Departments	1,085	1.5%	6.7%
Aging	1,032	1.4%	9.7%
Total Spending	71,297	100.0%	4.9%

Source: Authors' calculation based on the data from the State of Illinois Comptroller's Office and Fiscal Futures Project.

How much of Illinois' FY2016 and FY2017 fiscal imbalances would have been alleviated if the personal and corporate income tax rates had not been allowed to decline by approximately one-third as of January 1, 2015?

As shown in Table 4, assuming the level of economic activity was not affected by higher personal and corporate income tax rates, Illinois' revenue would have increased more than \$4.7

billion in both FY2016 and FY2017. However, even with this additional revenue Illinois would still have experienced very large budget gaps in FY2017.

Table 4: Revenues would have Increased if No Tax Rates Decline on or after January 1, 2015

			2016	2017
Individual Income Taxes	Current	Tax Rate	3.75%	3.75%
		Amount of Revenue (\$ millions)	11,950	11,738
	If No Tax Rates	Tax Rate	5%	5%
	Decline on or after January 1, 2015	Amount of Revenue (\$ millions)	15,933	15,651
Corporate Income Taxes	Current	Tax Rate	5.25%	5.25%
		Amount of Revenue (\$ millions)	2,915	2,389
	If No Tax Rates Decline on or after	Tax Rate	7%	7%
	January 1, 2015	Amount of Revenue (\$ millions)	3,887	3,185
Total Income Tax	Current	Amount of Revenue (\$ millions)	14,865	14,127
	If No Tax Rates Decline on or after January 1, 2015	Amount of Revenue (\$ millions)	19,820	18,836
Extra Revenue if Tax Rate were Increased (\$ millions)			4,955	4,709
Current Budget Gaps (\$ millions)			-2,896	-13,480
The Ratio of Extra Revenue to Current Budget Gaps (Absolute Value)			171%	35%

Source: Authors' calculation based on the data from the State of Illinois Comptroller's Office and Fiscal Futures Project.

Furthermore, while an increase in income tax rates will raise the level of income tax revenue, it will not increase the revenue *growth rate*. Thus, even if revenue increased to equal spending, fiscal balance could not be maintained unless the historical pattern of growth rates could be altered to bring spending and revenue growth into balance. In order to bring spending and revenue growth rates into balance, Illinois will have to either increase revenue growth rates or decrease spending growth rates.

How can Illinois move toward fiscal balance?

The major factors determining Illinois' revenue growth rates will be (1) state tax policy, (2) federal intergovernmental aid policies and (3) economic conditions.

State tax policy can change the rate of revenue growth in two primary ways: by altering incentives that result in changes in economic activity and by choosing tax bases that grow more or less slowly. We discuss the relationship between economic activity and tax revenue below.

Tax revenue will grow faster to the extent that the tax base grows faster. State of Illinois revenue comes from two primary tax bases: sales and income, both personal and corporate. The sales tax is assessed on most goods but is not assessed on most service transactions. It is well known that expanding the sales tax base could significantly increase revenue (COGFA, January 2017) but less well understood that changing the tax base in this manner could also increase the *growth rate* of revenue. This is because expenditures on services are expected to grow faster than expenditures on goods that are currently in the sales tax base (Taylor, 2013).

Changes in Illinois' personal income tax base could also alter the rate of revenue growth. Illinois currently exempts all retirement income from personal income taxes. This lowered income tax revenue about \$1.8 billion in FY2016 (State of Illinois Comptroller's Office, 2017). This also results in slower growth in income tax revenue since the number of retirees in the state is expected to grow rapidly (State of Illinois Comptroller's Office, 2014). Changing from Illinois' current flat tax to a graduated rate tax would also change the tax base by putting more weight on income earned by higher income taxpayers. If the historical pattern of relatively rapid income gains by higher income earners persists, revenue from a graduated-rate tax could grow more rapidly than Illinois' current flat rate personal income tax.

Although the direction in which these potential changes in tax bases could change revenue growth rates is clear, the amount that revenue growth rates change would depend upon the details of implementation. Discussion of magnitudes is beyond the scope of this brief report.

The future growth rate of state revenue will also depend on federal intergovernmental aid policies. As shown in Table 2, federal intergovernmental aid (federal aid for Medicaid, transportation and other combined) is Illinois' largest source of revenue. Federal aid policies are thus crucial to Illinois' structural balance. With the Republican Party currently in control of the U.S. Presidency and both the U.S. House and Senate, there is potential for major policy changes. The 2016 Republican platform stated that "[w]e applaud the Republican governors and state legislators who have undertaken the hard work of modernizing Medicaid. We will give them a free hand to do so by block-granting the program without strings." (emphasis added) (Republican National Committee, July 2016). The potential revenue implications of block-

granting Medicaid are uncertain but historical experience suggests that, in the long term, the growth rates of intergovernmental grant revenue would diminish.

Economic conditions can also affect revenue growth since the growth rate of any tax base will generally increase with the growth rate of the underlying economy. Past Fiscal Futures Project reports (Dye and Merriman, 2016) have examined this question and concluded that even relatively large increases in economic growth rates would result in only modest increases in tax revenue because tax revenue responds approximately proportionately to economic activity. Even a doubling of economic growth rates (say from 2 to 4 percent) would increase tax revenue only by 2 percent or so.

Budget gaps can be reduced by slowing the growth rate of spending as well as increasing the growth rate of revenue. How will the growth rates of spending change in the future? As discussed above, Illinois' biggest expenditure items are Medicaid, K-12 education and pension contributions. Since early 2015, Illinois has made extraordinary efforts involving 13 different government entities to transform Medicaid to achieve the objective of paying for quality, value, and outcomes (Illinois Department of Healthcare and Family Services, 2017). While these efforts and similar efforts going back many years may improve Medicaid delivery and patient health, there is little evidence that they have substantially slowed the growth rate of Medicaid spending or will do so in the future. Medicaid spending growth is mostly likely to be influenced by national trends in the cost of care and by the composition of the patient population. These are factors largely beyond the short-term control of state government.

Illinois' second biggest expenditure item is K-12 education. Leaders of both major political parties support increased state spending in this area and in 2017 the Illinois General Assembly passed a major change in the formula used to distribute state aid to local school districts. This evidence-based funding plan is intended to distribute additional aid to local school districts (Illinois State Board of Education, Fall 2017). The Illinois State Board of Education has used the new formula, which is designed to distribute all of the funding necessary to provide an adequate education, to justify a request for a \$7 billion funding increase. Board members argue that this is necessary in order to implement the new funding model with fidelity (Yount, January 2018). As of late January 2018, some uncertainty about the implementation of the plan remains due to the governor's amendatory veto which was motivated by a dispute regarding the new formula's funding of some private schools (Garcia, January 2018). It seems likely the bill passed by the General Assembly or something similar will soon be implemented and it is likely that state spending for K-12 education will increase faster than it has in the past.

Illinois' third largest expenditure item is payments to public worker pensions. Because Illinois faces a large unfunded liability and because Illinois' courts have given the state little option but to honor these obligations, Illinois pension spending will continue to be a large expenditure

item. The future growth rate of pension spending will, however, slow somewhat in future years (COGFA, March 2017).

IV. Simulation Model and Results

Illinois faces a \$13.5 billion budgetary gap on revenue of only about \$61 billion. The state has a large stack of unpaid bills in FY2017 and numerous constraints on spending and revenue. Bringing about structural balance will clearly require determination, administrative and political skill, and enormous persistence. Tough choices will have to be made, value judgments discussed, compromise accepted, and tradeoffs squarely faced. It would be presumptuous of us to believe that we could offer a complete and detailed path to fiscal balance without substantially more resources and access to the internal machinery of state government.

Several distinguished organizations have offered serious substantive frameworks that consider specific policy choices Illinois must make (Civic Committee of the Commercial Club of Chicago, 2017; Civic Federation, 2017).

Our goals in this section are modest. We offer an analysis that describes the scope of Illinois' fiscal challenges and provides a standard that can be used to assess the feasibility and likely success of alternative policy approaches.

We describe a fiscal simulation that demonstrates the implications of various growth rates of spending and revenue for Illinois' budget gap. As discussed above, future gaps ultimately depend on the growth rates of state revenue and spending. In our simulation, we show what happens assuming that in the future the (compound annual) growth rate of total revenue is constant and equal to its historic average druing the FY1998 – FY2015 period. As discussed above, the growth rate of revenue was about 4.3 percent. We focus on the period from FY1998 to FY2015 in order to avoid the high level of fiscal disruption that occurred during the two years in which Illinois did not enact a budget. Note that, even maintaining this historic rate of revenue growth may be challenging because the personal and corporate income tax rate increased during the later part of the historical period (i.e. the second half of FY2011 to the first half of FY2015) that we use as a baseline. Thus, policy changes and/or increased economic activity will be required if Illinois' revenue is to match its historical annual growth rate of 4.3 percent.

We illustrate the challenges Illinois will face with three scenarios about Illinois' spending growth rates. Our baseline scenario shows what will happen to budgetary gaps if Illinois' spending continue to grow at its historical average growth rate of 4.9 percent. Our second scenario shows what would happen if we were able to reduce the spending growth rate to 4.3 percent, i.e. spending and revenue were to grow at the same rate. Our third scenario optimistically asks what would happen if Illinois were able to lower its spending growth rate to 3.6 percent which

would mimic the growth rate of Michigan, which had the lowest spending growth rate of any state in the nation during the FY1998 to FY2015 period.

All of our scenarios assume that we begin the period with observed FY2017 spending of about \$74.9 billion (see Table 5), and revenue equal to FY2017 revenue of about \$61 billion (see Table 6). We add an upward adjustment of about \$5 billion for the additional revenue we expect to be generated by the personal and corporate income tax increase that began at the start of FY2018. Note that our simulations don't take into account the inter-dependence of revenue and spending. This is particularly evident with respect to Medicaid because cutting state Medicaid spending will result in declines in federal matching revenue. Our analyses also do not account for the fact that past budget gaps may have to be financed with debt and servicing this debt will raise spending in future years. Because of this, our results should be viewed as relatively optimistic estimates of policies required to deal with budgetary gaps.

Table 5: Illinois' All Funds Spending in FY2017, By Category

Expenditure Category	Amount (\$ millions)	Share of Spending
Medicaid	17,853	23.8%
K-12 Education	9,755	13.0%
State Pension Contribution	7,519	10.0%
Local Government Revenue Share	6,460	8.6%
Debt Service	5,603	7.5%
Human Services	5,364	7.2%
Transportation	3,998	5.3%
State Employee Healthcare	2,974	4.0%
Toll Highway Authority	1,764	2.4%
Corrections	1,274	1.7%
University Education	1,265	1.7%
Aging	1,256	1.7%
Children & Family Services	1,076	1.4%
Central Management	1,012	1.4%
Environmental Protect Agency	902	1.2%
Public Safety	812	1.1%
Other Departments	731	1.0%
Elected Officers	725	1.0%
Student Assistance Commission	693	0.9%
Commerce & Community Affairs	649	0.9%
Revenue	505	0.7%
Community College Board	431	0.6%
Judicial	421	0.6%
Public Health	363	0.5%
Healthcare & Family Services (Net of Medicaid)	332	0.4%
Capital Improvement	251	0.3%
Natural Resources	211	0.3%
Other Boards & Commissions	208	0.3%
Employment Security	194	0.3%
Business & Profession Regulation	146	0.2%
Legislative	89	0.1%
Agriculture	67	0.1%
Total Spending	74,903	100.0%

Source: Authors' calculation based on the data from the State of Illinois Comptroller's Office and Fiscal Futures Project.

Table 6: Illinois' All Funds Revenues in FY2017, By Category

Revenue Category	Amount (\$ millions)	Share of Revenue
Individual Income Taxes	11,738	19.1%
Sales Taxes	11,385	18.5%
Federal Medicaid	10,448	17.0%
Federal Other	5,934	9.7%
Corporate Income Taxes	2,389	3.9%
Receipts From Revenue Producing Activities	2,221	3.6%
Medical Provider Assessments	2,138	3.5%
Federal Transportation	2,105	3.4%
All Other Sources	1,885	3.1%
Motor Vehicle & Operators	1,585	2.6%
Public Utility Taxes	1,396	2.3%
Motor Fuel Tax	1,329	2.2%
Lottery Receipts	1,244	2.0%
Licenses, Fees & Registrations	1,207	2.0%
Gifts And Bequests	1,128	1.8%
Cigarette Taxes	782	1.3%
Other Taxes	775	1.3%
Insurance Taxes, Fees & Licenses	530	0.9%
Riverboat Wagering Taxes	440	0.7%
Liquor Gallonage Taxes	294	0.5%
Inheritance Tax	255	0.4%
Corp Franchise Taxes & Fees	215	0.4%
Total Revenue	61,423	100.0%

Source: Authors' calculation based on the data from the State of Illinois Comptroller's Office and Fiscal Futures Project.

Given the above data and assumptions, our baseline budgetary gap is about -13.6 percent of revenue (= (\$66 - \$74.9) / \$66). In Scenario 1, we assume both revenue and spending continue to grow at their historic rates. In this case, of course the ratio of the budget gap to revenue will grow over time as shown (in solid blue) in Figure 4. The fiscal gap ratio grows from -13.6 percent in the baseline year to 27.4 percent after 20 years.

Our second scenario uses the same framework as the first but assumes that total revenue and spending grow at the same rate in the future. The budget gap's share of total revenue in various years is displayed in Scenario 2 (in downward diagonal orange) in Figure 4. Because

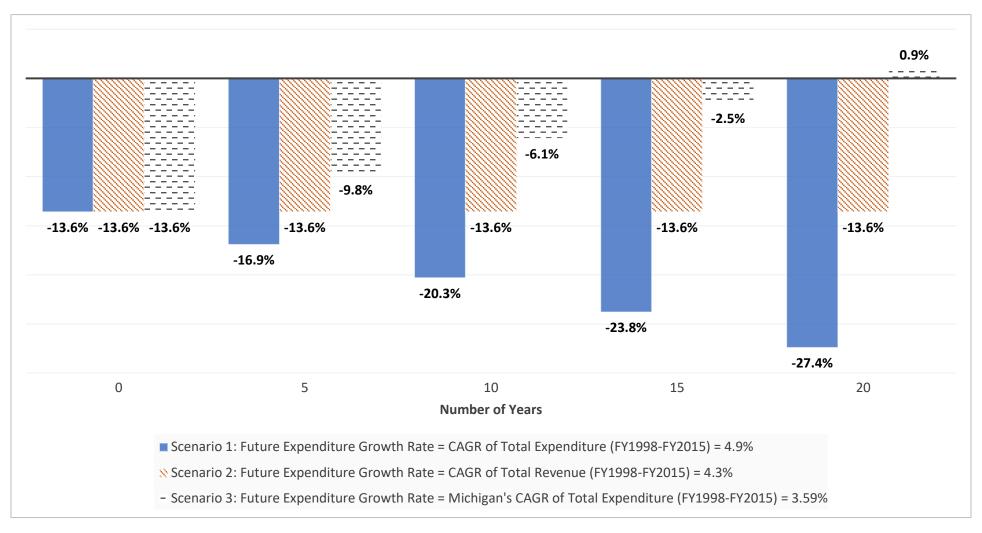
both revenue and spending grow at the same pace, the ratio of the budget gap to revenue does not change over time.

The analysis of scenarios 1 and 2 should make it clear that spending must grow more slowly than revenue if Illinois' budget gap is to be eliminated. How much is it reasonable to believe that the rate of spending growth can be reduced? To answer this question, we analyzed data on the general expenditures of all 50 states during the years 1998 to 2015 gathered by the U.S. Census and complied into an easily accessible format by Pierson, Hand and Thompson (2015). While these data are not directly comparable to the Fiscal Futures database because of differences in methods and coverage, they are compiled by uniform methods across all states. Our analyses showed that Michigan had the lowest total spending growth rate during the period FY1998 – FY2015 among all 50 states.

In Scenario 3, we calculate what would happen if Illinois were able to have its spending grow as slowly as Michigan's slowest-in-the-nation growth rate of 3.6 percent. Our results for this scenario are presented in Scenario 3 (in dashed grey) in Figure 4. The ratio of budget gap to revenue diminishes from -13.6 percent (in baseline year) to positive 0.9 percent 20 years later. Our calculation also indicates that, even under this extremely optimistic scenario, it would take nearly 19 years for Illinois to eliminate its budget gap if Illinois keeps revenue growing at its historical rate (4.3 percent).

Figure 4: Deficit Share of Total Revenue as a Function of Time and Compound Annual Growth Rates (CAGR)

(Fixing Total Revenue Growth Rate at CAGR of Total Revenue in Period FY1998-FY2015)



Source: Authors' calculation based on the data from the State of Illinois Comptroller's Office, Fiscal Futures Project, and the Government Finance Database from Willamette University.

V. Summary and Conclusions

After two years without a complete budget, FY2018 offers Illinois' taxpayers, residents, and public institutions a bit more fiscal stability, but an enormous amount of uncertainty remains. Our analysis of comprehensive data through the end of FY2017 shows an enormous and unsustainable annual budget gap of \$13.5 billion. In addition, Illinois has accumulated a very large stack of unpaid bills.

Despite a significant tax increase that began July 1, 2017, there is little reason to believe that things will improve much in FY2018. Even with the tax increase, FY2018 spending will greatly exceed FY2018 forecast revenue unless FY2018 spending can be reduced far below those of FY2017. Even during the extreme fiscal stress of FY2016 when Illinois lacked a budget and a fiscally conservative governor used his authority to almost unilaterally decide on many categories of spending, Illinois did not make sustainable spending reductions. Because there is little flexibility to cut the Illinois' three biggest expenditure items: Medicaid, K-12 education and contribution to state worker pension funds, we do not expect FY2018 spending to be significantly different from FY2017.

If Illinois is to chart a fiscally sustainable budgetary path, it must embark on a multi-year plan that restrains spending growth and enhances revenue growth. Our technical analysis shows that, even if Illinois is able to exercise enormous discipline, we should expect a long period of relative fiscal austerity during which new taxes are imposed or the tax base of current taxes are expanded while spending growth is very modest. This task will require honesty, commitment, compromise and cooperation. In the absence of this Illinois may careen toward even worse fiscal outcomes and be unable to capitalize on its significant economic, cultural and historical resources.

Bibliography

- 1. Bosman, Julie and Monica Davey. June 29, 2017. "'Everything's in Danger': Illinois Approaches 3rd Year without Budget," The New York Times. https://www.nytimes.com/2017/06/29/us/illinois-state-budget-impasse.html
- Bosman, Julie and Monica Davey. July 6, 2017. "Illinois Lawmakers Override Budget Veto, Ending Two-Year Stalemate," The New York Times. https://www.nytimes.com/2017/07/06/us/illinois-budget-shutdown-states-rauner.html
- Civic Committee of the Commercial Club of Chicago. March 2017. "Bringing Illinois Back:
 A Framework for Our Future."
 http://www.civiccommittee.org/Media/Default/pdf/BringingIllinoisBack2017.pdf
- Civic Federation, The Institute for Illinois' Fiscal Sustainability. July 1, 2016. "Break in Illinois' Budget Impasse Allows for Partial Spending Plan." https://www.civicfed.org/iifs/blog/break-illinois-budget-impasse-allows-partial-spending-plan
- 5. Civic Federation, The Institute for Illinois' Fiscal Sustainability. February 10, 2017. "State of Illinois FY2018 Budget Roadmap."

 https://www.civicfed.org/sites/default/files/reportroadmapfy2018.pdf
- Commission on Government Forecasting & Accountability (COGFA). January 2017.
 "Service Taxes, 2017 Update." http://cgfa.ilga.gov/Upload/ServiceTaxes2017update.pdf
- Commission on Government Forecasting & Accountability (COGFA). March 2017.
 "Illinois State Retirement Systems, Financial Condition as of June 30, 2016."
 http://cgfa.ilga.gov/Upload/FinConditionILStateRetirementSysMar2017.pdf
- 9. Dye, Richard, David Merriman and Andrew Crosby. February 15, 2016, "Consequences of Inaction: The Effects of the Budget Stalemate on Revenue and Spending at the Midpoint of Fiscal Year 2016." Institute of Government and Public Affairs, University of Illinois.

https://igpa.uillinois.edu/sites/igpa.uillinois.edu/files/reports/Consequences-of-Inaction.pdf

- 10. Garcia, Monique. January 9, 2018. "Rauner Vetoes Education Funding Bill over Private School Concerns," Chicago Tribune.
 http://www.chicagotribune.com/news/local/politics/ct-met-bruce-rauner-education-bill-veto-20180108-story.html
- 11. Illinois State Board of Education. Fall 2017. "An Overview of the Evidence-Based Funding Formula PA 100 0465."

 https://www.isbe.net/Documents/EBF Presentation Overview.pdf
- 12. Mahtani, Shibani and Douglas Belkin. June 27, 2017. "How Bad Is the Crisis in Illinois? It Has \$14.6 Billion in Unpaid Bills," The Wall Street Journal. https://www.wsj.com/articles/how-bad-is-the-crisis-in-illinois-it-has-14-6-billion-in-unpaid-bills-1498590946
- 13. Moody's Analytics. January 2017. "State of Illinois Economic Forecast, January 2017." http://cgfa.ilga.gov/Upload/2017MoodysEconomylLForecast.pdf
- 14. Illinois Department of Healthcare and Family Services. March 31, 2017. "FY2016 Annual Report Medical Assistance Program."
 https://www.illinois.gov/hfs/SiteCollectionDocuments/HFS2016AnnualReportFINAL331
 17.pdf
- 15. Pierson Kawika, Michael L. Hand and Fred Thompson. 2015. "The Government Finance Database: A Common Resource for Quantitative Research in Public Financial Analysis." PLoS ONE doi: 10.1371/journal.pone.0130119. http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0130119
- 16. Republican National Committee. July 18, 2016. "The 2016 Republican Party Platform." https://prod-cdn-static.gop.com/media/documents/DRAFT 12 FINAL[1]ben 1468872234.pdf
- 17. Schoen, John W. July 16, 2017. "States in Crisis: Embroiled in the Worst Budget Battles Since the Great Recession." CNBC News. https://www.cnbc.com/2017/07/11/states-in-crisis-the-worst-budget-battles-since-the-great-recession.html

- 18. Singman, Brooke. June 26, 2017. "Illinois In Danger of Entering Financial 'Death Spiral," Fox News. http://www.foxnews.com/politics/2017/06/26/illinois-in-danger-entering-financial-death-spiral.html
- 19. State of Illinois Comptroller's Office. April 2014. "Tax Expenditure Report, Fiscal Year 2013." https://ledger.illinoiscomptroller.com/Ledger-Temp/assets/File/TaxExpend/Tax%20Expenditure%202013Final.pdf
- 20. State of Illinois Comptroller's Office. August 2017. "Tax Expenditure Report, Fiscal Year 2016." https://ledger.illinoiscomptroller.com/find-reports/fundamental-reporting/tax-expenditure-report/fiscal-year-2016/
- 21. State of Illinois Comptroller's Office. January 2018. "Debt Transparency Report Summary, Period Ending December 31, 2017."

 https://ledger.illinoiscomptroller.gov/ledger/assets/file/DTA/current/DTAReport.pdf
- 22. State of Illinois Comptroller's Office. Accessed February 5, 2018. "Bond Ratings." https://ledger.illinoiscomptroller.com/fiscal-condition/bond-ratings/
- 23. Taylor, Mac. August 5, 2013. "Why Have Sales Taxes Grown Slower than the Economy?" California Legislative Analyst's Office. http://www.lao.ca.gov/reports/2013/tax/sales-tax/sales-tax-080513.pdf
- 24. Yount, Benjamin. January 17, 2018. "Illinois State Board of Education Asks for \$7 billion More for Next Year's Budget," Illinois News Network.

 https://www.ilnews.org/news/schools/illinois-state-board-of-education-asks-for-billion-more-for/article-b84afd2e-fbbe-11e7-8eda-17a50df0f635.html