

To: Kevin Willens
From: Don Boyd
Date: December 17, 2024
Subject: Studies on where federal, state, and MTA revenue comes from and goes to

You asked for past analyses of (1) where the federal budget comes from and where it goes to, by state, (2) where the state budget comes from and where it goes to, by county or region, and (3) where the MTA budget comes from and where it goes to, by county.

The table below summarizes and provides links (where available) for the most recent versions of each kind that I have found. I attach the reports as well.

I offer a few comments after the table.

In the interest of speed and given that your inner nerd plans to read the reports, I have not summarized or compared methodologies but can if you want.

Summary

Analyses	Budget period	Key conclusions	Comments
Federal budget and the states			
Holland, Lynn and Patrick Schumacher. “ Giving or Getting? New York’s Balance of Payments with the Federal Government, 2024 Report. ” Rockefeller Institute of Government, July 2024.	FFY 2022	NY net negative \$19.4b balance of payments, 5 th worst in nation. NY had positive balance in 2020 and 2021 due to COVID relief.	Landing page Interactive map
DiNapoli, Thomas P. “ New York’s Balance of Payments in the Federal Budget: Federal Fiscal Year 2022. ” Office of the State Comptroller, New York, April 2024.	FFY 2022	NY net positive \$21.2 b balance of payments, due to COVID relief.	Interactive map and data Difference vs. Rockefeller probably driven by treatment of federal COVID relief. See comments after table.
NY state budget and its regions and counties			
Robert Ward. “ Giving and Getting: Regional Distribution of Revenue and Spending in the New York State Budget, 2009-2010. ” Rockefeller Institute of Government, December 2011.	SFY 2010	NYC and downstate suburbs “give” far more to Albany in revenue than they “get” in state-funded expenditures. Capital Region and Rest of State get significantly more than they give.	Blog
MTA revenue and spending and the 12 counties			
David Keller, “MTA County Payment Ratio Analysis”, January 2019.	2005, 2011 and 2016	MTA region gets more than it spends because feds and NYS fund significant capital. Orange and Rockland got less than they spent, Nassau and Putnam got more. Important changes over time.	Not sure if this analysis was publicly released.
Boyd, County analysis of MTA revenue	2016-2022	2022 per-capita tax payments greatest for NYC, Suffolk, Westchester, and Nassau. Lowest for Rockland, Putnam, Dutchess, and Orange	I allocated approximately 10 MTA tax sources to the 12 counties for each year from 2016-2022. I think the press of other things kept us from in-depth discussion of this.

Overarching conceptual and measurement issues

These studies always raise big challenges. Here are a few:

- **Spending by place is not the same as benefit by place.** If the state spends a lot on upstate prisons is that benefiting the downstate region, which disproportionately sends prisoners upstate? Is it benefiting the local communities upstate, which have high-paying prison jobs they otherwise would not have? Does university spending benefit where the students are from or where the campuses are? More generally, should state payroll be allocated to where the jobs are or to where the workers live?
- **Revenue from a place is not the same as the burden on a place.** It's traditional to allocate income taxes to the residents of a place, and sales taxes to where the sales are made or possibly to the residents of a place. The income tax is generally consistent with economic incidence literature; the sales tax not so much. Where does the corporate income tax come from by state or county? No one knows. Is it where the employers are? Where the owners are, which could be anywhere in the world? Where the workers live? There's no clear single concept and relatively little useful data for several of the competing concepts.
- **What to do about the federal budget deficit?** If the federal budget always spends more than it receives, absent adjustments, these studies can show that all regions "receive" more spending than they pay for, year after year.
- **How to treat aid from other governments?** For the state and for MTA, if spending of aid from other governments is counted, but the corresponding revenue from other governments is not counted, then what each county "gets" in spending can be greater than what it "gives" through taxes.
- **What to do about income taxes paid by nonresidents?** For example, where should the NYS income tax paid by commuters from CT or NJ be allocated?
- **How to treat capital spending and debt service?** If you count both, then you're double-counting some spending. (When debt service is paying for some of the capital spending.) And where should the spending be allocated?

For these and other reasons, the studies are generally an unprincipled mix of approaches and concepts made possible by available data and time, rather than having a single underlying principle driving how the numbers are produced. The challenges for allocating state and MTA budgets are probably greater than for allocating the federal budget.

Federal budget and the states

- These analyses were started by Senator Daniel Patrick Moynihan decades ago. They were housed for many years at the Kennedy School of Government. *Interesting fact:* An early author was Jay Walder, after he was MTA CFO but before he was MTA chair (e.g., see [this](#)). I corresponded with him about it at one point. KSG eventually stopped doing the reports, and there was a hiatus before the Rockefeller Institute picked them up again.
- Coincidentally, OSC started doing the studies at about the same time as the Rockefeller Institute.
- Progressive federal income tax, combined with (1) NY's high income and (2) NY's highly unequal income distribution, is a major cause of the traditional conclusion that NY "gives" far more than it "gets."
- I suspect (but did not investigate) that the primary difference between the Rockefeller Institute report and the OSC report for FFY 2022 is how they measured the timing of COVID relief. There are several possible reasons for differences. For example, if Rockefeller measured federal initial budget authority (authorization to spend, similar to an appropriation) but OSC measured outlays (cash disbursements), Rockefeller federal COVID "spending" would end sooner than OSC COVID "spending" (federal outlays can go on for years after the initial budget authority). The studies were much closer to each other pre-COVID and I expect they will again be close to each other another year or two down the road.
- I have looked for similar studies prepared by other states but have not found them. New York has always had the greatest or near-greatest imbalance by these measures, and has the largest incentive to prepare reports.
- Many data sources on federal taxes and spending provide partial information on the questions these studies address. I can elaborate if you want.
- I led the first version of the Rockefeller Institute federal report and consulted on several versions of the OSC federal report.

New York state budget and the counties

- Less comprehensive than the federal studies, largely due to lack of data and challenges in obtaining data.
- Rockefeller published estimates for revenue under alternative assumptions for the income tax – one set of estimates allocating based on place of residence, and another allocated based on place of work.

- Rockefeller published estimates for spending under alternative assumptions for SUNY and Corrections – one set of estimates allocating based on location of institution, and another allocated based on students' or inmates' previous residence.
- I have looked for other more recent reports but did not find any. I recall that the Center for Governmental Research, a nonprofit analytic group in Rochester, did an even earlier study but have not found it.
- I advised on the SFY 2010 Rockefeller Institute state budget report.

MTA revenue and spending

- For David Keller's analysis, Attachments to this memo include his notes, the ratio analysis document, and an associated spreadsheet. You have this already but I'm attaching it for completeness.
- I attach various files from my analysis. I can provide explanations if desired.

Appendix: Some notes I wrote on the Rockefeller NYS budget study, long ago

What the Rockefeller study shows

- The published report divided the state into 4 regions: NYC, capital region, downstate suburbs, and rest of state. It did not publish county information. They put Rockland into downstate suburbs and Orange into rest of state. While the 2 counties border each other, the averages for downstate suburbs are very different from averages for rest of state.
- They allocated most/much revenue and spending in the 2009-2010 state budget to these 4 regions.
- I have managed to obtain many of the unpublished details behind their analysis, and they are voluminous. Rockefeller appears to have allocated many/most specific revenue items to individual counties and rolled them up to regions. They appear to have allocated some spending items to counties and rolled them up; other spending items appear to have been obtained from OSC, already rolled up to regions (i.e., no county information available, even in the unpublished details).

The next few tables show summary results.

Table 1a shows share of receipts and of expenditures by region, as well as population. Because NYC's share of receipts is much greater than its share of expenditures, it could be thought of as a donor. Same for downstate suburbs (which include Rockland), but rest of state (which includes Orange) is a recipient.

Table 1a. Regional Distribution of New York State Revenues and Spending, FY 2010					
<i>Personal income tax allocated by place of residence</i>					
Region	Taxes/other receipts paid		State expenditures		Share of statewide population
	Share of NYS	Per capita	Share of NYS	Per capita	
Capital Region	3.8%	\$3,326	7.0%	\$6,934	4.2%
New York City	45.1%	\$3,915	40.0%	\$3,881	42.9%
Downstate Suburbs	27.4%	\$4,711	17.7%	\$3,400	21.7%
Rest of State	23.8%	\$2,843	35.2%	\$4,702	31.2%
Note: Statewide revenue total excludes tax payments of \$5 billion from out-of-state residents.					
Source: Rockefeller Institute calculations.					

Table 1b is similar but allocates income tax according to where people work rather than live. NYC is a bigger donor in this approach, downstate is a smaller donor, and rest of state is about the same.

Table 1b. Regional Distribution of New York State Revenues and Spending, FY 2010					
<i>Personal income tax allocated by place of work</i>					
Region	Taxes/other receipts paid		State expenditures		Share of statewide population
	Share of NYS	Per capita	Share of NYS	Per capita	
Capital Region	3.9%	\$3,702	7.0%	\$6,934	4.2%
New York City	48.7%	\$4,536	40.0%	\$3,881	42.9%
Downstate Suburbs	23.6%	\$4,353	17.7%	\$3,400	21.7%
Rest of State	23.8%	\$3,059	35.2%	\$4,702	31.2%
Note: Statewide revenue total includes New York State tax payments from out-of-state residents.					
Source: Rockefeller Institute calculations.					

These conclusions are driven by the biggest numbers. On the revenue side, the income tax and the sales tax are the big drivers, as Table 2 shows.

Table 2. Tax and Other Own-Source Revenues, 2009-10					
Revenue source	Total (thousands)	Capital Region	New York City	Downstate Suburbs	Rest of State
Personal income tax (based on residence)	\$29,434,400	3.0%	46.7%	33.8%	16.4%
Personal income tax (based on workplace)	\$34,751,400	3.5%	54.6%	24.3%	17.7%
Consumption/ Use Taxes	\$12,852,087	4.5%	39.7%	25.5%	30.4%
Alcoholic Beverage	\$225,560	4.9%	27.6%	24.2%	43.3%
Auto Rental	\$76,109	3.4%	31.2%	24.0%	41.4%
Cigarette and Tobacco Products	\$1,365,934	4.5%	36.8%	16.3%	42.5%
Highway Use	\$137,247	5.0%	22.6%	17.5%	54.9%
Motor Fuel	\$506,910	6.8%	17.6%	27.1%	48.5%
Sales and Use	\$10,527,492	4.3%	41.7%	26.7%	27.3%
Business Taxes	\$7,458,092	3.8%	54.6%	20.6%	21.1%
Bank	\$1,399,278	1.4%	77.3%	12.2%	9.2%
Corporation Franchise	\$2,510,832	2.7%	59.5%	19.4%	18.4%
Corporation and Utility	\$953,670	4.1%	47.1%	26.6%	22.1%
Insurance	\$1,490,767	5.4%	57.3%	21.7%	15.7%
Lubricating Oil	\$3	6.8%	17.6%	27.1%	48.5%
Petroleum Business	\$1,103,542	6.8%	17.6%	27.1%	48.5%
Other Taxes	\$2,606,144	0.9%	63.1%	29.0%	7.0%
Estate and Gift	\$866,377	1.6%	51.9%	36.2%	10.3%
MCTD Mobility Tax	\$1,227,721	0.0%	72.2%	25.0%	2.8%
Real Estate Transfer	\$493,050	2.0%	60.4%	26.0%	11.6%
Miscellaneous Receipts [excludes bond receipts]	\$20,505,151	4.8%	40.4%	21.5%	33.3%
Health Care Reform Act	\$3,902,659	3.5%	46.1%	23.4%	27.1%
SUNY & CUNY	\$2,501,276	10.6%	7.8%	16.2%	65.5%
Gaming	\$2,951,114	3.8%	47.8%	22.9%	25.5%
Abandoned Property	\$614,759	3.9%	44.9%	27.2%	24.1%
Other Miscellaneous Receipts	\$10,535,343	4.2%	43.7%	21.4%	30.8%
Total Receipts [PIT allocated by county of residence]	\$72,855,874	3.8%	45.1%	27.4%	23.8%
Total Receipts [PIT allocated by place of work]	\$78,172,874	3.9%	48.7%	23.6%	23.8%
Source: Rockefeller Institute calculations.					
Note: Total receipts exclude bond & federal receipts.					

On the spending side, local assistance is most important, followed by state operations (Table 4).

Table 4. Total Expenditures, and Major Categories					
	<i>Regional Shares, FY 2009-10</i>				
	Total (thousands)	Capital Region	New York City	Downstate Suburbs	Rest of State
Local Assistance Grants	\$53,453,619	3.6%	49.3%	17.4%	29.7%
State Operations	\$23,363,342	15.3%	21.8%	17.7%	45.2%
Capital Projects	\$4,515,672	5.4%	25.3%	20.5%	48.7%
Total Disbursements	\$81,332,633	7.0%	40.0%	17.7%	35.2%
Population		4.2%	42.9%	21.7%	31.2%
Poor people		3.0%	57.1%	10.5%	29.5%
Source: Rockefeller Institute calculations.					

In local assistance, education and Medicaid are the largest by far (Table 5):

Table 5. Distribution of Local Assistance Payments, State-Funds Expenditures, FY 2010					
	Total (thousands)	Capital Region	New York City	Downstate Suburbs	Rest of State
Education	\$26,130,319	3.8%	41.3%	18.2%	36.7%
<i>Support of public schools</i>	\$18,413,759	3.9%	39.4%	17.0%	39.8%
<i>School Tax Relief</i>	\$3,411,395	3.9%	33.8%	32.4%	29.9%
<i>Municipal/Community college aid</i>	\$1,962,898	1.5%	78.8%	6.9%	12.8%
<i>Education of handicapped</i>	\$919,779	3.9%	39.4%	17.0%	39.8%
<i>Other education</i>	\$1,422,488	5.5%	33.8%	17.1%	43.6%
Medicaid	\$12,255,062	2.6%	62.1%	13.7%	21.7%
Transportation	\$4,041,339	1.1%	66.1%	24.6%	8.2%
Health and Environment	\$3,462,238	5.1%	44.8%	21.4%	28.6%
Other Social Services	\$3,275,219	3.6%	68.4%	10.0%	18.1%
Mental Hygiene	\$1,742,442	6.0%	43.4%	18.4%	32.2%
General Purpose	\$1,252,195	5.7%	13.6%	19.9%	60.8%
Total Local Assistance Grants	\$53,453,619	3.6%	49.3%	17.4%	29.7%
Source: Rockefeller Institute calculations.					

Note that it is a misnomer to call state spending on Medicaid local assistance. In almost every state, Medicaid is entirely paid for by the state; New York is the only state with a significant local share. So, another way to think about it is that state Medicaid spending is a state purpose, and local Medicaid spending – not shown here – is also a state purpose (local aid to the state) that in most states would be paid by the state.

Could the Rockefeller analysis be delved into more deeply, or updated?

Deeper analysis: Because I have obtained some unpublished details at the county level, I should be able to give some insight into how Orange and Rockland fared in the year of the study, which is important because the regions are highly aggregated. That would involve disentangling dozens of documents and spreadsheets. It would not be possible to be

comprehensive; I would pick on the largest numbers and dig into them. It's a necessary first step before trying to extend anything.

Updating: For a recent year(s) I think we could do county level PIT and sales tax analysis, and probably Medicaid analysis and K12 education analysis. We probably could not do other spending items as many would require special runs from the Comptroller. Picking a few targets might, however, give us a sense of how things have changed since 2009-10. Updating the full analysis, while possible, is a major undertaking.