Preventing the Next State Budget Crisis: Improving Budget Transparency to Bolster Fiscal Sustainability
THE \textit{HOW'S}, THE \textit{WHY'S} AND THE \textit{CONSEQUENCES} OF STATE AND LOCAL DEFICITS

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FEDERAL RESERVE BANK, NEW YORK
CALVIN AND HOBBES

I don't understand how Santa runs his operation. How can he afford to give toys away?

How does he pay for the raw materials he uses to make the toys? How does he pay his elves?

There's no income to cover his costs. How does he do it?

Deficit spending, I guess.

Sure, but sooner or later it's going to catch up to him, and then where will I be??
A CURRENT FISCAL CRISIS IS A CASH FLOW PROBLEM

“CONTRACTUAL” OBLIGATIONS - AID - CASH > MAXIMAL TAX REVENUES

“LEGALLY CONTRACTUAL” OBLIGATIONS TO:

CURRENT BONDHOLDERS

CURRENT PENSIONERS

CURRENT SUPPLIERS

“POLITICALLY CONTRACTUAL” OBLIGATIONS TO:

MINIMAL SERVICES TO CURRENT RESIDENTS: EDUCATION, SAFETY (?)

FUTURE RESIDENTS: INFRASTRUCTURE (?)

FUTURE PENSIONERS (?)
A FUTURE FISCAL CRISIS IS A PROBLEM OF DECLINING PUBLIC WEALTH

STEP 1: BUILD UP CONTRACTUAL OBLIGATIONS:

- Underfund the Pension
- Borrow Short-Term (Rollover) and Long-Term
- Delay Supplier Payments

STEP 2: BUILD UP POLITICAL OBLIGATIONS

- Mandates for Education and Poverty
- Expand Benefit Promises

STEP 3: DEPLETE CASH & ASSETS

- Sell Cash and Assets
- Fail to Maintain Infrastructure
MONITORING FOR A FUTURE FISCAL CRISIS

NET PUBLIC WEALTH =

[CASH & SECURITIES] - [LTDEBT + STDEBT] - [SUPPLIER OWED PAYMENTS] +

[REPLACEMENT VALUE OF PUBLIC & ENTERPRISE INFRASTRUCTURE] +

[PENSION FUND ASSETS - PENSION OBLIGATIONS]
### WHO HAS HAD A CRISIS?

<table>
<thead>
<tr>
<th>Government</th>
<th>Year</th>
<th>Pensions (Normal Cost)</th>
<th>Supplier Obligations</th>
<th>Dissave</th>
<th>Failure to Maintain K</th>
<th>Sell Public Assets</th>
<th>Sell Enterprise Assets</th>
<th>Pension (Withdrawals)</th>
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A PHILADELPHIA STORY

APPENDIX

How Much Money Is in a Philadelphian's Public Purse?

Net Worth per Resident

<table>
<thead>
<tr>
<th>Year</th>
<th>Average State &amp; City</th>
<th>PA &amp; Philadelphia</th>
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WHO MIGHT HAVE A CRISIS?

“TAX SMOOTHERS” VIA RAINY DAY FUNDS:

Arizona, California, Colorado, Connecticut, Delaware, Idaho, Nevada, New Mexico

“BORROWERS”

Illinois, Kansas, Maryland, Massachusetts, Mississippi, New Jersey

“SAVERS”

Iowa, Montana, Nebraska, North Dakota, South Dakota, Texas, Wyoming
TAX SMOOTHERS
Real Total Wealth in Connecticut per Capita

- Total Wealth per Capita
- Capital Stock per Capita
- Financial Wealth per Capita
BORROWERS
SAVERS
Real Total Wealth in North Dakota per Capita

- Total Wealth per Capita
- Capital Stock per Capita
- Financial Wealth per Capita
SHOULD WE CARE? THE CONSEQUENCES OF FISCAL CRISES

DISTRIBUTIONAL CONSEQUENCES

POTENTIAL WINNERS:
CURRENT TAXPAYERS RECEIVED SERVICES AT SUBSIDIZED “PRICES”

POTENTIAL LOSERS:
☞ FUTURE RESIDENT TAXPAYERS WHO NOW MUST COVER THE COSTS
   “AUSTERITY BUDGETS” WITH TAX INCREASES AND SERVICE CUTS
☞ BONDHOLDERS WHO ARE NOT FULLY REPAID
☞ RETIREES WHO LOSE THEIR SOME OR ALL OF THEIR PENSIONS
☞ FUTURE NON-RESIDENT TAXPAYERS IF “BAILOUT”
EFFICIENCY CONSEQUENCES

STATIC INE FFICIENCY

.enabled
SUBSIDIZED LABOR COSTS WITH PENSION UNDERFUNDING

EFFICIENCY LOSS ≈ $.20 FOR EACH DOLLAR OF LABOR SPENDING

.enabled
SUBSIDIZED SERVICE COSTS WITH “COMMON POOL” SPENDING

EFFICIENCY LOSS ≈ $.20 TO $.40 IN CURRENT ACCOUNTS SPENDING

DYNAMIC INE FFICIENCY

.enabled
FISCAL CRISIS, UNEMPLOYMENT, and “AUSTERITY” BUDGETS

16 % DECLINE IN NATIONAL INCOME IN GREECE OVER 9 YEARS

.enabled
PUBLIC INFRASTRUCTURE AND LOST CONTRIBUTION TO GROWTH
TO MANAGE DEFICIT FINANCING YOU NEED TO KNOW: *WHY?*

- MOVERS’ MOTIVATION: LEAVE BEFORE DEFICITS ARE DUE
  
  (Young, Renters, Unemployed, and Elderly)

- COOPERATIVE STAYERS’ MOTIVATION:
  
  EFFICIENT “TAX SMOOTHING” DEFICITS

- NON-COOPERATIVE STAYERS’ MOTIVATION: EXTRACT A BAILOUT
  
  (Financial Spillovers, Service Immiseration)

- NON-COOPERATIVE STAYERS’ MOTIVATION: OWN POLITICS
  
  WEAK PARTIES: THE “COMMON POOL”

  STRONG PARTIES: CONSTRAIN COMPETITORS
KNOWING WHY, WHAT SHOULD WE DO?

**BETTER MARKETS:** CREDIBLE INFORMATION OF $\Delta NPW$ & NPW

ASSET MARKET CAPITALIZATION

REMOVE THE INCENTIVES FOR BAILOUTS

**BETTER POLITICS:** CREDIBLE INFORMATION OF $\Delta NPW$ & NPW

NOVY-MARX & RAUH (Journal of Finance, 2011); STATE BUDGET TASK FORCE

RATING AGENCIES

**BETTER REGULATION:** CREDIBLE INFORMATION OF $\Delta NPW$ & NPW

EX POST

$\Delta NPW$

“OUTSIDE” ENFORCERS
WHAT'S THE SOLUTION?

IT IS HARD WALKIN' ON THIS STUFF.

YEP, SON. WE HAVE MET THE ENEMY AND HE IS US.