Can (or Should) a Statewide Property Tax Be Used To Payoff the Unfunded Pension Liability?

Rick Mattoon, Thomas Walstrum and Thomas Haasl
Federal Reserve Bank of Chicago
April 17, 2018

*The views expressed herein are those of the authors and do not necessarily represent the views of the Federal Reserve Bank of Chicago or the Federal Reserve System.
Assuming the Pension Liability Cannot be Altered, What are the Options for Paying Off the Balance?

• **Step 1: Assumptions**
  – Increasing worker contributions is unlikely due to Constitutional protection, therefore funding has to be generated by the state.
  – The state faces 2 budget issues—generating enough revenue to pay for the “normal” operations of government and paying for the pension obligation.
  – The pension problem creates a special risk. New revenue will have to be used to pay for services already consumed. Higher taxes provide no new services to taxpayers.
Possible Revenue Options

- Suspect 1—the major state tax bases—personal income, corporate income and sales.
  - Both Personal and Corporate income have had recent tax rate increases so further increases seem unpopular/unlikely. Could broaden the base by including some level of retiree income and changing some loopholes in the corporate base but this has seen limited support. Graduated income tax could raise an unspecified level of revenue but requires Constitutional action.
  - Sales tax—while the state rate is middle of the pack, the local add-ons have driven the tax in Chicago to being the highest in the nation. Not much room for rate change. Base broadening to services would help but again doesn’t seem to get much support.
Possible Revenue Options

• Suspect 2—new taxes
  – Legalized marijuana. Based on Colorado and Washington experience this doesn’t raise enough
  – More gambling. Evidence suggests that revenues from casinos are essentially flat
  – Tax financial transactions—fear of driving a key industry from the state
  – Issue a massive amount of pension bonds and hope interest rates work in your favor
What’s Left?

• A Statewide Property Tax in a state with some of the highest property tax burdens in the country?
The Defense for a Statewide Property Tax

• How you raise the revenue for paying off the liability matters...need to consider the economic feedback of taxes into the economy.

• Start with where is a large liability likely to be capitalized.
  – Not likely in income if wages are paid on a national level. In fact higher income tax rates might cause employers to have to pay higher wages.
  – Not likely on retail sales. Hikes in sales taxes could be regressive and also encourage avoidance.
  – That leaves property—has the greatest chance of efficiently capitalizing the liability into prices.
How can an unfunded liability be capitalized into property prices?

• Tracy Gordon—Condo Association special assessment concept
• Academic work—
  – Wallace Oates, University of Maryland
Why the Property Tax?

– It is potentially more efficient—the tax can be calibrated to fund the ARC and pay down the balance over a longer-time horizon.

– Its transparent. The payments would be known as well as the duration. The tax would be capitalized into real estate values which would prevent people leaving the state to avoid paying for the liability. Similarly new entrants would be able to purchase real estate at a discount.

– It’s generationally fair. The liability reflects services already consumed that weren’t paid for by previous taxpayers. Other tax bases would not recover taxes from beneficiaries of an era where government services were not fully paid for.
Why the Property Tax?

– It creates certainty. A dedicated property tax would only be used to pay off the pension liability. Once this occurs, the tax expires.

– It avoids squeezing out other state government services by making them compete for the same tax base. Paying for the liability out of the general fund requires reducing expenditures for other necessary state services. This allows government services to be fully funded using the existing tax base.

– The plan can be modified to reflect equity concerns. Communities with high effective property tax rates could be exempted since the additional property tax burden might have serious development consequences.
However, is it practical?

• First, assuming this could even be legal, you need at least a back of the envelop calculation to see how much revenue is possible under differing assumptions.
The Model

• Goal: Pay entire $129 billion liability
• Assumptions:
  – Only tax residential property
  – Tax rate is constant
  – Duration of pay-off period
  – Property value growth
  – Degree of capitalization

1. Model of Revenue, Tax Base Growth, and Capitalization

(1) \( \text{Revenue}_N = \sum_{n=1}^{N} \text{Base}_n \times \text{Rate} = 129.1 \text{ Bil.} \)

(2) \( \text{Base}_n = \text{Base}_{n-1} \times \left(1 + \frac{\alpha}{\text{Trend Growth}} - \frac{\text{Rate} \times \beta}{\text{Capitalization}} \right) \)
2. Model Assumptions and Average Tax Rates by Scenario

<table>
<thead>
<tr>
<th>Assumption</th>
<th>Low Rate</th>
<th>Middle/Baseline Rate</th>
<th>High Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>N (Duration of payments)</td>
<td>30</td>
<td>30</td>
<td>20</td>
</tr>
<tr>
<td>β (Degree of capitalization)</td>
<td>58.8%</td>
<td>58.8%</td>
<td>44.6%</td>
</tr>
<tr>
<td>α (Property value annual growth rate)</td>
<td>4.5%</td>
<td>2.8%</td>
<td>1.3%</td>
</tr>
<tr>
<td>Average annual tax rate</td>
<td>0.26%</td>
<td>0.35%</td>
<td>0.73%</td>
</tr>
</tbody>
</table>

Source: Authors' calculations based on data from the Civic Federation, Illinois Department of Revenue, and Federal Housing Finance Agency accessed via Haver Analytics.

5. Estimated Tax Bills ($ Thous.) By Tax Rate Scenario and Area

<table>
<thead>
<tr>
<th>Area</th>
<th>Estimated Med. Home Values</th>
<th>Effective Rate</th>
<th>Low Rate</th>
<th>Middle/Baseline Rate</th>
<th>High Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illinois</td>
<td>170</td>
<td>N/A</td>
<td>0.446</td>
<td>0.601</td>
<td>1.244</td>
</tr>
<tr>
<td>Cook County</td>
<td>215</td>
<td>N/A</td>
<td>0.564</td>
<td>0.760</td>
<td>1.574</td>
</tr>
<tr>
<td>City of Chicago</td>
<td>221</td>
<td>3.669</td>
<td>0.579</td>
<td>0.782</td>
<td>1.618</td>
</tr>
<tr>
<td>Lake Forest</td>
<td>832</td>
<td>13.894</td>
<td>2.181</td>
<td>2.943</td>
<td>6.090</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Area</th>
<th>Estimated Med. Sales Prices</th>
<th>Effective Rate</th>
<th>Low Rate</th>
<th>Middle/Baseline Rate</th>
<th>High Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illinois</td>
<td>192</td>
<td>N/A</td>
<td>0.503</td>
<td>0.679</td>
<td>1.405</td>
</tr>
<tr>
<td>Cook County</td>
<td>243</td>
<td>N/A</td>
<td>0.637</td>
<td>0.859</td>
<td>1.779</td>
</tr>
<tr>
<td>City of Chicago</td>
<td>283</td>
<td>4.698</td>
<td>0.742</td>
<td>1.001</td>
<td>2.072</td>
</tr>
<tr>
<td>Lake Forest</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

Notes: N/A indicates not available

Sources: Authors' calculations based on data from Zillow, the Civic Federation, Illinois Department of Revenue, and Federal Housing Finance Agency accessed via Haver Analytics.
4. Tax Revenues By Tax Rate Scenarios

Sources: Authors' calculations based on data from the Civic Federation, Illinois Department of Revenue, and Federal Housing Finance Agency accessed via Haver Analytics.
Concluding thought--a Hybrid Solution Work?

• State’s over-reliance on the property tax to fund schools already makes it difficult to increase existing levies, let alone create a new levy.

• This suggests that a tax swap might be an option—raise income and sales taxes through base broadening and use the revenue gained to reduce local property taxes (most likely by increasing state funding for local education). This would mute the impact of the pension related property tax.

• Also possible to use a more limited form of a pension bond sale to reduce the amount of property tax revenue would be needed to fund the pensions.