Potential Rural Impacts of Pension Reductions

Steven Miller, Michigan State University
Steven Deller, University of Wisconsin, Madison
Judith I. Stallmann, University of Missouri

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This Discussion

Focusing on multi-employer plans

1. What extent is rural America exposed to the pension crises?
2. What are the potential economic impacts to these communities?

Structure of presentation

- Study Motivation and Literature Review
- Approach
- Findings
- Synthesis

Study Motivation

- Private and public pension funds (defined benefit retirement plans) are under pressure:
  - Under funded by sponsors
  - Lower than projected returns on investments
  - Pensioners living longer – creating unexpected claims against the balances
  - History of exuberant optimism on behalf of both sponsors and beneficiaries that the future returns and revenues will be better
Study Motivation

- Private pension funds fall into two categories:
  - Single-employer pension fund
    - Single party is responsible for managing fund
  - Multi-employer pension fund
    - Multiple employers and/or unions are jointly responsible for managing fund
    - Adverse incentives for new firms to join existing multi-employer pensions

- The number of workers with pensions has steadily declined and many employers have froze their plans and most are expected to be frozen in the foreseeable future

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Study Motivation

- Pensions make up a sizable share of total household income

![Sources of Income](image)

Source: SSA, Office of Retirement and Disability Policy, Income of the Population 55 or Older 2014

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Study Motivation

- In 1974 the Employee Retirement Income Security Act established the Pension Benefit Guaranty Corporation. From PBGC 2015 Projections Report:
  - Single-Employer Program (30 million workers in 22,000 plans)
    - Stable and potentially will generate surplus revenues over liabilities
  - Multi-Employer Program (10 million workers in 1,400 plans)
    - Unstable and likely to use up all of its assets at the end of 2025
Study Motivation


- Analysis of 124 multi-employer plans indicates an average funding ratio of only 47%.

- The PBGC Multi-employer fund has $2 billion in assets but $54 billion in liabilities.

- To defray the inevitable:
  - many multi-employer pension funds seek to modify the benefits component of their defined benefits agreements ala the Kline-Miller Multiemployer Pension Reform Act of 2014.
  - PBGC increased premiums on a graduated scale (2015).

Study Motivation

- Not only is the pensioner impacted by pension insolvency, but also the community.
  - Income to the pensioner is income earned by the community.
  - The degree of community exposure may vary across community types.
  - Income is spent in the community, generating multiplier effects.

- Given this, we wanted to better inform the potential economic impact of a sudden change in pension payments to rural communities.
Approach

➢ Case approach using Central States, Southeast And Southwest Areas Pension Plan
   ✓ 411,238 members (4 times larger than next largest)
   ✓ Fund currently pays out $2 billion more in annual liabilities than it receives (about 53.9% funded)
   ✓ Several contributing sponsors have cut back on contributions or gone bankrupt
   ✓ Expected to run out of money in 10-15 years

➢ This situation is mirrored across the U.S. — notably the United Mine Workers of America
   (115,120 members @ 72.3% funded)

Distribution of Defined Benefit Plans

Figure 1. Percentage of employees participating in defined benefit pension plan, by geographic region, private industry 2011.


Distribution of Defined Benefits Plans

➢ Rural areas are more exposed to changes in pension income because of the aging of rural America
➢ The distribution of retirees dependent on pensions is not well understood
➢ Use IRS SOI data (4-year averages) to map out county-level pension and annuity income
➢ Use Getis-Ord GI* statistics to identify clusters of above and below average dependence
Distribution of Defined Benefits Plans

Figure 3a: Share of Returns Declaring Pension Income (2011-2014)

Figure 3b: Spatial Clustering Share of Returns Declaring Pension Income (2011-2014)

Figure 4a: Share of AGI Income from Pensions (2011-2014)
Distribution of Defined Benefits Plans

There's a remarkable correlation with rural areas

Sub-Sample Equivalency Tests

- Compared exposure to pensions along three dimensions:
  - Urban-Rural
    - Metro; non-metro but adjacent to metro; non-metro remote
  - Economic Base
    - Non-specialized; farm; mining; manufacturing; government; recreation
  - County Type
    - Retirement destination; low education; persistent poverty
### Pension Dependency Across Urban-Rural Spectrum

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Pension Income Per Capita</th>
<th>Share of AGI from Pensions</th>
<th>Share of Filings with Pensions</th>
<th>Average Pension per Pension Return</th>
<th>Percent Change in Pension per Pension Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metro</td>
<td>1,164</td>
<td>2,070.31</td>
<td>0.085</td>
<td>0.208</td>
<td>21,557.93</td>
<td>2.108</td>
</tr>
<tr>
<td>Adjacent (Nonmetro)</td>
<td>1,027</td>
<td>1,814.04</td>
<td>0.096</td>
<td>0.214</td>
<td>19,423.30</td>
<td>2.084</td>
</tr>
<tr>
<td>Remote (Nonmetro)</td>
<td>944</td>
<td>1,646.13</td>
<td>0.085</td>
<td>0.198</td>
<td>18,628.09</td>
<td>1.998</td>
</tr>
</tbody>
</table>

### Rural County Pension Dependency Across Economic Base

<table>
<thead>
<tr>
<th>Economic Base</th>
<th>N</th>
<th>Pension Income Per Capita</th>
<th>Share of AGI from Pensions</th>
<th>Share of Filings with Pensions</th>
<th>Average Pension per Pension Return</th>
<th>Percent Change in Pension per Pension Return</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonspecialized (and Metro)</td>
<td>1,236</td>
<td>1,865.85</td>
<td>0.087</td>
<td>0.206</td>
<td>20,317.12</td>
<td>2.070</td>
</tr>
<tr>
<td>Farm</td>
<td>444</td>
<td>1,442.44</td>
<td>0.071</td>
<td>0.187</td>
<td>16,686.06</td>
<td>2.084</td>
</tr>
<tr>
<td>Mining</td>
<td>219</td>
<td>1,503.45</td>
<td>0.068</td>
<td>0.190</td>
<td>18,486.55</td>
<td>2.121</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>506</td>
<td>1,649.93</td>
<td>0.084</td>
<td>0.207</td>
<td>18,037.07</td>
<td>2.127</td>
</tr>
<tr>
<td>Federal/State Govt</td>
<td>404</td>
<td>2,026.95</td>
<td>0.107</td>
<td>0.213</td>
<td>22,678.28</td>
<td>2.056</td>
</tr>
<tr>
<td>Recreational</td>
<td>331</td>
<td>2,712.57</td>
<td>0.115</td>
<td>0.239</td>
<td>23,762.49</td>
<td>2.148</td>
</tr>
</tbody>
</table>

### Sub-Sample Equivalency Tests

- Economies most exposed to pension shortfall risks appear to be:
  - Metro counties in terms of pension income per capita
  - Adjacent nonmetro counties in terms of income shares, share of filings with pension and growth in dependence
  - Remote counties specializing in recreation and government sectors in terms of income shares and shares of filings
  - Remote counties specializing in manufacturing and manufacturing in terms of growth in dependence
Sub-Sample Equivalency Tests

- Economies most exposed to pension shortfall risks appear to be:
  - Retirement destinations (may reflect higher mobility associated with hire post-retirement income)
  - Counties with higher-education
  - Counties with stable populations
  - Counties without persistently high unemployment

Impact Estimates

- Selected 9 non-metro counties within two dimensions:
  - Remoteness
    - Adjacent; non-adjacent
  - Population size
    - Small (<35,000); Medium

- Shares of tax returns with pensions/annuities ranged from 16 to 40%
- Pensions/annuities made up between 6 and 23% of AGI

Impact Estimates

- Assumed 50% reduction in pension (& annuity) income
- Used IMPLAN Pro 3.1 for each respective county
- Assumed reduction occurred to Households $35-$50k
  - Estimates induced effects
  - Direct effects are added back into final estimates
Impact Estimates

Table 5: Base Data for Simulated Analysis

<table>
<thead>
<tr>
<th></th>
<th>Number of Returns w/ 1099-R</th>
<th>Percent of Total Returns</th>
<th>Pensions Percent of AGI</th>
<th>Annual 1099-R Payments ($000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MI Newaygo County</td>
<td>4,990</td>
<td>24%</td>
<td>10%</td>
<td>$86,938</td>
</tr>
<tr>
<td></td>
<td>Roscommon County</td>
<td>4,493</td>
<td>40%</td>
<td>$100,793</td>
</tr>
<tr>
<td>MI Meeker County</td>
<td>2,193</td>
<td>20%</td>
<td>7%</td>
<td>$39,723</td>
</tr>
<tr>
<td></td>
<td>Winona County</td>
<td>4,260</td>
<td>19%</td>
<td>$77,712</td>
</tr>
<tr>
<td>MO Adair County</td>
<td>1,987</td>
<td>21%</td>
<td>10%</td>
<td>$39,629</td>
</tr>
<tr>
<td></td>
<td>Johnson County</td>
<td>4,943</td>
<td>23%</td>
<td>$116,658</td>
</tr>
<tr>
<td>WI Clark County</td>
<td>2,400</td>
<td>16%</td>
<td>6%</td>
<td>$38,959</td>
</tr>
<tr>
<td></td>
<td>Grant County</td>
<td>4,650</td>
<td>21%</td>
<td>$83,116</td>
</tr>
<tr>
<td></td>
<td>Marinette County</td>
<td>4,557</td>
<td>23%</td>
<td>$80,010</td>
</tr>
</tbody>
</table>

Table 6: Simulated Impacts of a 50% Reduction in Pension Income

<table>
<thead>
<tr>
<th></th>
<th>Change in Pension</th>
<th>Change in Labor Income</th>
<th>Change in Total Income</th>
<th>Change in Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>MI Newaygo County</td>
<td>-43,469,000</td>
<td>-49,317,000</td>
<td>-57,641,000</td>
<td>-192</td>
</tr>
<tr>
<td></td>
<td>Roscommon County</td>
<td>-50,396,000</td>
<td>-56,388,000</td>
<td>-222</td>
</tr>
<tr>
<td>MN Meeker County</td>
<td>-19,861,000</td>
<td>-22,185,000</td>
<td>-25,814,000</td>
<td>-83</td>
</tr>
<tr>
<td></td>
<td>Winona County</td>
<td>-37,972,000</td>
<td>-44,560,000</td>
<td>-219</td>
</tr>
<tr>
<td>MO Adair County</td>
<td>-19,814,000</td>
<td>-24,156,000</td>
<td>-28,172,000</td>
<td>-135</td>
</tr>
<tr>
<td></td>
<td>Johnson County</td>
<td>-58,329,000</td>
<td>-67,058,000</td>
<td>-308</td>
</tr>
<tr>
<td>WI Clark County</td>
<td>-19,157,000</td>
<td>-21,341,000</td>
<td>-24,495,000</td>
<td>-81</td>
</tr>
<tr>
<td></td>
<td>Grant County</td>
<td>-40,602,000</td>
<td>-47,767,000</td>
<td>-230</td>
</tr>
<tr>
<td></td>
<td>Marinette County</td>
<td>-39,299,000</td>
<td>-47,426,000</td>
<td>-247</td>
</tr>
</tbody>
</table>

Conclusions

➢ The threat of pension shortfalls to pensioners is largely well documented
  - It's threat to local economies is not
➢ Regional exposure to pension risks are not uniformly distributed
  - Metro counties tend to be more exposed followed by metro-adjacent counties
  - Retirement destinations (recreation) tend to attract higher income pensioners – increasing exposure
Conclusions

- Nine counties in Midwest were modeled for their economy-wide impacts
- Impacts and impact multipliers tend to be largest for larger economies
  - Typical employment impact is about 5.2 jobs per million in reduced pension income
  - GRP multipliers center on 1.35

Questions???

- Contact information:
  Steven Miller, mill1707@msu.edu
  Steven Deller, deller@aae.wisc.edu
  Judith I. Stallmann, stallmannj@missouri.edu

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