# The Aging Population and State Income Tax Revenue: 2007 and 2035 

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## Questions the Study Addresses:

- What would happen to MN tax revenues if:
- the 2007 population had the same age distribution as projected for 2035;
- the mix of 2007 income (by type of income) matches what is projected for 2035;
- 2007 labor force participation rates matched those projected for 2035; and
- 2007 tax law reflected current law for 2035?
- How would the impact differ if Minnesota provided more generous tax benefits for seniors (as many other states do)?


## Research Strategy

| Population | 2007 |  |
| :--- | :---: | :--- |
| Total Real Income | 2007 |  |
| Age Distibution of Population | 2035 | 15 age categories (State Demographer) |
| Income Mix by Type of Income | 2035 | Gll 30-year trend, CBO, Social Security |
| Labor Participation Rates | 2035 | 15 age categories (State Demographer) |
| Tax Law | 2035 | Same as 2007 except for effects of inflation |

## So to compare 2007 to 2035

- Adjust age distribution of tax filers
- Apply 2035 age distribution to 2002 total population
- Adjust labor force participation rates to 2035 levels.
- Adjust relative shares of income.
- Grow different types of income/subtractions to 2035 levels, then adjust downward to match 2007 total income
- Control for inflation: Adjust un-indexed tax parameters downward for anticipated inflation


## Description of dataset and model

- Stratified random sample of 2007 MN returns $(35,000)$
- Sample includes data from
- Federal 1040 and Schedules
- MN return
- Federal tapes (Social Security)
- Sample includes taxpayer age (on $99.8 \%$ of returns) and separate wages of each spouse for joint returns.
- Analysis limited to full-time MN residents who report age
- Model grows income components and recalculates liability


## Projected Changes in Labor Force Participation Rates (2007 to 2035)

| Age <br> Category | Change in <br> Participation <br> Rate |
| :---: | :---: |
| $<20$ | $-12.8 \%$ |
| $20-24$ | $-1.4 \%$ |
| $25-29$ | $1.8 \%$ |
| $30-34$ | $1.9 \%$ |
| $35-39$ | $-1.0 \%$ |
| $40-44$ | $0.4 \%$ |
| $45-49$ | $0.8 \%$ |
| $50-54$ | $3.6 \%$ |
| $55-59$ | $10.0 \%$ |
| $60-64$ | $19.2 \%$ |
| $65-69$ | $12.6 \%$ |
| $70-74$ | $58.8 \%$ |
| $75-79$ | $18.20 \%$ |
| $80-84$ |  |
| 85 or over |  |
| All Ages | $3.6 \%$ |

Non-workers replaced by workers, with same probability of becoming a worker whether non-worker was a single filer, filing jointly with a working spouse, or filing jointly with a non-worker spouse.

Worker $=$ has wage income or (if no wage income) return reports sole proprietor or farm income.

## Change in Mix of Incomes



Separately model 15 categories of income plus another 15 adjustment/deduction categories.

| Results: Changes from 2007 <br> to 2035 pase <br> projected |  |
| :---: | :---: |
| :Earned income | $-12.7 \%$ |
| Capital income | $-9.5 \%$ |
| Retirement income | $34.4 \%$ |
| Taxable retirement | $52.4 \%$ |
| Taxable SS Inc | $118.7 \%$ |
| FAGI | $-1.2 \%$ |
| Exempt income | $11.2 \%$ |
| Total income | $0.0 \%$ |
| Tax | $-7.5 \%$ |
|  |  |

Impact on Tax Revenue Assuming Alternative Tax Law in Both 2007 and 2035

## Baseline

 -7.5\%A. \$10K pension subtraction, not indexed -8.4\%
B. $\$ 10 \mathrm{~K}$ pension subtraction, indexed $-8.9 \%$
C. Full pension subtraction $-10.9 \%$
D. No tax on social security income -10.5\%
B. plus D. (typical state) $-11.4 \%$
C. plus D. (most generous states) $-12.6 \%$

The more generous to seniors now, the bigger the fall, but ...

# Impact on Tax Revenue If Minnesota Tax Law Changes in 2035 

Baseline -7.5\%

Social Security thresholds indexed to 2007
A. $\$ 10 \mathrm{~K}$ pension subtraction, not indexed
B. $\$ 10 \mathrm{~K}$ pension subtraction, indexed
C. Full pension subtraction -18.0\%
D. No tax on social security income
B. plus D. (typical state)
-16.2\%
C. plus D. (most generous states)
-21.3\%
... if less generous now, the potential loss is larger in the future. ${ }^{13}$


Pressure to match tax breaks in other states may be severe.


## Conclusion

- Even states that follow federal law and limit senior preferences (such as Minnesota) will face substantial declines in income tax revenue (7.5\%) due to the aging population.
- Decreases are likely to exceed $10 \%$ in the many states that exempt social security and provide generous pension exclusions
- States with limited senior preferences (like MN) face an even greater potential loss, given the likely pressure to match tax breaks in other states.


## Why do these results differ so much from the $\mathbf{2 0 0 2}$ to $\mathbf{2 0 3 0}$ analysis?

- More complete impact of aging (2002 to 2030 still saw increase in share of taxpayers in their 50s)
- Recession year (2002) as base year meant more growth in capital income (and wages) relative to retirement income. Loss due to aging was hidden.
- Differing long-run forecasts (GII, CBO)
- Lower pension growth (5.7\% of GDP vs $7.4 \%$ )
- Lower inflation (cumulative $66 \%$ rather than $100 \%$ )

