Impact on Hawaii’s Economy of Proposed Federal Cuts in Medicaid and Medicare

Economic Fact Sheet #22
February 1996

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by

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Executive Summary. This fact sheet outlines the estimated impact of Federal cuts in Medicaid and Medicare on the State of Hawaii’s economy. The response to the cuts will be some combination of the following: (1) General public absorbs reduction, (2) State and county governments absorb reduction, (3) Public cuts medical expenses. We estimate the impacts on the state economy in terms of sales, jobs, household income, and general excise tax collections. Over a seven year period and for the extreme cases, a $1.825 billion reduction in Federal Medicaid and Medicare will reduce business sales by up to $4.1 billion, cut up to 48,000 jobs, reduce household income by up to $2.8 billion, and decrease general excise tax collections by up to $71 million. Indices are provided to estimate the impact of Federal reductions of any foreseeable magnitude, and for any combination of the extreme cases.

OBJECTIVES
2. Some observations regarding impacts on different groups (distributional or equity aspects)

BASIC PREMISE
Either the Hawaii State and Local Governments (HS&LG) or the general public will absorb the cuts in Federal funding.

1. If HS&LG, cost will be passed on to the general public in the form of a reduction in other services provided by HS&LG, or via increased taxes (out-of-pocket payment by general public).
2. The general public will either pay the provider out-of-pocket, or will reduce the amount of medical goods and services that are consumed.

**METHODOLOGY**

The 1987 State of Hawaii input-output (I-O) model developed by the Department of Business, Economic Development, and Tourism (DBED&T) was used to measure the total economic impacts. The input-output model is a mathematical representation of the local economy. Like any other technique, input-output analysis has several weaknesses which are well documented elsewhere. However, input-output analysis has been well accepted for the purpose of measuring economic impacts as attested by the numerous studies in which this technique has been used in the US and Hawaii. Among others, input-output analysis has recently been utilized to measure the economic impacts of the proposed Honolulu Rapid Transit System and the proposed long-term care program for Hawaii.

**SCENARIO DEVELOPMENT**

The possible impacts can be encompassed in three extreme case scenarios, and various combinations of the extreme cases. While the exact form of action is not known, some combination of the three extremes is the most likely outlook. Four combinations are provided as examples.

*Extreme cases:*

Scenario 1. All public. General public absorbs entire reduction, either via increased taxes or direct payments to the provider. These translate to a reduction in personal income and hence a reduction in personal consumption expenditures (PCE).

Scenario 2. All government. HS&LG absorbs entire reduction via reduction in other HS&LG expenditures. The cuts are assumed to be evenly distributed across government.

Scenario 3. Cut med. General public cuts medical expenses by the entire amount of federal reduction. Revenues of medical service providers are correspondingly reduced.

*Combinations*

Scenario 4. 1&2. General public and HS&LG each absorbs half the reduction.

Scenario 5. 1&3. General public absorbs half the reduction via a reduction in other PCE, and cuts their medical expenses by half.

Scenario 6. 2&3. HS&LG absorbs half and general public cuts medical expenses by half.

Scenario 7. 1,2, &3. General public absorbs 1/3, HS&LG absorbs 1/3, and medical expenses are cut by 1/3.

**RESULTS**

The tables summarize the aggregate impacts on the State economy based on a total reduction of $1.825 billion ($572 million for Medicaid and $1.253 billion for Medicare) over 1996 to 2002. Figures are not discounted.

Table 1 presents total impacts over the seven-year period 1996 to 2002. These figures are converted to an average annual basis in Table 2 and in per capita and relative to totals in Table 3. Finally, results are standardized into terms of impact per million dollars in reduction, in Table 4. These figures can be used to estimate the impact of different levels of
funding cuts, as well as different scenarios (ratios among the three extreme cases).

**DISCUSSION**

While the public in general absorbs the costs, the impact on various groups will depend on the actual action used. Specific details are not known, but the following are some general observations of such impacts associated with the extreme cases. Qualifiers such as “least” or “largest” are in reference to the scenarios considered. Impacts of other scenarios are linear relationships of the extreme cases.

Scenario 1. Public pays all.
- An increase in income taxes will tend to distribute the impact over the entire public in comparison to decreasing direct payments to medical providers, which will mostly impact recipients of Medicaid and Medicare. Figures in Table 3 are the average in both cases, but more accurately reflect the former case—i.e., all persons will pay. In the latter case, the impact on those affected will be larger to account for lower/no impact on non-recipients.
- Medical providers will not be directly impacted.
- Impact on economy is from reduction in personal consumption expenditures.
- Business sales at lower end of scenarios, but general excise taxes at higher end.
- Least impact on jobs lost, since consumption is spread throughout economy.
- Largest reduction in household income (entire reduction assumed to be passed through as income reduction).

Scenario 2. Government pays all.
- Shortfall is made up from reduction in other government activities, so relative impact depends on current recipients of those other activities, e.g., agencies with a larger share of HS&LG budgets will have a larger dollar (but same percentage) reduction compared to others. Selective cuts will have different impacts on different groups.
  - Medical providers will not be directly impacted.
  - Impact on economy is from reduction in HS&LG expenditures.
  - Least impact among scenarios on business sales.
  - Largest impact on jobs lost, especially in government sectors.
  - Least impact on household income.
  - Least impact on general excise taxes.

Scenario 3. Cut medical goods and services.
- Recipients reduce their consumption of medical goods and services by the amount of the shortfall. Their personal consumption expenditures are otherwise not affected, i.e., there is no change in consumption patterns of other goods and services.
- Medical providers are severely impacted.
- Impact on economy is from large reduction in medical services and related sectors.
- Largest impact on business sales.
- Jobs lost at higher end of scenarios.
- Loss of household income at lower end.
- Largest impact on general excise taxes lost.

This publication is issued in furtherance of Cooperative Extension Work, Acts of May 8 & June 30, 1914, in cooperation with the US Department of Agriculture. Sylvia Yuen, Interim Director and Dean, Cooperative Extension Service, College of Tropical Agriculture and Human Resources, University of Hawaii at Manoa, Honolulu, Hawaii 96822. The University of Hawaii is an Equal Opportunity/Affirmative Action Institution providing programs and services to the people of Hawaii without regard to race, sex, age, religion, color, national origin, ancestry, disability, marital status, arrest and court record, sexual orientation, or veteran status.
Table 1.--Reduction in Key Economic Indicators (1996-2002)
(in millions of dollars and number of jobs)

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<tbody>
<tr>
<td></td>
<td>All Public</td>
<td>All Govt.</td>
<td>Cut Med.</td>
<td>Scenario 4</td>
<td>Scenario 5</td>
<td>Scenario 6</td>
<td>Scenario 7</td>
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<tr>
<td><strong>Business Sales</strong></td>
<td>2,512</td>
<td>2,473</td>
<td>4,140</td>
<td>2,493</td>
<td>3,326</td>
<td>3,307</td>
<td>3,042</td>
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<tr>
<td><strong>Jobs</strong></td>
<td>25,239</td>
<td>47,810</td>
<td>44,108</td>
<td>36,524</td>
<td>34,673</td>
<td>45,959</td>
<td>39,051</td>
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<tr>
<td><strong>Household Income</strong></td>
<td>2,684</td>
<td>1,922</td>
<td>1,959</td>
<td>2,303</td>
<td>2,321</td>
<td>1,941</td>
<td>2,186</td>
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<tr>
<td><strong>General Excise Tax Collection</strong></td>
<td>59</td>
<td>29</td>
<td>71</td>
<td>33</td>
<td>65</td>
<td>49</td>
<td>52</td>
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Table 2.--Total Reduction in Key Economic Indicators, Average Year
(in millions of dollars and number of jobs)

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<td>Scenario 6</td>
<td>Scenario 7</td>
</tr>
<tr>
<td><strong>Business Sales</strong></td>
<td>359</td>
<td>353</td>
<td>591</td>
<td>356</td>
<td>475</td>
<td>472</td>
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<tr>
<td><strong>Jobs</strong></td>
<td>3,606</td>
<td>6,830</td>
<td>6,301</td>
<td>5,218</td>
<td>4,953</td>
<td>6,566</td>
<td>5,579</td>
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<tr>
<td><strong>Household Income</strong></td>
<td>383</td>
<td>275</td>
<td>280</td>
<td>329</td>
<td>332</td>
<td>277</td>
<td>313</td>
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<td><strong>General Excise Tax Collection</strong></td>
<td>8</td>
<td>4</td>
<td>10</td>
<td>5</td>
<td>9</td>
<td>7</td>
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Table 3.--Reduction in Key Economic Indicators in Relative Terms, Average Year
(base year = 1994)

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<td>Scenario 7</td>
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<tr>
<td><strong>Business Sales</strong></td>
<td>0.304</td>
<td>0.300</td>
<td>0.502</td>
<td>0.302</td>
<td>0.403</td>
<td>0.401</td>
<td>0.369</td>
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<tr>
<td><strong>Household Income</strong></td>
<td>0.325</td>
<td>0.233</td>
<td>0.237</td>
<td>0.279</td>
<td>0.281</td>
<td>0.235</td>
<td>0.265</td>
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<tr>
<td><strong>General Excise Tax Collection</strong></td>
<td>0.007</td>
<td>0.004</td>
<td>0.009</td>
<td>0.004</td>
<td>0.008</td>
<td>0.006</td>
<td>0.006</td>
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</tbody>
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Table 4.--Reduction in Key Economic Indicators, per million dollars of reduction
(in millions of dollars and number of jobs)

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<td>Scenario 5</td>
<td>Scenario 6</td>
<td>Scenario 7</td>
</tr>
<tr>
<td><strong>Business Sales</strong></td>
<td>1.376</td>
<td>1.355</td>
<td>2.268</td>
<td>1.366</td>
<td>1.822</td>
<td>1.812</td>
<td>1.667</td>
</tr>
<tr>
<td><strong>Jobs</strong></td>
<td>14</td>
<td>26</td>
<td>24</td>
<td>20</td>
<td>19</td>
<td>25</td>
<td>21</td>
</tr>
<tr>
<td><strong>Household Income</strong></td>
<td>1.471</td>
<td>1.053</td>
<td>1.073</td>
<td>1.262</td>
<td>1.272</td>
<td>1.064</td>
<td>1.199</td>
</tr>
<tr>
<td><strong>General Excise Tax Collection</strong></td>
<td>0.032</td>
<td>0.016</td>
<td>0.039</td>
<td>0.018</td>
<td>0.036</td>
<td>0.027</td>
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