<table>
<thead>
<tr>
<th>Title</th>
<th>Prospects for the Future of the Old-Age, Survivors, and Disability Insurance Programs in the United States of America</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author(s)</td>
<td>Donkar, Eli N.</td>
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<tr>
<td>Citation</td>
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</table>
Prospects for the Future of the OASI and DI Programs in the United States

Forecasts prepared for the 2002 OASDI Trustees Report by SSA’s Office of the Chief Actuary
OASDI now and in the future?

- Benefit and financing structure
- Current forecasts
- Quantification of the current problem
- President’s Commission to Strengthen Social Security
Retired Workers Are The Largest Category of Beneficiaries

- 28.8 million retired workers (63%)
- 3.2 million dependents of retired workers (7%)
- 5.3 million dependents of disabled workers (11%)
- 1.6 million dependents of retired workers (4%)
- 4.8 million aged survivors (11%)
- 2.1 million young survivors (5%)

45.9 million as of December 31, 2001
OASDI eligibility

- One quarter of coverage for each $870 of covered earnings in 2002 (maximum of 4 in a calendar year)
- Fully-insured with 40 QCs (essentially 10 years of covered employment)
- Disability-insured status requires recent work (20 QCs in last 40 before disability onset)
## OASDI Benefit Amounts

<table>
<thead>
<tr>
<th>Category</th>
<th>Average Benefit Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 2001</td>
<td>$874</td>
</tr>
<tr>
<td>Retired Workers</td>
<td>$874</td>
</tr>
<tr>
<td>Men</td>
<td>985</td>
</tr>
<tr>
<td>Women</td>
<td>756</td>
</tr>
<tr>
<td>Aged widow(er)s</td>
<td>841</td>
</tr>
<tr>
<td>Disabled workers</td>
<td>814</td>
</tr>
</tbody>
</table>
## Illustrative Benefit Amounts for Retirees in 2002

<table>
<thead>
<tr>
<th>2001 Earnings</th>
<th>Monthly Benefit Amount</th>
<th>Benefit as % of final earnings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Age 62&lt;sup&gt;2&lt;/sup&gt;</td>
<td>Age 65</td>
</tr>
<tr>
<td>$10,000</td>
<td>$475</td>
<td>$569</td>
</tr>
<tr>
<td>$20,000</td>
<td>682</td>
<td>820</td>
</tr>
<tr>
<td>$30,000</td>
<td>890</td>
<td>1,072</td>
</tr>
<tr>
<td>$40,000</td>
<td>1,098</td>
<td>1,323</td>
</tr>
<tr>
<td>$50,000</td>
<td>1,212</td>
<td>1,453</td>
</tr>
<tr>
<td>$60,000</td>
<td>1,281</td>
<td>1,536</td>
</tr>
<tr>
<td>$80,400&lt;sup&gt;3&lt;/sup&gt;</td>
<td>1,382</td>
<td>1,660</td>
</tr>
</tbody>
</table>

<sup>1</sup> Assumes earnings over work life kept pace with growth in average wages.

<sup>2</sup> Includes 40 months of actuarial reduction.

<sup>3</sup> Taxable maximum in 2001.
Primary Insurance Amount
Formula for the 2002 cohort

Average indexed monthly earnings

Primary insurance amount

First bend point ($592)
Second bend point ($3,567)

90%
32%
15%
Maximum Family Benefit
Formula for the 2002 cohort

First bend point
($756)

Second bend point
($1,092)

Third bend point
($1,424)

Primary insurance amount

Maximum family benefit

$0 $500 $1,000 $1,500 $2,000 $2,500 $3,000 $3,500

150% 272% 134% 175%

$0 $500 $1,000 $1,500 $2,000 $2,500 $3,000 $3,500

Maximum Family Benefit
Formula for the 2002 cohort
Covered employment

- 152 million workers will pay Social Security taxes in 2002
- Workers outnumber beneficiaries by 3.4 to 1
# The Social Security Payroll Tax

<table>
<thead>
<tr>
<th>Year</th>
<th>Maximum Taxable Earnings</th>
<th>Tax Rates for</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td></td>
<td>Employees and employers each:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total 7.65%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OASDI 6.20</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HI 1.45</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Self-employed:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total 15.30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OASDI 12.40</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HI 2.90</td>
</tr>
</tbody>
</table>

OASDI: Old Age, Survivors, and Disability Insurance
HI: Hospital Insurance

Maximum taxable earnings:
- **OASDI**: $84,900
- **HI**: No maximum
Income and Outgo
Calendar Year 2001

Payroll taxes
$516.4 billion

Taxes on benefits
$12.7 billion
Interest
$72.9 billion

Benefits
$431.9 billion

Admin. expenses
$3.7 billion
(0.9% of benefits)
Sources of OASDI Income

- Mainly from OASDI payroll taxes (86%)

- Benefit taxation (2%) and interest (12%) is the source of virtually all the rest
Income taxation of OASDI benefits

- Enacted in 1983 amendments to the Social Security Act
- At most 85% of an individual’s benefit is included in taxable income
- Approximates tax treatment of private pensions
- Revenue split between OASDI and HI
Interest rates earned by the OASDI Trust Funds

Calendar year

Life insurance general accounts
OASDI effective rates
OASDI new issue rates
Board of Trustees

- Ex Officio Members:
  - Secretary of Treasury -- Managing Trustee
  - Secretary of Health & Human Services
  - Secretary of Labor
  - Commissioner of Social Security

- Two Public Members
  - John L. Palmer, Trustee
  - Thomas R. Saving, Trustee
## Assumptions

Projections use 3 sets of assumptions about future economic and demographic conditions

<table>
<thead>
<tr>
<th>Economic</th>
<th>Demographic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productivity</td>
<td>Fertility</td>
</tr>
<tr>
<td>Average wage growth</td>
<td>Mortality improvement</td>
</tr>
<tr>
<td>Inflation (CPI)</td>
<td>Immigration</td>
</tr>
<tr>
<td>Real wage differential</td>
<td>Disability</td>
</tr>
<tr>
<td>Unemployment</td>
<td></td>
</tr>
<tr>
<td>Interest rates</td>
<td></td>
</tr>
</tbody>
</table>
## Demographic assumptions

<table>
<thead>
<tr>
<th>Ultimate assumptions</th>
<th>Intermediate</th>
<th>Low Cost</th>
<th>High Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total fertility rate</td>
<td>1.95</td>
<td>2.2</td>
<td>1.7</td>
</tr>
<tr>
<td>Average annual reduction in age sex adjusted death rates</td>
<td>.73</td>
<td>.35</td>
<td>1.29</td>
</tr>
<tr>
<td>Annual net immigration (000)</td>
<td>900</td>
<td>1,210</td>
<td>655</td>
</tr>
</tbody>
</table>
## Economic assumptions

<table>
<thead>
<tr>
<th>Ultimate assumptions</th>
<th>Intermediate</th>
<th>Low Cost</th>
<th>High Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average annual % change in:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Average wage</td>
<td>4.1</td>
<td>3.6</td>
<td>4.6</td>
</tr>
<tr>
<td>Consumer Price Index</td>
<td>3.0</td>
<td>2.0</td>
<td>4.0</td>
</tr>
<tr>
<td>Real wage differential(%)</td>
<td>1.1</td>
<td>1.6</td>
<td>.6</td>
</tr>
<tr>
<td>Productivity(total econ.)</td>
<td>1.6</td>
<td>1.9</td>
<td>1.3</td>
</tr>
<tr>
<td>Unemployment rate</td>
<td>5.5</td>
<td>4.5</td>
<td>6.5</td>
</tr>
<tr>
<td>Interest rate</td>
<td>6.0</td>
<td>5.7</td>
<td>6.2</td>
</tr>
</tbody>
</table>
Examples of Key Assumptions

<table>
<thead>
<tr>
<th></th>
<th>Total Fertility Rate</th>
<th>Real Wage Differential</th>
</tr>
</thead>
<tbody>
<tr>
<td>I (Low cost)</td>
<td>2.20</td>
<td>1.60%</td>
</tr>
<tr>
<td>II (Intermediate)</td>
<td>1.95</td>
<td>1.10</td>
</tr>
<tr>
<td>III (High cost)</td>
<td>1.70</td>
<td>0.60</td>
</tr>
<tr>
<td>History</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1962-2001</td>
<td>2.1</td>
<td>1.19</td>
</tr>
<tr>
<td>1962-1971</td>
<td>2.8</td>
<td>1.81</td>
</tr>
<tr>
<td>1972-1981</td>
<td>1.8</td>
<td>-0.22</td>
</tr>
<tr>
<td>1982-1991</td>
<td>1.9</td>
<td>0.98</td>
</tr>
<tr>
<td>1992-2001</td>
<td>2.1</td>
<td>2.20</td>
</tr>
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</table>
Assets at end of year, OASDI

[In billions]
Trust Fund Ratios for OASDI
[Assets as a percentage of annual expenditures]
Fund Ratios for OASI and DI
[Assets as a percentage of annual expenditures]
Number of Workers per Beneficiary

Calendar year

1990 2000 2010 2020 2030 2040 2050 2060 2070 2080

Historical  Estimated

I  II  III
OASDI Income Rates and Cost Rates
[As a percentage of taxable payroll]
## Actuarial Balance of the OASDI Program

**Over the Next 75 Years**

[As a percentage of taxable payroll]

<table>
<thead>
<tr>
<th></th>
<th>Intermediate</th>
<th>Low Cost</th>
<th>High Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Income rate</strong></td>
<td>13.72</td>
<td>13.60</td>
<td>13.87</td>
</tr>
<tr>
<td><strong>Cost rate</strong></td>
<td>15.59</td>
<td>13.16</td>
<td>18.87</td>
</tr>
<tr>
<td><strong>Actuarial balance</strong></td>
<td>-1.87</td>
<td>.44</td>
<td>-5.00</td>
</tr>
</tbody>
</table>
OASDI Income, Outgo, and Assets
[In trillions of dollars]
OASDI Outgo as a Percent of GDP
OASDI and Medicare Outgo as a Percent of GDP

Historical

Estimated

OASI + DI

HI + SMI

Calendar year

PAYGO Financing

Required tax rate =

\[
\frac{(Average \ benefit)}{(Average \ wage)} \times \frac{(# \ of \ beneficiaries)}{(# \ of \ taxpayers)}
\]
Number of Beneficiaries per 100 Covered Workers
1994-96 Advisory Council: The three plans

- *Maintenance of benefits* – marginal changes to fix funding of current system
- *Individual accounts* – preserve social adequacy protections of current system, while increasing overall national retirement saving through additional contributions to publicly managed individual accounts
- *Personal security accounts* – move toward fully funded defined contribution plan for retirement
What can we do?

- PAYGO would require 6.42 percentage point tax rate increase by 2076 and growing thereafter
- Reduce benefits over 2002-76 by 13% but what about later
- Structural changes needed
Propose reform plans to strengthen Social Security using the following principles:

- No changes for those already retired or soon to retire
- Social Security surplus dedicated to Social Security
- No increases in SS payroll taxes
- No government investment of SS funds in stock market
- Preserve disability and survivor components
- Include individually controlled, voluntary personal retirement accounts to augment SS safety net
Three reform models…

- All three include voluntary personal accounts
- Promise of benefits under new system at least as high as today after adjusting for inflation
- Significantly increase benefits for low-income workers
- Move current system toward fiscal sustainability
- All need some transitional investments
- Goal of increasing national savings
Model #1

- Voluntary personal account based on 2% of taxable earnings
- Traditional SS benefit offset by worker’s personal account accumulated at rate of price inflation + 3.5%
- No other changes
Model #2

- Voluntary personal account based on 4% of taxable earnings, up to $1,000 (indexed), redirected from OASI payroll tax
- Traditional SS benefit offset by worker’s personal account accumulated at rate of price inflation + 2%
- Index OASDI benefits across generations by prices rather than wages
- Enhance benefits for long-time low paid workers and widows
- Temporary transfers from general revenue between 2025 and 2054
Model #3

- If worker makes 1% contribution, gets match of 2.5% redirected from OASI payroll tax (up to $1,000)
- Traditional SS benefit offset by worker’s personal account accumulated at rate of inflation + 2.5%
- Longevity indexed benefits
- Reduce benefits for high earners; enhance benefits for low earners; modify actuarial adjustments for early and late retirement
- Additional general revenue transfers required (some specified, others not specified)
President's Commission to Strengthen Social Security

On May 2, President Bush announced establishment of a bipartisan, 16-member Commission "to study and report ... specific recommendations to preserve Social Security for seniors while building wealth for younger Americans."

Guiding Principles

The Commission was asked to make recommendations to modernize and restore fiscal soundness to Social Security, using six guiding principles:
http://www.ssa.gov/OACT/pubs.html

- **Status of the Social Security and Medicare Programs** -- a summary of the 2002 OASDI and Medicare Trustees Reports; also available in PDF

- **2002 OASDI Trustees Report** -- the annual report on the status of the Social Security program, published March 26, 2002. See list of prior OASDI Trustees Reports. Also see who signed the reports.

  Prior reports -- reports issued in 1997-2000