Base-Broadening Strategies for Tax Reform:

- Eliminate Existing Deductions
- Retain but Scale Back Existing Deductions
  - Income-Related Clawbacks
  - Cap on Rate for Deductions
- Expand Definition of AGI & Taxable Income
  - Imputed Rent on Homes
  - Employer Provided Health Insurance

Itemized Deductions with Largest Revenue Cost, FY2010 ($Billion)

<table>
<thead>
<tr>
<th>Item</th>
<th>Revenue Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employer-Provided Health Insurance</td>
<td>$159.9</td>
</tr>
<tr>
<td>Pension Contributions &amp; Earnings</td>
<td>142.0</td>
</tr>
<tr>
<td>Mortgage Interest Deduction</td>
<td>92.2</td>
</tr>
<tr>
<td>State/Local Income Taxes</td>
<td>33.9</td>
</tr>
<tr>
<td>Charitable Giving</td>
<td>44.2</td>
</tr>
<tr>
<td>State/Local Property Taxes</td>
<td>18.9</td>
</tr>
</tbody>
</table>

Source: OMB, 2011 Budget.

Key Questions:

* How Responsive are Taxpayer Choices to Variation in After-Tax Price of Activity (Health Insurance, Housing, Charity)?
* What are the Efficiency Costs of Allowing Tax Deductions and Exclusions?
General Problem of Tax Rate Endogeneity:

Illustration Using Charitable Giving. Assume Underlying Demand Model is Log-linear:

\[ \ln G_i = \alpha + \beta \ln Y_i + \gamma \ln (1-\tau_i) + \delta X_i + \varepsilon_i \]

Marginal Tax Rate \( \tau_i = T_i'(Y_i - G_i) \) where \( T(.) \) is the tax function that depends on gross income minus deduction for charitable gifts. Problem is that \( \varepsilon_i \) is correlated with \( G_i \), which in turn is correlated with \( \tau_i \). Larger values of error term translate into larger deductions, hence (if tax schedule is progressive) lower marginal tax rate, hence larger value of \( (1-\tau_i) \). Thus there is a spurious positive correlation between \( G_i \) and \( (1-\tau_i) \) leading to an upward bias in the estimates of \( \gamma \). Since this parameter is the price elasticity of demand for charitable giving it is expected to be negative; the positive bias will therefore lead to an underestimate of the price elasticity.

How do we solve this? Use "first dollar marginal tax rate" for instrument. Simple example (can be improved upon): calculate \( \tau_i^* = T_i'(Y_i) \) for all taxpayers. Note \( \tau_i^* \) is correlated with \( \tau_i \) but it is NOT affected by the spurious correlation channel noted above. Some studies estimate reduced form regressions replacing \( \tau_i \) with \( \tau_i^* \) in the regression equation; better strategy uses IV.

Estimates Almost Ideal Demand System with current and future income, current and future tax price variables. Dependent variable is share of income devoted to charitable gifts. Let $Y_{it} = \text{"modified after-tax income" (correcting for inframarginal charitable donations at higher MTR).}$

$$(1-\tau_{it})\frac{G_{it}}{Y_{it}} = \delta_{0t} + \delta_{0i} + X_{it}\beta + \delta_{1}\ln\left(\frac{(1-\tau_{it})}{(1-\tau_{i}^*)}\right) + \delta_{2}\ln(1-\tau_{i}^*) + \delta_{3}\ln\left(\frac{Y_{it}}{Y_{i}^*}\right) + \delta_{4}\ln Y_{i}^* + \delta_{5}\ln\left(\frac{(1-\tau_{it})}{(1-\tau_{i}^*)}\right)^2 + \delta_{6}\ln(1-\tau_{i}^*)\ln(1-\tau_{it}) + \varepsilon_{it}$$

One important measurement issue: how to include gifts of appreciated assets in tax rate calculation (problem: if part of the charitable donation is made up of appreciated stock, the tax benefit is even larger than for a cash gift). Set

$$(1-\tau_{it}) = 1 - \text{MTR}_{it} - (\text{gift share of appreciated assets})\cdot(\text{effective tax rate on long-term capital gains})$$

Sample of 12000 taxpayers, six years of panel data (1979, 80, 83, 84, 85, 88). Span significant change in marginal
tax rates (TRA86) so there is "transitory" tax rate variation. Few demographic variables on tax returns (married, number of exemptions, age (sometimes age > 65 dummy variable). Estimation sample: 51,146 returns.

"Permanent price elasticity": both $\tau_{it}$ and $\tau_i^*$ change by the same amounts. In this case

$$dG_{it}/d\ln(1- \tau_i^*) = [\delta_2 + 2*\delta_6*\ln(1-\tau_i^*) ]*Y_{it}/(1-\tau_{it}) - G_{it}$$

when we divide through by $G_{it}$ to obtain $d\ln G_{it}/d\ln(1- \tau_i^*)$ this yields the elasticity of charitable giving with respect to a "permanent" tax change of:

$$d\ln G_{it}/d\ln(1- \tau_i^*) = \{\delta_2 + 2*\delta_6*\ln(1-\tau_i^*)\}/\omega_{it} - 1$$

where $\omega_{it} = (1-\tau_{it})*G_{it}/Y_{it}$.

Key Findings:

<table>
<thead>
<tr>
<th>Elasticity Measure</th>
<th>Income</th>
<th>Tax Price</th>
</tr>
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<tbody>
<tr>
<td>&quot;Current&quot; (no transitory/perm distinction)</td>
<td>0.82 (0.01)</td>
<td>-1.21 (0.07)</td>
</tr>
<tr>
<td>Transitory</td>
<td>0.58 (0.01)</td>
<td>-1.55 (0.06)</td>
</tr>
<tr>
<td>Permanent</td>
<td>1.14 (0.01)</td>
<td>-0.51 (0.06)</td>
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Capital Gains Taxation:

Long-standing question of whether capital income should be taxed at the same rate ("income tax") or lower rate ("consumption tax") than other income.

Three key questions about capital gains taxation:

i) does a lower tax rate on capital gains stimulate venture capital and encourage risk-taking?

ii) should capital gains rate be lower than ordinary income rate to avoid taxation of inflationary gains?

iii) would lowering the tax rate on realized gains raise or lower revenues? Short run vs. long run issue. Realized gains are among the most elastic elements of the tax base.

Important institutional features:
* gains are taxed at realization not on accrual (note that this COULD be done, but difficult to explain)
* long-term (> 12 months today) vs. short term gains distinction (short term gains taxed as ordinary income)
* loss offset limitations ($3K of losses used against ordinary income, then loss-carryforward with no interest)
* "step up in basis at death" (can reduce effective tax burden substantially)
Empirical literature on capital gains realizations: has advanced from aggregate time series data to household level data with controls for time, person effects), distinguishing permanent vs. transitory tax rate effects.

Open underlying question: why do taxpayers realize gains? for consumption? to rebalance their portfolio?

Burman & Randolph AER 1994: careful distinction of permanent vs. transitory

Identification from state-level tax rates and from changes in federal tax law

Elasticity of realizations with respect to "Permanent" changes in tax rate: -0.18 (0.48)

Elasticity of realizations with respect to "Transitory" changes in tax rate: -6.42 (0.34)

Very large differences - suggests that long-run reductions in capital gains tax rates would reduce revenues, while there can be large short-run gyrations in realizations when tax rates change.