### Seminar on Public Finance

Lecture #10: April 3

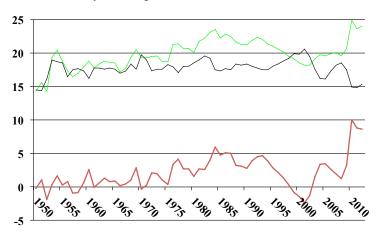
Tax Reform: Income vs. Consumption Taxes

## Why Tax Reform?

Big issues in fiscal policy:

- 1. Fiscal shortfalls
- 2. Complexity
- 3. International competitiveness

#### Outlays, Receipts and Deficit as Share of GDP



Budget Data: Vario	ous Sourc	es					
billions of dollars							
	<u>2008</u>	2009	<u>2010</u>	<u>2011</u>	2012	<u>2013</u>	<u>2014</u>
Receipts	2,524	2,105	2,163	2,314	2,635	3,069	3,423
Outlays	2,983	3,518	3,456	3,597	3,609	3,692	3,803
Deficit	459	1,413	1,293	1,283	974	623	380
Held by public	5,803	7,552	9,023	10,164	11,153	11,773	12,148
Held by govt	4,183	4,336	4,510	4,620	4,773	4,967	5,199
Total Debt	9,986	11,888	13,533	14,784	15,926	16,740	17,347
As Share of GDP							
Receipts	17.7%	14.8%	14.9%	15.3%	16.7%	18.3%	19.2%
Outlays	21.0%	<u>24.7%</u>	23.8%	23.8%	22.8%	22.0%	21.4%
Deficit	3.2%	9.9%	8.9%	8.5%	6.2%	3.7%	2.1%
Held by public	40.8%	53.0%	62.2%	67.3%	70.5%	70.3%	68.3%
Held by govt	29.4%	30.4%	31.1%	30.6%	30.2%	29.7%	29.2%
Total Debt	70.2%	83.5%	93.3%	97.9%	100.7%	99.9%	97.6%
Gross Interest	451	383	414	455			
implied interest rate	4.5%	3.2%	3.1%	3.1%			

## What Do We Mean by "Tax Reform"?

- Implies a fundamental shift in tax philosophy. Typically, movement towards a system that is closer to a pure income or consumption tax system.
  - We now have a hybrid income tax system.

## What Do We Mean by "Tax Reform"? (2)

- Attempting to **improve efficiency** of the tax system by
  - reducing complexity
  - · distortion of behaviors
  - non-compliance
  - · deadweight loss

## What Do We Mean by "Tax Reform"? (3)

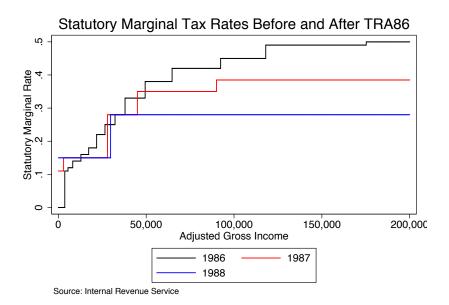
- Typically (but not necessary) an experiment where we require revenue neutrality compared to current system (e.g., TRA 86).
  - Select level of revenues → what is the best way to generate them?
  - Does not address the appropriate size of government or level of taxes
  - Does not address the proper size of the deficit.

## What Do We Mean by "Tax Reform"? (4)

- Tax Reform usually implies three general elements:
  - 1. Flatter rate structure
    - Lower marginal rates
    - Fewer rates/brackets
  - 2. Flatter (broader) tax base
    - A "clean" tax base
  - 3. Flatter time dynamics:
    - timing of consumption does not matter, no penalty for deferring consumption (i.e., savings not taxed twice)
    - consumption taxation is generally less complex since returns to capital are not taxed

#### Recent Reforms - Tax Reform Act of 1986

- The last major true tax reform
- Worked on the 1st two dimensions of flatness
  - Much flatter rate schedule
  - Broader tax base
  - But moves away from consumption taxes by slowing depreciation deductions (thus increasing taxes on savings/investment)



#### Recent Reforms - Bush Tax Cuts

- More recently, Bush rate cuts from 2001 and 2003
- Had some elements of tax reform, but it was very piecemeal
  - Rate reductions on ordinary, dividend and capital gains income
  - All gain, no pain: real tax reform has winners and losers

## Complexity

### Is a Flat, Single Rate Better?

- Depends
  - Certainly less progressive
  - As with any tax system: the trade-off between simplicity and equity
  - Depending on rate, it might have less deadweight loss and inefficiency
  - It may or may not result in more "level playing field" where tax law drives a wedge between the after-tax return on various investments
- Big advantage of single rate system is that it potentially facilitates a simpler, business-based system of taxation (e.g., Value Added Taxes or VATs)
- Also reduces incentives for income shifting between individual and business tax systems (capital vs. labor income)
  - Owners of small C corporation: depending on the corporate and individual tax rates, the "reasonable compensation" they must pay themselves varies, typically prefer to pay themselves a wage (get to deduct form corp tax base)
  - Conversely, S corporation owners prefer to receive profit distributions (avoid payroll taxes)

## A Word About Complexity

Note: Borrowed from Joel Slemrods presentation to the 2005 Tax Panel.

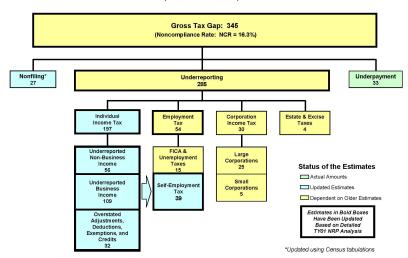
- The IRS budget: **administrative costs.** 
  - FY2008 Budget request of \$11 billion
- The time and money spent by taxpayers and third parties: compliance costs.
  - Individuals: \$85 billion.
    - This includes the value of 3.5 billion hours of time by taxpayers, the equivalent of nearly two million hidden IRS employees
  - Businesses (other than sole props): \$40 billion.
  - Total: \$125 billion.
    - Nearly 13 cents per dollar of income tax receipts
    - More than 12 times higher than the IRS budget.

## Details of Recent Estimates of the Collection Cost of the U.S. Income Tax System

	Slemrod (1996)	Slemrod (2004)
<u>Individuals</u>		
Hours (billions)*Value per hour (\$)	2.8*15.0	3.5*20.0
Value of hours (\$ bil.)	42	70
Expenditures (\$ bil.)	8	15
Total individual cost (\$ bil.)	50	85
Businesses, other than sole props		
Hours (billions)*Value per hour (\$)	0.8*25.0	
Total business cost (\$ bil.)	20	40
Total compliance cost (\$ bil.)	70	125
Total IRS cost (\$ bil.)	5	10
Total cost (\$ bil.)	75	135
Individual income tax receipts (\$ bil.)	590.2	809
Corporate income tax receipts (\$ bil.)	157	189.4
Total income tax receipts (\$ bil.)	747.2	998.4
Total cost as a % of receipts	10	13.5

#### Tax Year 2001 FEDERAL TAX GAP

(in Billions of Dollars)



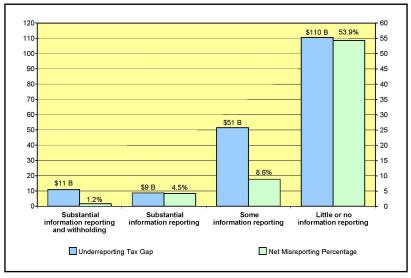
#### Individual Income Tax Underreporting Gap Estimates, Tax Year 2001

Type of Income or Offset	Tax Gap (\$B)	NMP †	
Total Underreporting Gap	197	18%	
Underreported Income	166	11%	
Non-Business Income	56	4%	
Wages, salaries, tips	10	1%	
Interest income	2	4%	
Dividend income	1	4%	
State income tax refunds	1	12%	
Alimony income	*	7%	
Pensions & annuities	4	4%	
Unemployment Compensation	*	11%	
Social Security benefits	1	6%	
Capital gains	11	12%	
Form 4797 income	3	64%	
Other income	23	64%	
Business Income	109	43%	
Nonfarm proprietor income	68	57%	
Farm income	6	72%	
Rents & royalties	13	51%	
Partnership, S-Corp, Estate & Trust, etc.	22	18%	
Overreported Offsets to Income	15	4%	
Adjustments	-3	-21%	
SE Tax deduction	-4	-51%	
All other adjustments	1	6%	
Deductions	14	5%	
Exemptions	4	5%	
Credits	17	26%	
Net Math Errors (non-EITC)	*		

<sup>†</sup> NMP = Net Misreporting Percentage

<sup>\*</sup> Less than \$0.5 billion.

#### **Individual Income Tax Underreporting Gap**



### Some Notes on Non-Compliance

- US rates are similar to other advanced countries
  - Some exceptions: e.g., Italy and Greece
- Switching from an income tax to a consumption tax likely will not have a large impact on non-compliance rates
  - Most non-compliance is at the business level as unreported income

## Some Notes on Non-Compliance (2)

- There is **no easy solution** to solve non-compliance
  - Increased information reporting helps, but it requires a disinterested third party, and many items are already reported
  - Very difficult to force all income to be reported in an income tax system
  - All check transactions would need to be reported by bank
  - No reporting for cash transactions
  - Ultimately, increased auditing necessary to impact compliance rate
    - Politicians are reluctant to support
    - Burdensome to compliant taxpayers
  - Simplification is also a good solution, but rarely achieved due to entrenched interests.

### US income tax evasion

- Key: Forcing income to be reported.
  - Cash transactions are a problem here
- Unreported income: burden is on IRS.
- Requires an audit to disprove.
- Even if ALL income is reported, taxpayers could still overstate deductions.
  - Most have relatively small profit margins.
- Deductions: burden is on taxpayer to prove.
- Given that they are already non-compliant, would these taxpayers accept a very large increase in their tax rate if they can take other steps to escape it?

#### US income tax evasion

- Audit rates are key.
  - The perception of enforcement
    - Are others paying their "fair share"?
    - Also, the ability to compete.

#### Tax Evasion Elsewhere

- European non-compliance: how high?
  - Relatively high rates in Italy and Greece.
  - Italy: 40% non-compliance for VAT (Pedone, 1981).
  - Greek non-compliance: about 33% of gov't receipts.

#### The Unavoidable Tradeoff

- Thomas Sowell: "There are no solutions, only tradeoffs"
- Fairness or Equity
  - Income distribution, generational distribution, horizontal equity
  - Which base is more "fair": total potential consumption (income) or actual consumption (benefits received)?
- Efficiency (maximizing long-term growth, minimizing distortions)
  - Lump sum principle (most efficient, no distortions)
  - Incentives for savings and investment
  - Capital allocation: types of investment, industry and entity treatment
  - · Anything tax-motivated is generally inefficient
- Simplicity
  - Administrative costs
  - Compliance costs, potential for confusion or abuse
- In general, trade-off is fairness/equity vs. efficiency/simplicity.

#### Rest of Class

- Some background: compare US system to major trading partners
  - Giving some context.
- Big Picture: Income vs. Consumption, How Different Are They? (not very)
- Quasi-Tax Reform: Cleaning Out Our Hybrid System, What Does it Get Us?

How Does US Compare to Other Countries?

### How Does the US Compare to Rest of the World?

- Total tax burden is lower than most OECD countries
  - If measured as % of GDP
  - In middle of pack of large, developed countries if just look at dollar value
- US relies much more heavily on direct income taxes and less heavily on indirect consumption taxes (VATs)
- US has a worldwide system of taxation rather than a territorial system
  - Under US system, profits of foreign subsidiaries are not tax until "repatriated"
  - In a territorial system, those profits are not included

Table 0.1							
Total tax revenue as percentage of GDP							
	1975	1985	1995	2005	2006	2007	diff w/US
Canada	32.0	32.5	35.6	33.4	33.3	33.3	5.0
Mexico	17.0	17.0	16.7	19.9	20.6	20.5	-7.8
<b>United States</b>	25.6	25.6	27.9	27.3	28.0	28.3	0.0
Australia	25.8	28.3	28.8	30.8	30.6	30.8	2.5
Japan	20.9	27.4	26.8	27.4	27.9	27.9	-0.4
Denmark <sup>1</sup>	38.4	46.1	48.8	50.7	49.1	48.9	20.5
Finland	36.5	39.7	45.7	43.9	43.5	43.0	14.6
France 1	35.4	42.8	42.9	43.9	44.2	43.6	15.2
Germany <sup>2</sup>	34.3	36.1	37.2	34.8	35.6	36.2	7.9
Ireland	28.7	34.6	32.5	30.6	31.9	32.2	3.9
Italy	25.4	33.6	40.1	40.9	42.1	43.3	15.0
Netherlands <sup>4</sup>	40.7	42.4	41.5	38.8	39.3	38.0	9.7
Norw ay	39.2	42.6	40.9	43.5	43.9	43.4	15.0
Spain 1	18.4	27.6	32.1	35.8	36.6	37.2	8.9
Sw eden	41.2	47.3	47.5	49.5	49.1	48.2	19.8
United Kingdom	35.2	37.6	34.5	36.3	37.1	36.6	8.3
Unweighted aver	age:						
OECD Total	29.4	32.7	34.8	35.8	35.9	35.9	7.6
EU 19	32.2	37.6	38.9	38.7	38.7	38.7	10.4

# How Does Dollar Amt of US Taxes Compare to that paid elsewhere? (from Greg Mankiw)

- France:  $.461 \times 33,744 = 15,556$
- Germany:  $.406 \times 34,219 = 13,893$
- UK:  $.390 \times 35,165 = 13,714$
- US:  $.282 \times 46,443 = 13,097$
- Canada:  $.334 \times 38,290 = 12,789$
- Italy:  $.426 \times 29,290 = 12,478$
- Spain:  $.373 \times 29,527 = 11,014$
- Japan:  $.274 \times 32,817 = 8,992$

Table O.2

Taxes on income, profits and capital gains as percentage of GDP <sup>2</sup>								
	1975	1985	1990	1995	2000	2005	2006	diff w/US
Canada	15.1	14.4	17.4	16.5	17.8	15.9	16.2	2.7
Mexico		3.8	4.7	4.1	5.0	4.8	5.2	-8.4
United States	11.8	11.6	12.6	12.8	15.1	12.7	13.5	0.0
Japan	9.3	12.5	14.6	10.3	9.4	9.3	9.9	-3.6
Denmark <sup>1</sup>	22.6	26.6	28.0	30.1	29.8	31.1	29.5	16.0
Finland	15.8	16.2	17.1	16.5	20.3	16.8	16.6	3.0
France 1	5.6	6.8	6.7	7.0	11.1	10.3	10.7	-2.8
Germany	11.8	12.5	11.3	11.3	11.2	9.8	10.8	-2.7
Ireland	8.6	12.0	12.2	12.7	13.2	11.7	12.7	-0.8
Italy	5.4	12.4	13.8	14.2	14.0	12.9	14.0	0.5
Netherlands	14.2	11.2	13.8	10.9	10.0	10.8	10.7	-2.8
Norw ay	13.5	16.9	14.4	14.3	19.2	21.4	22.0	8.5
Spain 1	4.1	6.8	10.0	9.4	9.8	10.6	11.4	-2.2
Sw eden	20.8	20.0	21.7	18.6	21.2	19.4	19.4	5.8
UK	15.8	14.5	14.2	12.7	14.5	13.9	14.7	1.2
Unweighted ave	erage:							
OECD Total	12.1	12.8	13.5	12.9	14.2	13.5	13.8	0.3
EU 19	12.6	14.2	14.8	14.4	15.4	14.6	14.8	1.3

## Highest Rates of Income Tax: U.S. and Selected Trading Partners 2008

Personal Income Tax Rates			Corporate Inc	Corporate Income Tax Rates		
Country	Rate	Threshold	Country	Rate		
Germany	47.50%	\$299,004	Japan	39.50%		
Japan	47.20%	\$193,375	US	39.30%		
Canada	46.40%	\$100,768	France	34.40%		
Italy	40.20%	\$96,232	Canada	31.70%		
US	41.70%	\$357,700	Germany	30.20%		
UK	40.00%	\$62,550	UK	28.00%		
France	37.60%	\$100,063	ltaly	27.50%		

## Effective Marginal Corporate Income Tax Rates: U.S. and Selected Trading Partners

Country	Standard Rate
Germany	28.00%
<b>United States</b>	24.00%
France	21.00%
EU Average	20.40%
United Kingdom	20.00%
Italy	9.00%

Effective marginal corporate tax rate in the manufacturing sector. Assumes that the tax is on return from investment in plant and machinery and is financed by equity or retained earnings. State-level corporate tax rates, as well as supplementary taxes (i.e., corporate surcharges) are included. Taxation at the shareholder level is not included.

- Note: 2001 data.
- Source: Eric Engen and Kevin A. Hassett, Does the U.S. Corporate Tax Have a Future?, Tax Notes, 30th Anniversary Issue, 24 tbl. 2. (2002).

Table 0.5

Taxes on goods and services as percentage of GDP<sup>2</sup>

	1975	1985	1995	2000	2005	2006	diff w / US
Canada	10.2	10.3	9.0	8.6	8.5	8.1	3.4
Mexico		11.0	9.0	9.8	11.3	11.6	6.9
<b>United States</b>	5.0	4.8	5.0	4.8	4.8	4.7	0.0
Japan	3.6	3.8	4.2	5.2	5.3	5.2	0.5
Denmark <sup>1</sup>	13.2	15.8	15.7	15.9	16.3	16.3	11.6
Finland	11.6	13.4	13.8	13.7	13.8	13.5	8.8
France <sup>1</sup>	11.8	12.7	11.7	11.4	11.1	10.9	6.2
Germany	9.2	9.3	10.4	10.5	10.1	10.1	5.4
Ireland	13.4	15.4	13.2	12.2	11.6	11.6	6.9
Italy	7.4	8.5	10.9	11.8	10.8	10.8	6.1
Netherlands	9.8	10.9	11.3	11.5	12.3	12.0	7.3
Norw ay	14.7	16.0	15.8	13.5	12.1	12.0	7.3
Spain <sup>1</sup>	4.5	7.8	9.2	10.3	10.0	9.9	5.2
Sw eden	10.0	12.6	13.2	12.8	12.9	12.8	8.1
United Kingdom	8.8	11.8	12.2	11.8	11.0	10.8	6.1
Unweighted ave							
OECD Total	8.9	10.2	10.4	10.6	10.6	10.5	5.8

# Standard VAT/GST Rates for U.S. Trading Partners (2009)

Country	Standard Rate
Italy	20.00%
France	19.60%
United Kingdom	15.00%
Germany	19.00%
Canada	5.00%
Japan	5.00%
United States*	0.00%

A Value Added Tax (VAT)/Goods and Services Tax (GST) is a tax on all business sales less purchases from other businesses.

- Note: 2003 data
- Although the United States does not impose a VAT, retail sales taxes, another form of consumption tax, are collected by most U.S. states and localities.
- Source: OECD Tax Database, tbl. 1.7

## Income vs. Consumption Taxation

### Big Picture: Income vs. Consumption Taxes

- Difference in tax bases best shown at a very high level using data from the National Income and Product Accounts (NIPAs).
- Start with Gross Domestic Product (GDP) which can be viewed two equivalent ways:
  - <u>Production</u> sum of the value of all **final** goods and services produced in the economy
    - Total expenditures by consumers or final users
    - This is the familiar GDP number
  - <u>Incomes</u> sum of all incomes paid that result from **production** 
    - Sum of wages, profits, rents and other income (does not include capital gains)
    - This is the Gross Domestic Income Measure (GDI)
  - In theory, GDP = GDI (it's an accounting identity)

#### National Income and Product Accounts

- The NIPAs are convenient because each transaction in the economy generates two equivalent entries.
- On one side are <u>sellers or businesses</u>. The NIPAs show how they use the proceeds from final sales to consumers and the type of income that is generated from sales: profits, wages, rents or interest.
- On the other side are <u>buyers</u>. The NIPAs show the types of products they purchase.
- Total Income Received = Total Production or Purchases.
- A key condition that links Production to Income is the fact that for a national economy, Savings = Net Investment.

## Savings = Investment Identity

- GDP = Total Production = Consumption + Investment + Govt + (Exports - Imports)
  - $\bullet \ \ Y = C + I + G + NX$
- GDP = Total Income = Consumption + Savings + Taxes
  - Y = C + S + T
- S + (T G) + (IM EX) = I
- Gross Personal Savings + Gov't Savings + Net Foreign Savings/Investment = Private Investment

#### **Equivalent Consumption Taxes**

- Due to the S=I, various different forms of consumption taxation will, in theory, be equivalent:
  - National Retail Sales Tax (indirect system): Final Business Sales - Investment (expensing of new purchases, excludes all business to business sales)
    - Tax base is Y I = C + G + NX
  - Savings Exempt Income Tax (SEIT, direct system): Total Income of Households - Savings (savings exempt from taxation)
    - Tax base is Y S = C + G + NX

# National Income and Product Accounts: Net Savings = Net Investment

INVESTMENT	2005	2006	2007	2008	2009	2010
Gross Domestic Investment	2,564	2,752	2,752	2,585	2,052	2,300
Private	2,172	2,327	2,295	2,088	1,547	1,795
Govt	392	425	457	497	505	505
Less Depreciation (CFC)	1,541	1,661	1,768	1,854	1,866	1,875
Private	1,291	1,391	1,476	1,543	1,542	1,541
Govt	251	269	292	311	324	334
Equals Net Investment	1,023	1,092	984	731	186	425
Private	881	936	819	545	5	254
Govt	141	156	165	186	181	171
SAVINGS (Sources of Fun	ding)					
Net Personal (households)	148	258	243	587	557	593
Plus						
Corp Retained Earnings	486	430	271	153	470	652
Net Lending by Foreign	723	801	716	674	378	480
Govt Surplus/Deficit	-257	-153	-233	-686	-1,296	-1,299
Statistical Discrepancy	<u>-95</u>	-242	<u>-12</u>	<u>-2</u>	<u>77</u>	1
Equals Net Savings	1,005	1,095	985	726	186	427

# National Income and Product Accounts: Consumption vs. Income Tax Base

INCO	ME SIDE - Paid Out by Bu	siness	2005	2006	2007	2008	2009	2010
GDP			12,623	13,377	14,028	14,291	13,939	14,527
less	Depr of Existing Private Cap	oital	1,291	1,391	1,476	1,543	1,542	1,541
	Depr of Existing Govt Capital	al	251	269	291	311	324	334
plus	Net Payments from ROW		<u>97</u>	<u>72</u>	123	<u>169</u>	<u>152</u>	<u>189</u>
Net I	National Product (broades	t)	11,179	11,788	12,384	12,606	12,225	12,841
	Less: Statistical Discrepar	су	<u>-95</u>	-242	<u>-12</u>	<u>-2</u>	<u>77</u>	<u>1</u>
Net I	National Income		11,274	12,030	12,396	12,609	12,148	12,840
1	Wages and Other Labor Co	mp	7,065	7,477	7,857	8,068	7,806	7,971
2	Corporate Profits		1,456	1,608	1,511	1,248	1,362	1,800
3	Non-Corporate Profits		1,070	1,133	1,090	1,097	941	1,036
4	Net Interest and Rent		721	798	869	1,103	964	915
5	Indirect Business Taxes		869	935	974	986	958	997
6	Business Current Transfers		92	79	96	107	117	121
PRO	DUCT SIDE - Consumption	by End U	sers					
GDP			12,623	13,377	14,028	14,291	13,939	14,527
1	Personal Consumption		8,804	9,301	9,772	10,036	9,866	10,246
2	State and Local Govt		1,494	1,587	1,698	1,798	1,775	1,780
3	Federal Govt		876	932	977	1,080	1,143	1,223
4	Net Exports		-723	-769	-714	-710	-392	-517
5	Gross Private Domestic Inv	estment	2,172	2,327	2,295	2,087	1,547	1,795

# Consumption Tax Base = Income less Saving (direct tax such as Savings Exempt Income Tax)

		2005	2006	2007	2008	2009	2010
Wa	ages and Other Labor Comp	7,065	7,477	7,857	8,068	7,806	7,971
Ca	pital Income: Profits, Interest and Other	3,247	3,540	3,478	3,448	3,266	3,750
1	Sole Prop and Partnership Income	1,070	1,133	1,090	1,098	941	1,036
2	Rental Income (royalties too)	178	147	145	232	306	350
3	Corporate Profits with IVA-CCAdj	1,456	1,608	1,511	1,248	1,362	1,800
4	Net Interest	543	652	732	870	657	564
Eq	uals: Comp NIPA Income	10,312	11,017	11,334	11,516	11,072	11,721
Les	SS						
1	Personal Savings	148	258	243	587	557	593
2	Corporate Retained	486	430	271	153	470	652
3	Net Lending by Foreign	723	801	716	674	378	480
4	Govt Deficit	-257	-153	-233	-686	-1,296	-1,299
Eq	uals: Comp NIPA Consumption	9,212	9,681	10,337	10,788	10,963	11,295
	consumption base / income base	89%	88%	91%	94%	99%	96%
No	te: Income above includes NIPA adjustm	ent for unre	ported an	nounts.			
	Wages-Salaries	76	81	96	88	88	97
	Sole Props and Partnerships		502	495	422	444	
	Corporate Profits	265	300	288	287		

# Consumption Tax Base = Sum of Non-Business Sales (indirect tax such as NRST, Flat Tax or VAT)

	2005	2006	2007	2008	2009	2010
Personal Consumption Expendit	ures 8,804	9,301	9,772	10,035	9,866	10,245
Durable Goods						
Motor Vehicles	408	395	400	339	317	340
Furnishings and Househ	old E 261	272	271	258	253	244
Recreational Goods	313	334	349	344	317	330
Other Durable Goods	141	155	168	168	161	172
Non-Durable Goods						
Food and Beverages	645	674	711	746	746	766
Clothing and Footwear	314	327	335	331	318	334
Gas and Energy	304	335	365	411	299	354
Other Non-Durable	691	733	764	785	804	847
Services	5,727	6,076	6,408	6,653	6,669	6,859
Plus: State and Local Govt	1,494	1,587	1,698	1,798	1,775	1,780
Federal Govt	876	932	977	1,080	1,143	1,223
Net Exports	-723	-769	-714	-710	-392	-517
Less: Net Payments of FI to RO	)W -97	-72	-123	-169	-152	-189
Govt Investment Purchases	392	425	457	497	505	505
Indirect Business Taxes	961	1,014	1,070	1,093	1,075	1,118
Comp NIPA Consumption	9,195	9,684	10,329	10,782	10,964	11,297

### Theory vs. Practice: Haig-Simons Pure Income Tax

- Our system is a hybrid: income with some consumption aspects
- "True" Income can be thought of as the money value of the net increase in an individuals power to consume
- Income = Consumption +  $\Delta$ wealth
- Under this definition the following are included in income:
  - Wages and salary (taxed)
  - Profits, rents, royalties, dividends and interest (mostly taxed)
  - Other compensation like pension and insurance (deferred)
  - Benefits paid by government (generally only UI)
  - Total capital gains (deferred or not taxed (housing))
  - Imputed income such as imputed rent (never taxed)

## Theory vs. Practice: Haig-Simons Pure Income Tax

- Truly taxing income would require that we
  - Mark all assets to market every year and compute gains
  - Control for inflation
  - Allow deductions for actual depreciation
  - Include all imputed income
- Deviations from this ideal are what we call "tax expenditures"

### Summary: Income vs. Consumption

- In the broadest possible constructs, difference is not that large between consumption and income tax bases.
  - Consumption tax base is roughly 90% of income tax base.
- MUCH more important is how all of the current preferences under the current system are treated:
  - Exclusion of health benefits from taxable income
  - Deduction for home mortgage interest
  - Deduction for charitable giving, state and local income/property taxes

# Summary: Income vs. Consumption (2)

- BOTH the broad income and consumption bases shown include items that would never be taxed realistically:
  - Imputations: transactions or benefits that do not take place in the marketplace
  - Imputed rent of homeowners (\$1.2 trillion)
  - Imputed benefits from financial services provided (\$245 billion)
  - Services and benefits provided by non-profits

# Summary: Consumption vs. Income Taxation (3)

- The adjustment for unreported income in the NIPAs is very large.
  - Is it possible to capture some by switch to consumption tax?
  - This has significant implications for implied tax rates.
- Non-compliance is likely to be similar under both systems if consumption tax is designed correctly.
  - Certain consumption tax systems are clearly inferior at the national level (e.g., retail sales taxes).
  - Non-compliance under our income tax system is very concentrated at pass through entities, particularly small ones.
  - Non-compliance merely takes a different form under consumption taxation.

### Converting to a Consumption Tax: Transition Relief

- Three simple steps
  - 1. Exempt all interest, dividends and capital gains from tax
  - 2. Allow expensing of investment
  - 3. Eliminate all deductions for interest
- For 2004, these steps would reduce revenues by \$64 billion, or 6% of all income tax revenues (Gordon et al. 2004 AER)
  - NO transition relief. This is huge.
  - Roughly \$3-\$4 trillion in unused depreciation deductions.
  - Unused inventory deductions = \$1.2 trillion.
  - Unused interest deductions = ????. But recall for corporations alone, the deduction for interest payments on debt = \$534 billion.
  - If we allow any of these old deductions, we lose many of the benefits of switching to a consumption tax.

# Cleaning Out Our Hybrid Tax System

### Existing "Income Tax" is a Hybrid System

Many departures from pure income tax towards a consumption tax

- Housing (gains not taxed)
- Retirement savings (in many forms)
- Preferential treatment of other investment income:
  - realization requirement (deferral reduces effective tax rate)
  - step-up of basis at death for capital gains
  - preferential rates for capital gains, and dividends (for now)
  - accelerated depreciation
  - expensing: small business up to \$500,000, advertising, research

#### Departures from pure income taxation in the opposite direction

- Inflationary gains are taxed (pure income tax is on economic income)
  - depreciation is not indexed for inflation
  - capital gains are not indexed for inflation
- Corporate income tax
  - to the extent corporate tax system is not "integrated"

#### Clean Tax Bases

#### What is in the tax base?

- There are numerous deductions, credits and exclusions in the current code
  - Many are designed to make system more progressive
  - Many intended to encourage behavior
  - Many are targeted at specific groups
- Regardless of whether they have intended effect at appropriate costs, they narrow the tax base and require higher rates for everyone. They generally lower average tax rates, but not marginal tax rates.
- Called "tax expenditures"
  - Represent revenue loss from various credits, deductions, exclusions, special rates, deferral of tax liability
  - Policy makers now identify and estimate 146 tax expenditures.
  - The majority are administered through individual tax code.

## Cleaning the Tax Base

- We really mean get rid of "preferences" or "tax expenditures"
- Tax expenditures are "spending" through the tax code.
  - No different than budget outlays.
- Tax expenditures provide special exemptions, deductions, tax credits, preferential rates, or deferral of tax liability.
- Congressional Budget Act of 1974 requires publication of tax expenditure list.
- The purpose is to make these items comparable to spending in other parts of the budget.
  - Raise their visibility.
  - Generally not achieved.

FY 2012 Budget, Analytical Perspectives		
Table 17-3 Income Tax Expenditures Ranked by Projected Revenu	e Effect	
	2012	2012-16
Exclusion of employer contributions for medical care and premiums	185	1,071
Deduction for home mortgage interest	99	609
401(k) Plans	68	356
Step up basis of capital gains at death	62	357
Exclusion of net imputed rental income	51	303
Deduction for state and local income taxes, other than occupied homes	49	292
Accelerated depreciation of machinery and equipment	24	270
Capital gains	38	256
Deduction for charitable contributions, non-health and education	43	249
Deduction for charitable contributions, health	5	29
Deduction for charitable contributions, education	5	29
Employer plans	45	246
Exclusion of interest on public purpose state and local bonds	37	230
Capital gains exclusion on home sales	35	217
Deduction for state and local property taxes, owner occupied homes	25	142
Exclusion of interest on life insurance savings	23	129
Social security benefits for retired workers	22	129
Keogh Plans	17	104
IRAs	16	81

#### Misc. Notes on Tax Expenditures

- Tax expenditure estimates do not reflect behavioral effects from repealing a specific provision.
  - By comparison, "revenue estimates" do include behavioral effect.
  - Neither includes dynamic or "macro feedback" effects.
- Estimates assume there is NO interaction with other provisions that might be repealed. They are "stand alone" estimates.
- For both reasons, it is misleading to simply sum up tax expenditures to project revenues that could be generated if we repeal them, especially simultaneously.
  - It is likely that the revenue gain is quite a bit smaller.
  - For example, would charitable contributions fall if we repealed other tax expenditures, effectively raising taxes?
- Not all estimates are equally reliable: exclusions or exemptions.

Individual	Income Tax	Data, 200	7				
thousands o	of filers, billio	ons of dolla	rs				
AGI Class	Returns	<u>AGI</u>	<u>Share</u>	Taxes	Share	Average	ATR
< 25k	56,986	688	7.8%	15	1.3%	263	2.2%
25-50	34,897	1,260	14.3%	72	6.4%	2,052	5.7%
50-75	19,451	1,196	13.6%	97	8.7%	4,981	8.1%
75-100	11,744	1,015	11.5%	94	8.4%	7,990	9.2%
100-200	13,458	1,793	20.4%	229	20.5%	16,998	12.8%
200-500	3,492	1,005	11.4%	196	17.6%	56,257	19.6%
500-1000	651	441	5.0%	103	9.2%	158,457	23.4%
1000-5000	346	647	7.4%	155	13.9%	449,070	24.0%
>5000	<u>46</u>	<u>754</u>	8.6%	<u>155</u>	13.9%	3,329,600	20.5%
Total	141,071	8,799		1,116		7,909	12.7%
Note: Exclu	ides filers wi	th negative	AGI.				

#### Individual Income Tax Data, Itemizers Only, 2007

thousands of filers, billions of dollars

	Home Mortgage Interest Deduction			on	State and Local Tax Deductions			
AGI Class	Number	<u>Amount</u>	Average		Number	<u>Amount</u>	Average	
< 25k	3,011	29.1	9,658		4,056	3.3	824	
25-50	8,016	73.8	9,209		10,031	15.6	1,555	
50-75	8,896	89.8	10,091		10,433	26.8	2,567	
75-100	7,382	82.2	11,129		8,340	30.7	3,684	
100-200	10,105	140.1	13,866		11,518	69.2	6,004	
200-500	2,659	54.8	20,612		3,262	47.8	14,658	
500-1000	457	13.1	28,559		606	22.8	37,604	
1000-5000	226	7.6	33,713		327	34.9	106,874	
>5000	<u>26</u>	<u>1.0</u>	39,998		<u>45</u>	<u>36.7</u>	810,926	
Total	40,777	491.4	12,052		48,619	287.9	5,921	
	Cash Contr	ibutions			Non-Cash Contributions			
AGI Class	Number	<u>Amount</u>	Average		Number	Amount	Average	
< 25k	2,663	4.3	1,604		1,307	0.8	622	
25-50	6,882	13.2	1,919		4,215	2.8	660	
50-75	7,861	17.4	2,212		4,971	3.6	734	
75-100	6,716	17.2	2,559		4,346	3.9	887	
100-200	10,002	33.4	3,337		6,680	7.7	1,156	
200-500	2,999	19.2	6,419		1,847	7.0	3,792	
500-1000	575	8.3	14,401		313	3.4	10,773	
1000-5000	314	12.0	38,376		153	8.1	52,948	
>5000	44	<u>18.8</u>	425,212		<u>22</u>	<u>21.5</u>	998,024	
Total	38,057	143.8	3,779		23,854	58.7	2,463	

### Restrict or Eliminate Housing Subsides

- Highly favored by the tax code
  - Deduct up to \$1 million of mortgage interest on first or second home
  - Deduct interest on home equity loans up to \$100,000 (do taxpayers use this to finance consumption?)
  - Deduction of local property taxes
  - Exclusion of capital gains up to \$500,000
  - First time homebuyers credit (now expired, \$8,000)
  - No taxation of "imputed rents".
    - Homeowners consume housing services. If taxed, we would also need to allow for home depreciation and expenses for upkeep/improvements
- Recall, we are increasing average tax rates, not marginal.

#### Restrict or Eliminate Housing Subsides

- Comparisons to other countries without mortgage interest deduction suggests little impact on homeownership rates
- 2005 Tax Panel suggests conversion to a credit
  - Credit equal to 15% of mortgage interest paid
  - Amount of mortgage interest used in computation is based on average regional housing costs
    - Limit is 125% of median housing price, by county (roughly \$225,000 to \$412,000)
  - No deduction for second homes or home equity loans
  - All taxpayers would be eligible to claim the credit, not just those who itemize
  - Currently, only 54% of homeowners enjoy the benefit of the deduction, the proposal increases to 88%
    - Transition over five years to limit impact on existing homes

## More Housing Subsidies: Imputed Rent

- Imputed Rent (NIPAs) = \$1.2 trillion
  - We would include this in "economic" income
    - It is properly labeled a "tax expenditure" or a deviation from an idealized income tax
  - Tax expenditure = \$51 billion in 2012
  - An example:
    - Monthly Rent = \$3k
    - Price of comparable house = \$600k (\$\$ on hand)
    - 5% return on investment
    - \$100k salary

# More Housing Subsidies: Imputed Rent (2)

- Scenario 1: continue to rent
  - Rental payments = \$36k
  - Interest = \$600k \* 5% = \$30k
  - Economic income = \$130k
  - Tax income = \$130k
- Scenario 2: buy the home
  - Economic Income = \$100k + Net Imputed Rent = \$136k
  - Tax Income = \$100k state/local deduction
- Scenario 3: buy home and rent it out (file a Schedule E), continue to rent
  - Economic Income = \$100k + Net Rental Income = \$136k
  - Tax Income = \$100k + Net Rental Income state/local = \$136k - state/local

### Housing Subsidies

- If US homeownership rates go up, does GDP fall from lower rental payments?
  - No. Imputed rent goes up to offset.
- You rent out your home while overseas for a few years. Does GDP go up?
  - No. Imputed rent goes down to offset it (in theory).
- The investment in the house is no different than investments in other physical assets.
  - They "throw off" a stream of services
    - Income or benefits to the owners over time which have value.
  - There is an opportunity cost to buying the home.
  - They depreciate over time.

## Restrict Deduction for Charitable Giving

- These deductions also benefit wealthy taxpayers more
- Taxpayers that do not itemize receive no benefit
- 2005 Tax Panel recommends a deduction for charitable contributions that exceed 1% of income.
  - Small effect at the margin (i.e., behavior) since most taxpayers that claim the deduction contribute more than that.
  - Levels the playing field a bit. Deduction based on some ability to pay.
  - A wage earner making \$50,000 must donate at least \$500.
  - A millionaire must donate at least \$10,000.
  - · Raises revenues.
- Require information reporting by charities
  - Currently, IRS has no way to verify the deduction.
  - Perhaps a reporting threshold of \$600 to limit burden.
  - Fairly high fraud rate for these deductions.

#### Eliminate Deduction for State and Local Taxes

- Deduction for State and Local income and property taxes
  - Wealthy benefit more due to higher tax rates.
  - Taxpayers in low tax states subsidize those in high tax states.
  - Presumably, taxpayers receive the benefits of local taxes and should not receive a deduction for them.
- Huge preference item that is eliminated under the AMT.
- Elimination makes regular and AMT tax system more comparable.
  - So, less of a revenue hit if we repeal the AMT.
  - Paves the way towards repeal.

# Other Important Deductions to clean out

- "Employer Plans" tax expenditure
  - = \$45 billion 2012
- Defined Benefit plans (contributions from employer)

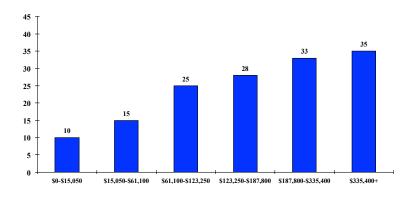
#### Cleaning the tax base

- Two policy experiments:
  - Holding current law brackets constant (the income ranges), what tax rates would be revenue neutral if we removed some preferences?
  - 2. What single rate would be revenue neutral?
- Use a "Broad income tax base"
  - Retain standard deduction and personal exemptions
  - No credits, no above-the-line deductions, no itemized deductions, no special deductions
  - No AMT
  - No exclusions for employer-provided fringe benefits, no exclusions for employee contributions to retirement accounts
  - Integrate corporate and individual tax
    - No double taxation of business income
    - 100% dividend exclusion at individual level and basis adjustment for retained earnings (for both individual and corporate shareholders)
    - Capital gains taxed at ordinary rates

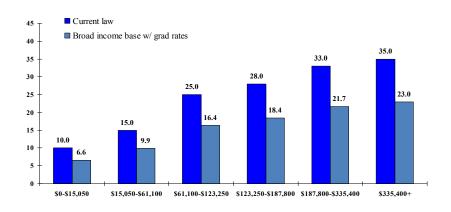
## Cleaning the income tax base

- Corporate income tax
  - Eliminate credits, special rates, graduated rates, and AMT
  - No accelerated cost recovery (use economic depreciation)
- Corporate rate would be set equal to top individual rate
- Corporate and individual income taxes would be integrated
  - Dividends received would be excluded from tax
  - Basis would be adjusted for retained earnings

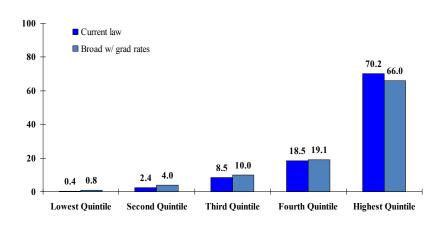
# Tax Rate Schedule: Current Law (2006) Married Filing Jointly



# Tax Rate Schedule: Broad Income Base Married Filing Jointly



# Distribution of Tax Burden: Broad Income Base w/ Graduated Rates



#### Distribution of Tax Burden: Broad Income Base

