

Who Cares about Mortgage Interest Deductibility?

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December 2004

Questions

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2. How are the benefits from MID distributed?

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 1. Very high (6.91% of government revenues)
 2. Benefits wealthy households

Questions

1. What is the cost, in terms of government revenue losses, of allowing mortgage interest deductibility (MID)?
2. How are the benefits from MID distributed?
 - Conventional answers:
 1. Very high (6.91% of government revenues)
 2. Benefits wealthy households
 - Our answers:
 1. Not so high (3 to 4 % of government revenues)
 2. Benefits high income low wealth households

Insight

One needs information on households' entire balance sheet to compute the cost of MID

- Mortgages are implicitly or explicitly used for many purposes
- Households would re-shuffle their balance sheet in the absence of MID

What we do:

- Use SCF data to get income and wealth information
- Use TaxSim to get tax information
- Re-evaluate the cost of MID under different schemes

Outline

- MID: A tax expenditure
- The data: SCF 1998 and TaxSim
- Measuring the cost of MID
- Distributional implications
- Conclusion

MID: An income tax expenditure

Tax expenditures are defined as

“Revenue losses attributable to provisions of the Federal tax laws which allow a special exclusion, exemption, or deduction from gross income or which provide a special credit, a preferential rate of tax, or a deferral of tax liability.” [Congressional Budget Act of 1974]

Income Tax Expenditures (2004)

Rank	Provision	Cost (\$m)
1	Exclusion of employer contributions for medical insurance premiums and medical care	120,160
2	Deductibility of mortgage interest on owner-occupied homes	68,440
3	Net exclusion of pension contributions and earnings: Employer plans	67,870
4	Net exclusion of pension contributions and earnings: 401(k) plans	55,290
5	Capital gains (except agriculture, timber, iron ore, and coal)	53,930

Source: U.S. Office of Management and Budget (2003)

Disclosure

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- The Bush Administration's 2002 budget stated that
“...the Administration believes the
meaningfulness of tax expenditure estimates is
uncertain...” [Office of Management and Budget,
2002]
and promised a new more meaningful presentation in
future years.

Measurement problem

Measure: Difference between tax liability under present law and the tax liability that would result from a recomputation of tax without benefit of the tax provision

Issues:

- Subjective concept: defined with reference to a “normal income tax structure”
- Tax expenditures interact with each other
- Taxpayer behavior may change following the elimination of a provision

Measurement problem

Measure: Difference between tax liability under present law and the tax liability that would result from a recomputation of tax without benefit of the tax provision

Issues:

- Subjective concept: defined with reference to a “normal income tax structure”
 - The normal tax baseline allows personal exemptions, a standard deduction, and deductions of the expenses incurred in earning income
- Tax expenditures interact with each other
- Taxpayer behavior may change following the elimination of a provision

Measurement problem

Measure: Difference between tax liability under present law and the tax liability that would result from a recomputation of tax without benefit of the tax provision

Issues:

- Subjective concept: defined with reference to a “normal income tax structure”
- Tax expenditures interact with each other
 - Total tax expenditures on MID and charity deductions is higher than the sum of the two individual components
- Taxpayer behavior may change following the elimination of a provision

Measurement problem

Measure: Difference between tax liability under present law and the tax liability that would result from a recomputation of tax without benefit of the tax provision

Issues:

- Subjective concept: defined with reference to a “normal income tax structure”
- Tax expenditures interact with each other
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This is what this paper is about...

Deductible Mortgage Interest

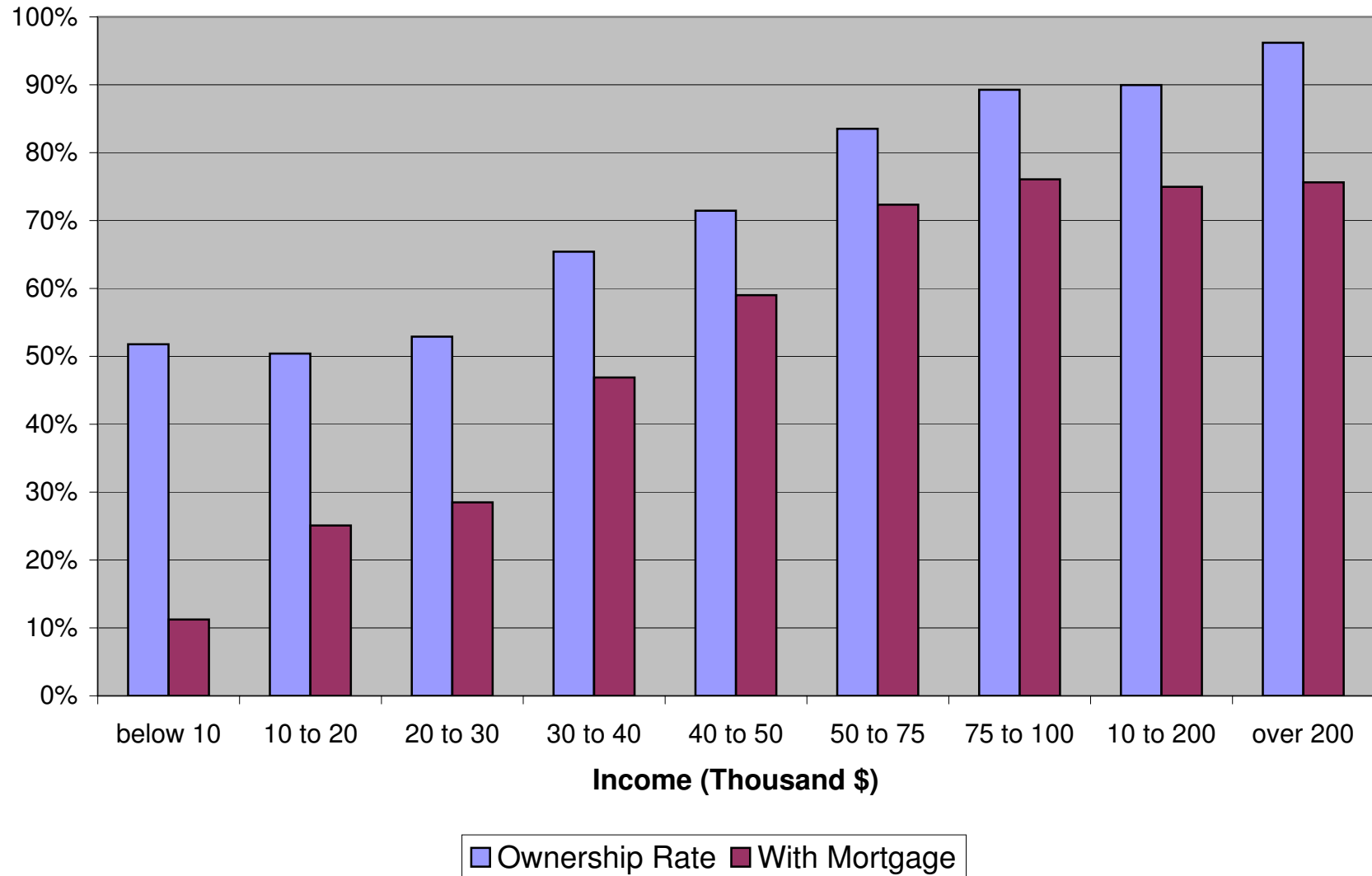
- Owner-occupants of homes may deduct mortgage interest on their primary and secondary residences
 - Debt no greater than the value of the residence
 - Since 1987, debt is also limited to no more than \$1 million
- Interest on up to \$100,000 of other debt secured by a lien on a principal or second residence
 - Debt cannot exceed the fair market value of the residence
 - Irrespective of the purpose of borrowing

Computing the cost of MID

- Data: 1998 Survey of Consumer Finances
 - Income data
 - Deductions
 - Balance sheet data [\[balance sheet\]](#)
- Taxes: NBER TaxSim Model (tax year 1997)
 - Tax liability and deductions [\[census regions\]](#)
 - Federal tax rates – average and marginal [\[tax data\]](#)

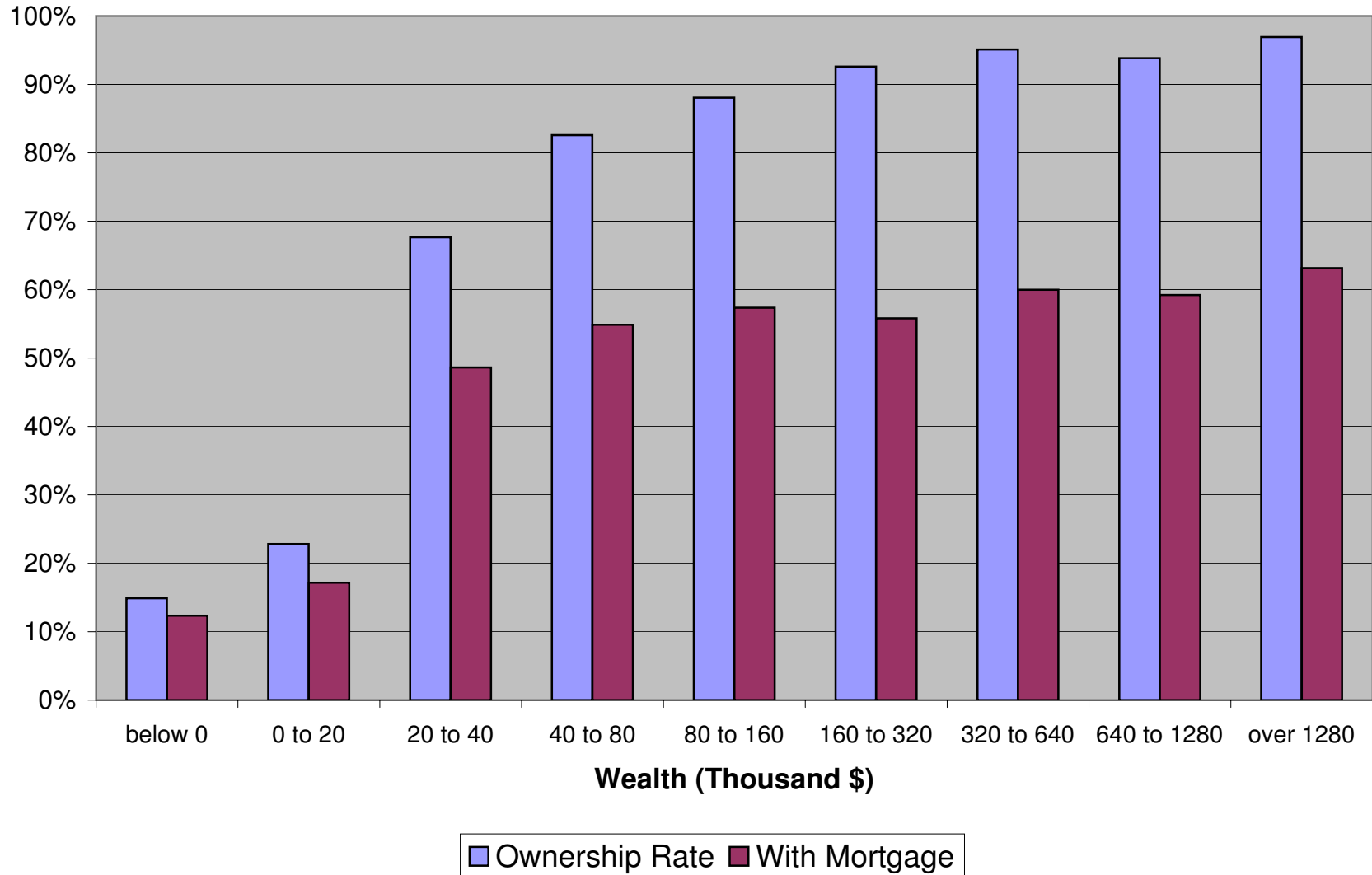
SCF Statistics

Homeownership Rate and Mortgage by Income



SCF Statistics

Homeownership Rate and Mortgage by Wealth



A Simple Example

Budget Constraint:

$$\begin{aligned}c_j + px_j + y_{j+1} &= w_j + (1 + i)a_j + (1 + i^h)h_j - (1 + i)b_j \\ &\quad - \tau(w_j + ia_j - ib_j) \\ &= w_j + (1 + i^h)h_j + (1 + i)(a_j - b_j) \\ &\quad - \tau(w_j + i(a_j - b_j))\end{aligned}$$

Net worth: $y_j = h_j + a_j - b_j$

Net non-res assets: $a_j - b_j$

Key: whether $y_j \geq h_j$

A Simple Example

Balance Sheet A

House	Mrtg debt
$h = 200,000$	$b = 50,000$
Non-res assets	
$a = 100,000$	
	Net worth
	$y = 250,000$

Balance Sheet B

House	Mrtg debt
$h = 200,000$	$b = 0$
Non-res assets	
$a = 50,000$	
	Net worth
	$y = 250,000$

A Simple Example

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OMB cost of MID: $\tau \times i \times 50,000$

OMB cost of MID: 0

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Miscalculation in A:

interest income ($i \times 50,000$) fully offsets MID

Conventional Measure of the Cost of MID

Cost of MID (\$bil)		
IRS	Measure 1	Measure 2
53.075	50.027	52.126

Measure 1 Using NBER TaxSim:

1. Compute total Federal tax collection with MID
2. Re-compute total Federal tax collection without MID

Measure 2 Using SCF Data:

1. Compute tax rates with MID
2. Add up each household's cost: $\tau \times MIP$

A Lower Bound on the Cost of MID

Assumptions:

- All net non-residential assets (except cars) can be used to pay mortgage debt [\[balance sheet\]](#)
- The borrowing and lending interest rates are the same: set so that the cost of MID under conventional measure is the same as Measure 1
- Marginal tax rates would remain the same without MID

Result:

- Cost of MID: 16.776 \$billion
- 33.5% of the cost with IRS measure

A Conservative Measure of the Cost of MID

Assumptions:

- Only financial assets with taxable income (except liquid assets) can be used to pay mortgage debt [\[bal sheet\]](#)
- The borrowing and lending interest rates are the same
- Marginal tax rates would remain the same without MID

Results:

- Cost of MID: 29.503 \$billion
- 59.0% of the cost with IRS measure

A 'Middle' Measure of the Cost of MID

Assumptions:

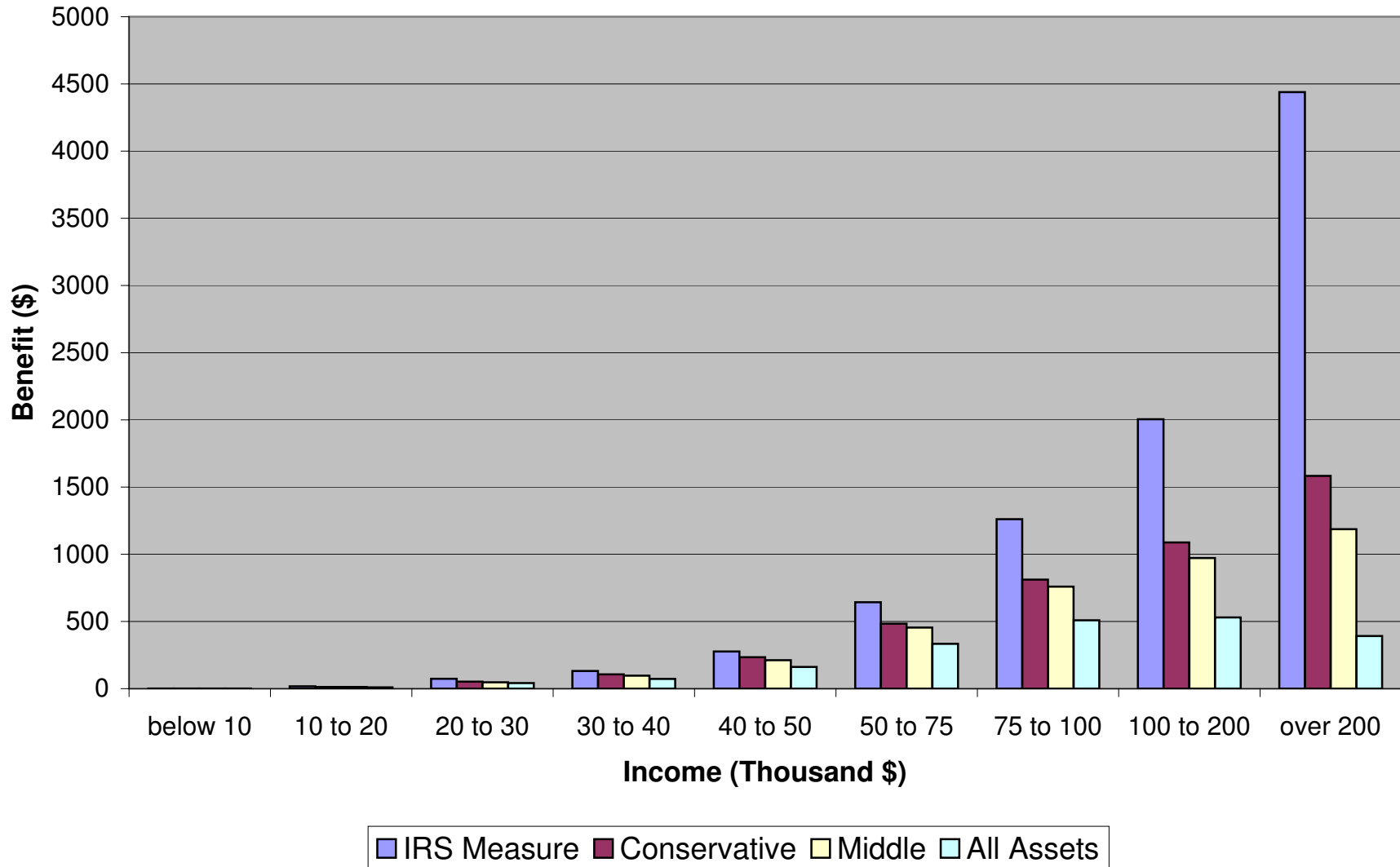
- Like conservative measure, plus net equity in non-residential real estate and other non-financial assets can be used to pay mortgage debt [\[bal sheet\]](#)
- The borrowing and lending interest rates are the same
- Marginal tax rates would remain the same without MID

Results:

- Cost of MID: 26.467 \$billion
- 52.9% of the IRS measure of the cost

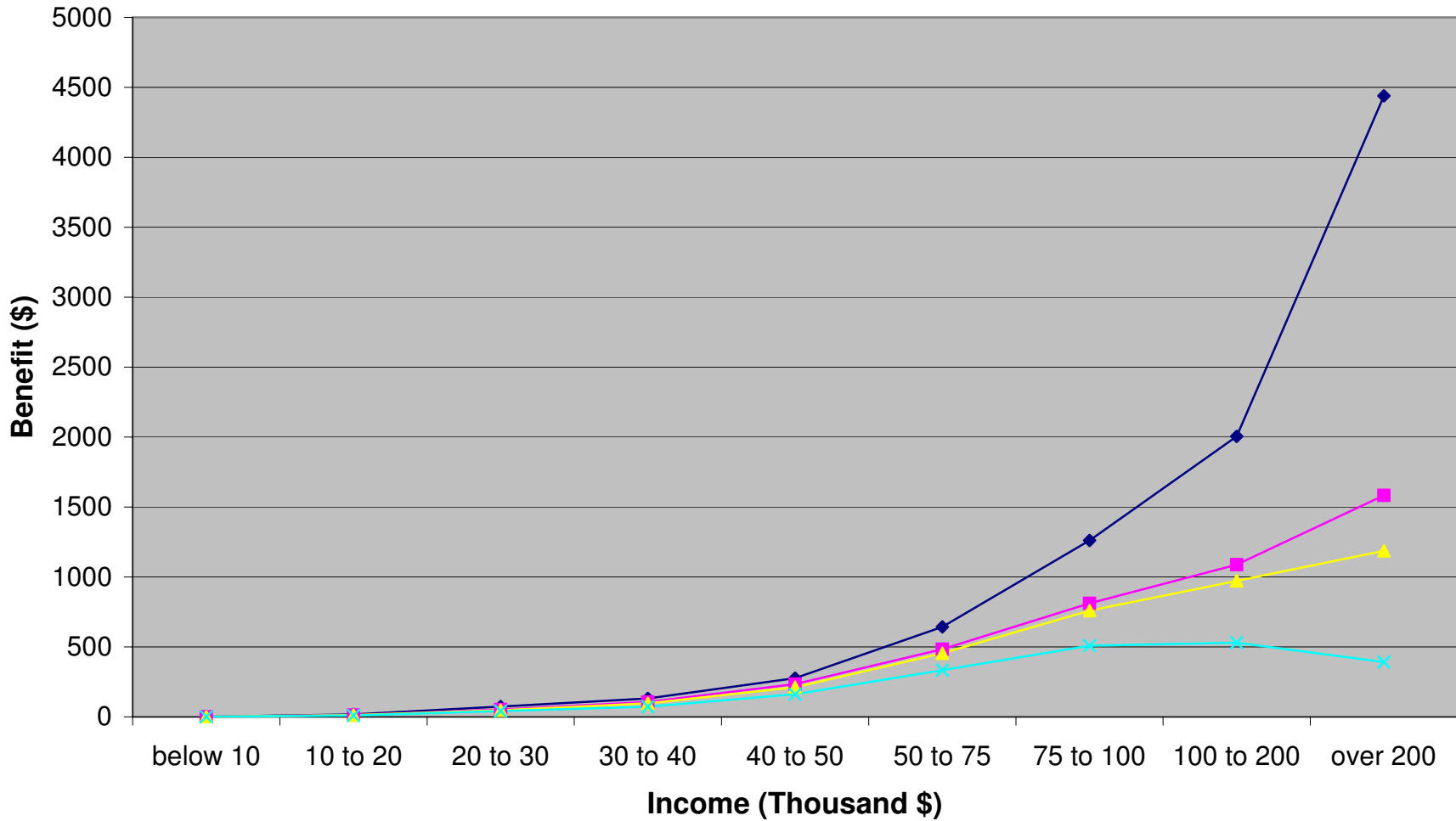
Distribution of Benefits

Benefits of MID by Income



Distribution of Benefits

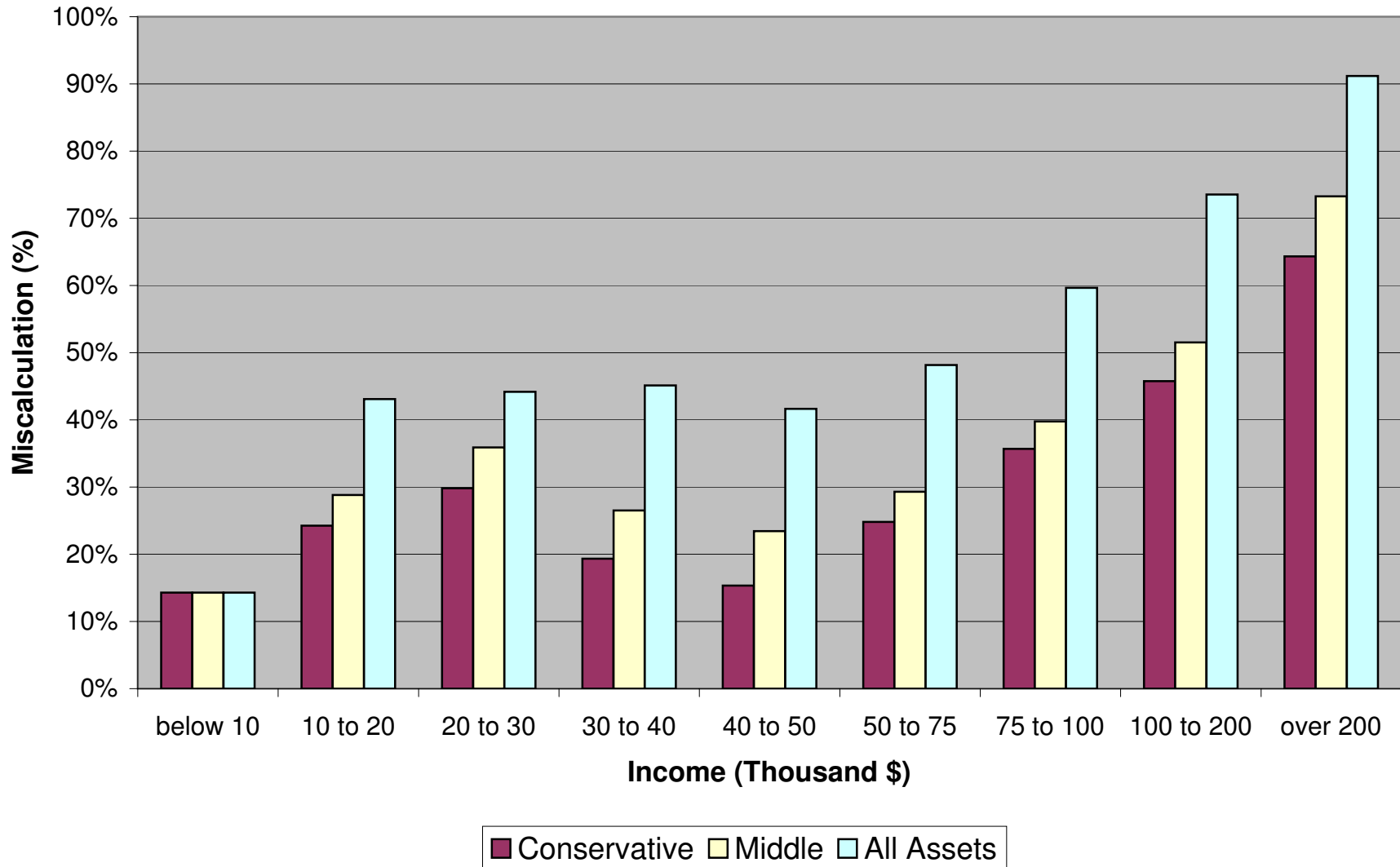
Benefits of MID by Income



—◆— IRS Measure —■— Conservative —▲— Middle —×— All Assets

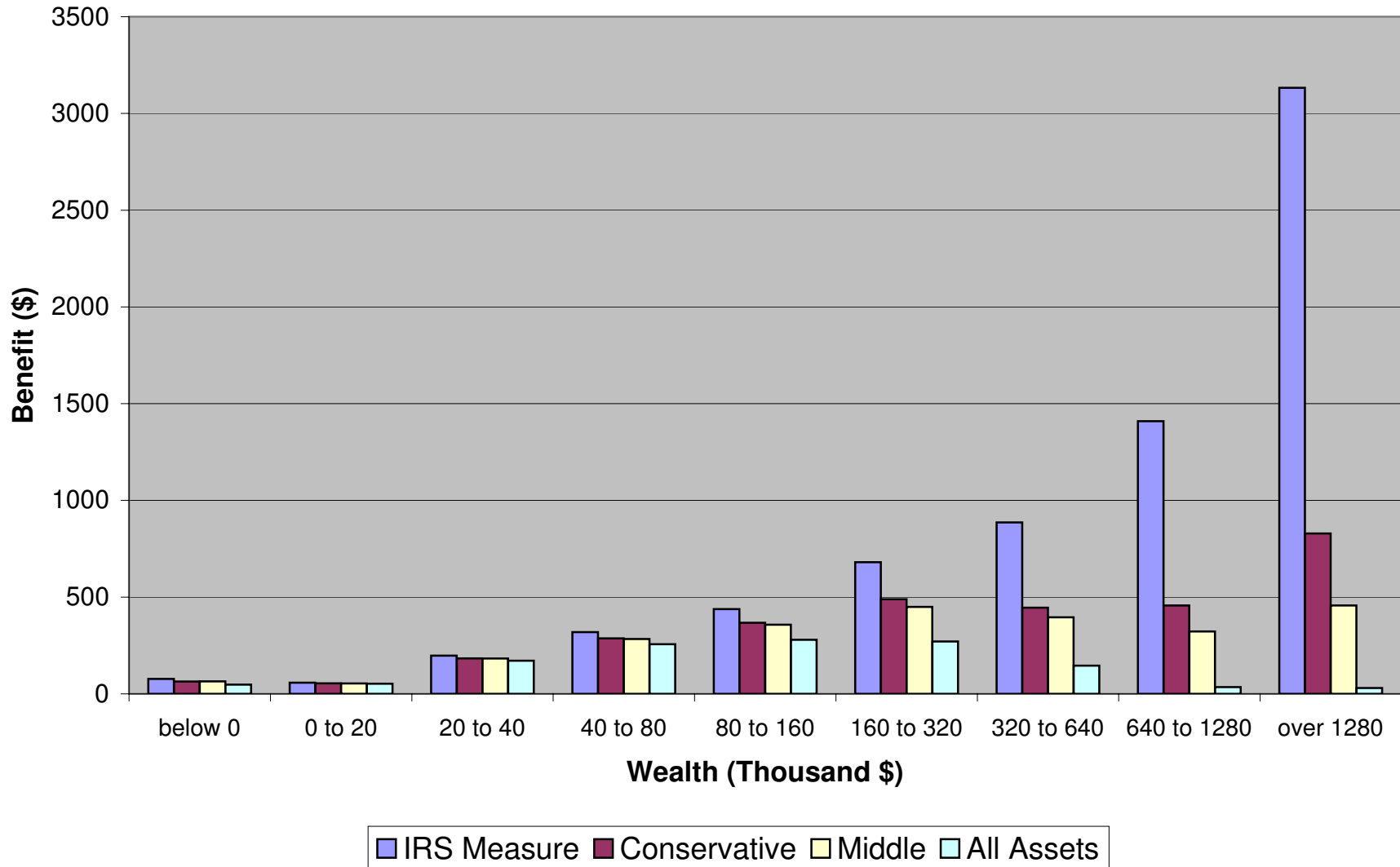
Miscalculation of Benefits

Miscalculation of Benefits by Income



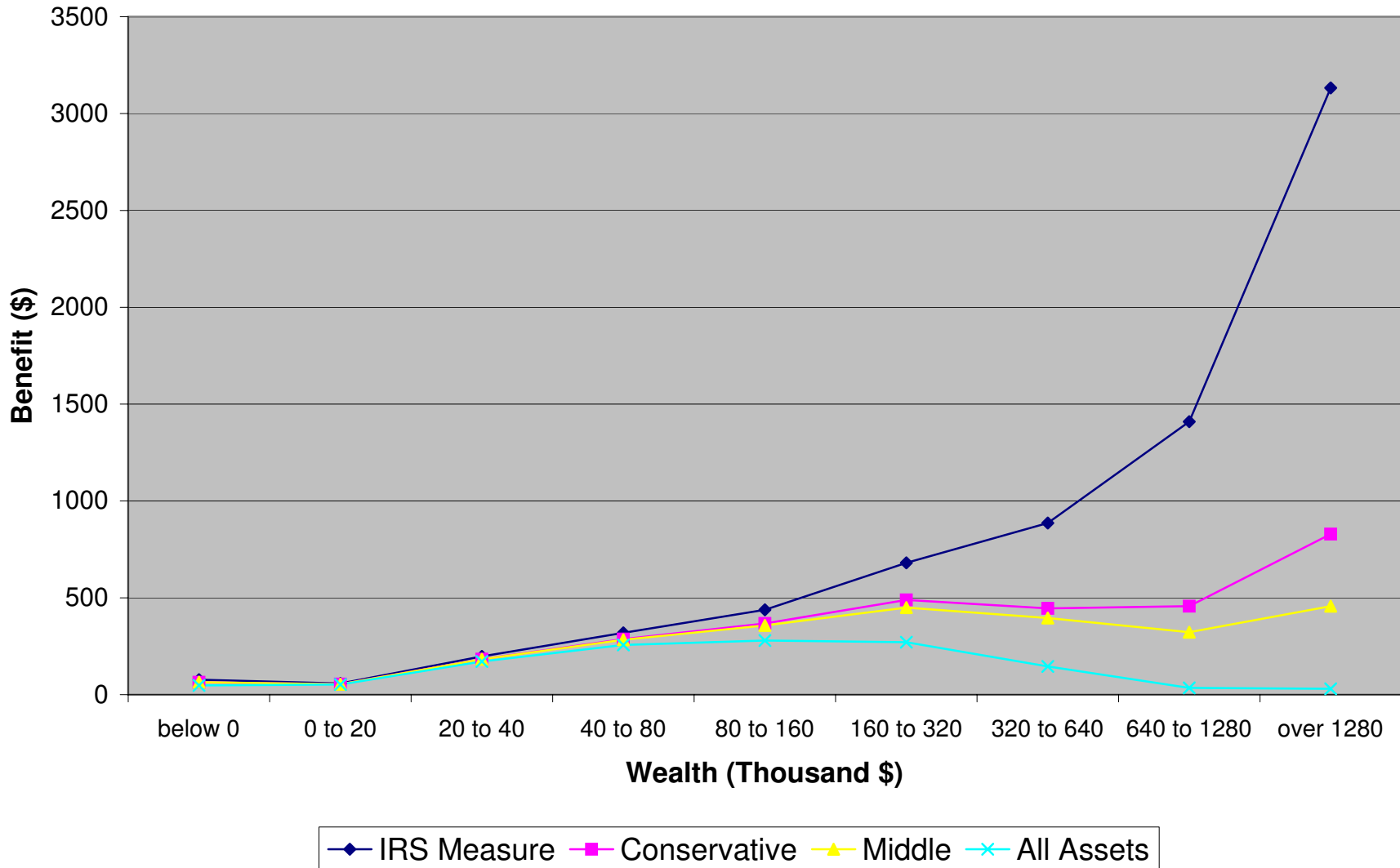
Distribution of Benefits

Benefits of MID by Wealth



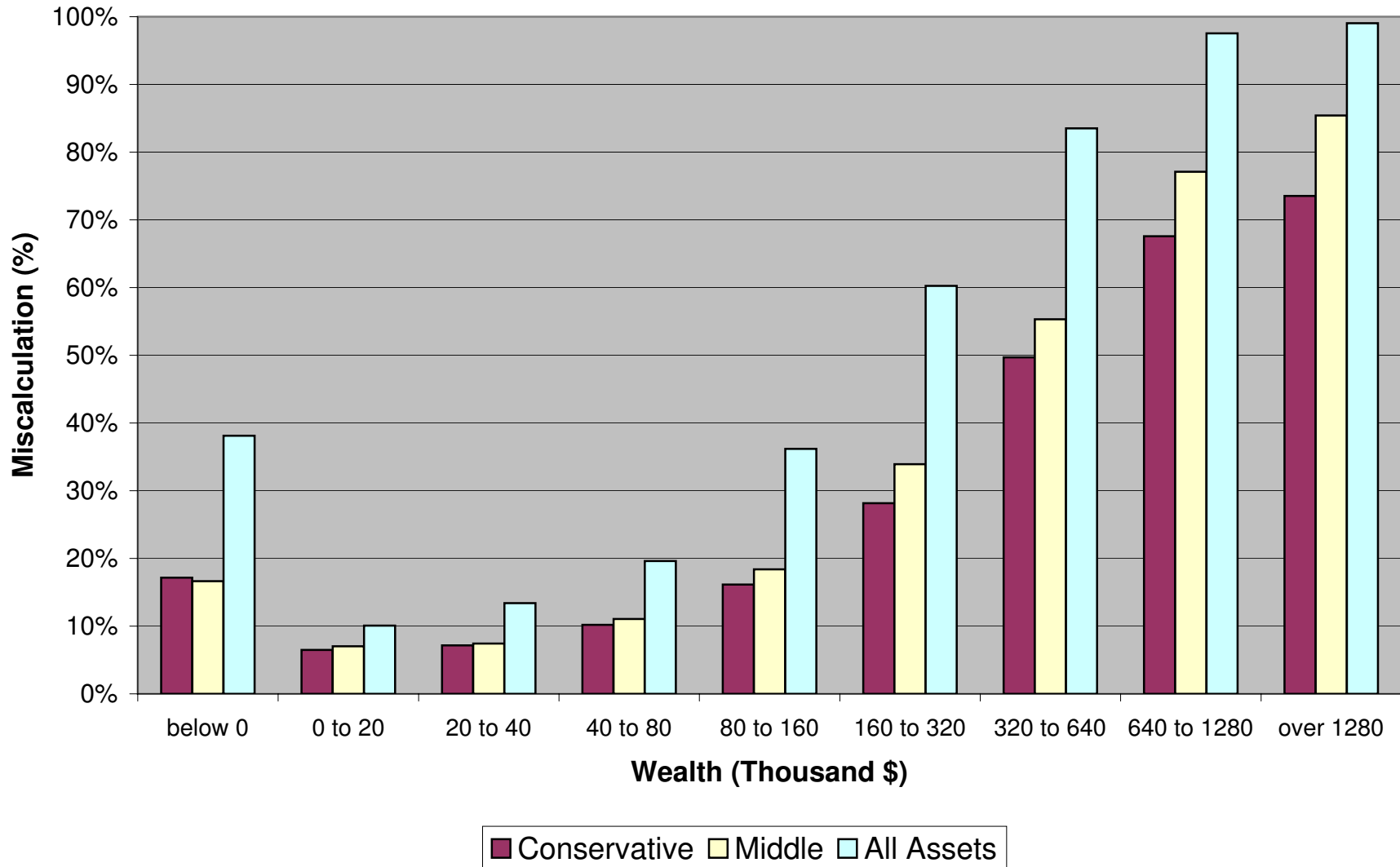
Distribution of Benefits

Benefits of MID by Wealth



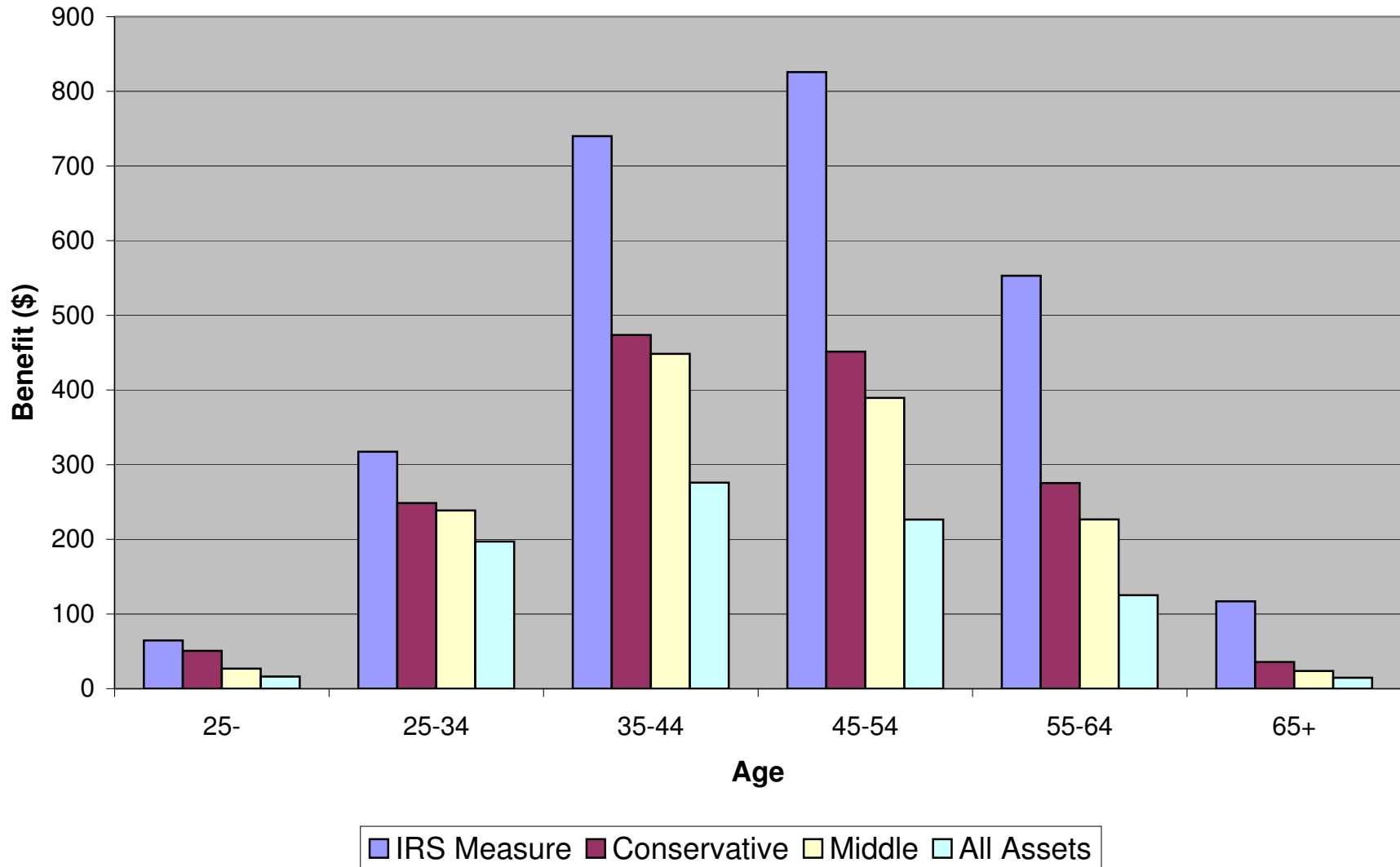
Miscalculation of Benefits

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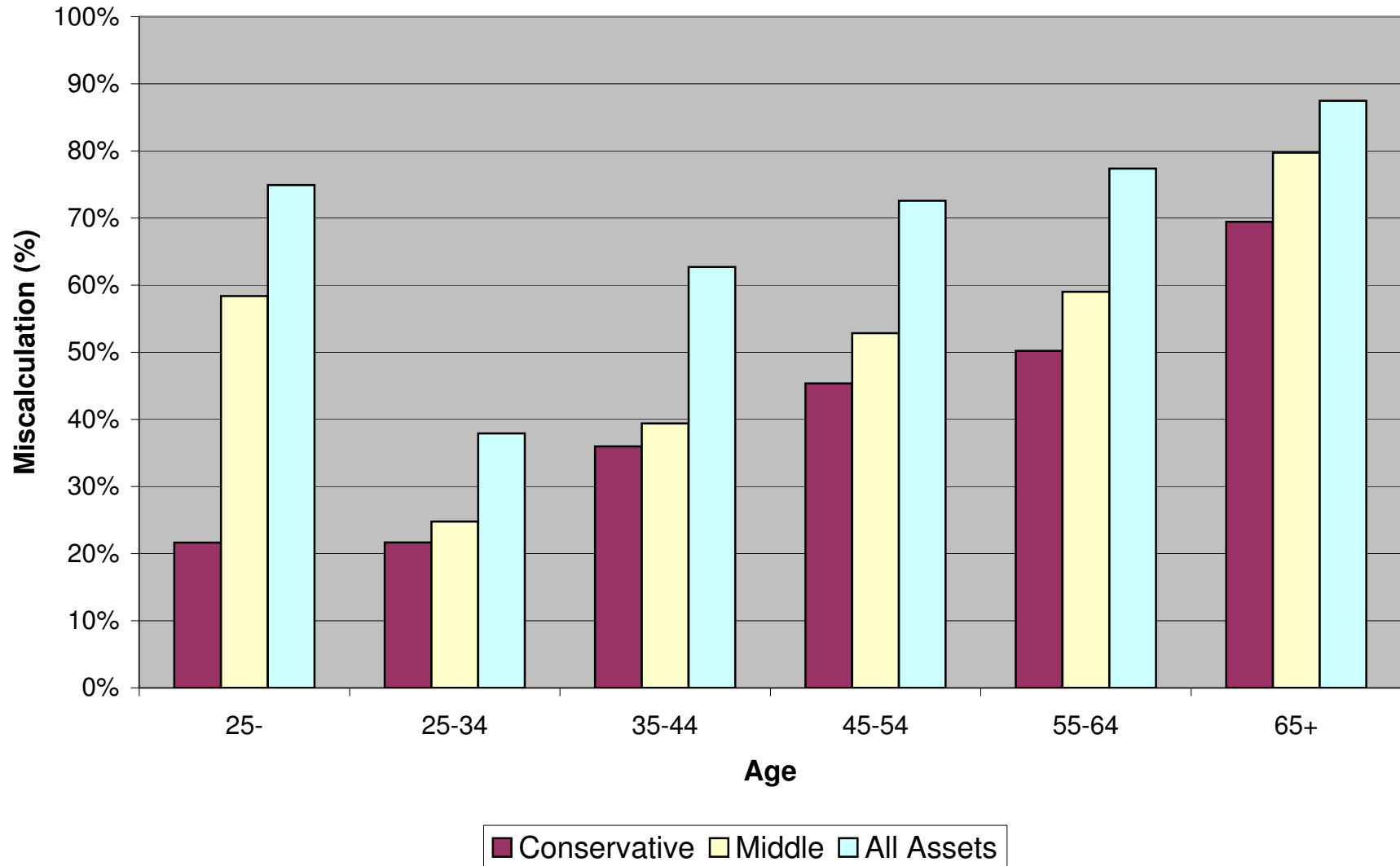
Distribution of Benefits

Benefits of MID by Age



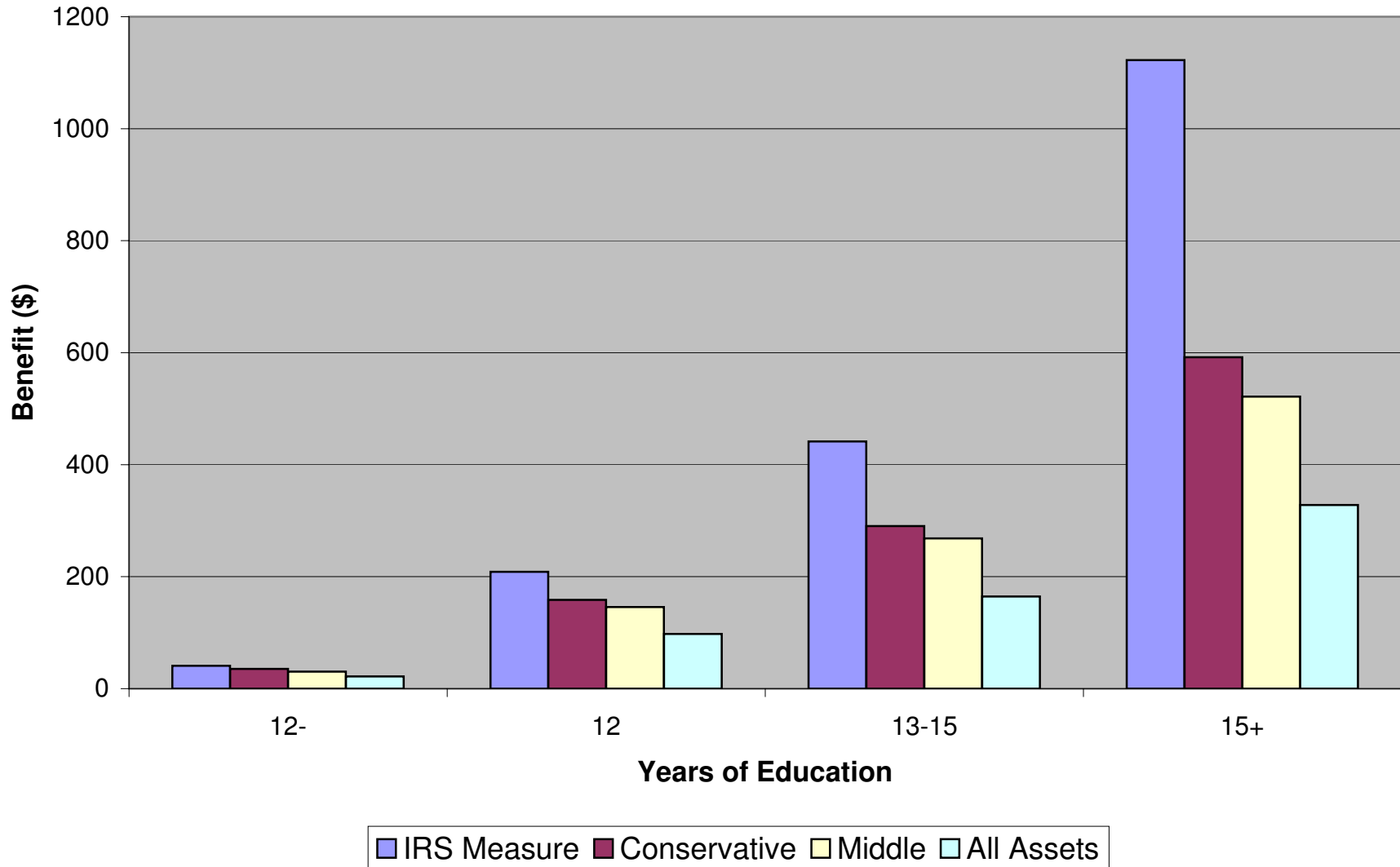
Distribution of Benefits

Miscalculation of Benefits by Age



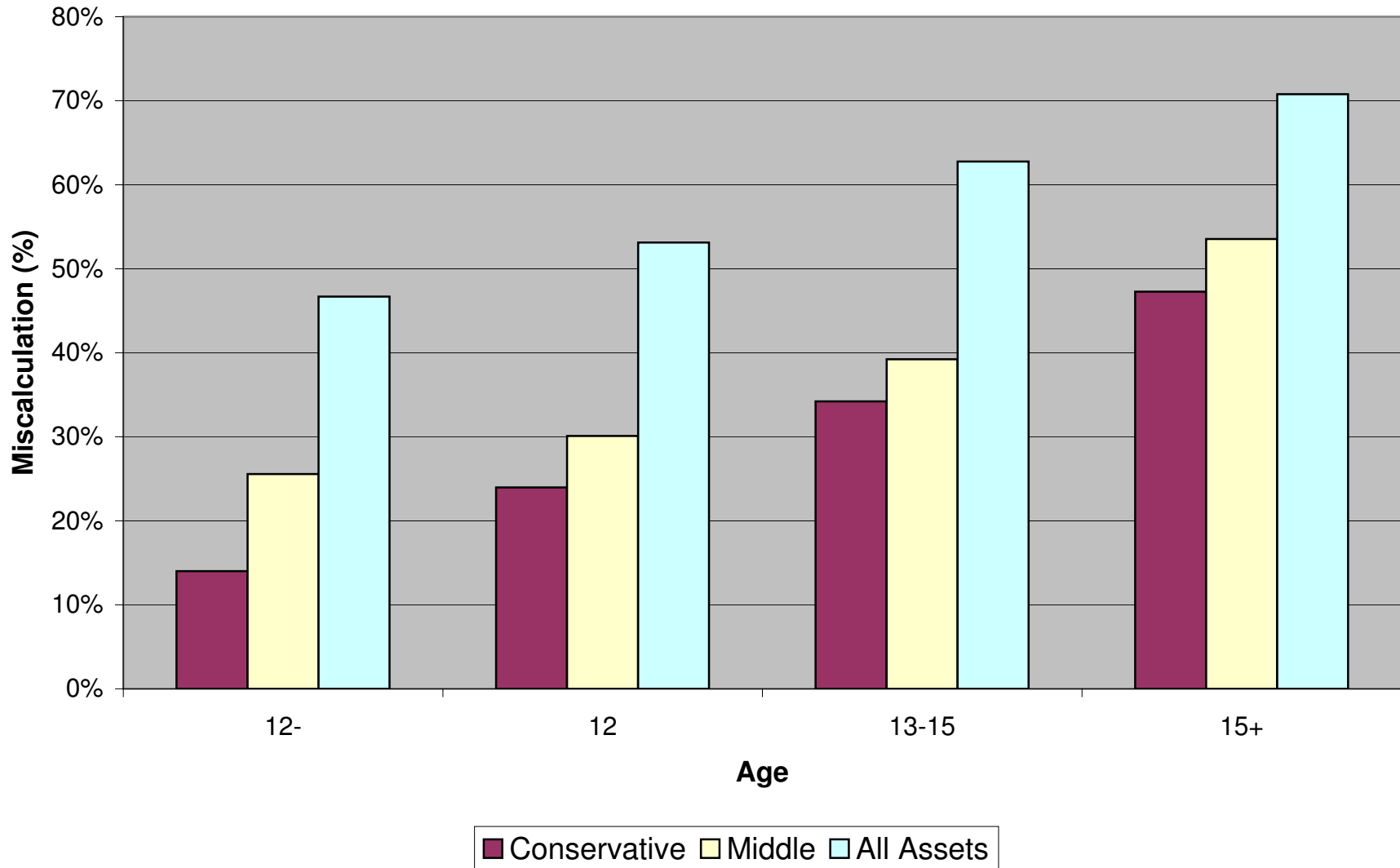
Distribution of Benefits

Benefits of MID by Education



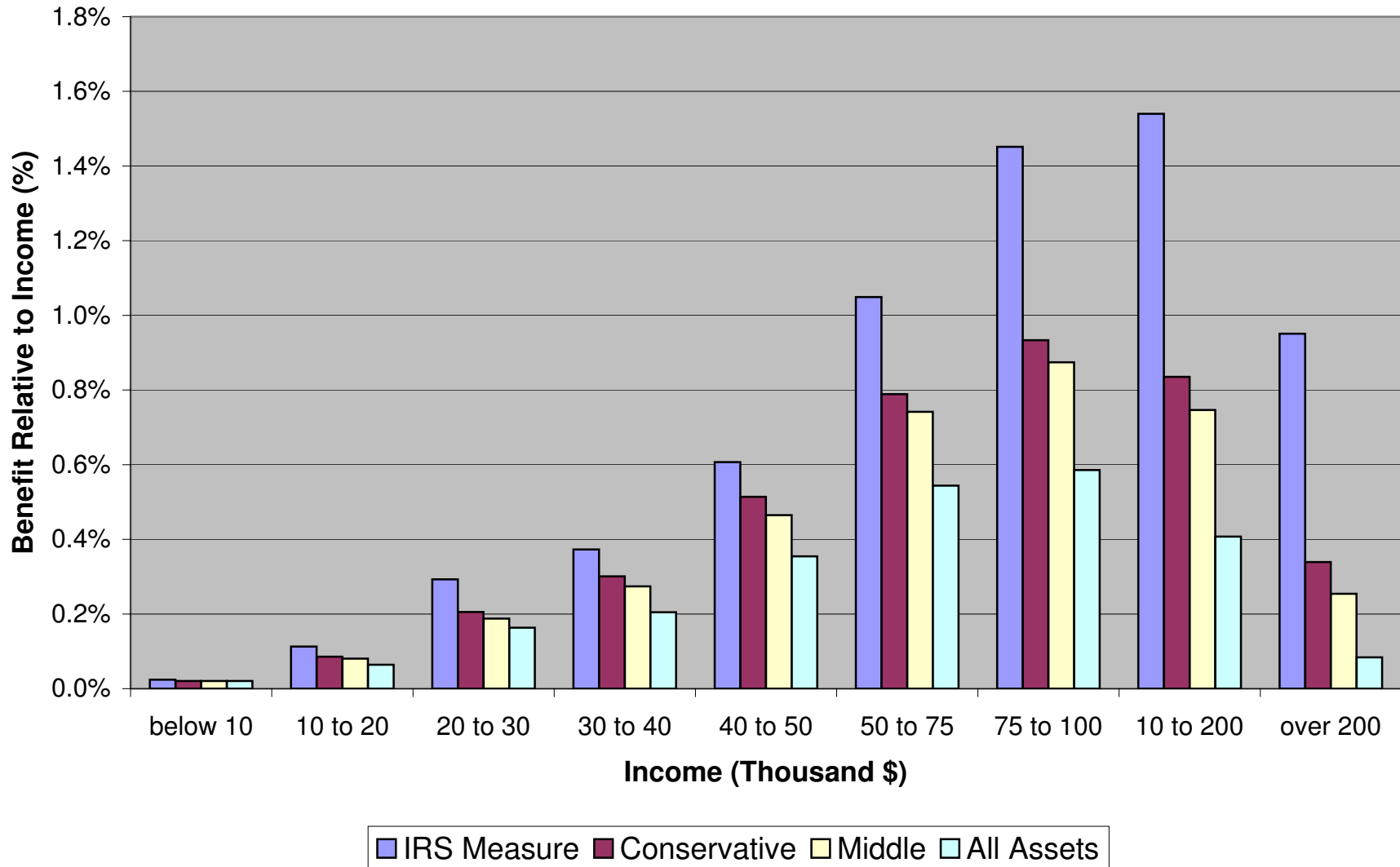
Distribution of Benefits

Miscalculation of Benefits by Education



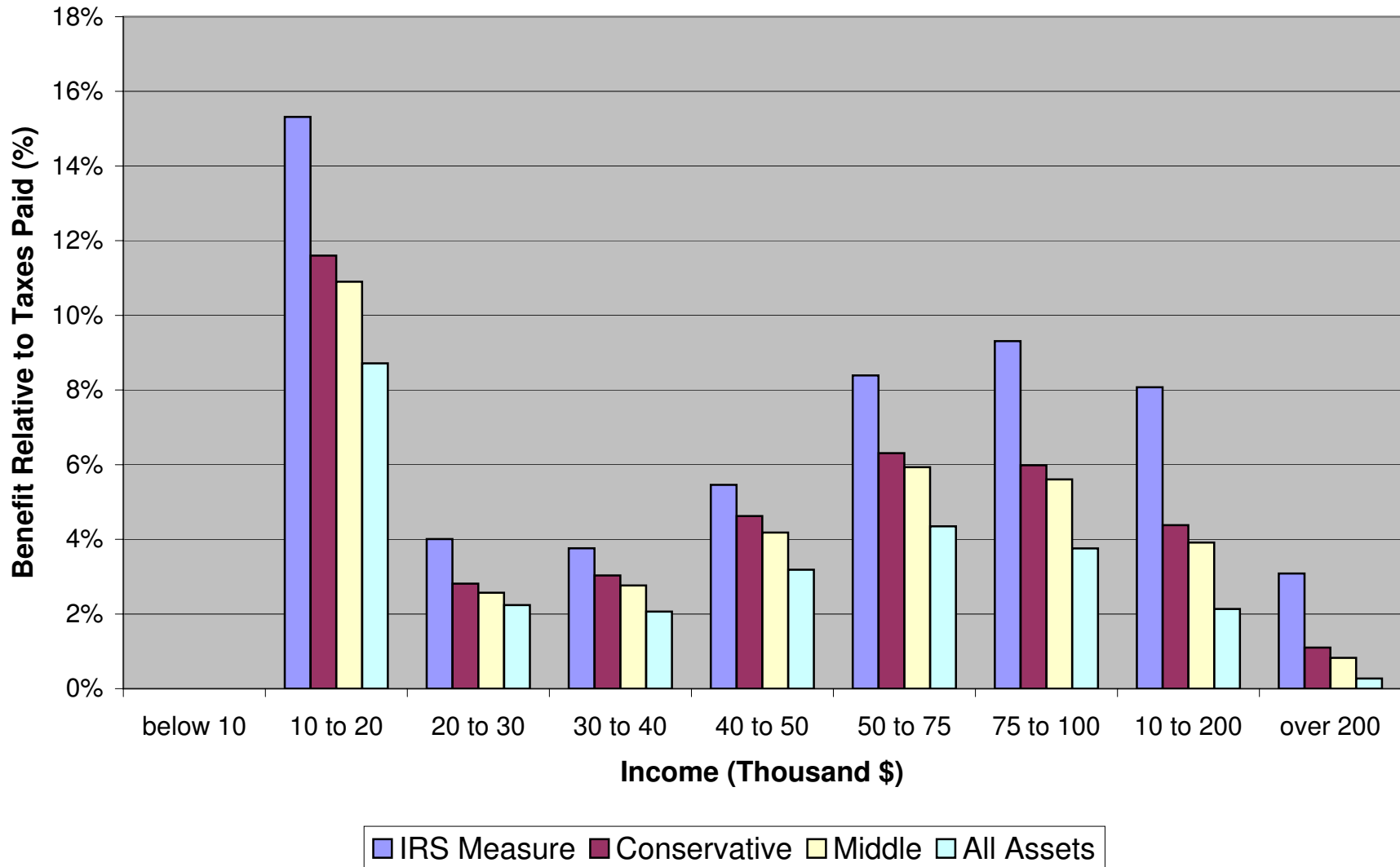
Distribution of Benefits

Benefits of MID Relative to Income



Distribution of Benefits

Benefits of MID Relative to Taxes Paid



Conclusion

- The cost of mortgage interest deductibility is greatly over-stated
- The benefits from mortgage interest deductibility are much less regressive than is conventionally believed

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Other Questions

- Would the elimination of MID lead to a better allocation?
- Could the tax system be changed to make everyone better off without MID?

Census Regions

Code	Region
1	Northeast: New England Division (CT ME MA NH RI VT)
2	Northeast: Middle Atlantic Division (NY NJ PA)
3	South: South Atlantic Division (DE DC FL GA MD NC SC VA WV)
4	South: East South Central Division (AL KY MS TN)
5	South: West South Central Division (AR LA OK TX)
6	Midwest: East North Central Division (IL IN MI OH WI)
7	Midwest: West North Central Division (IA KS MN MO NE ND SD)
8	West: Mountain Division (AZ CO ID MT NV UT WY NM)
9	West: Pacific Division (AK CA HI OR WA)

Tax Statistics from TaxSim

	IRS		SCF	
	Number	Amount	Number	Amount
All returns	122,421,991		102,548,842	
Federal Tax Total		768,290,921		875,850,374
Salaries & wages	104,404,985	3,613,918,456	77,540,200	3,870,160,160
Taxable interest	67,300,571	171,700,242	30,893,520	101,103,151
Tax-exempt interest	4,925,914	49,016,921	3,529,790	37,613,409
Dividends	29,507,639	120,493,432	16,275,028	98,345,183
Business income ^a		378,716,964		724,892,903
Net capital gain	24,240,112	356,083,267	10,502,082	259,872,092
Unemployment comp	7,124,100	17,230,102	4,588,889	13,762,613
Total item deduction	36,624,595	620,810,172	21,856,600	520,981,089
Morg Interest Deduct		235,000,000		249,250,000
AGI		4,969,949,986		5,145,062,346

^a Includes rent, partnership and farm income

Balance Sheet

Assets	Liabilities
Financial assets	Mortgage debt
Liquidity	Principal residence
CDS and NMMF	Second residence
Stocks and bonds	
Retirement assets	
Other fin assets	
Non-financial assets	Other debt
Vehicles	Other loc
House(s)	Loans
Business (nw)	Other debt
Other res assets	
Net non-res equity	
Other non-fin assets	Net worth

Balance Sheet: Conservative Measure

Assets	Liabilities
Financial assets	Mortgage debt
Liquidity	Principal residence
✓ CDS and NMMF	Second residence
✓ Stocks and bonds	
Retirement assets	
✓ Other fin assets	
Non-financial assets	Other debt
Vehicles	Other loc
House(s)	Loans
Business (nw)	Other debt
Other res assets	
Net non-res equity	
Other non-fin assets	Net worth

Balance Sheet: Inclusive Measure

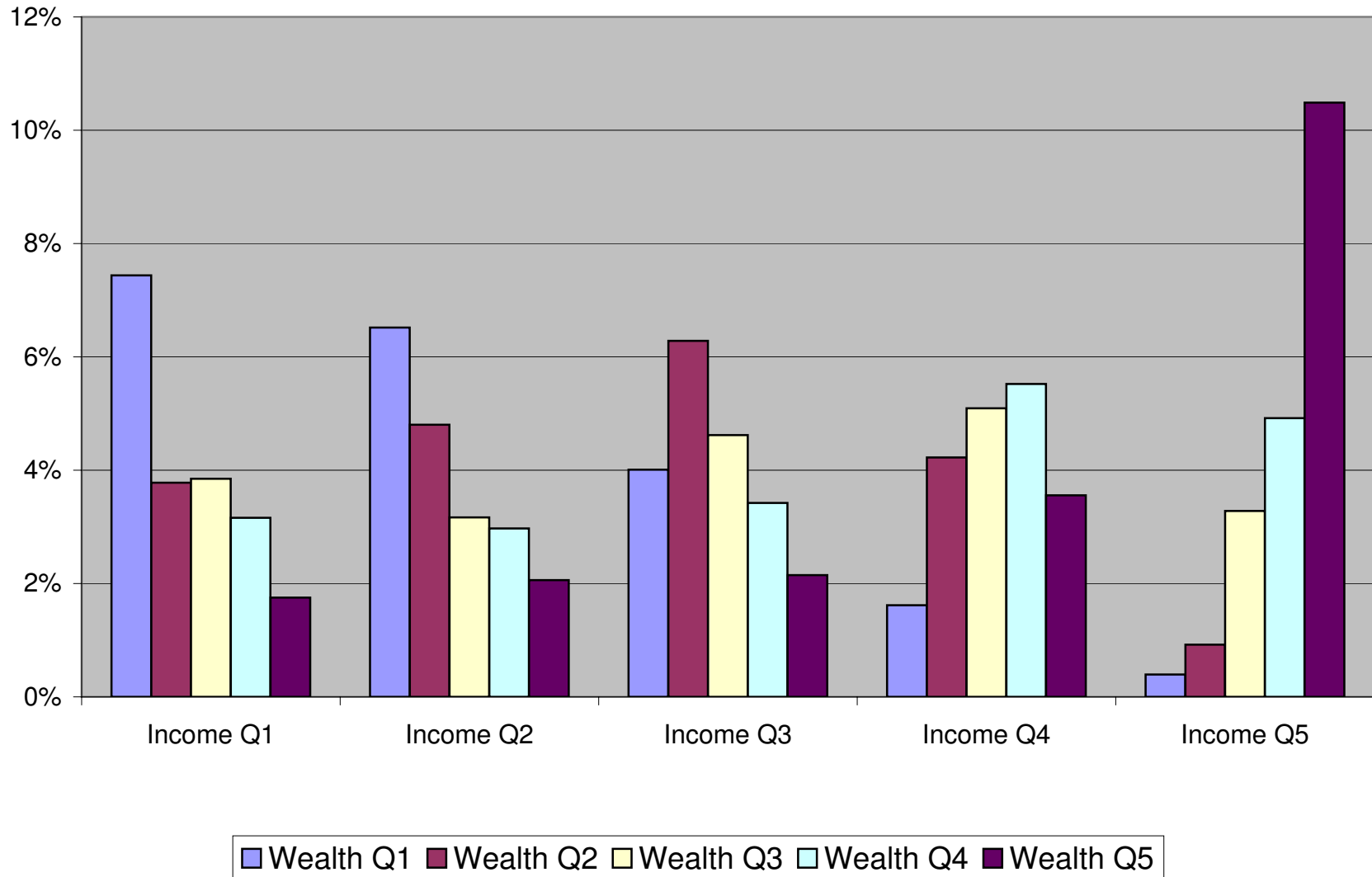
Assets	Liabilities
Financial assets	Mortgage debt
✓ Liquidity	Principal residence
✓ CDS and NMMF	Second residence
✓ Stocks and bonds	
Retirement assets	
✓ Other fin assets	
Non-financial assets	Other debt
Vehicles	✓ Other loc
House(s)	✓ Loans
✓ Business (nw)	✓ Other debt
✓ Other res assets	
✓ Net non-res equity	
✓ Other non-fin assets	Net worth

Balance Sheet: Preferred Measure

Assets	Liabilities
Financial assets	Mortgage debt
Liquidity	Principal residence
✓ CDS and NMMF	Second residence
✓ Stocks and bonds	
Retirement assets	
✓ Other fin assets	
Non-financial assets	Other debt
Vehicles	Other loc
House(s)	Loans
Business (nw)	Other debt
Other res assets	
✓ Net non-res equity	
✓ Other non-fin assets	Net worth

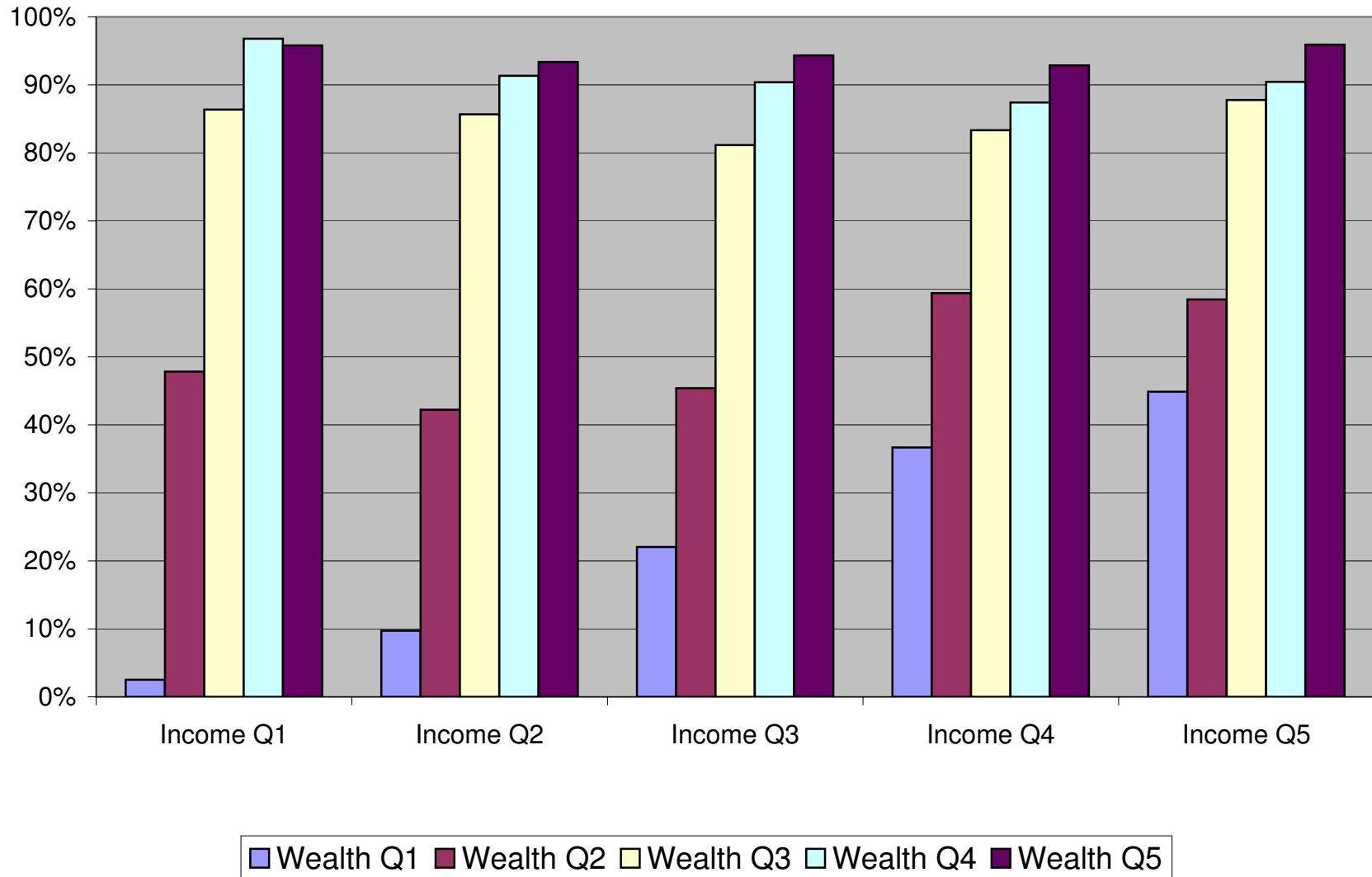
SCF Statistics

Fraction of Households by Quintiles



SCF Statistics

Homeownership Rate by Quintiles



SCF Statistics

Homeowners with Mortgage by Quintiles

