Removing the Disincentives of Long Careers in Social Security and Medicare

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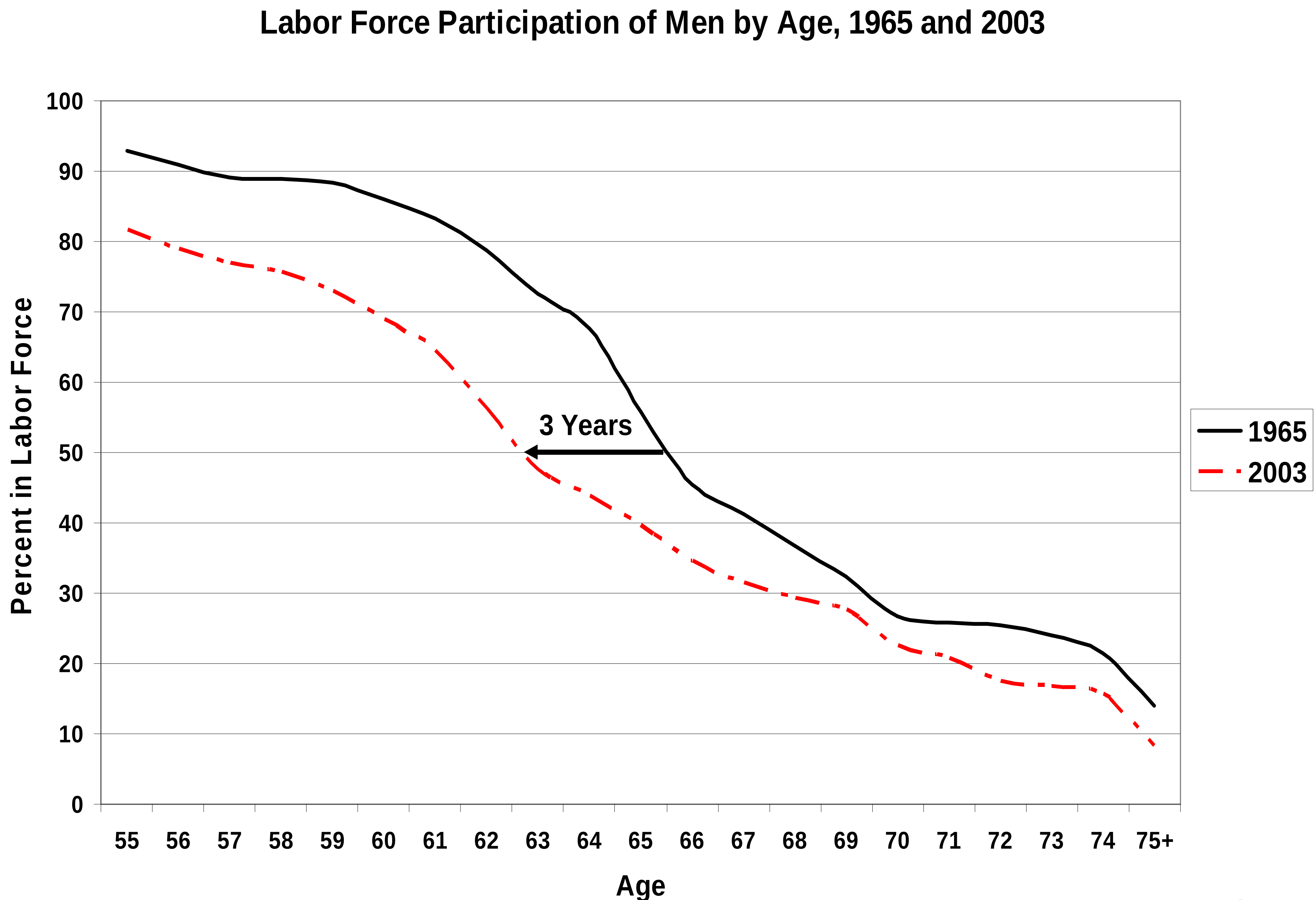
Motivation

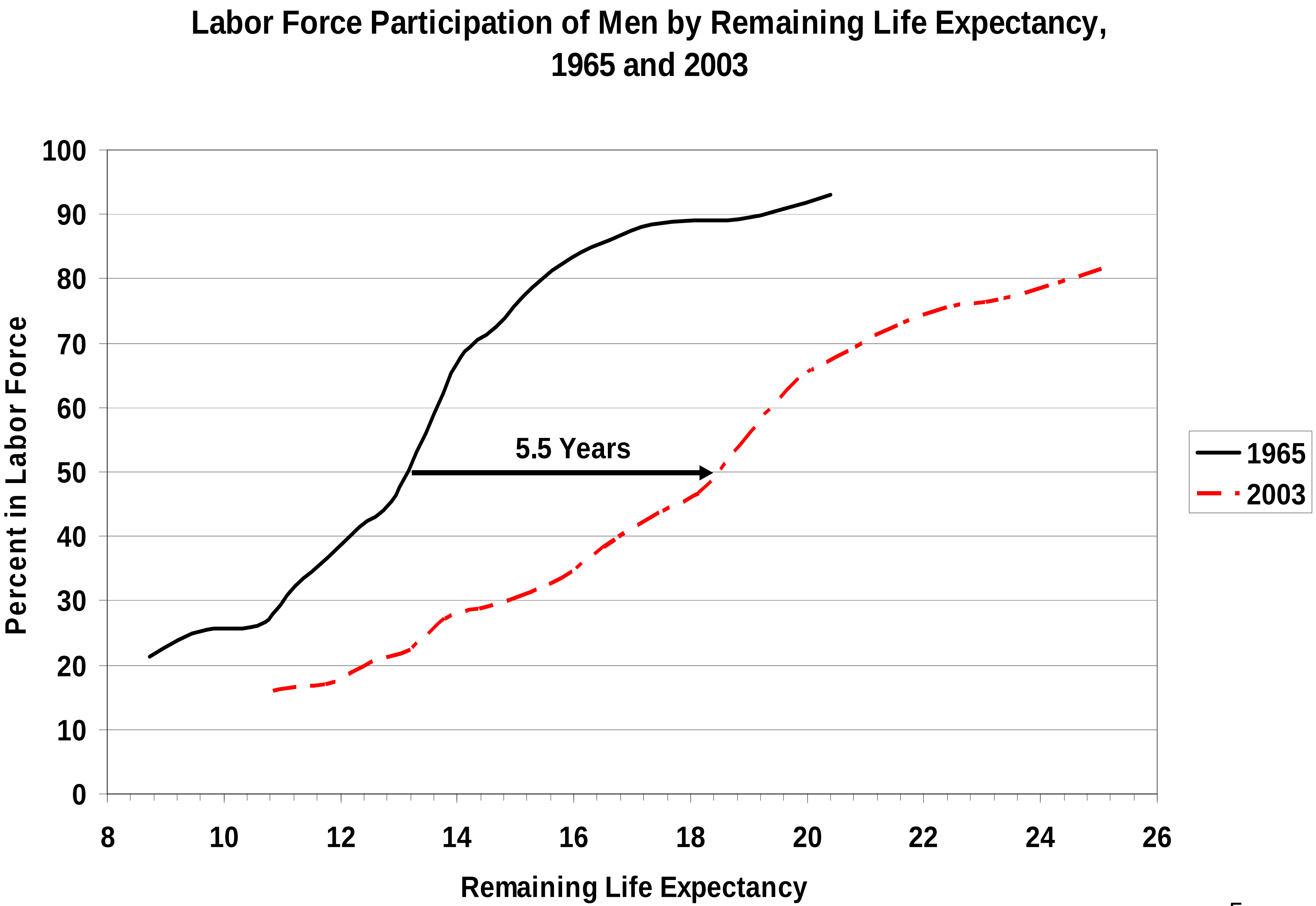
- Life expectancy has improved dramatically since the introduction of Social Security
  - Period life expectancy for 20-year-olds in 1935 was 66 for males, 69 for females
  - Today, 20-year-old males have life expectancy of 76, and females have life expectancy of 80
- We need to replace age (years since birth) with real age (based on mortality risk)
- Despite increases in life expectancy, men are retiring much earlier

New Age Thinking

- 65 year old men in 2000, 70 year old women in 2000, and 59 year old men in 1970 are all the same "real age."

- All have a two percent mortality risk, that is, a 2% chance of dying within 12 months.

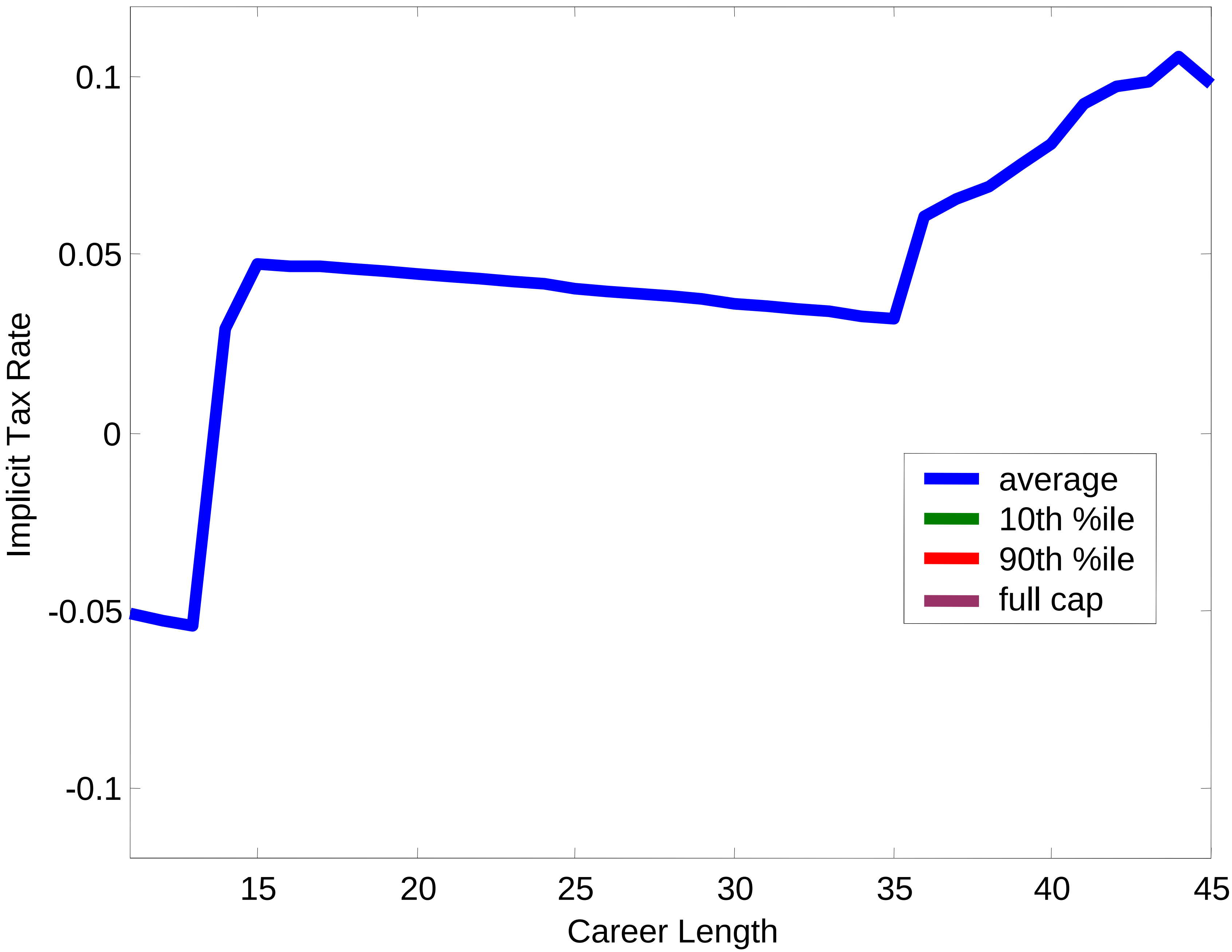

Labor Force Participation of Men by Age, 1965 and 2003
Percent in Labor Force
100
90
80
70
60
50
40
30
20
10
0
3 Years
55
56
57
58
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75+
Age
1965
2003

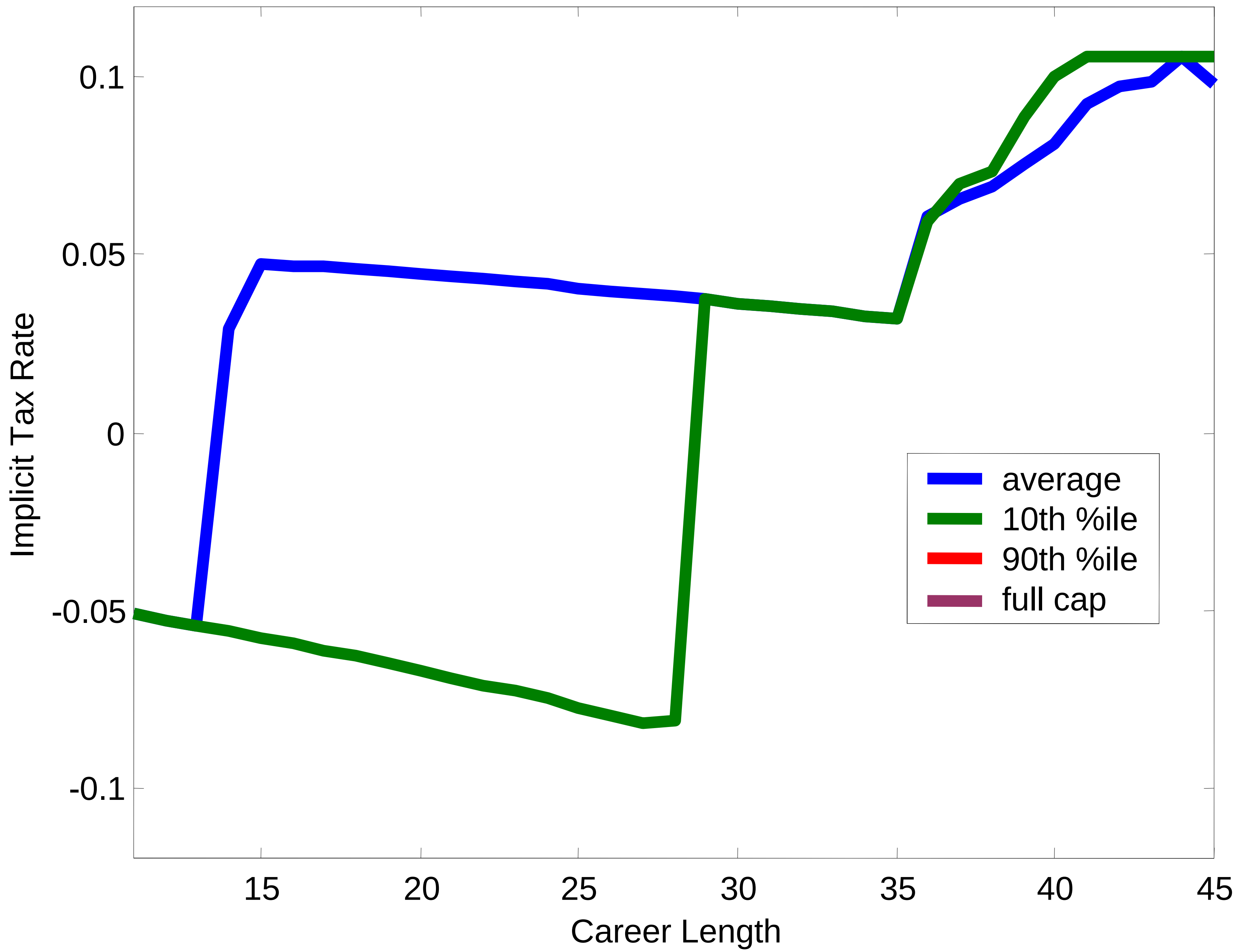

Labor Force Participation of Men by Remaining Life Expectancy,
1965 and 2003
Percent in Labor Force
100
90
80
70
60
50
40
30
20
10
0
8
10
12
14
16
18
20
22
24
26
Remaining Life Expectancy
5.5 Years
1965
2003

What are implicit Social Security tax rates?

- The implicit Social Security tax rate is the change in the net Social Security tax as a percentage of earnings

$$ImplicitSocSecTaxRate_x = \frac{PayrollTaxes_x - 12 \cdot \Delta PIA_x DAV_g(x, NRA)}{Earnings_x}$$


Implicit Tax Rate
0.1
0.05
0
-0.05
-0.1
15
20
25
30
35
40
45
Career Length
average
10th %ile
90th %ile
full cap



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0.1
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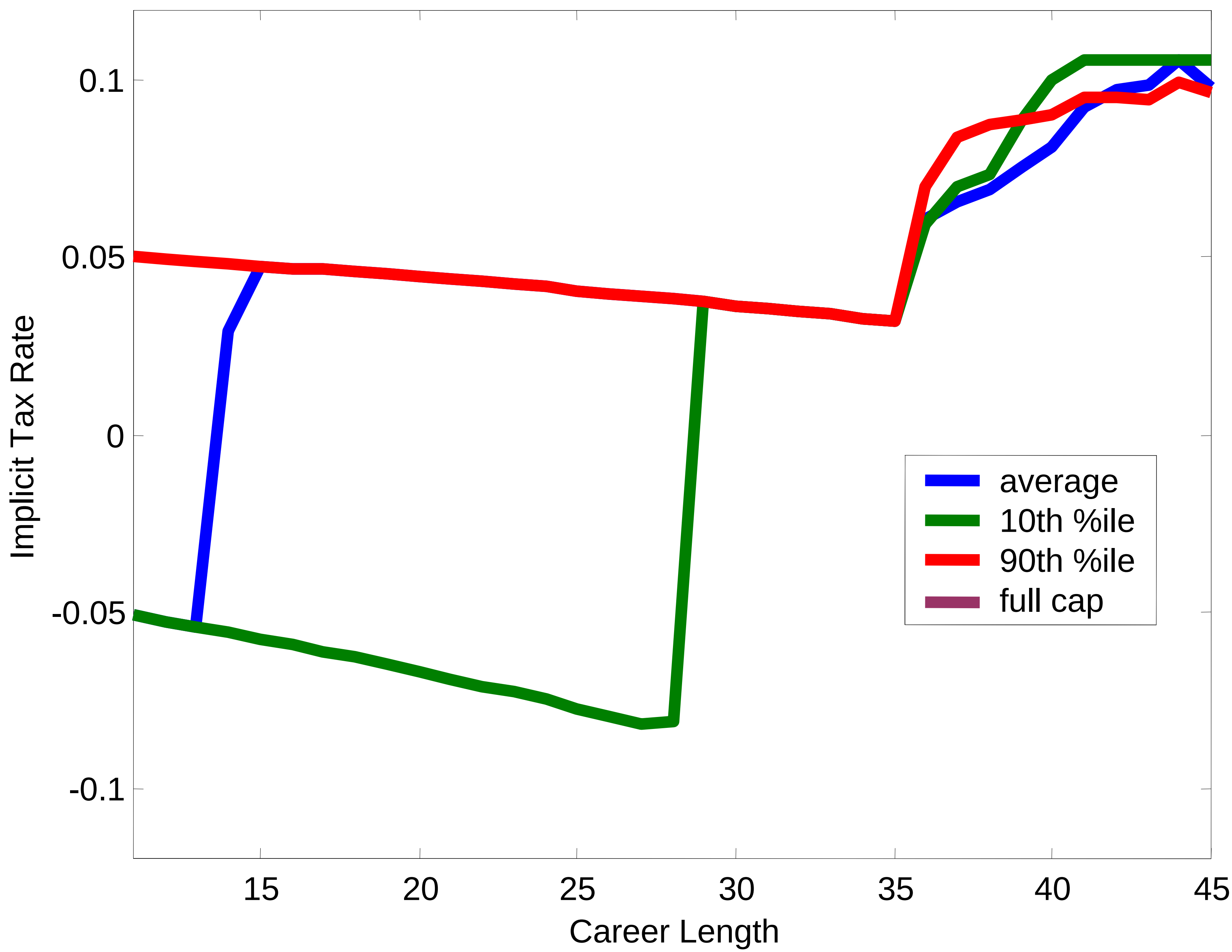

0.1
0.05
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Implicit Tax Rate
15
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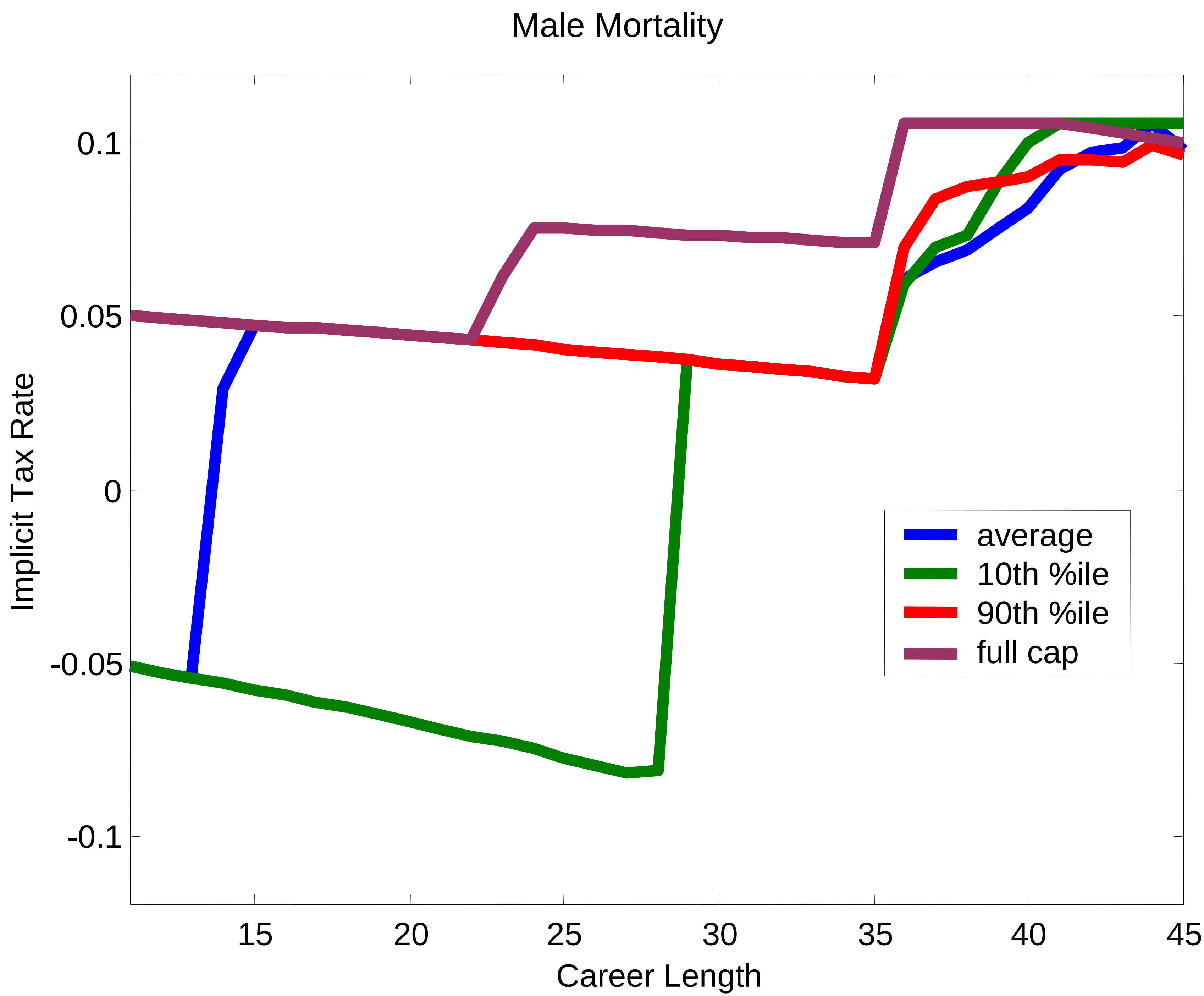
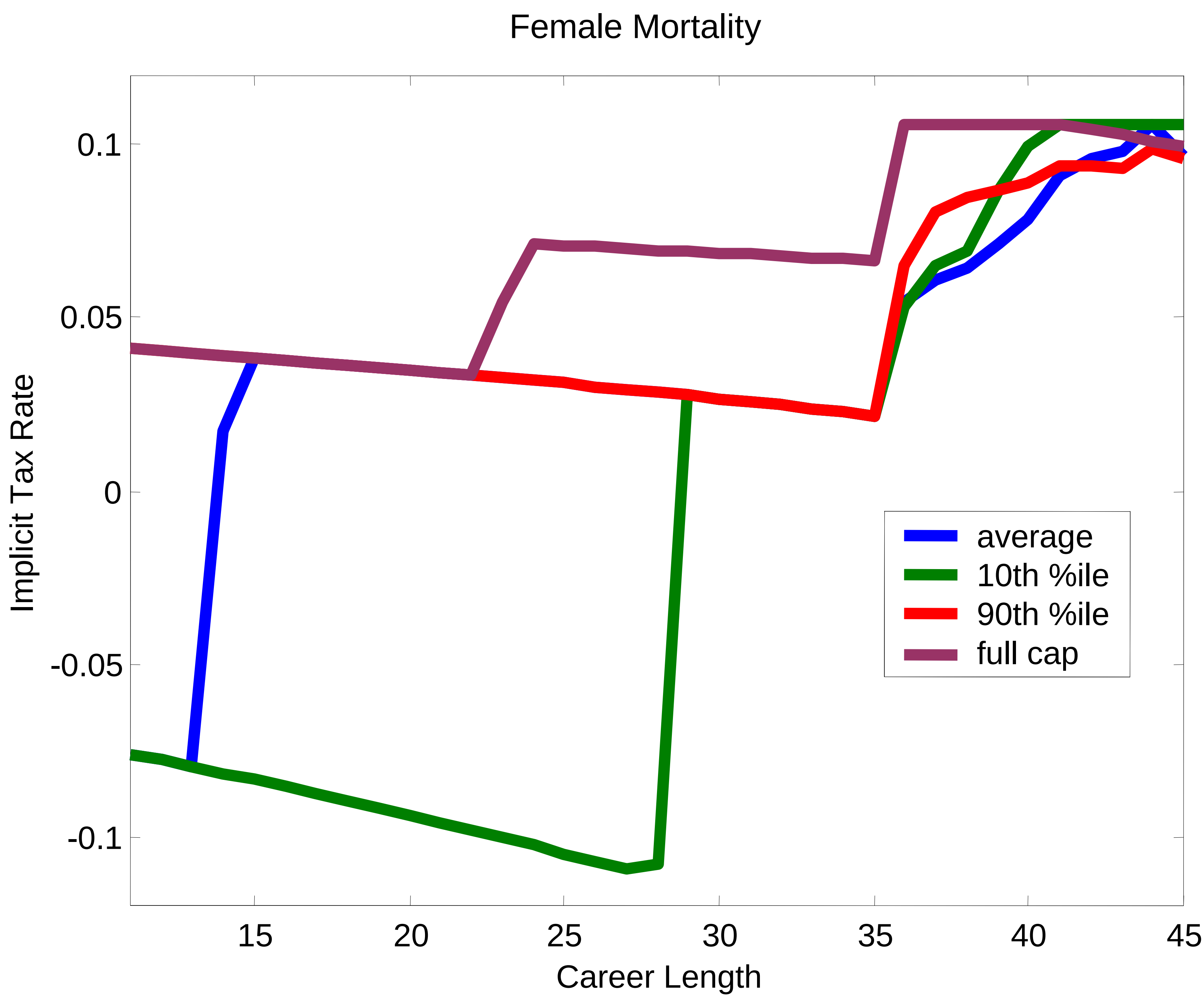

Male Mortality
Implicit Tax Rate
Career Length
0.1
0.05
0
-0.05
-0.1
15
20
25
30
35
40
45
average
10th %ile
90th %ile
full cap



Female Mortality
Implicit Tax Rate
0.1
0.05
0
-0.05
-0.1
15
20
25
30
35
40
45
Career Length
average
10th %ile
90th %ile
full cap

Why do we see these patterns?

- Once a person works 35 years, additional years of earnings are no longer replacing zeroes – they are replacing lower earnings years. Years 36, 37, etc. increase benefits much less than years 34 and 35 (if at all).

- Even for the first 35 years, each additional year of work does not count the same because of the way the system handles progressivity – those with short careers are treated as low lifetime earners.

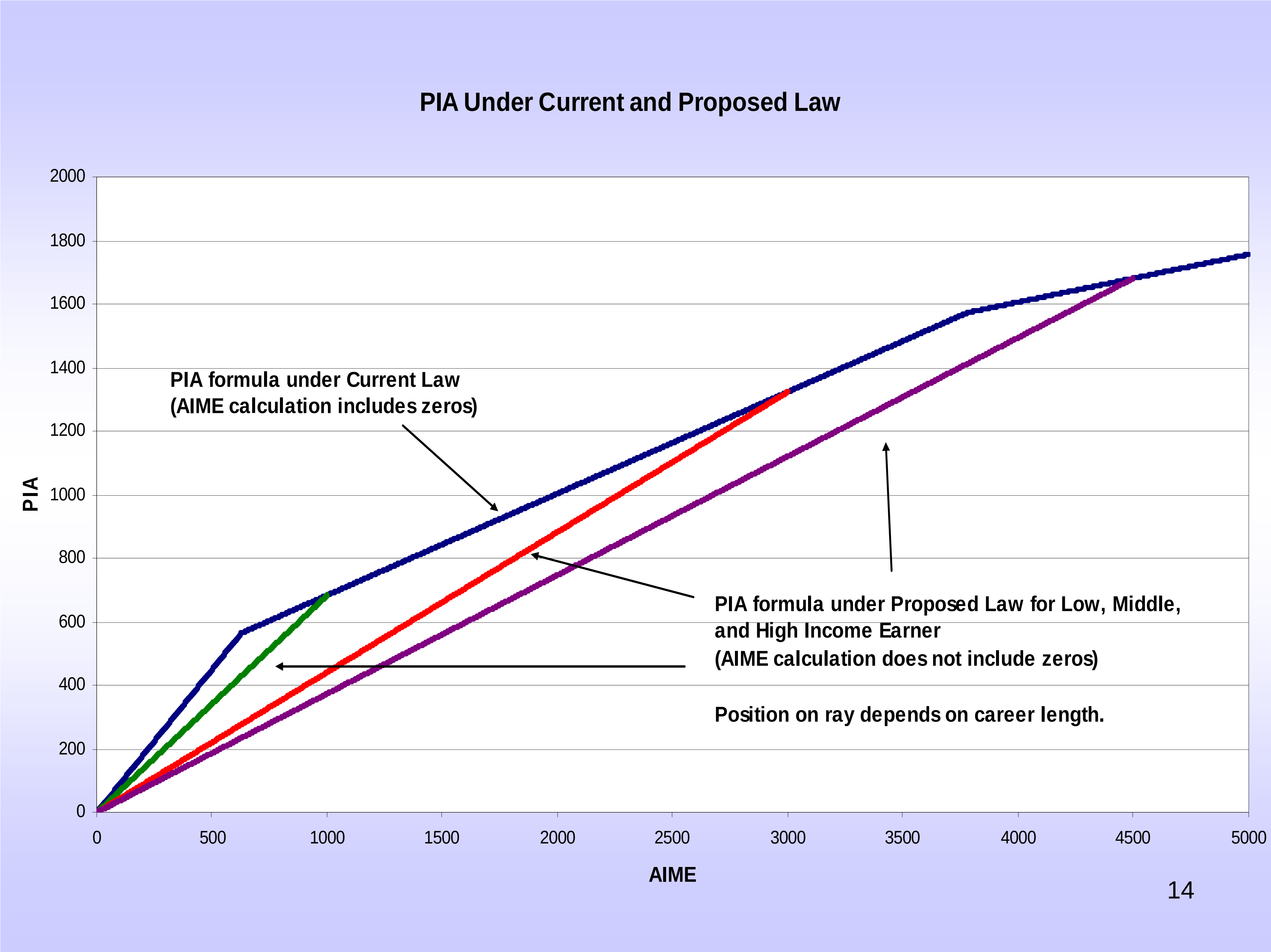
Three Possible Reforms

1. Use 40 years rather than 35 in the AIME calculation
2. Disentangle career length and progressivity

Current PIA Calculation

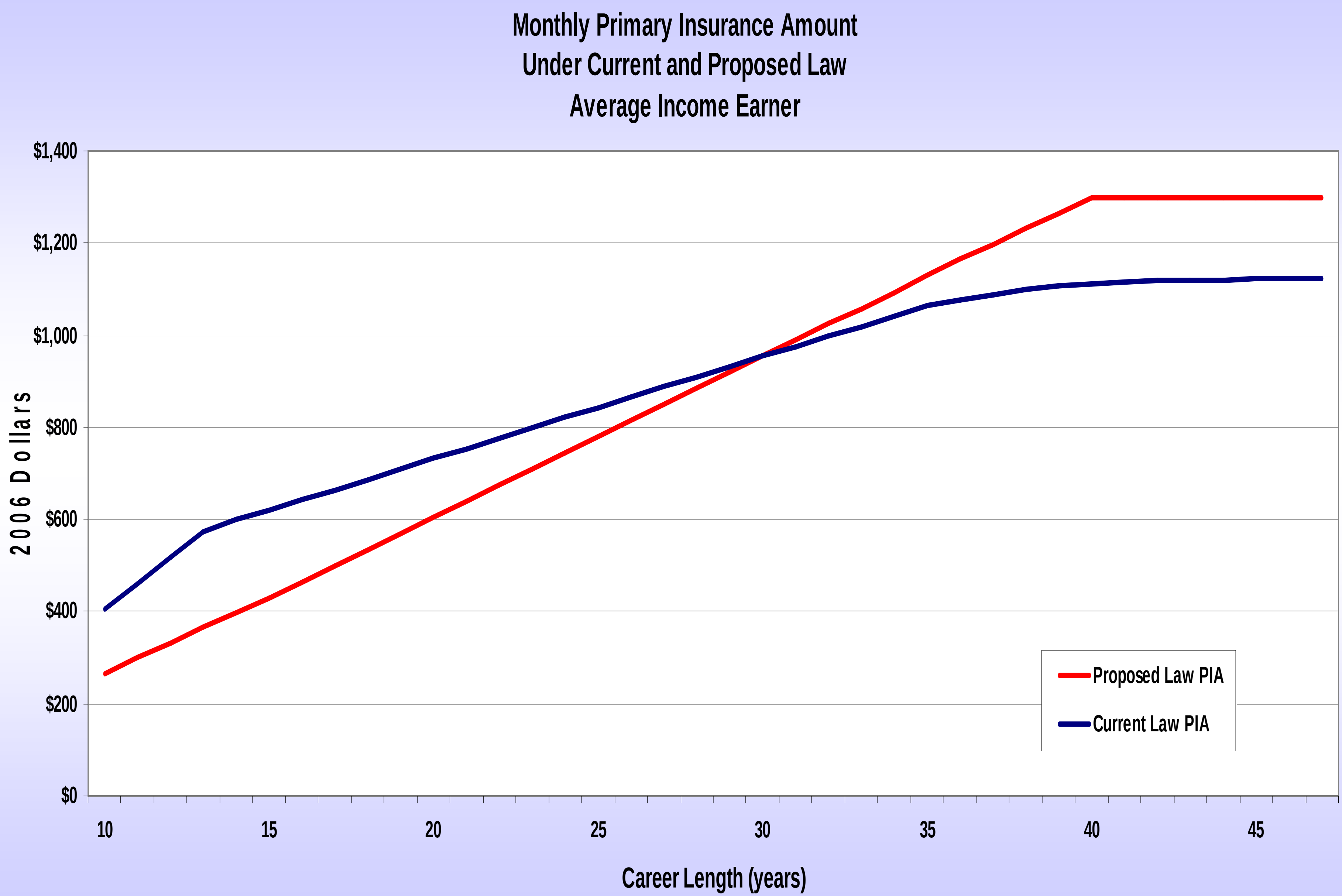
Proposed PIA Calculation

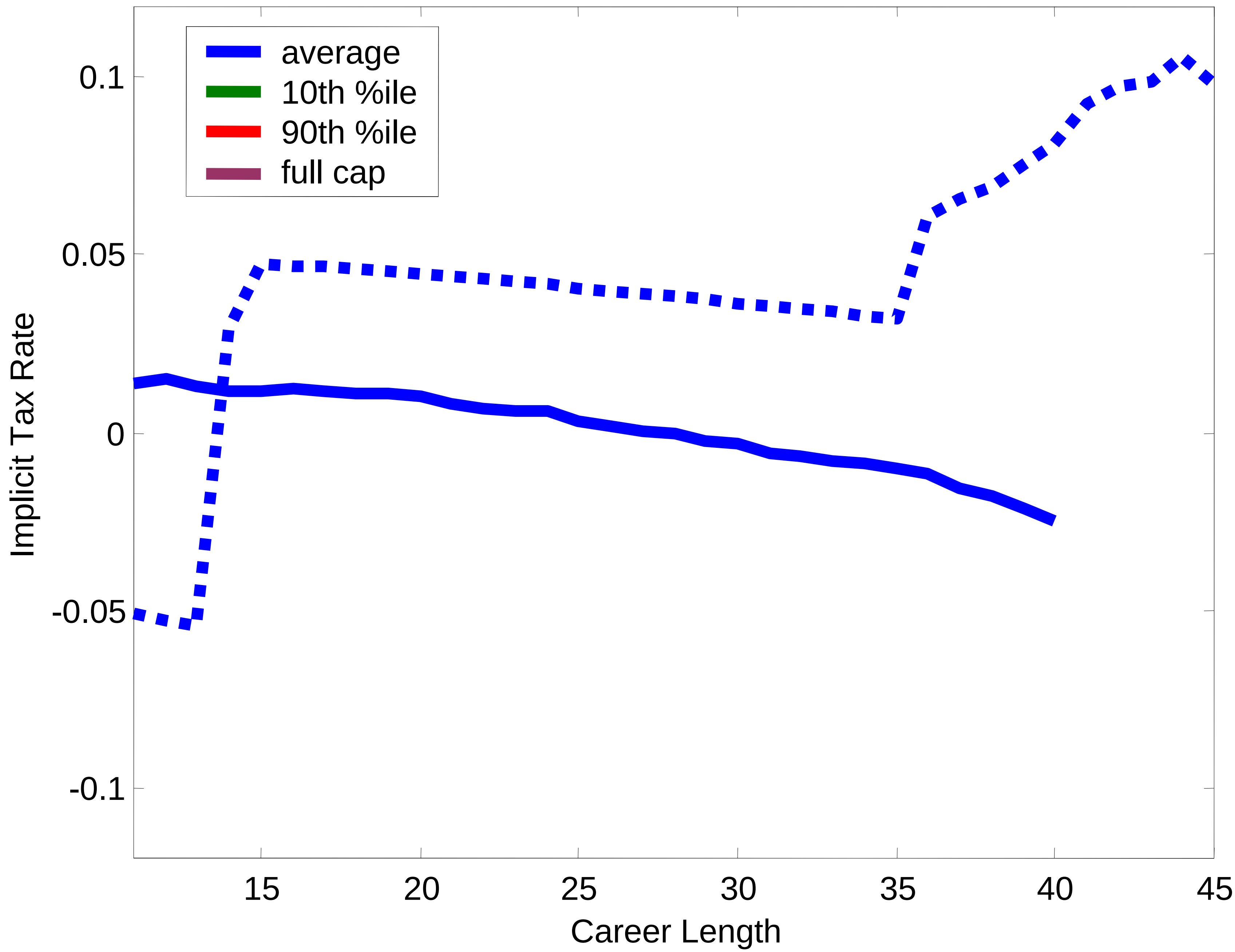
$$PIA = f\underbrace{\left(\frac{1}{T} * \sum \frac{w_{NRA}}{w_t} earn_t\right)}_{\substack{\text{AIME} \\ \text{(includes zeros)}}} = f\left(\frac{y}{T} * \frac{1}{y} * \sum \frac{w_{NRA}}{w_t} earn_t\right) \rightarrow PIA = \underbrace{\frac{y}{T}}_{\substack{\text{career} \\ \text{length} \\ \text{adjustment}}} * f \underbrace{\left(\frac{1}{y} * \sum \frac{w_{NRA}}{w_t} earn_t\right)}_{\substack{\text{modified AIME} \\ \text{(does not include zeros)}}}$$


PIA Under Current and Proposed Law
2000
1800
1600
1400
1200
1000
800
600
400
200
0
PIA
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
AIME
PIA formula under Current Law
(AIME calculation includes zeros)
PIA formula under Proposed Law for Low, Middle, and High Income Earner
(AIME calculation does not include zeros)
Position on ray depends on career length.

Three Possible Reforms

1. Use 40 years rather than 35 in the AIME calculation
2. Disentangle career length and progressivity
3. Establish a “paid-up” category of workers who have worked a full career of 40 years


Monthly Primary Insurance Amount
Under Current and Proposed Law
Average Income Earner
2006 Dollars
$1,400
$1,200
$1,000
$800
$600
$400
$200
$0
10
15
20
25
30
35
40
45
Career Length (years)
Proposed Law PIA
Current Law PIA



average
10th %ile
90th %ile
full cap
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0.05
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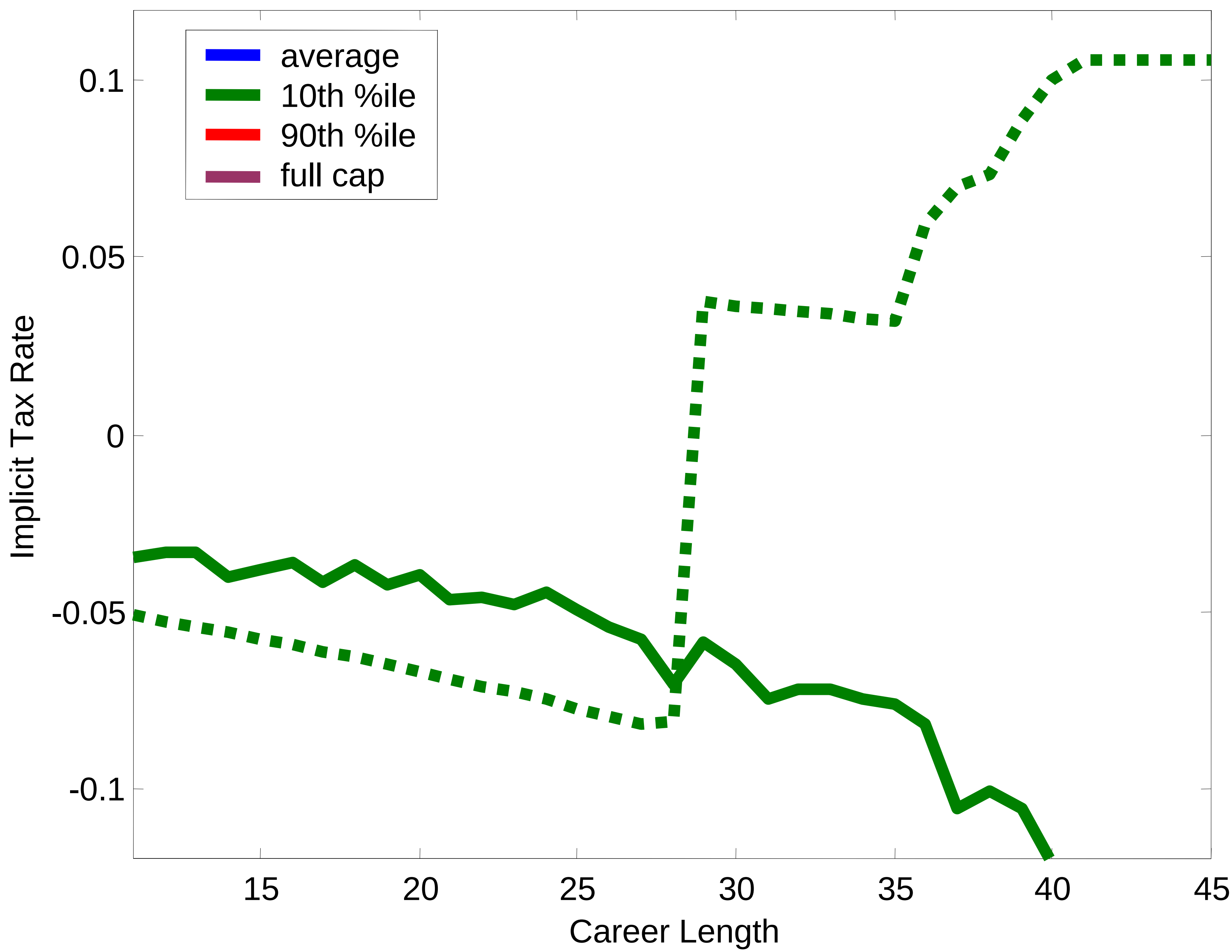
Career Length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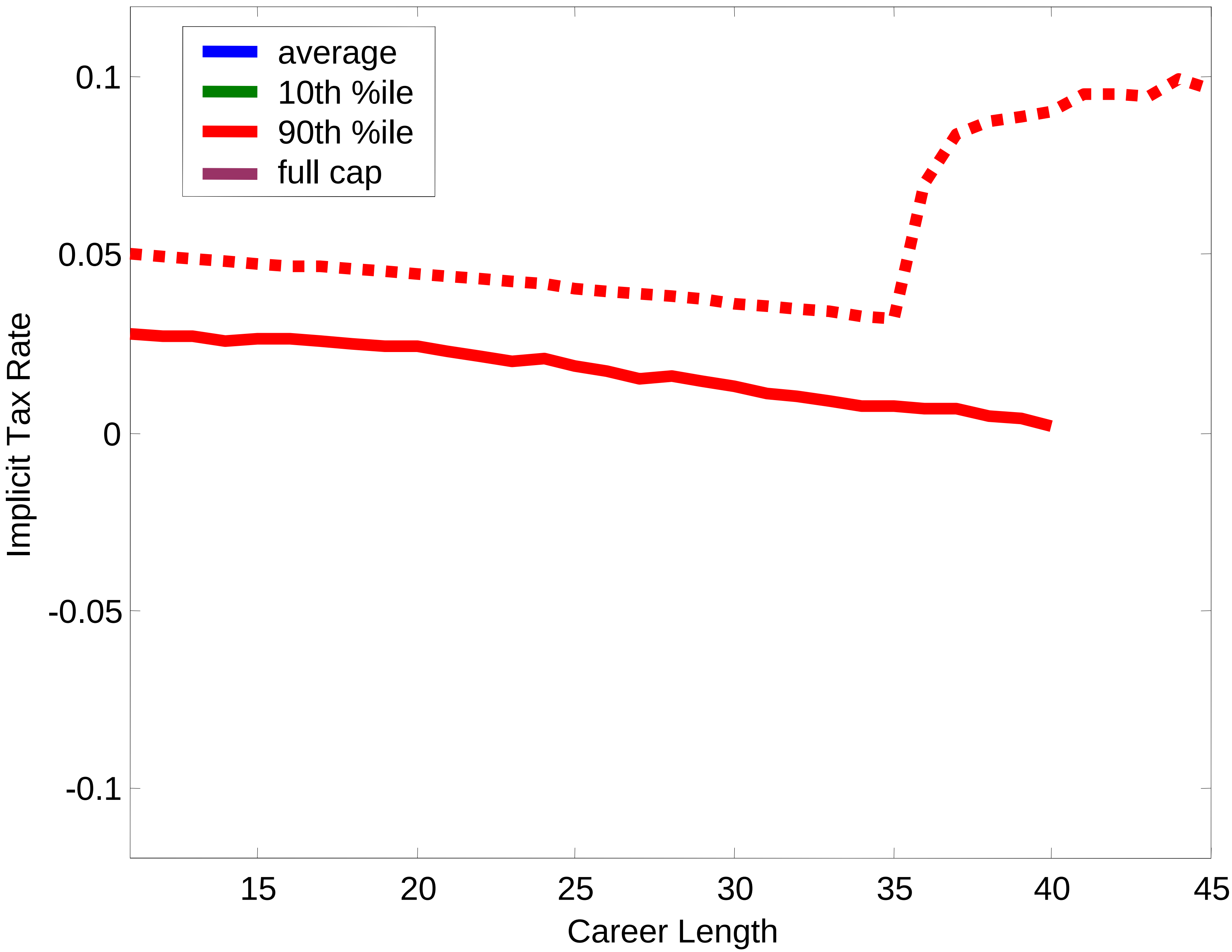

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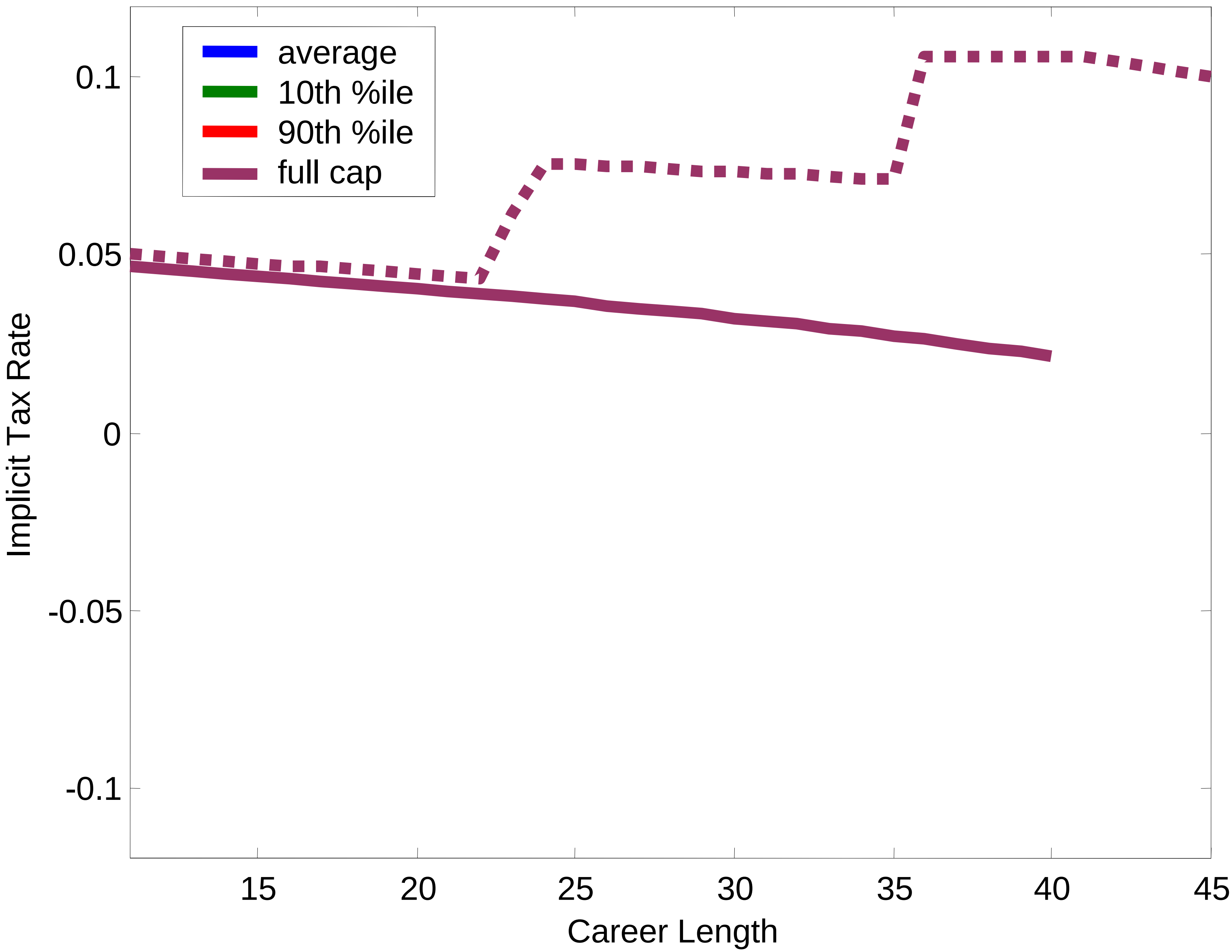
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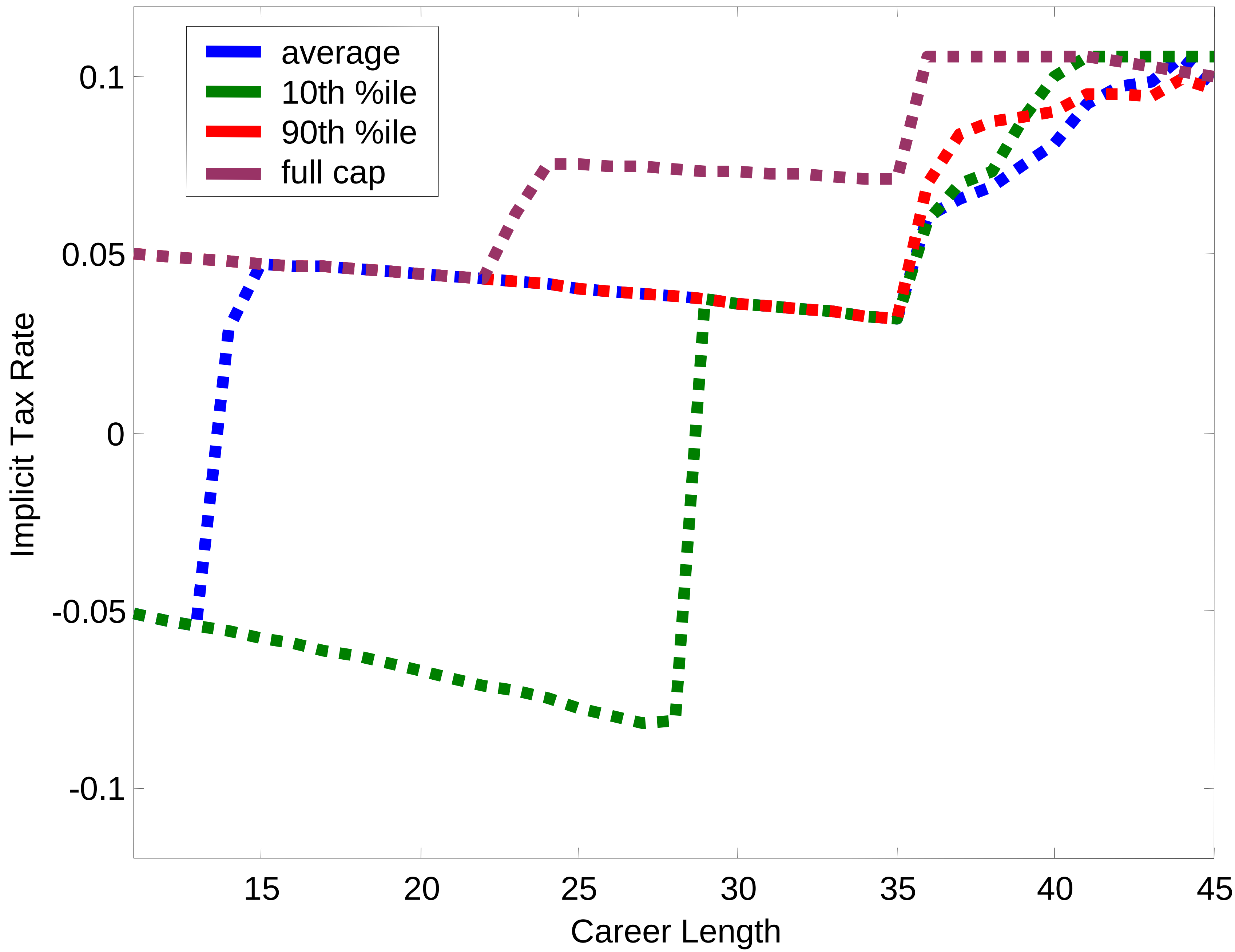

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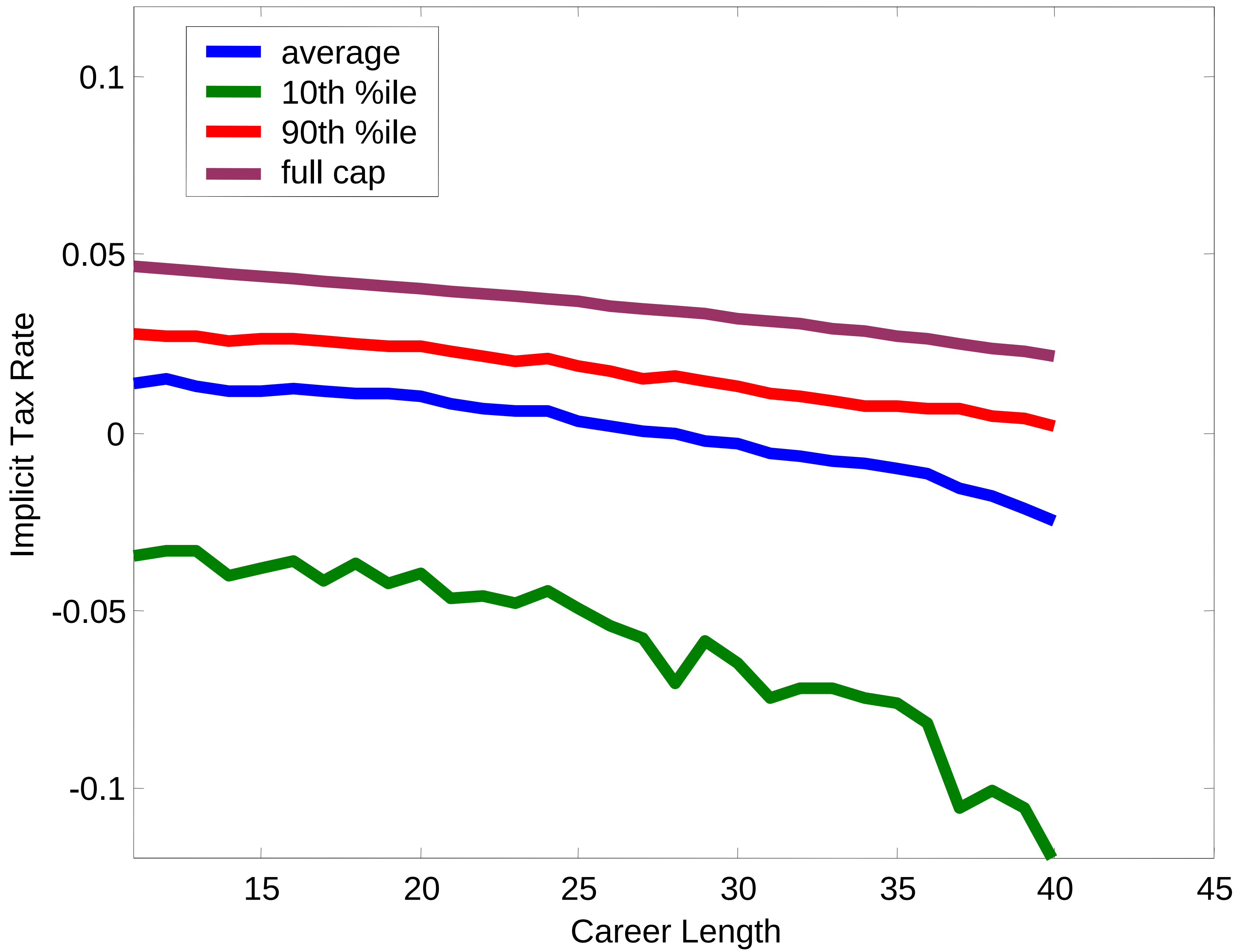

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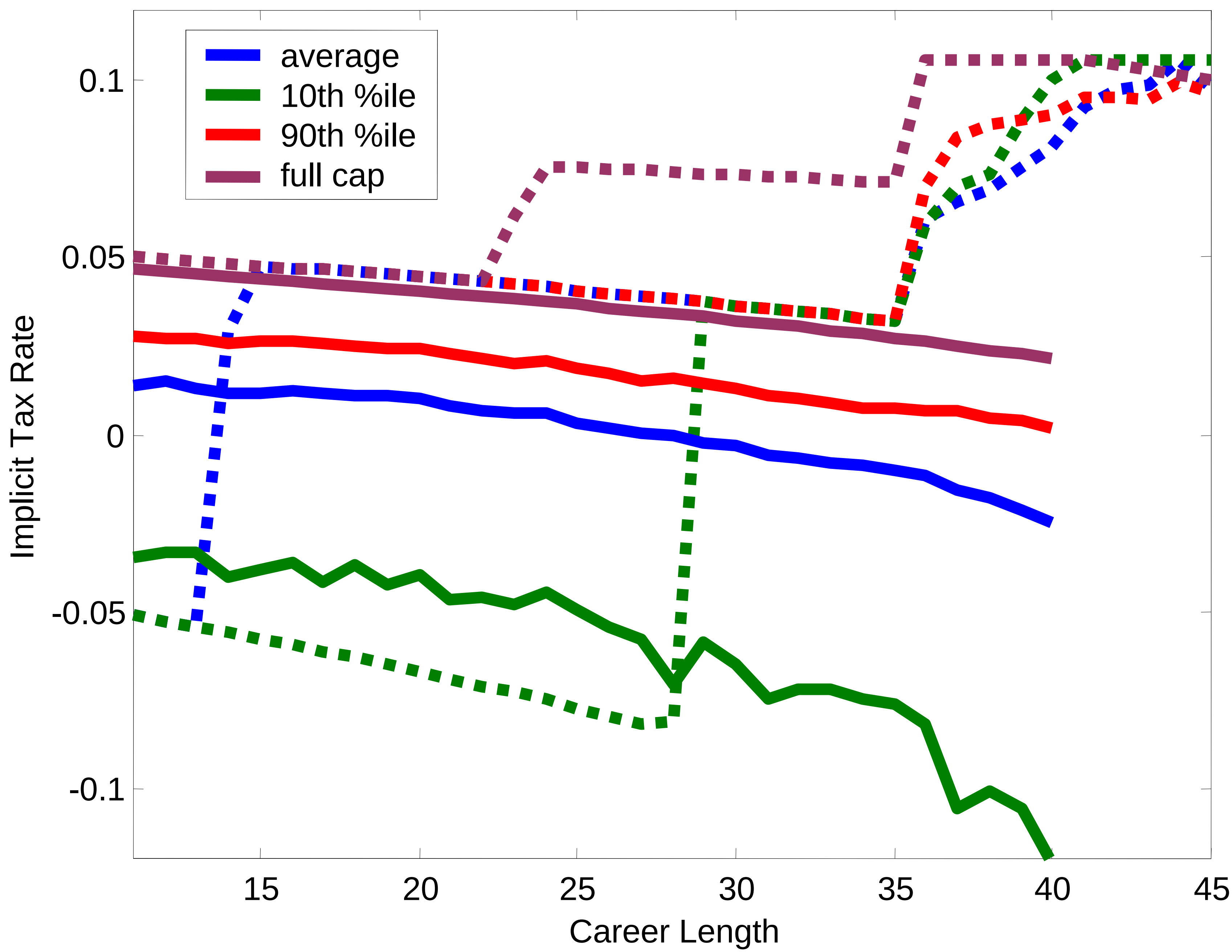
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Medicare As A Secondary Payer: A Tax on Work by Older Americans

- If you are 65+ and eligible for Medicare and if you work for a firm with 20+ employees offering health insurance, then you effectively don't get Medicare (it becomes a secondary payer)
- Lowers take home pay from work
- 65+ workers have <u>very</u> high labor supply elasticities

Alternative Policy: Medicare as a Primary Payer

- You get Medicare whether you work or not. Employers could provide Medigap coverage.
- Result = Higher take home pay, greater labor force participation, greater Medicare payouts, higher income tax collections
- Impact on federal government budget = approximately zero.

Summary

- Flat payroll taxes and the current benefit formula together imply that workers face increasing disincentives for working long careers
- This contributes to suboptimally long retirement periods

Summary

- Policies that flatten the pattern of implicit taxes as individuals age would reduce the disincentives of working longer careers
- These policies can be enacted in ways that are either revenue- or benefit-neutral in aggregate
- These policies would involve some redistribution from individuals who work short careers to individuals who work long careers