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# **Pension coverage, retirement status and earnings replacement rates among Canadian seniors**

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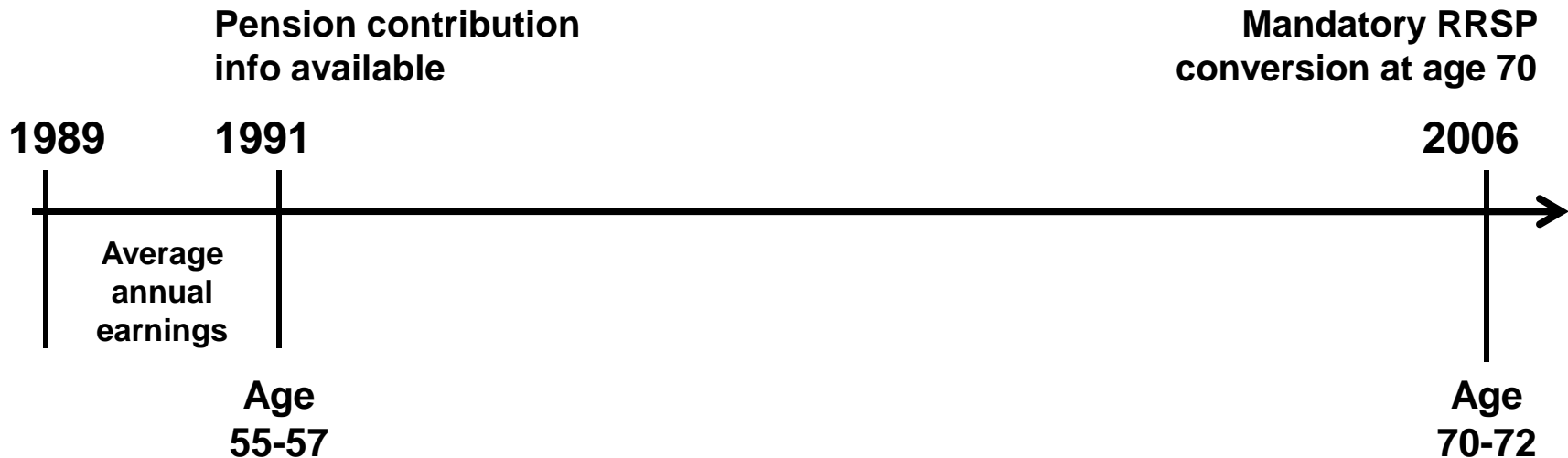


## Research question and data source

- Do individuals (couples) with and without RPP coverage at age 55 achieve comparable earnings replacement rates at age 70?
- Longitudinal Administrative Data base (LAD) -- 20% sample of tax filers
- An income-based approach
- Analysis focuses on differences between groups, not on absolute levels



# Sample selection



## Other criteria

- Positive earnings in each of 1989, 1990 and 1991
- Average annual earnings 1989 to 1991  $\geq$  \$10,000
- Self-employed individuals excluded
- Individuals with total incomes  $\geq$  \$500,000 in 2006 excluded
- Sample comprised of 32,200 men



## Men aged 55 to 57 in 1991: RPP coverage and average earnings by 1989-1991 earnings quintiles

	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	<u>Q5</u>
No RPP 1991 or 1992	77	45	29	21	23
RPP in one year	8	11	12	13	10
<u>RPP in both years</u>	<u>15</u>	<u>44</u>	<u>59</u>	<u>66</u>	<u>67</u>
Total	100%	100%	100%	100%	100%
<u>Average annual earnings (1989-91)</u>					
No RPP 1991 or 1992	22,300	39,050	51,450	65,800	138,500
RPP in one year	24,200	39,850	51,950	66,200	106,800
RPP in both years	25,500	40,150	51,800	66,500	107,750



# Validating our key independent variable

**Taxfilers aged 55 to 57 in 2001: Pension coverage over previous decade**

<u># of years of coverage in previous decade</u>	<u>No RPP coverage in 2001 or 2002</u>	<u>RPP coverage in both 2001 and 2002</u>
None	70.7	1.5
One	3.7	1.7
Two	2.9	1.9
Three	2.6	2.0
Four	2.2	2.3
Five	2.1	2.3
Six	2.1	2.7
Seven	2.2	3.5
Eight	2.5	4.8
Nine	3.5	10.0
Ten	5.5	67.3
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>

79.9% (bracketed next to No RPP coverage in 2001 or 2002)

85.6% (bracketed next to RPP coverage in both 2001 and 2002)

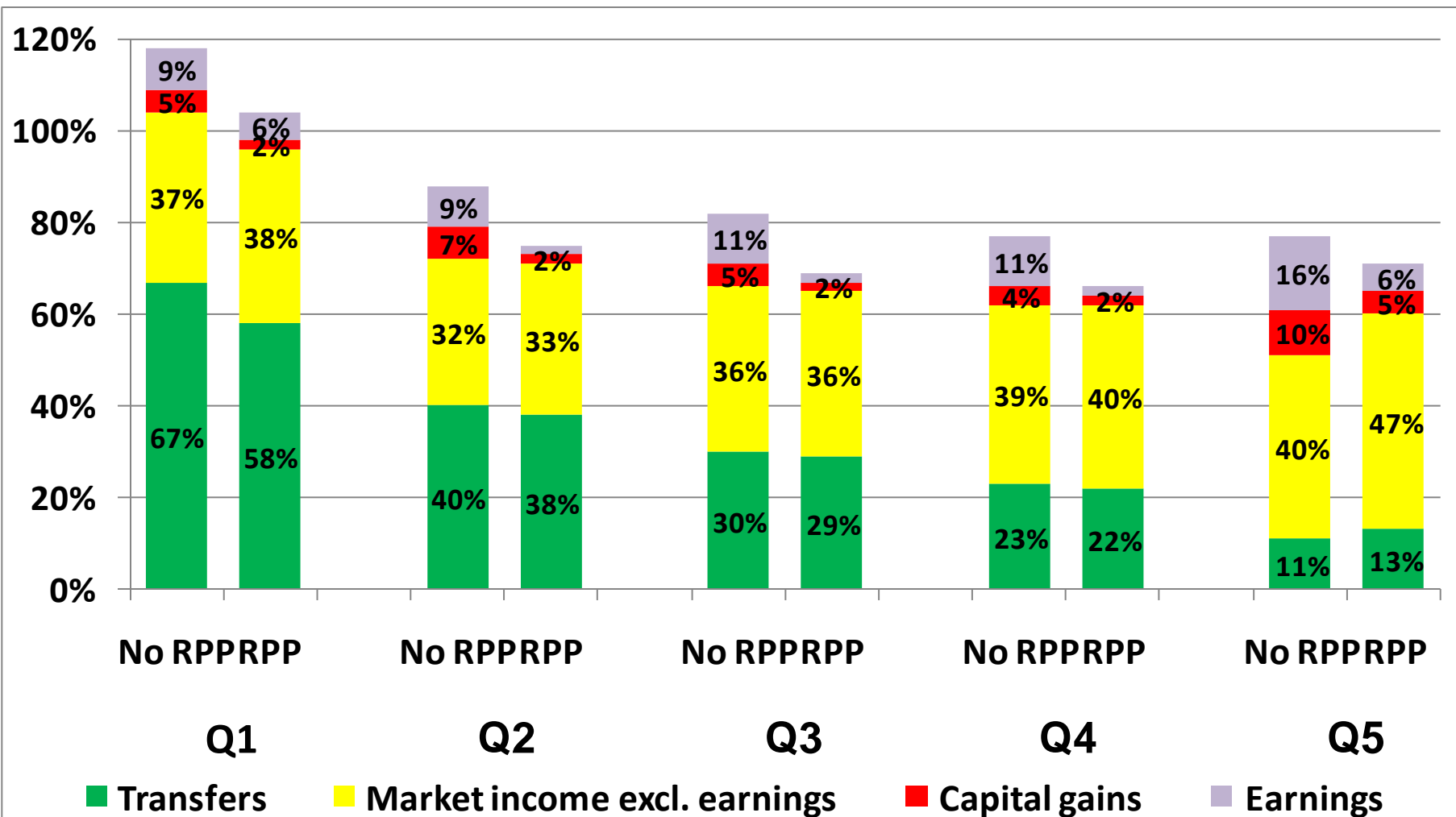


## Average market income received by men in 2006, by 1989-1991 earnings quintile and pension status

	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	<u>Q5</u>
<b><u>Pensions &amp; superannuations</u></b>					
No RPP	5,350	8,150	12,700	17,000	29,200
RPP - Both years	7,950	11,600	16,200	23,150	42,800
<b><u>Interest, investment &amp; dividends</u></b>					
No RPP	1,800	2,700	3,700	5,850	19,700
RPP - Both years	850	900	1,200	1,700	4,350
<b><u>Capital gains/losses</u></b>					
No RPP	1,200	2,650	2,400	2,800	14,350
RPP - Both years	500	650	1,000	1,400	5,000
<b><u>Earnings</u></b>					
No RPP	1,900	3,250	5,250	7,000	20,050
RPP - Both years	1,550	850	1,050	1,550	5,150

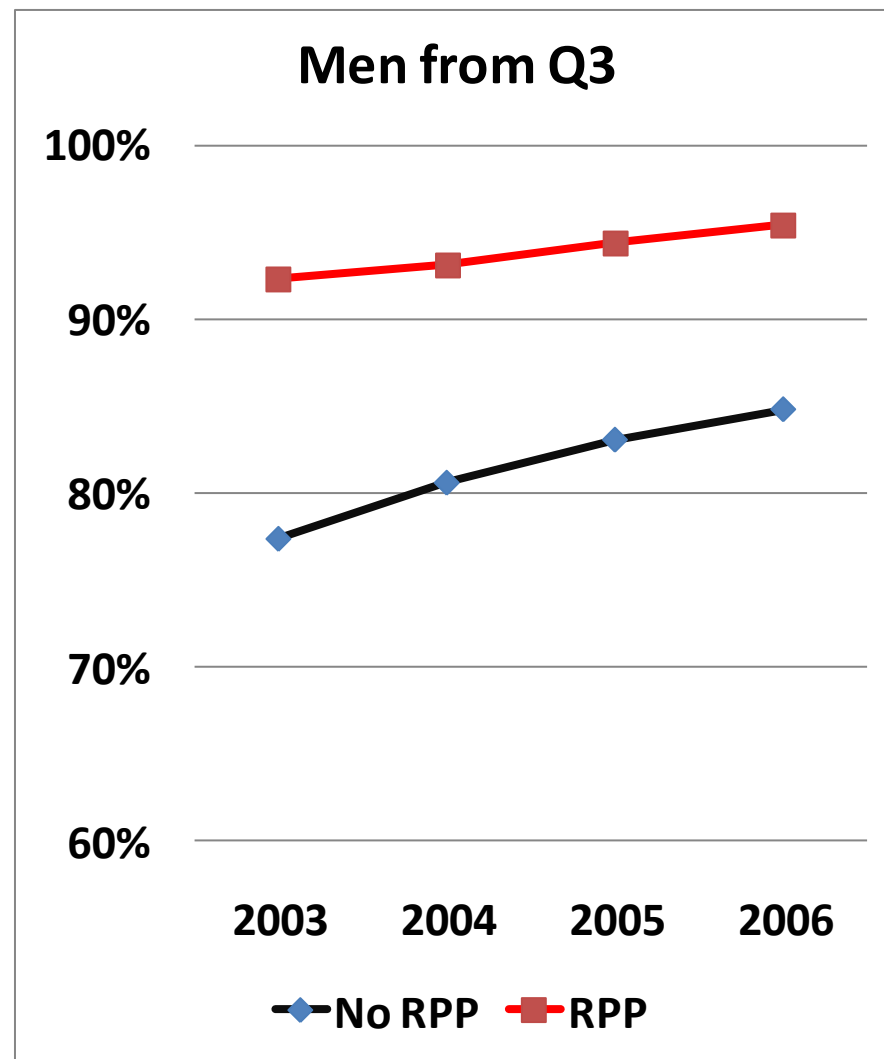
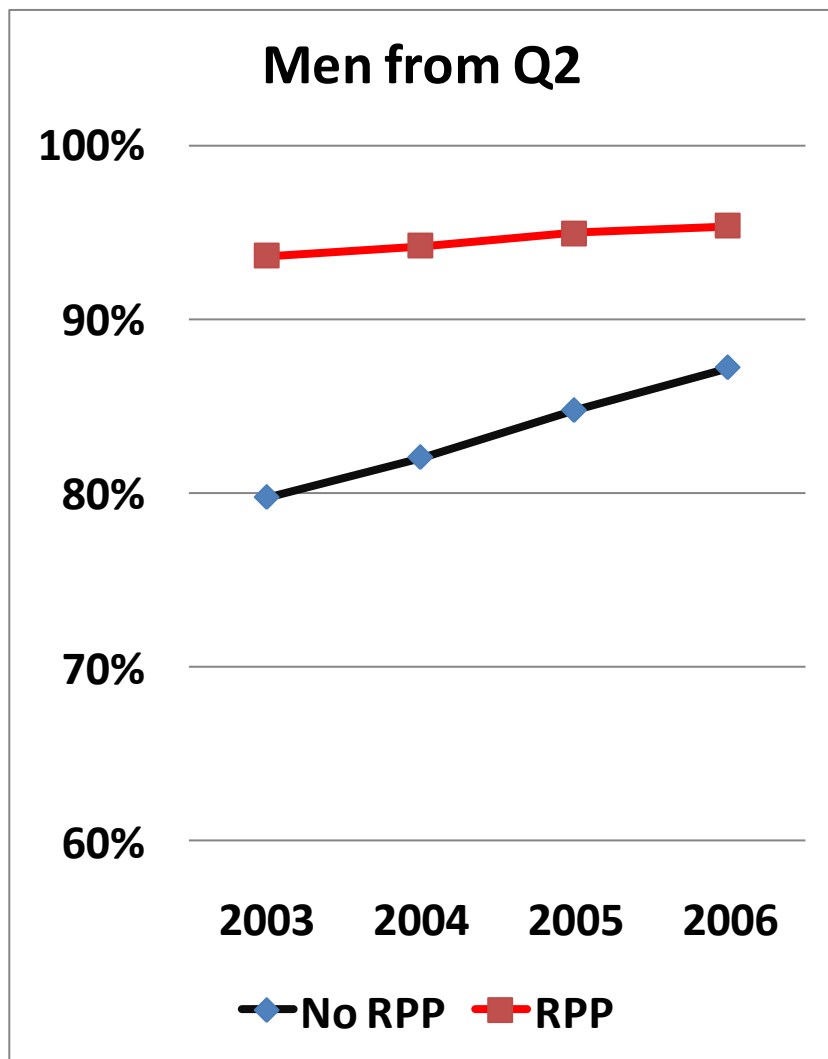


# Men aged 70-72: Average income in 2006 as a percent of average annual earnings in 1989-1991



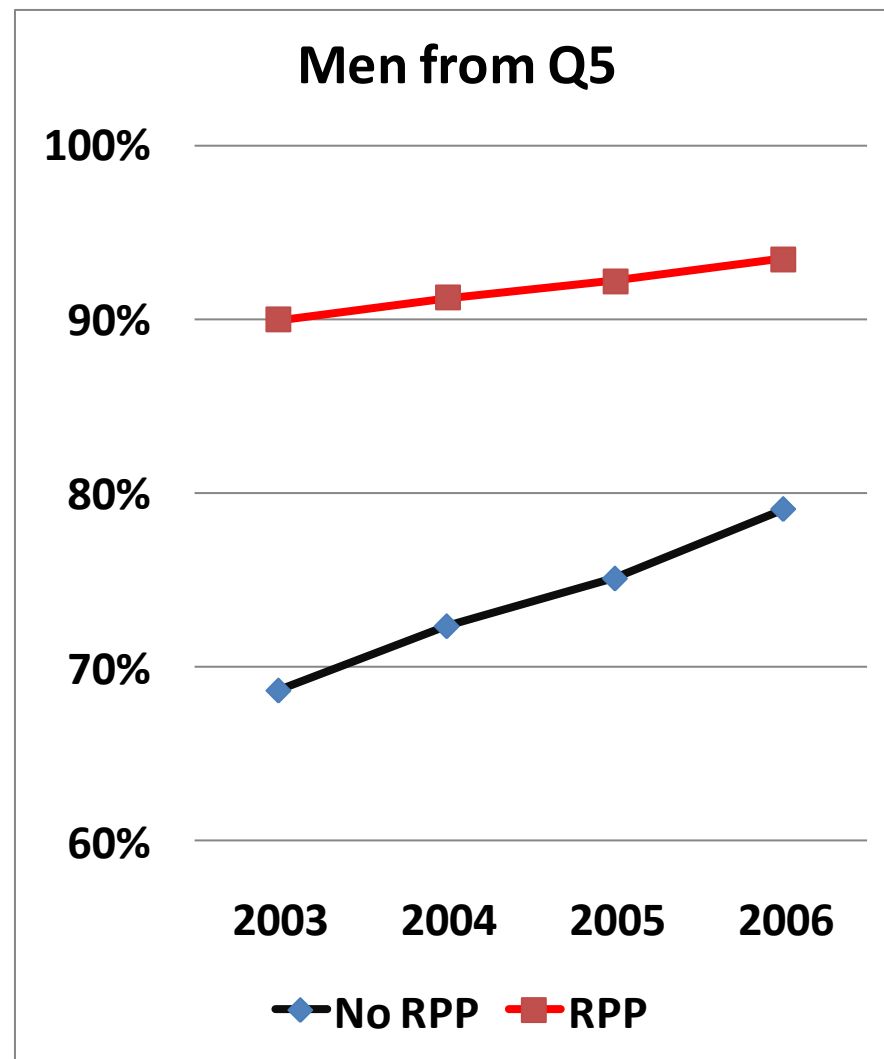
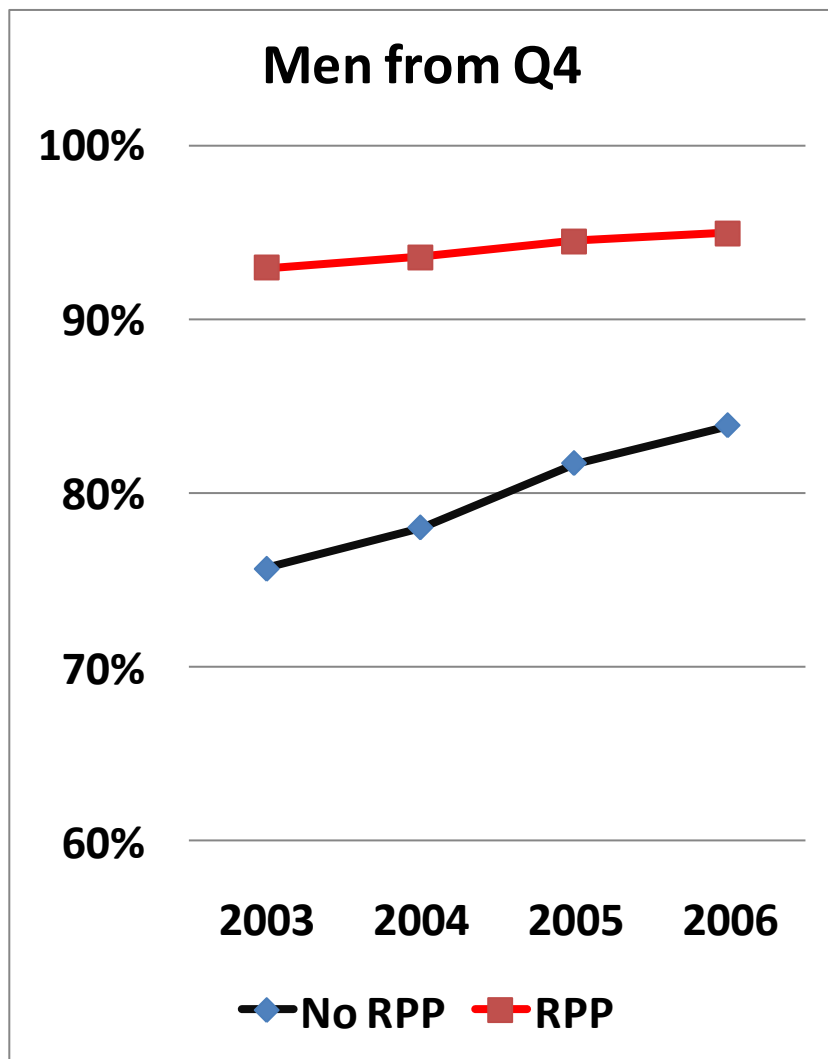


# Predicted probability of being retired

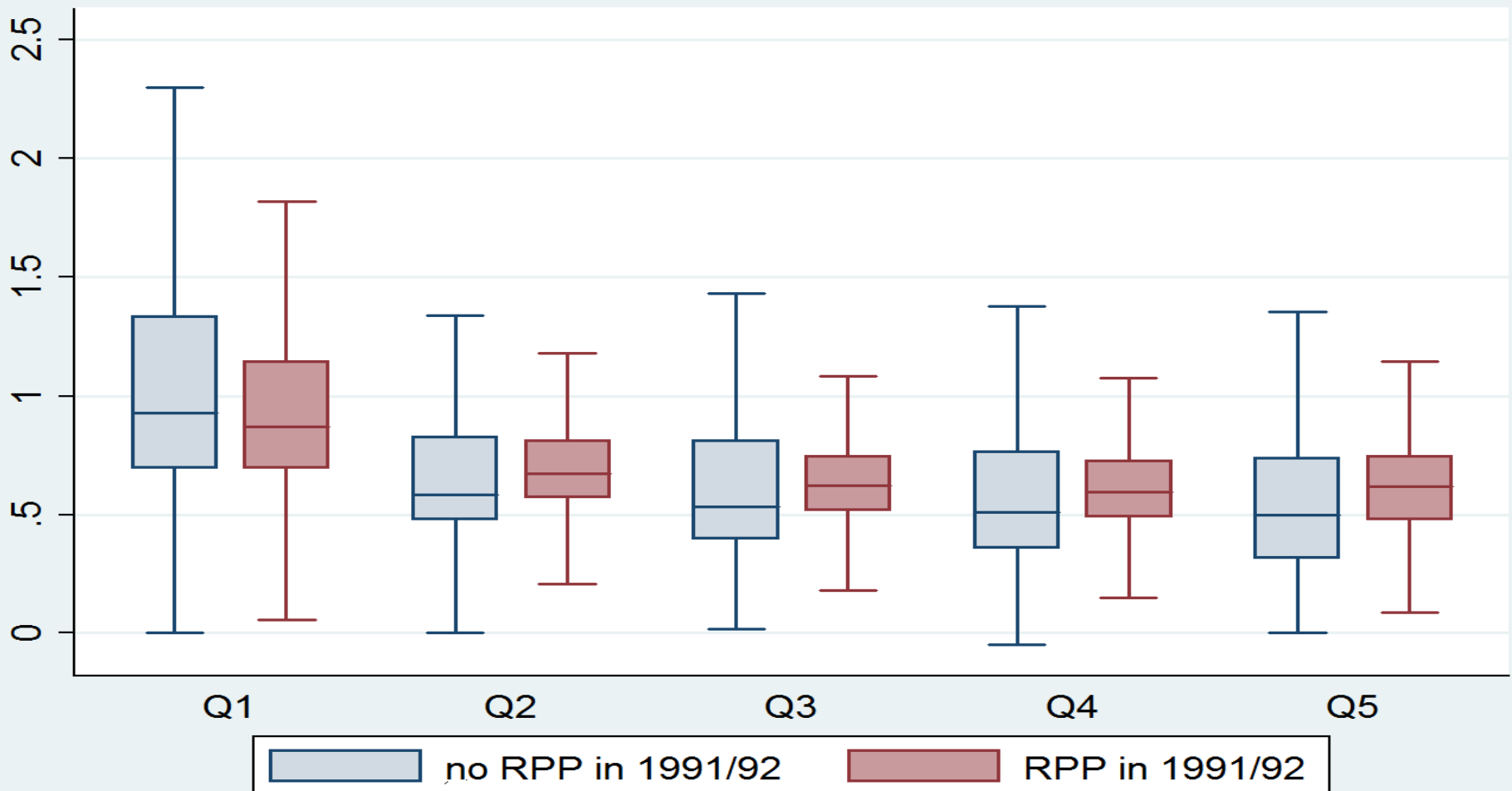




# Predicted probability of being retired

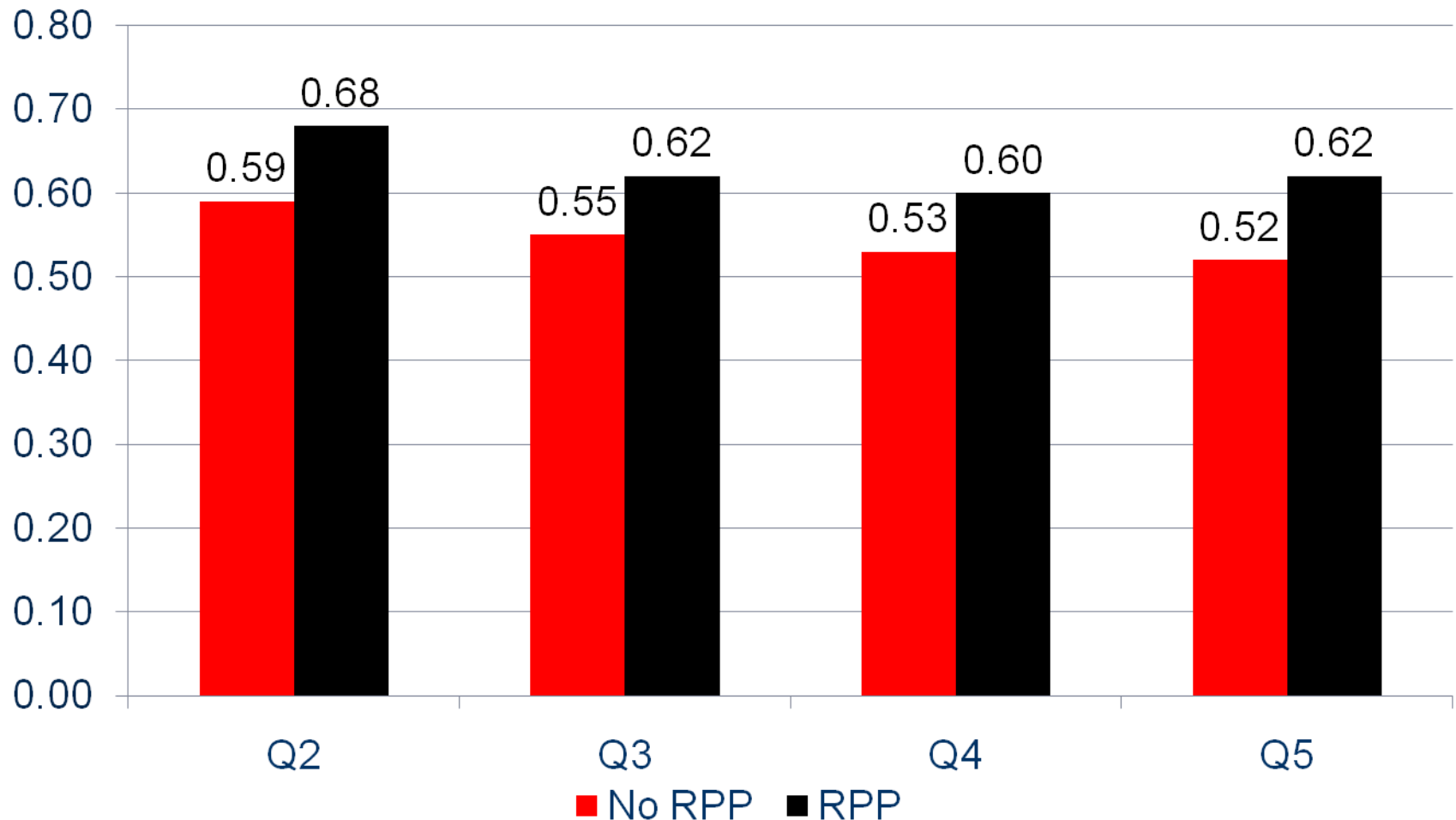


# Distribution of replacement rates, by earnings quintiles and pension coverage



excludes outside values

# Median earnings replacement rates of retired men in 2005-2007, by RPP coverage



## Summing up thus far

- 1) RPP members more likely to be retired than non-members
- 2) Financial characteristics of RPP members and non-members are similar when assessed in terms of **averages**
- 3) However, averages conceal differences in the underlying **distributions** of earnings replacement rates -- specifically, the wider range evident among RPP non-members than members
- 4) The **median** earnings replacement rates of retired male RPP non-members is 7 to 9 percentage points lower than the median of RPP members (among those from Q2 to Q4)



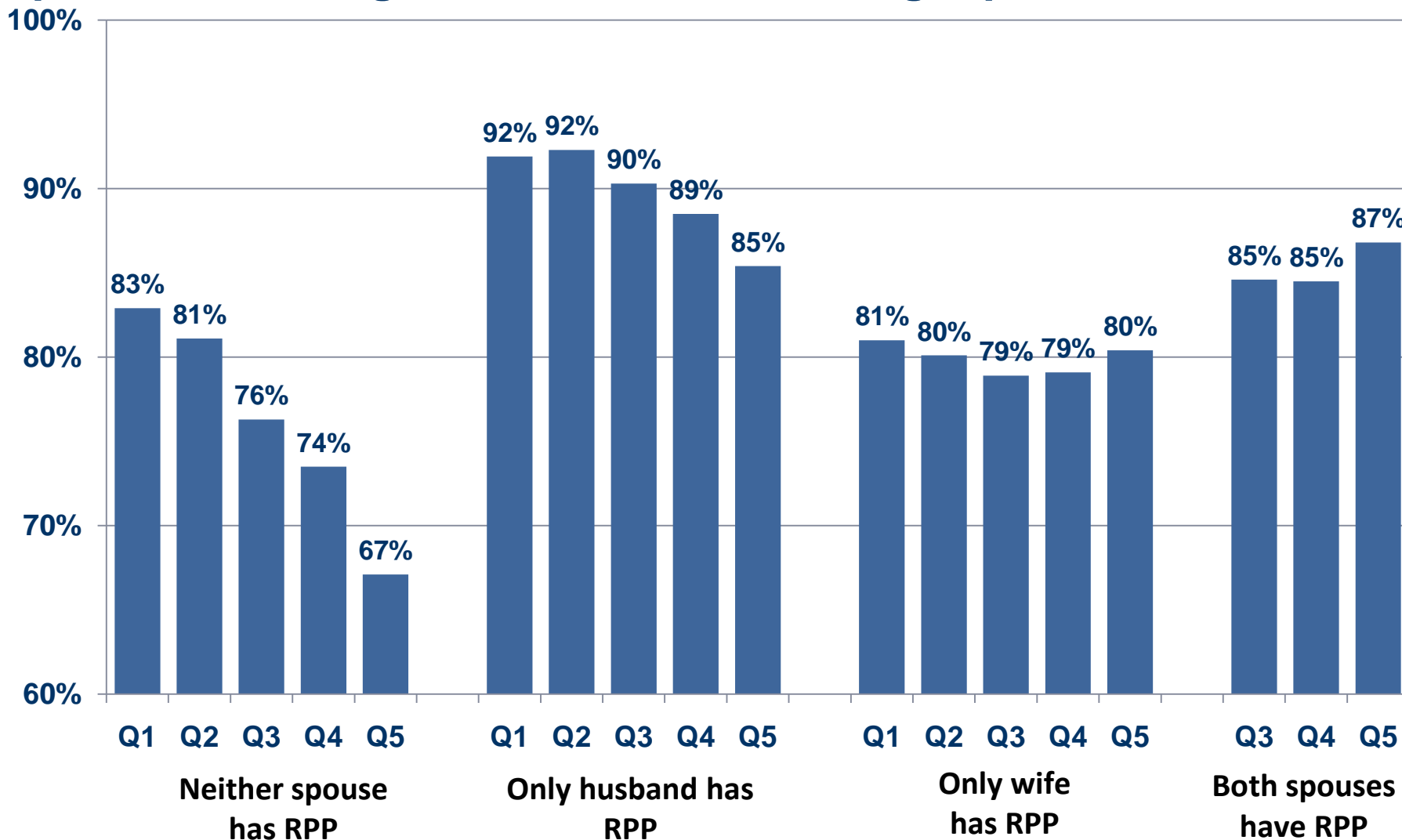
## Couples in which husbands were aged 55 to 57 in 1991: RPP coverage and average earnings by 1989-1991 earnings quintiles

	<u>Q1</u>	<u>Q2</u>	<u>Q3</u>	<u>Q4</u>	<u>Q5</u>
Neither spouse RPP	73	42	27	19	20
Only husband RPP	14	37	42	37	26
Both spouses RPP	--	2	8	20	32
Only wife RPP	7	9	10	10	9
Other	<u>6</u>	<u>10</u>	<u>12</u>	<u>14</u>	<u>13</u>
Total	100%	100%	100%	100%	100%
Couples' average annual earnings (1989-91)	\$26,900	\$49,800	\$66,700	\$86,600	\$141,100

Analysis based on couples that were together over the 1989 to 2006 period.  
Sample size of 52,650 couples.

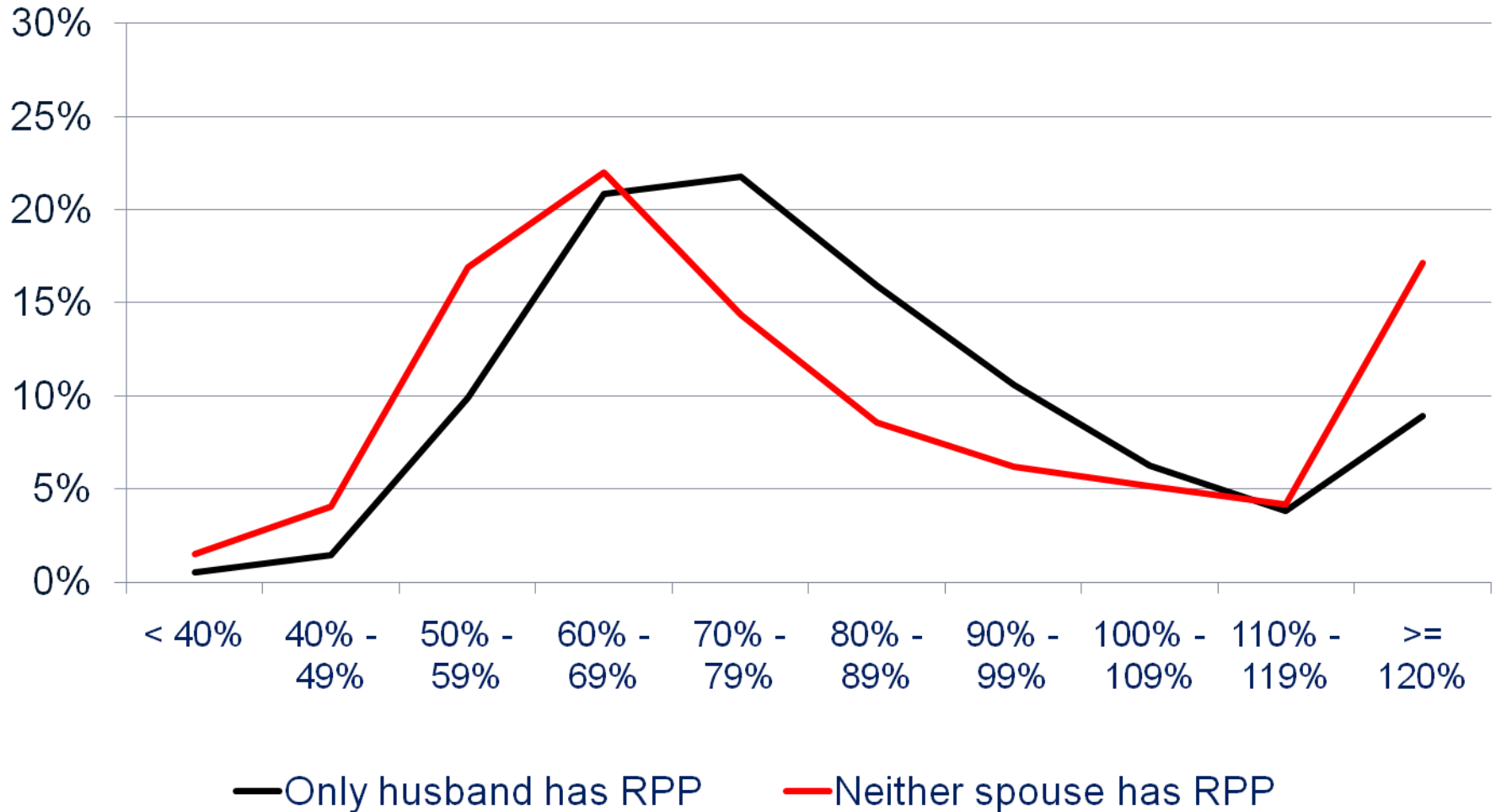


## Percent of couples in sample retired in 2006, by pension coverage and 1989-1991 earnings quintile



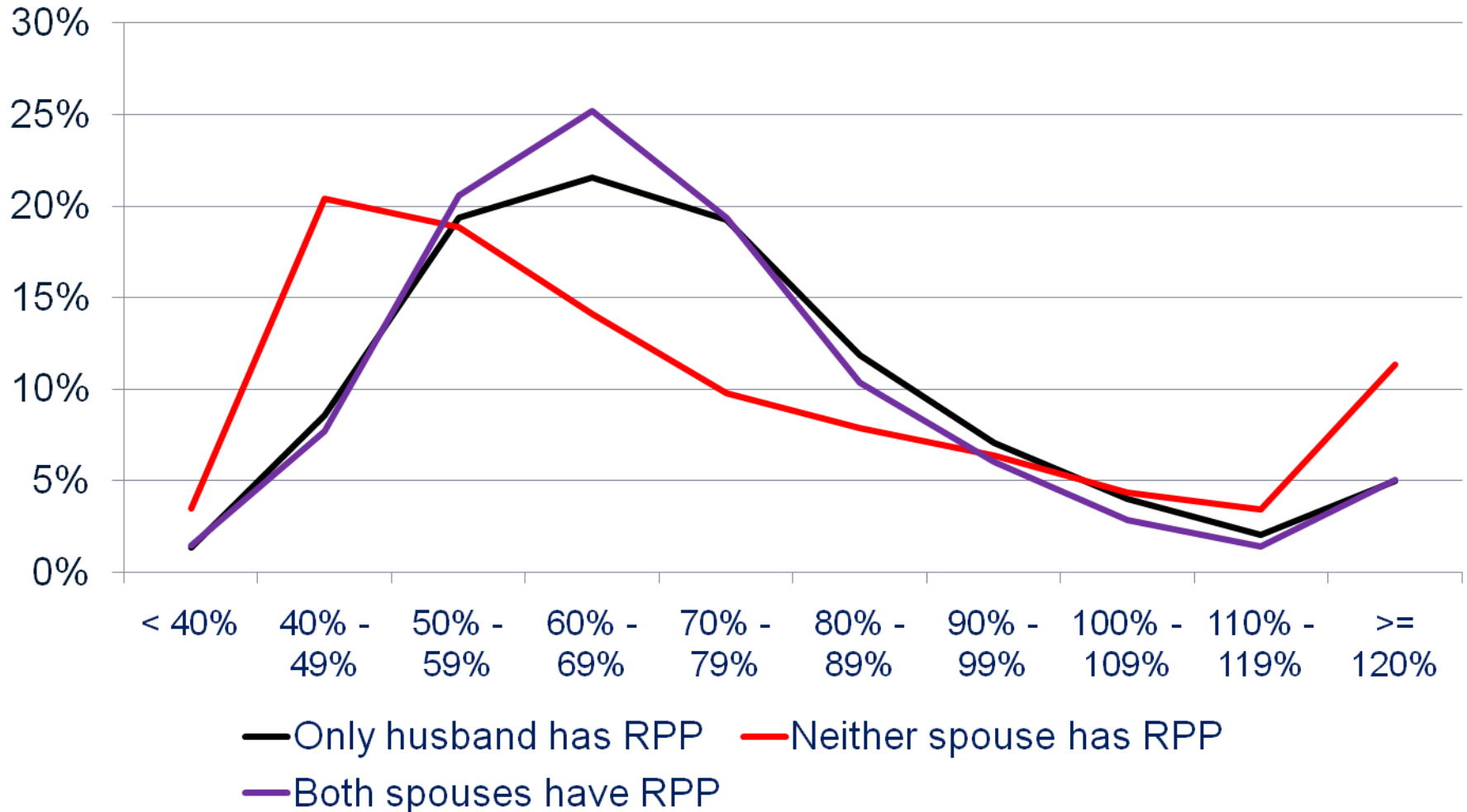


# Retired couples from Q2: Distribution of earnings replacement rates in 2006



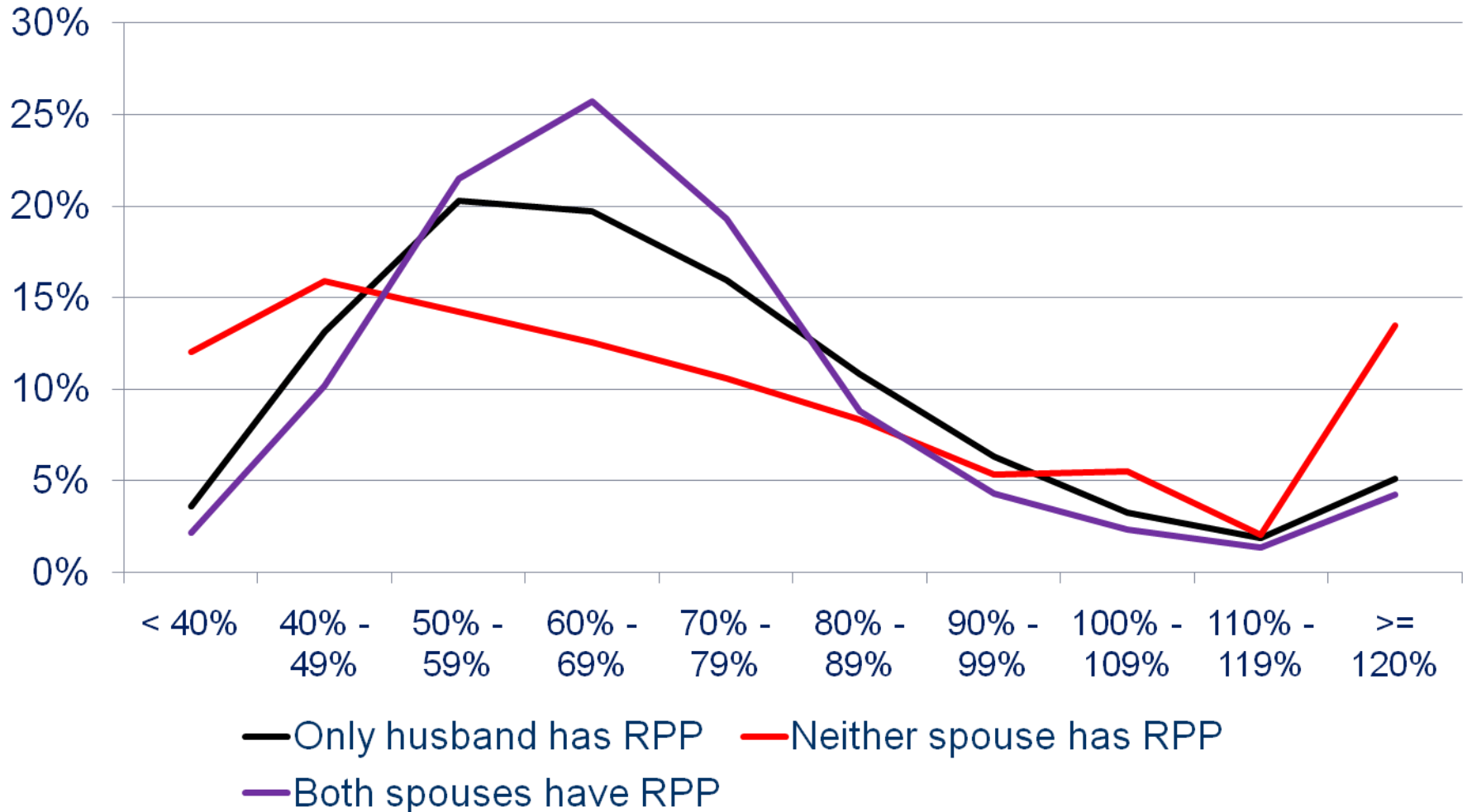


# Retired couples from Q3: Distribution of earnings replacement rates in 2006





# Retired couples from Q4: Distribution of earnings replacement rates in 2006



## Summing up couples

- 1) Couples with RPPs more likely to be retired than couples without RPPs
- 2) Wider range of replacement rates evident among retired couples without RPPs than among couples with RPPs
- 3) The **median** earnings replacement rates of retired couples without RPPs is 3 to 6 percentage points lower than the median of couples with RPPs\*

\* Among couples from Q2 to Q4, using couples in which the only the husband has an RPP or both spouses have an RPP in the comparison

# Conclusions (1)

Among retirees, a wide dispersion of replacement rate outcomes is evident among RPP non-members

How the replacement rates of RPP members and non-members compare varies across different measures

- **averages** indicate that RPP non-members fare as well as or better than RPP members
- the **median** earnings replacement rates of RPP non-members are lower than the medians of RPP members -- a 7 to 9 % point difference among retired men, a 3 to 6 % point difference among retired couples (Q2 to Q4)
- larger **shares** of RPP non-members have replacement below various thresholds... but larger shares have replacement rates above various thresholds as well



## Limitations and next steps

Analysis does not directly address the extent to which RPP members and non-members maintain their standard of living post-retirement

- Need to move to a family-level of analysis using adult-equivalent adjusted income

Analysis silent on whether retirement patterns reflect choice or necessity

- Examine timing and reasons for retirement among RPP members and non-members using Survey of Older Workers

Data gaps remain an obstacle