

**Does race response shift impact racial inequality?****SUPPLEMENTARY MATERIALS****Table S1.** Composition and structure of overlapping samples in rounds 4 and 5 of the PME survey

Round 4	Round 5												Total	
	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013		
2002	100	74.04	0	0	0	0	0	0	0	0	0	0	0	6.04
2003	0	25.96	74.35	0	0	0	0	0	0	0	0	0	0	8.07
2004	0	0	25.65	74.57	0	0	0	0	0	0	0	0	0	8.81
2005	0	0	0	25.43	74.06	0	0	0	0	0	0	0	0	9.12
2006	0	0	0	0	25.94	74.80	0	0	0	0	0	0	0	9.49
2007	0	0	0	0	0	25.20	74.44	0	0	0	0	0	0	9.47
2008	0	0	0	0	0	0	25.56	75.32	0	0	0	0	0	9.76
2009	0	0	0	0	0	0	0	24.68	75.54	0	0	0	0	9.71
2010	0	0	0	0	0	0	0	0	24.46	74.81	0	0	0	9.58
2011	0	0	0	0	0	0	0	0	0	25.19	74.56	0	0	9.89
2012	0	0	0	0	0	0	0	0	0	0	25.44	100	0	10.07
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Notes: Number of observations = 400,046. Population size= 18,457,504.

**Table S2.** Racial classification and income mass at time  $t$  by time  $t+9$ , ternary racial scheme, 2002-2012

		time $t + 9$ months			Total
		Whites	Browns	Blacks	
time $t$	Whites	9,113,854 (110,805,056)	1,321,082 (10,027,863)	142,805 (1,174,937)	10,577,740 (122,007,856)
	Browns	1,338,292 (10,343,822)	4,439,234 (27,959,001)	445,761 (2,602,057)	6,223,288 (40,904,879)
	Blacks	153,771 (1,293,366)	432,809 (2,560,231)	1,069,897 (6,593,212)	1,656,476 (10,446,808)
	Total	10,605,917 (122,442,244)	6,193,125 (40,547,095)	1,658,463 (10,370,205)	18,457,504 (173,359,543)

**Table S3.** Descriptive statistics by racial response type, ternary format

	w-w	w-br	w-b	br-w	br-br	br-b	b-w	b-br	b-b	Total
Age	38.51 (0.07)	36.80 (0.09)	38.18 (0.25)	<b>36.77</b> <b>(0.09)</b>	37.05 (0.06)	<b>36.69</b> <b>(0.14)</b>	38.34 (0.25)	37.28 (0.14)	38.94 (0.10)	37.86 (0.05)
Female	54.06 (0.15)	55.82 (0.31)	56.98 (0.94)	<b>56.13</b> <b>(0.31)</b>	57.07 (0.18)	<b>55.15</b> <b>(0.53)</b>	55.95 (1.01)	54.77 (0.52)	54.44 (0.35)	55.16 (0.11)
Education										
Primary School	11.37 (0.23)	17.34 (0.34)	19 (0.87)	<b>16.32</b> <b>(0.33)</b>	20.79 (0.29)	<b>21.14</b> <b>(0.50)</b>	17.47 (0.78)	21.99 (0.52)	23.79 (0.48)	15.74 (0.23)
Middle School	17.51 (0.30)	24.85 (0.36)	25.86 (0.96)	<b>24.3</b> <b>(0.34)</b>	28.28 (0.24)	<b>28.85</b> <b>(0.54)</b>	24.91 (0.94)	28.86 (0.54)	28.03 (0.40)	22.4 (0.24)
High School	34.43 (0.40)	40.09 (0.39)	37.24 (1.03)	<b>40.94</b> <b>(0.40)</b>	39.62 (0.30)	<b>40.06</b> <b>(0.62)</b>	36.99 (0.98)	39.68 (0.59)	37.19 (0.49)	37.02 (0.27)
Some college or more	36.69 (0.79)	17.73 (0.43)	17.9 (0.92)	<b>18.44</b> <b>(0.47)</b>	11.3 (0.25)	<b>9.94</b> <b>(0.40)</b>	20.63 (1.01)	9.47 (0.37)	11 (0.37)	24.84 (0.55)
Hourly income per capita (R\$)	12.16 (0.22)	7.59 (0.08)	8.23 (0.21)	<b>7.73</b> <b>(0.09)</b>	6.30 (0.05)	<b>5.83</b> <b>(0.07)</b>	8.41 (0.19)	5.91 (0.07)	6.16 (0.07)	9.39 (0.14)
Metropolitan region (%)										
Recife	2.04 (0.09)	10.1 (0.28)	2.4 (0.23)	<b>10.04</b> <b>(0.27)</b>	9.89 (0.23)	<b>6.49</b> <b>(0.30)</b>	2.13 (0.20)	6.61 (0.30)	1.09 (0.08)	5.25 (0.07)
Salvador	1.11 (0.09)	4.73 (0.23)	3.33 (0.31)	<b>4.48</b> <b>(0.25)</b>	10.83 (0.30)	<b>20.6</b> <b>(0.68)</b>	3.45 (0.32)	22.21 (0.70)	13.8 (0.55)	5.69 (0.10)
Belo Horizonte	7.09 (0.21)	18.29 (0.39)	9.22 (0.51)	<b>17.68</b> <b>(0.38)</b>	14.19 (0.31)	<b>19.51</b> <b>(0.60)</b>	8.07 (0.45)	18.38 (0.55)	9.97 (0.33)	11.13 (0.12)
Rio de Janeiro	28.73 (0.48)	14.01 (0.41)	22.29 (1.13)	<b>14.29</b> <b>(0.45)</b>	37.85 (0.73)	<b>17.77</b> <b>(0.76)</b>	23.55 (1.22)	17.91 (0.71)	47.07 (1.05)	29.28 (0.28)
São Paulo	46.37 (0.61)	49.82 (0.71)	45.58 (1.33)	<b>50.28</b> <b>(0.70)</b>	26.76 (0.76)	<b>31.98</b> <b>(1.02)</b>	47.7 (1.41)	31.68 (0.99)	21.88 (0.78)	40.07 (0.32)
Porto Alegre	14.66 (0.25)	3.05 (0.13)	17.17 (0.77)	<b>3.23</b> <b>(0.13)</b>	0.48 (0.03)	<b>3.64</b> <b>(0.23)</b>	15.1 (0.75)	3.2 (0.21)	6.19 (0.34)	8.58 (0.12)
Self respondent (%)	42.02 (0.27)	39.08 (0.36)	38.77 (0.97)	<b>39.04</b> <b>(0.37)</b>	38.86 (0.23)	<b>40.57</b> <b>(0.57)</b>	41.25 (1.02)	42.17 (0.56)	41.9 (0.44)	40.76 (0.19)
Sample size (n)	182,331	30,027	3,168	<b>30,045</b>	103,567	<b>11,795</b>	3,231	11,357	23,989	399,510

Notes: "w" refer to whites, "br" to browns and "b" to blacks. Thus "w-br" refer to whites at time  $t$  who reclassified as browns at time  $t+9$ . Standard errors are in parentheses. Sample sizes were constrained to variables with non-missing values in 2002-2012.

**Table S4.** Measures of racial inequality, binary and ternary classification schemes

	(2)	(3)	(4)	(5)
White/ Non-white	1.77	1.78	1.78	1.82
White/ Brown	1.75	1.76	1.76	1.80
White/ Black	1.83	1.85	1.87	1.89
Brown/ Black	1.04	1.05	1.05	1.02

Note: (2) refers to earnings inequality at time  $t$ ; (3) is the inequality at time  $t+9$ ; (4) lightening counterfactual; (5) darkening counterfactual.