College/high school median annual earnings gap, 1979–2012

In constant 2012 dollars

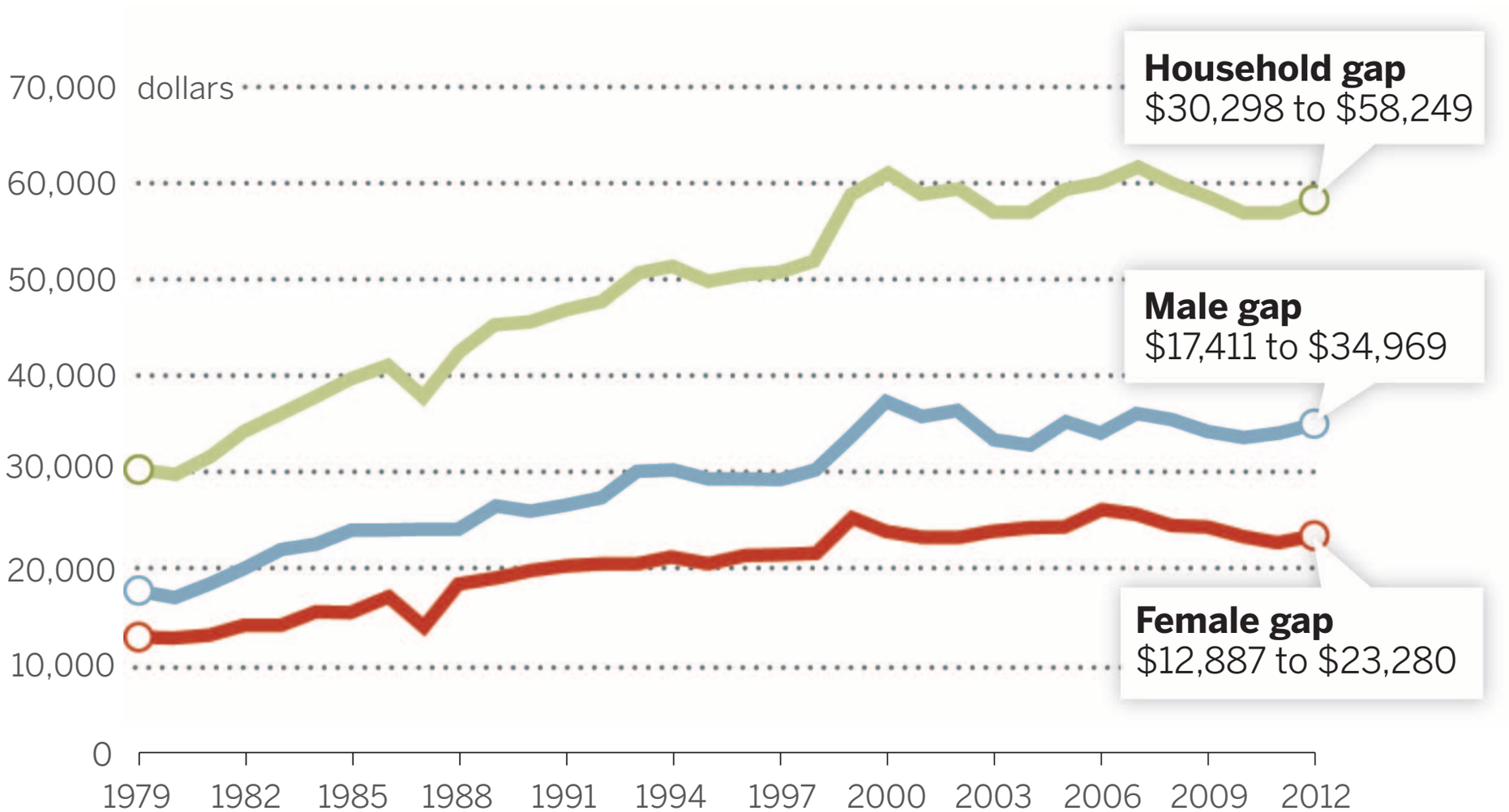


Fig. 1. College/high school median annual earnings gap, 1979–2012. Figure is constructed using Census Bureau P-60 (1979–1991) and P-25 (1992–2012) tabulations of median earnings of full-time, full-year workers by educational level and converted to constant 2012 dollars (to account for inflation) using the CPI-U-RS price series. Prior to 1992, college-educated workers are defined as those with 16 or more years of completed schooling, and high school–educated workers are those with exactly 12 years of completed schooling. After 1991, college-educated workers are those who report completing at least 4 years of college, and high school–educated workers are those who report having completed a high school diploma or GED credential.

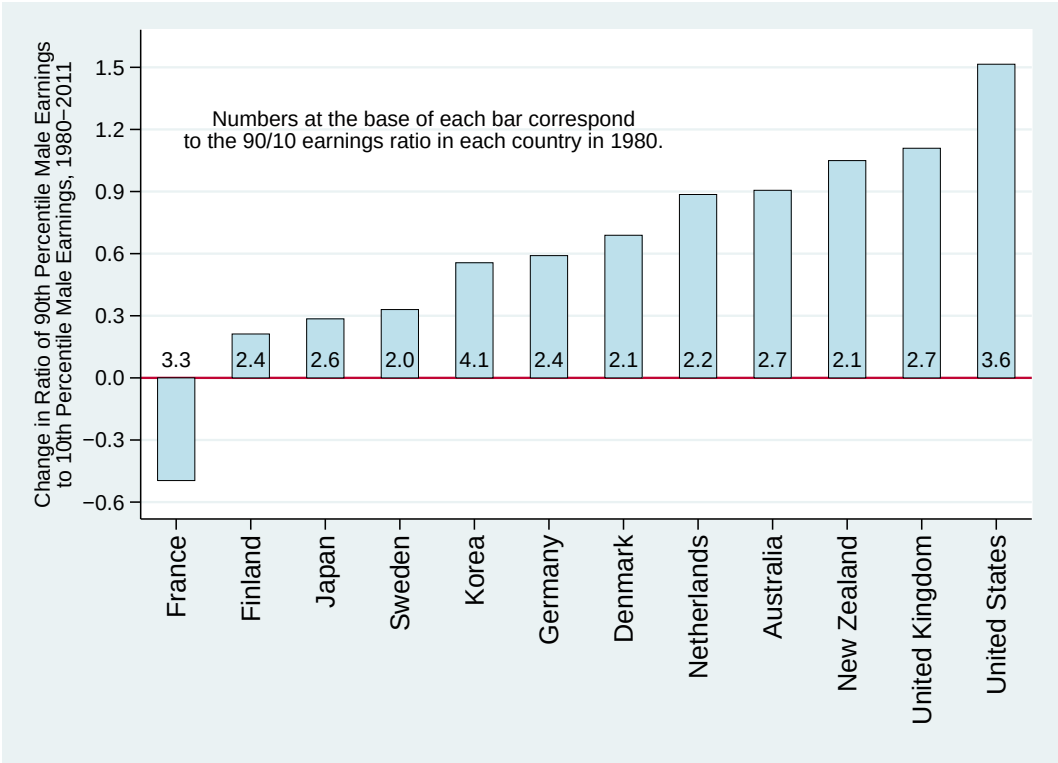
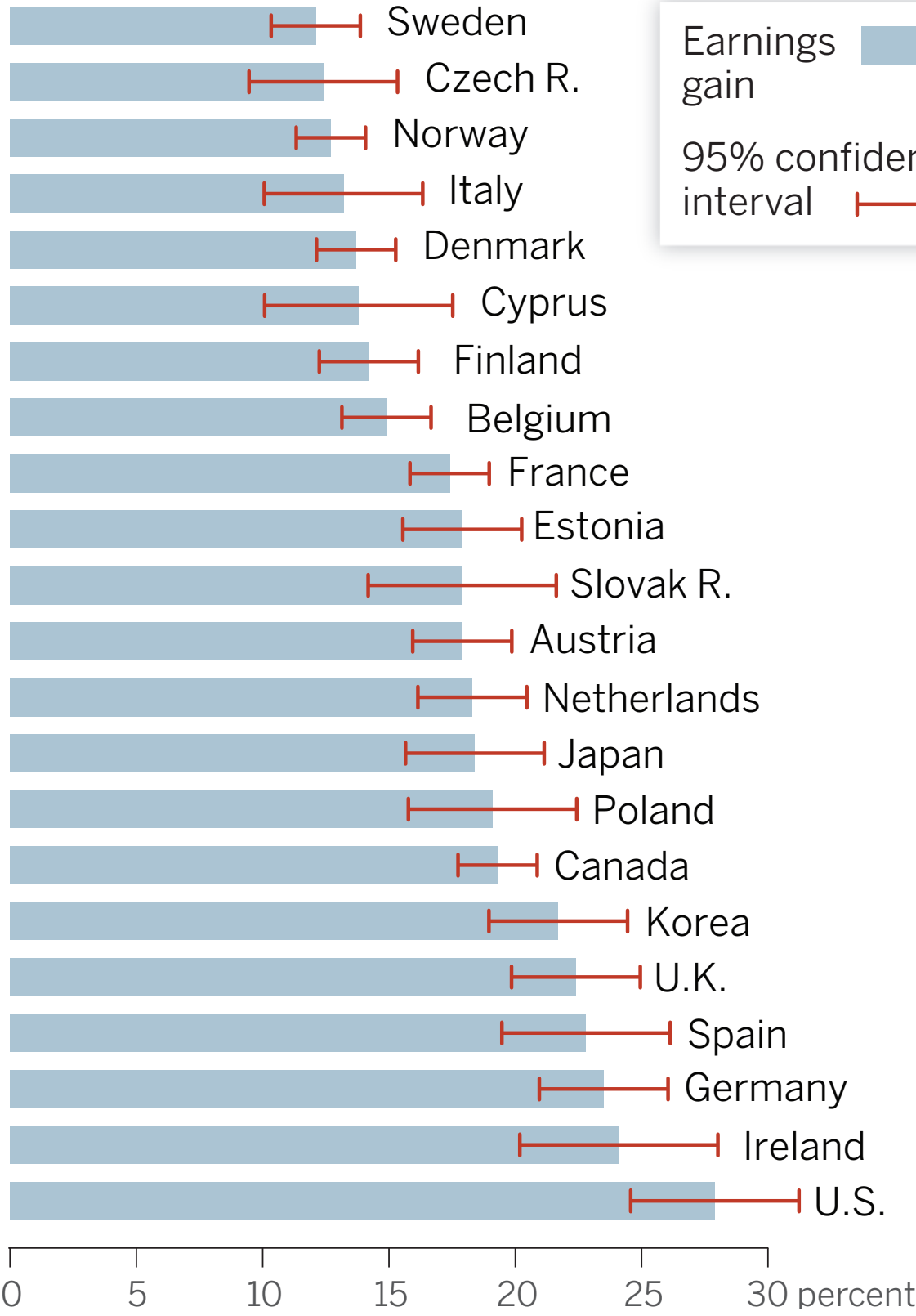
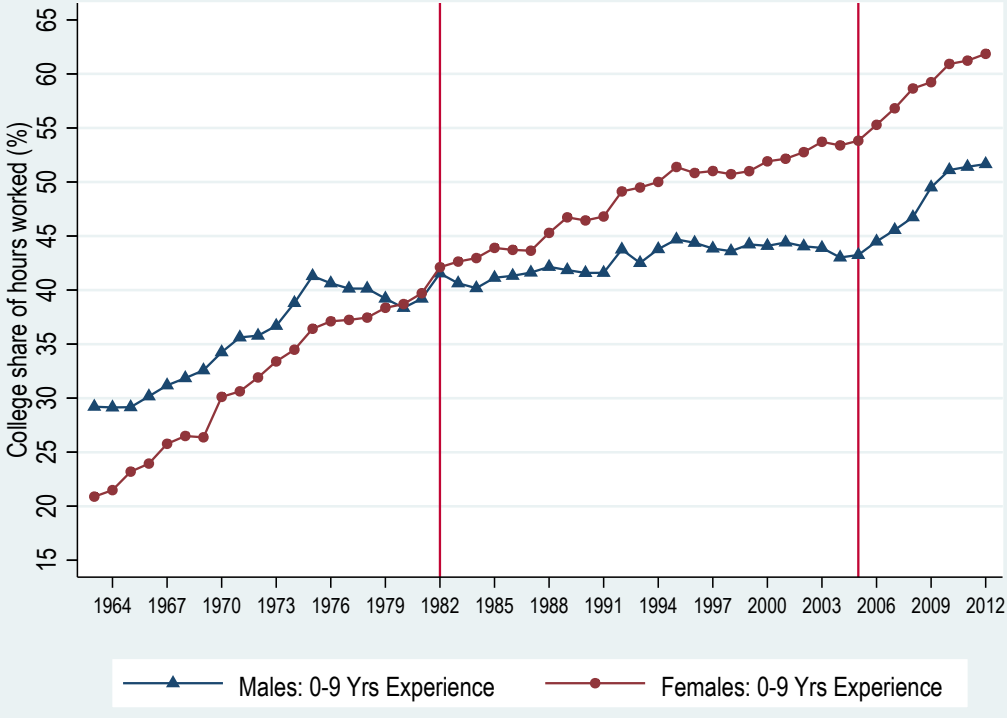


Fig. S1: Changes in the 90/10 Ratio of Full-Time Male Earnings Across Twelve OECD Countries, 1980-2011.

Cross-national differences in wage returns to skills, 2011–2013

Percentage increase for a one standard deviation increase in skill




College share of hours worked (%)
15
20
25
30
35
40
45
50
55
60
65
1964
1967
1970
1973
1976
1979
1982
1985
1988
1991
1994
1997
2000
2003
2006
2009
2012
Males: 0-9 Yrs Experience
Females: 0-9 Yrs Experience

The supply of college graduates and the U.S. college/high school premium, 1963–2012

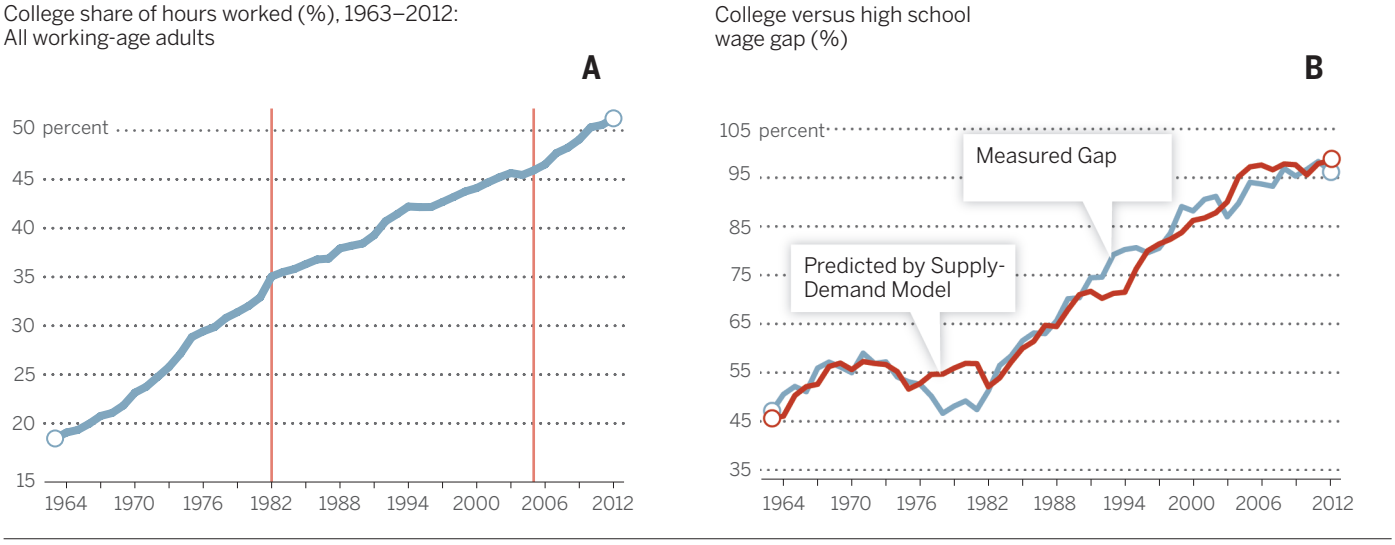


Fig. 3. The supply of college graduates and the U.S. college/high school premium, 1963–2012. (**A**) College share of hours worked in the United States, 1963–2012: All working-age adults. Figure uses March CPS data for earnings years 1963 to 2012. The sample consists of all persons aged 16 to 64 who reported having worked at least 1 week in the earnings years, excluding those in the military. Following an extensive literature, college-educated workers are defined as all of those with four or more completed years of college plus half of those with at least 1 year of completed college. Non-college workers are defined as all workers with high school or less education, plus half of those with some completed college education. For each individual, hours worked are the product of usual hours worked per week and the number of weeks worked last year. Individual hours worked are aggregated using CPS sampling weights. (**B**) College versus high school wage gap. Figure uses March CPS data for earnings years 1963 to 2012. The series labeled "Measured Gap" is constructed by calculating the mean of the natural logarithm of weekly wages for college graduates and non–college graduates, and plotting the (exponentiated) ratio of these means for each year. This calculation holds constant the labor market experience and gender composition within each education group. The series labeled "Predicted by Supply-Demand Model" plots the (exponentiated) predicted values from a regression of the log college/noncollege wage gap on a quadratic polynomial in calendar years and the natural log of college/noncollege relative supply. See text and supplementary material for further details.

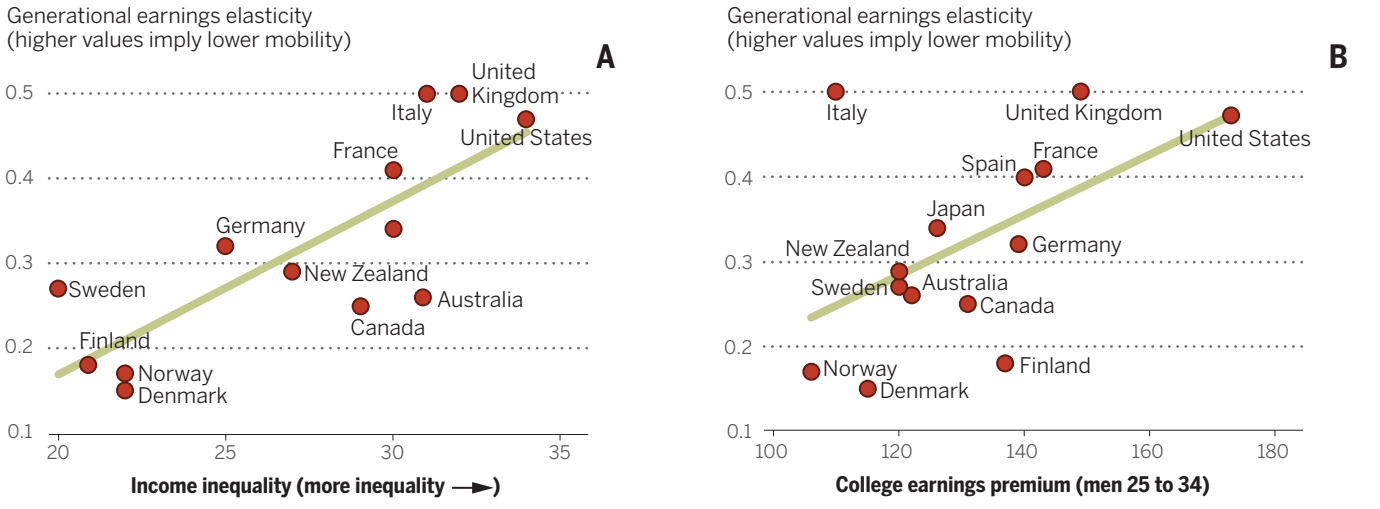


Fig. 5. Earnings inequality and economic mobility: Cross-national relationships. Reproduced from Corak [(*44*), figs. 1 and 4] with permission of the American Economic Association. In both panels, the mobility measure is equal to the intergenerational earnings "elasticity," meaning the average proportional increase in a son's adult earnings predicted by his father's adult earnings measured approximately three decades earlier. A higher intergenerational earnings elasticity therefore implies lower intergenerational mobility. In the left panel, cross-sectional income inequality is measured using a "Gini" index that ranges from 0 to 100, where 0 indicates complete equality of household incomes and 100 indicates maximal inequality (all income to one household). In the right panel, the college earnings premium refers to the ratio of average earnings of men 25 to 34 years of age with a college degree to the average earnings of those with a high school diploma, computed by the OECD using 2009 data. See (*44*) for further details.

Changes in real wage levels of full-time U.S. workers by sex and education, 1963–2012

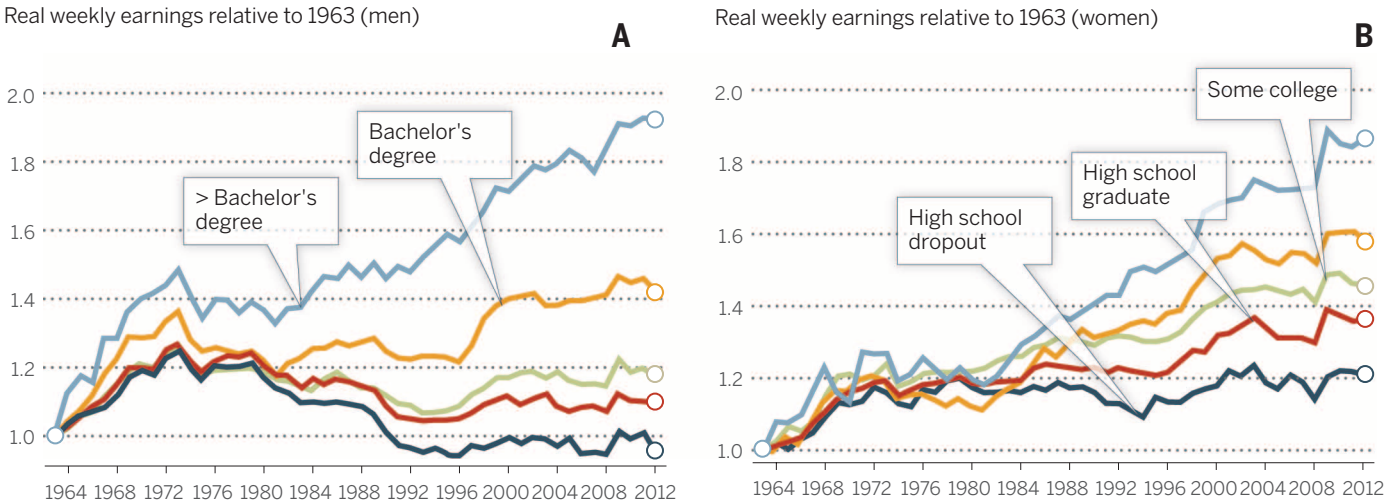


Fig. 6. Change in real wage levels of full-time workers by education, 1963–2012. (**A**) Male workers, (**B**) female workers. Data and sample construction are as in Fig. 3.

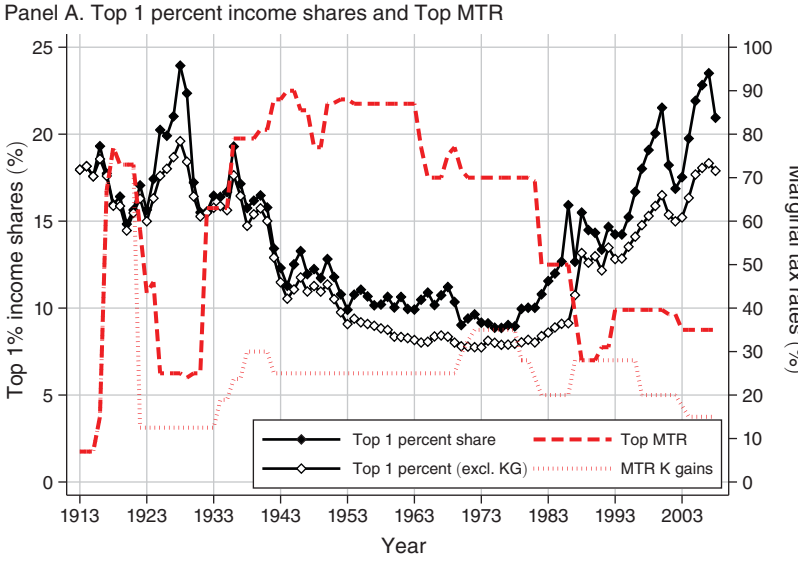
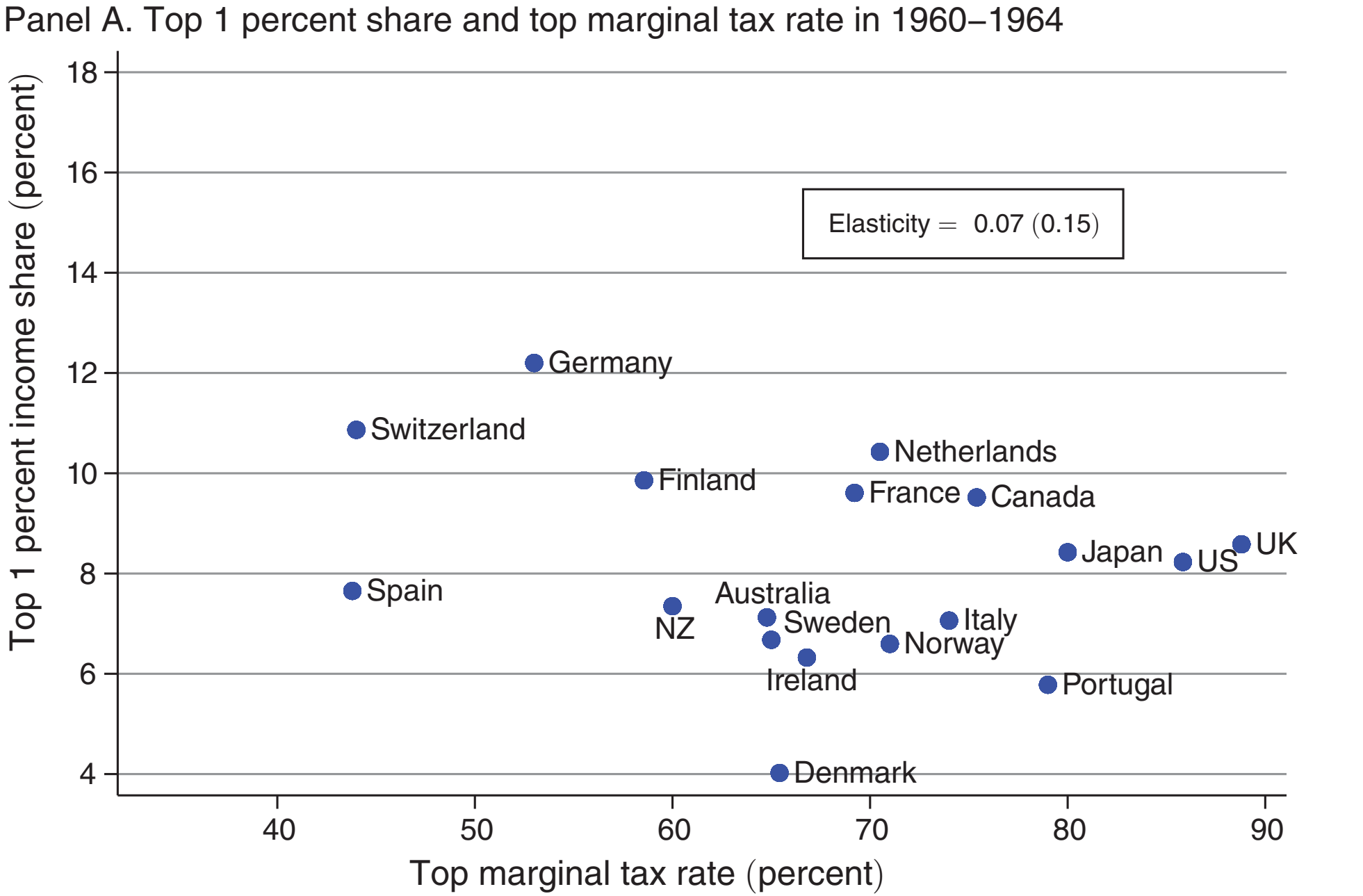
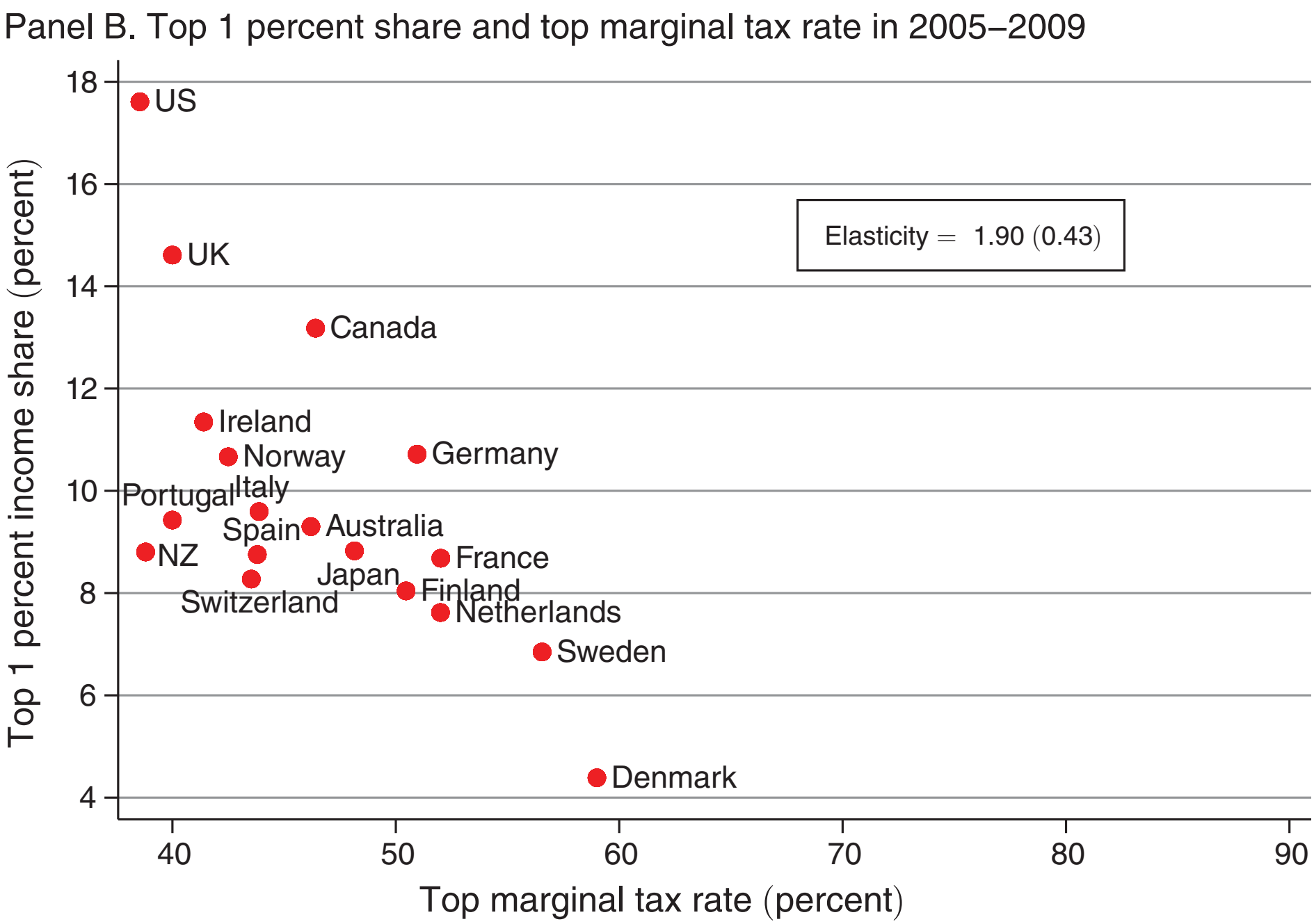


FIGURE 1. TOP MARGINAL TAX RATES, TOP INCOMES SHARES, AND INCOME GROWTH: US EVIDENCE

TABLE 1—US EVIDENCE ON TOP INCOME ELASTICITIES

		Income excluding capital gains (1)	Income including capital gains (to control for tax avoidance) (2)
Panel A. 1975–1979 versus 2004–2008 Comparison			
Top marginal tax rate (MTR)	1960–4	85 percent	85 percent
	2004–8	35 percent	35 percent
Top 1 percent income share	1960–4	8.2 percent	10.2 percent
	2004–8	17.7 percent	21.8 percent
Elasticity estimate:			
$\Delta \log$ (top 1 percent share)$/\Delta \log (1 -$ Top MTR)		0.52	0.52
Panel B. Elasticity estimation (1913–2008):			
$\log(\textit{top 1 percent income share}) = \alpha + e \times \log(1 - \text{Top MTR}) + c \times \textit{time} + \varepsilon$			
No time trend		0.25	0.26
		(0.07)	(0.06)
Linear time trend		0.30	0.29
		(0.06)	(0.05)
Number of observations		96	96
Panel C. Effect of top MTR on income growth (1913–2008):			
$\log(\textit{income}) = \alpha + \beta \times \log(1 - \text{Top MTR}) + c \times \textit{time} + \varepsilon$			
Top 1 percent real income		0.265	0.261
		(0.047)	(0.041)
Bottom 99 percent real income		−0.080	−0.076
		(0.040)	(0.039)
Average real income		−0.027	−0.027
		(0.018)	(0.034)
Number of observations		96	96


Panel A. Top 1 percent share and top marginal tax rate in 1960–1964
Top 1 percent income share (percent)
18
16
14
12
10
8
6
4
Elasticity = 0.07 (0.15)
Germany
Switzerland
Netherlands
Finland
France
Canada
Japan
US
UK
Spain
Australia
NZ
Sweden
Italy
Norway
Ireland
Portugal
Denmark
40
50
60
70
80
90
Top marginal tax rate (percent)


Panel B. Top 1 percent share and top marginal tax rate in 2005–2009
Top 1 percent income share (percent)
18
16
14
12
10
8
6
4
Elasticity = 1.90 (0.43)
US
UK
Canada
Ireland
Norway
Germany
Portugal
Italy
Spain
Australia
NZ
France
Japan
Finland
Switzerland
Netherlands
Sweden
Denmark
40
50
60
70
80
90
Top marginal tax rate (percent)

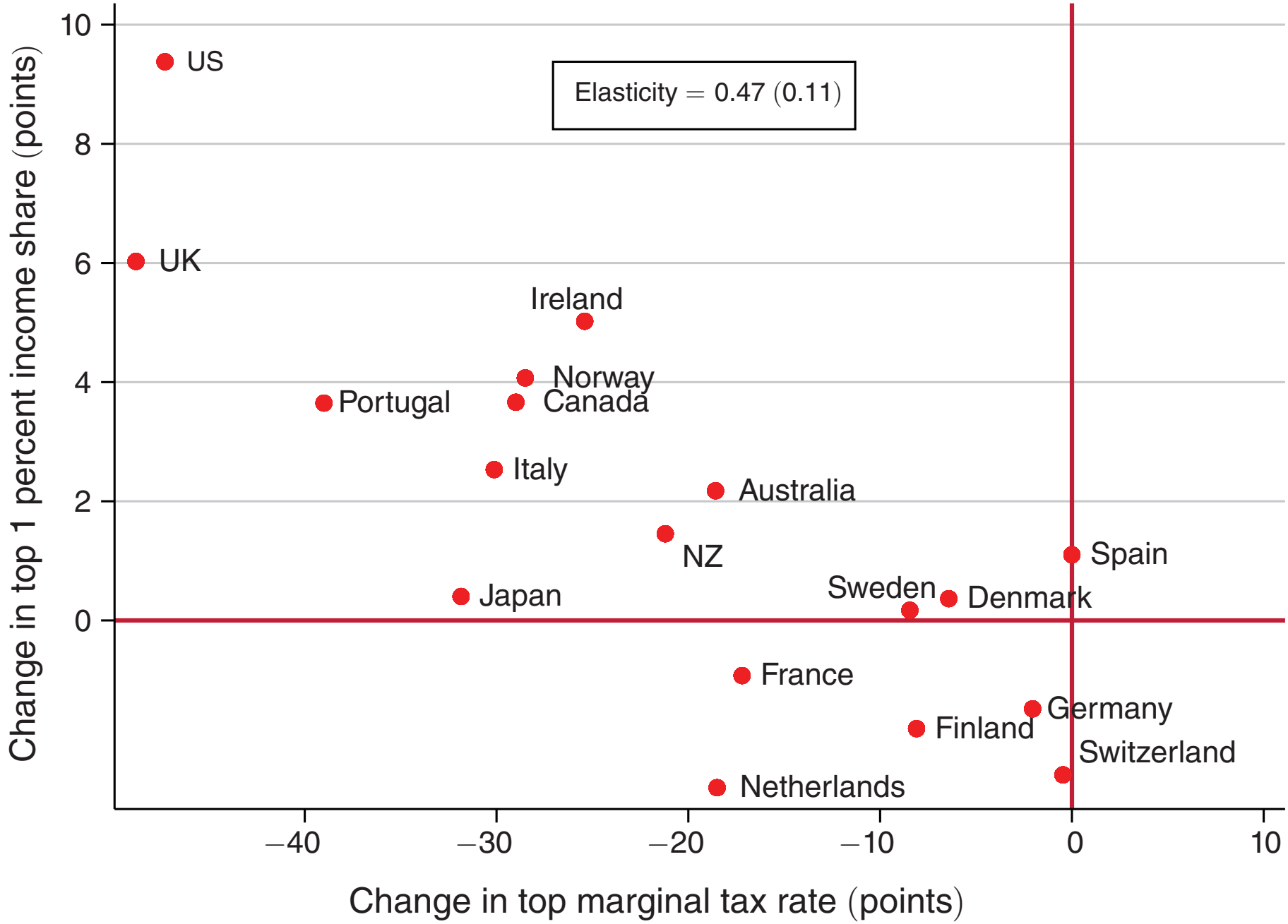


FIGURE 3. CHANGES IN TOP INCOME SHARES AND TOP MARGINAL TAX RATES

TABLE 2—INTERNATIONAL EVIDENCE ON TOP INCOME ELASTICITIES

	All 18 countries and fixed periods			Bootstrapping period and country set		
	1960–2010 (1)	1960–1980 (2)	1981–2010 (3)	Median (4)	5th percentile (5)	95th percentile (6)
Panel A. Effect of the top marginal income tax rate on top 1 percent income share						
Regression: $\log(\text{top 1 percent share}) = \alpha + e \times \log(1 - \text{Top MTR}) + \varepsilon$						
No controls	0.324	0.163	0.803	0.364	0.128	0.821
	(0.034)	(0.039)	(0.053)	(0.043)	(0.085)	(0.032)
Time trend control	0.375	0.182	0.656	0.425	0.191	0.761
	(0.042)	(0.030)	(0.056)	(0.045)	(0.091)	(0.032)
Country fixed effects	0.314	0.007	0.626	0.267	0.008	0.595
	(0.025)	(0.039)	(0.044)	(0.035)	(0.070)	(0.026)
Number of observations	774	292	482	286	132	516
Panel B. Effect of the top marginal income tax rate on real GDP per capita						
Regression: $\log(\text{real GDP per capita}) = \alpha + \beta \times \log(1 - \text{Top MTR}) + c \times \textit{time} + \varepsilon$						
No country fixed effects	−0.064	−0.018	−0.097	0.002	−0.214	0.173
	(0.033)	(0.041)	(0.043)	(0.042)	(0.080)	(0.026)
Country fixed effects	−0.029	−0.082	0.037	−0.004	−0.087	0.071
	(0.014)	(0.016)	(0.019)	(0.016)	(0.031)	(0.011)
Initial GDP per capita	−0.095	−0.025	−0.023	−0.054	−0.149	0.022
	(0.019)	(0.016)	(0.014)	(0.017)	(0.030)	(0.011)
Initial GDP per capita, time × intial GDP per capita	−0.088	0.004	−0.037	−0.060	−0.160	0.012
	(0.017)	(0.011)	(0.014)	(0.016)	(0.030)	(0.011)
Country fixed effects, time × initial GDP per capita	−0.018	0.000	0.008	−0.015	−0.069	0.040
	(0.011)	(0.014)	(0.017)	(0.013)	(0.031)	(0.009)
Number of observations	918	378	540	317	152	576

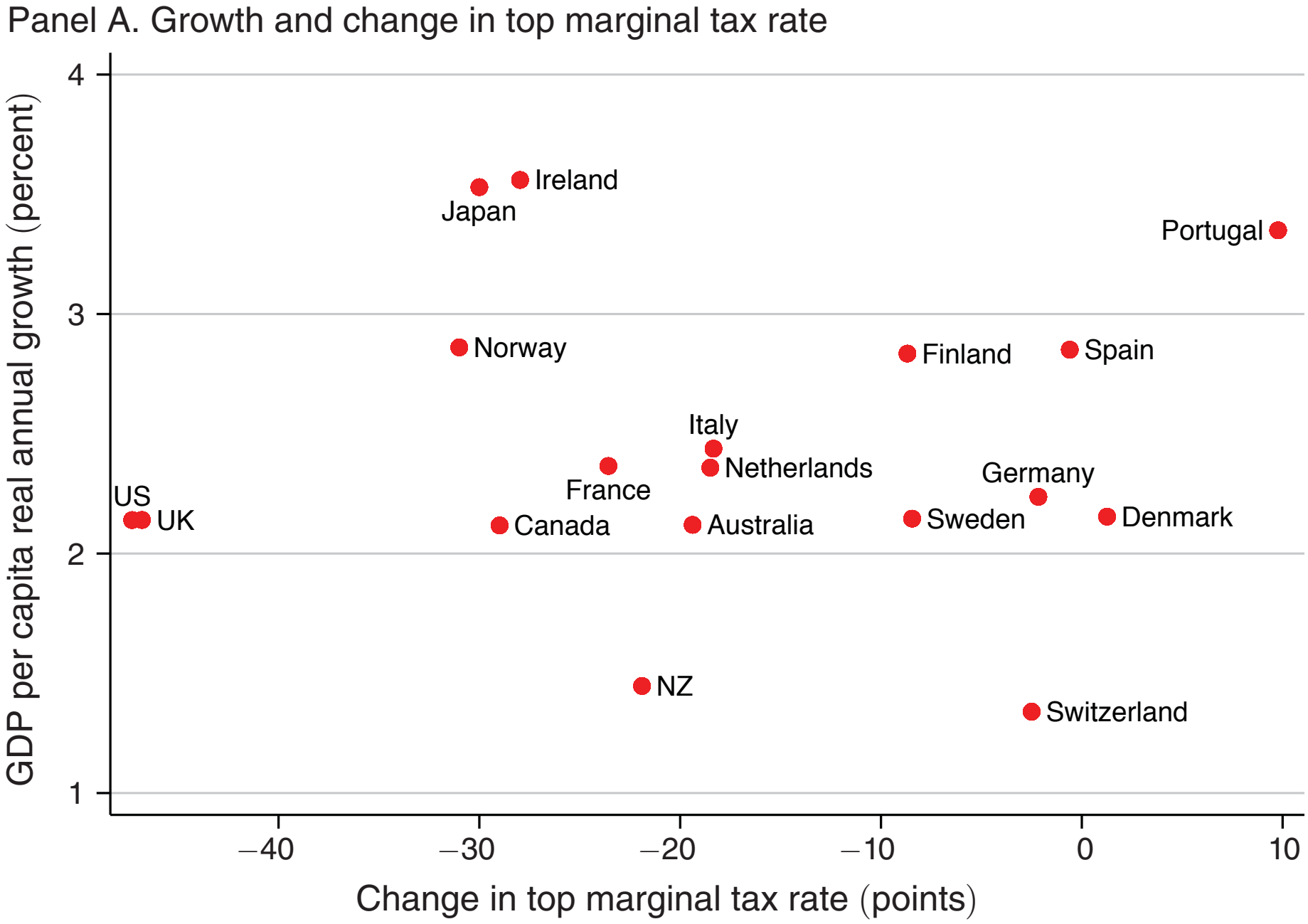
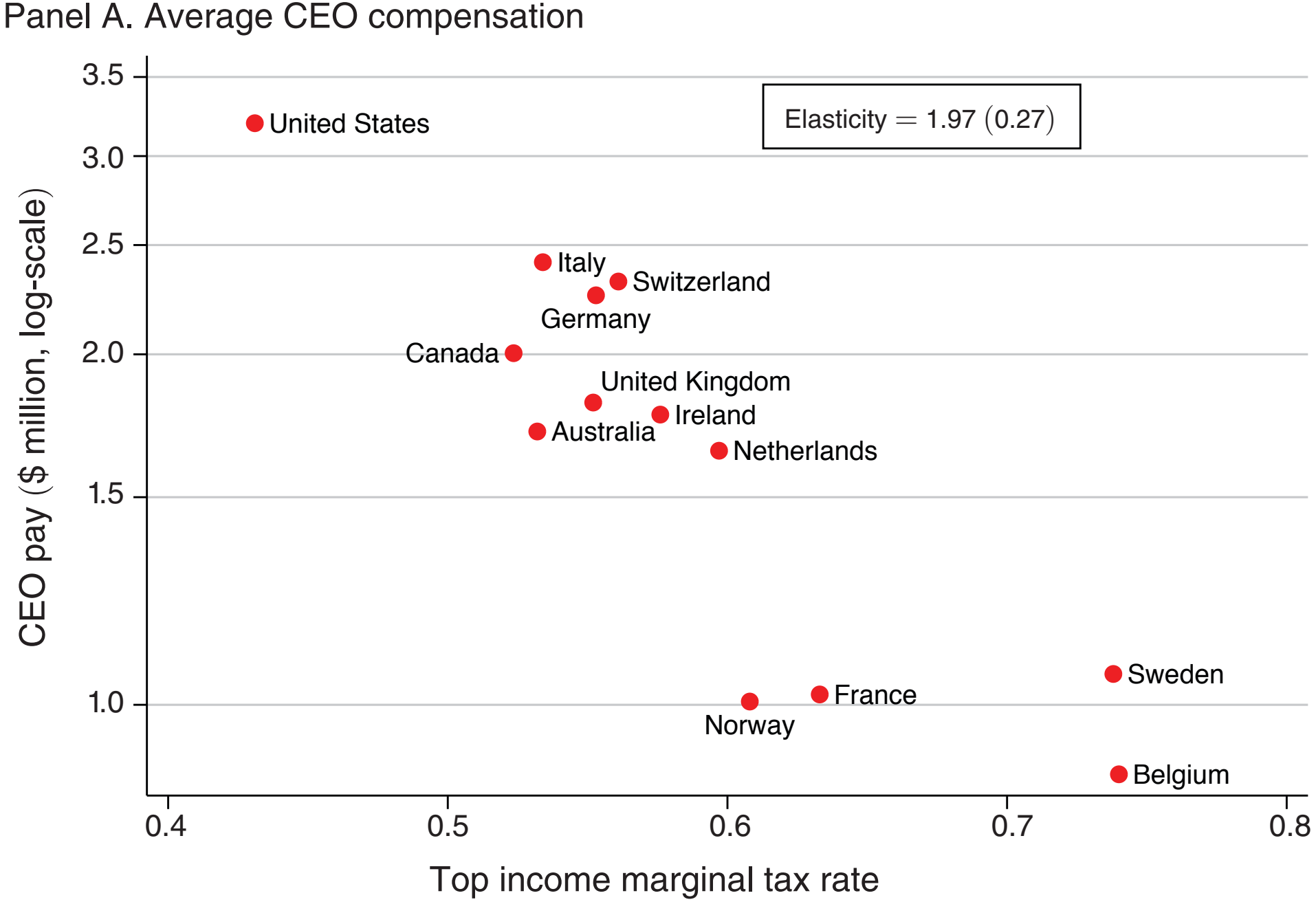
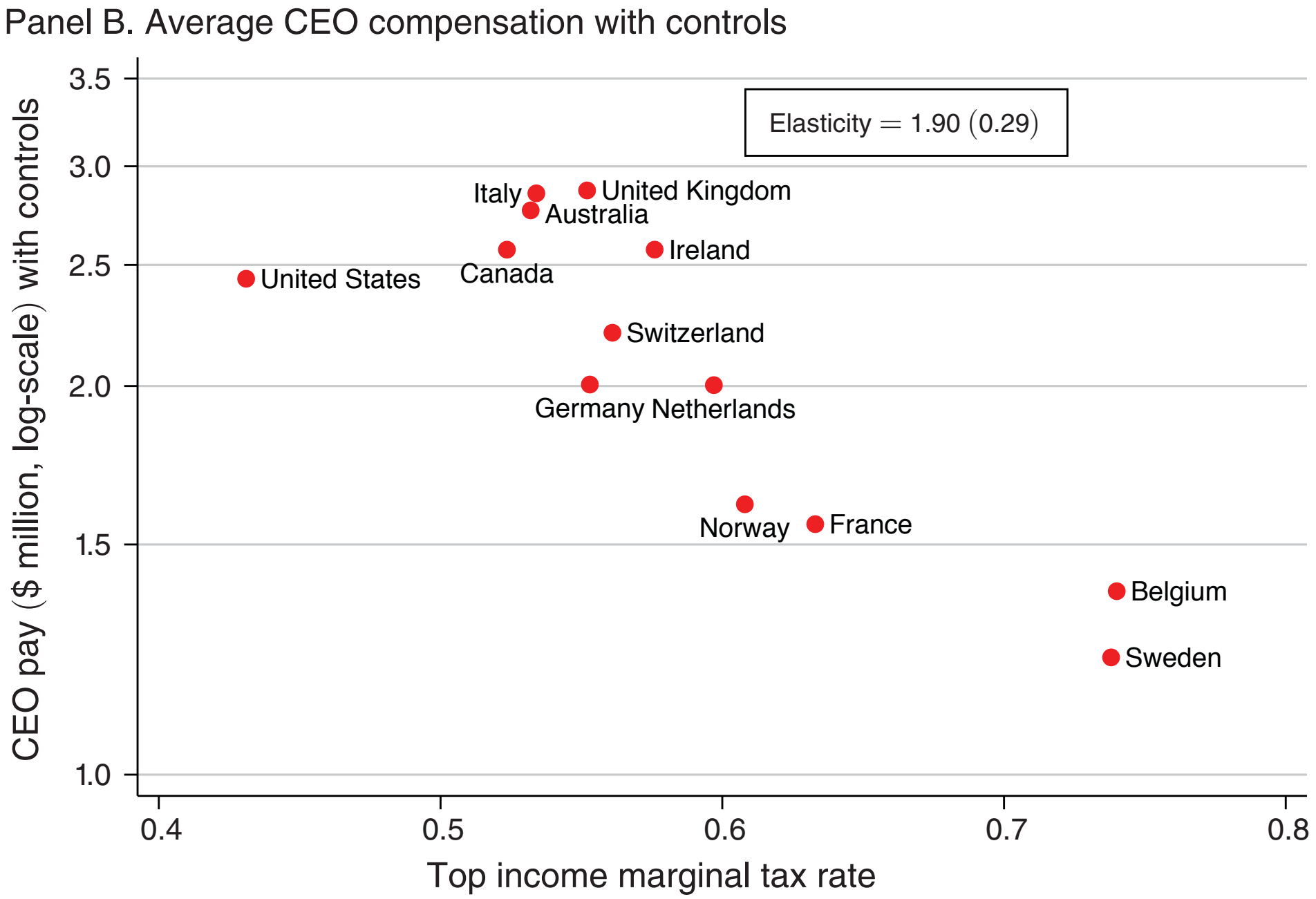

Panel A. Growth and change in top marginal tax rate
GDP per capita real annual growth (percent)
4
3
2
1
Ireland
Japan
Portugal
Norway
Finland
Spain
Italy
Netherlands
France
Germany
US
UK
Canada
Australia
Sweden
Denmark
NZ
Switzerland
−40
−30
−20
−10
0
10
Change in top marginal tax rate (points)

TABLE 3—US CEO PAY EVIDENCE, 1970–2010

Firm performance measure	log(net income)			log(stock-market value)		
Outcome (LHS variable)	log(CEO pay)	log(CEO pay)	log(industry level workers pay)	log(CEO pay)	log(CEO pay)	log(industry level workers pay)
OLS versus IV	OLS	Industry luck IV	Industry level OLS regression	OLS	Industry luck IV	Industry level OLS regression
	(1)	(2)	(3)	(4)	(5)	(6)
Panel A. Effect of firm performance on log pay in high top tax rate period (1970–1986)						
Firm performance (RHS variable)	0.23***	0.34***	0.00	0.28***	0.22*	0.00
	(0.013)	(0.072)	(0.010)	(0.022)	(0.123)	(0.015)
Number of observations	8,632	8,503	890	9,005	8,865	898
Panel B. Effect of firm performance on log pay in low top tax rate period (1987–2010)						
Firm performance (RHS variable)	0.27***	0.70***	−0.02	0.37***	0.95***	−0.02
	(0.012)	(0.148)	(0.020)	(0.021)	(0.309)	(0.023)
Number of observations	14,914	14,697	1,422	17,775	17,593	1,443
Panel C. Test for difference between low and high top tax rate periods						
Difference panel B–panel A	0.04***	0.36*	−0.019	0.09***	0.72**	−0.023
p-value of difference	0.01	0.06	0.440	0.00	0.05	0.46


Panel A. Average CEO compensation
Elasticity = 1.97 (0.27)
United States
Italy
Switzerland
Germany
Canada
United Kingdom
Ireland
Australia
Netherlands
Sweden
France
Norway
Belgium
CEO pay ($ million, log-scale)
3.5
3.0
2.5
2.0
1.5
1.0
0.4
0.5
0.6
0.7
0.8
Top income marginal tax rate


Panel B. Average CEO compensation with controls
Elasticity = 1.90 (0.29)
Italy
United Kingdom
Australia
Ireland
United States
Canada
Switzerland
Germany
Netherlands
Norway
France
Belgium
Sweden
CEO pay ($ million, log-scale) with controls
3.5
3.0
2.5
2.0
1.5
1.0
0.4
0.5
0.6
0.7
0.8
Top income marginal tax rate