Gender inequality and growth in Europe

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Introduction

- Gender inequality generally declining in Europe (compared with other regions):
  - Small now in education (and sometimes reverse);
  - Smaller in labor force participation (although still present);
  - Still substantial in occupational and sectoral segregation and associated pay gaps;
  - Still substantial in time use

- But substantial heterogeneity within Europe, esp. regarding time use and labor force participation: South North differential;
  - Early closing of gap in Scandinavia;
  - Much slower progress in Southern Europe (and Ireland);

Female per 100 Male Tertiary Graduates
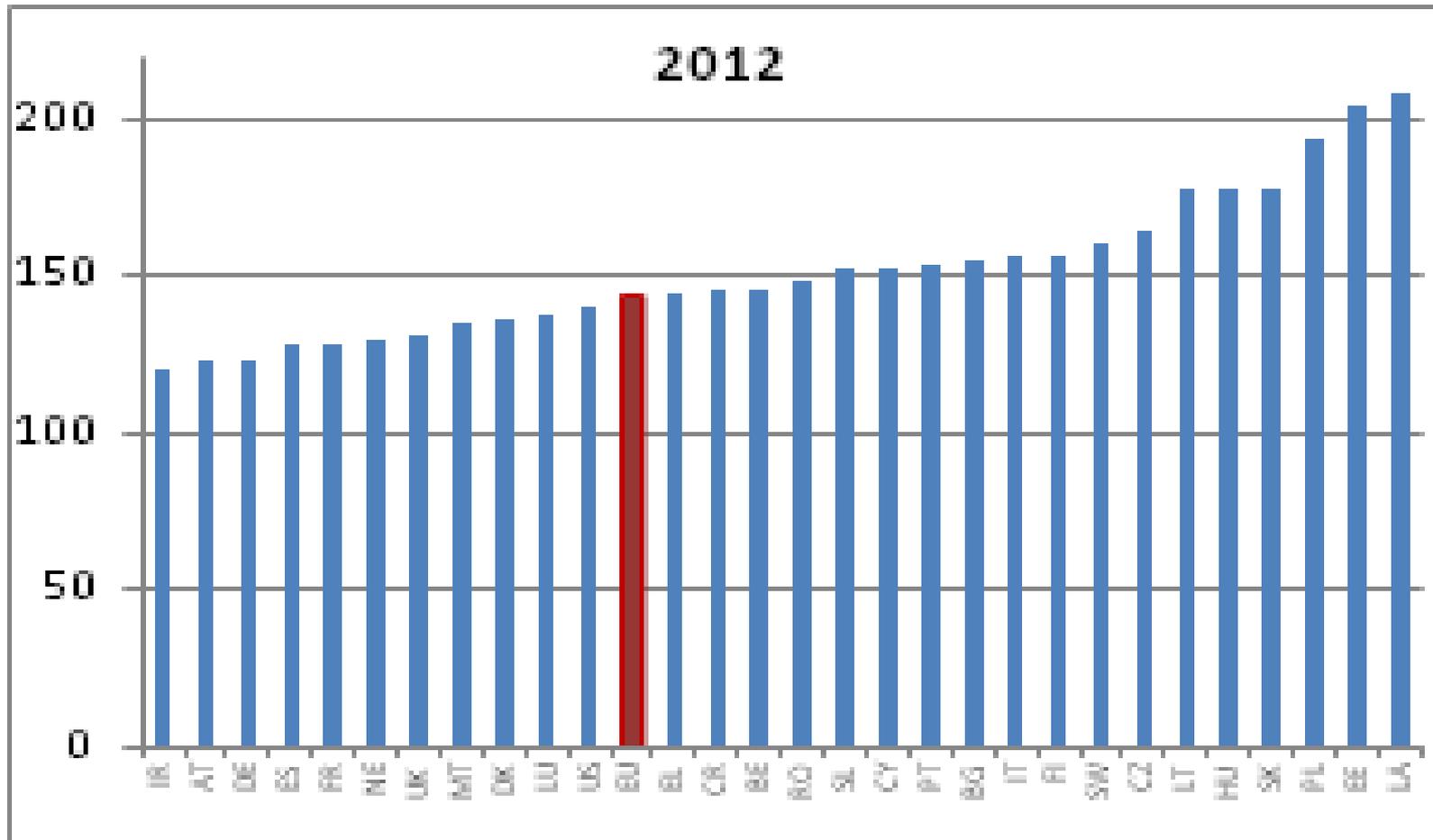
Female-Male Participation Ratios
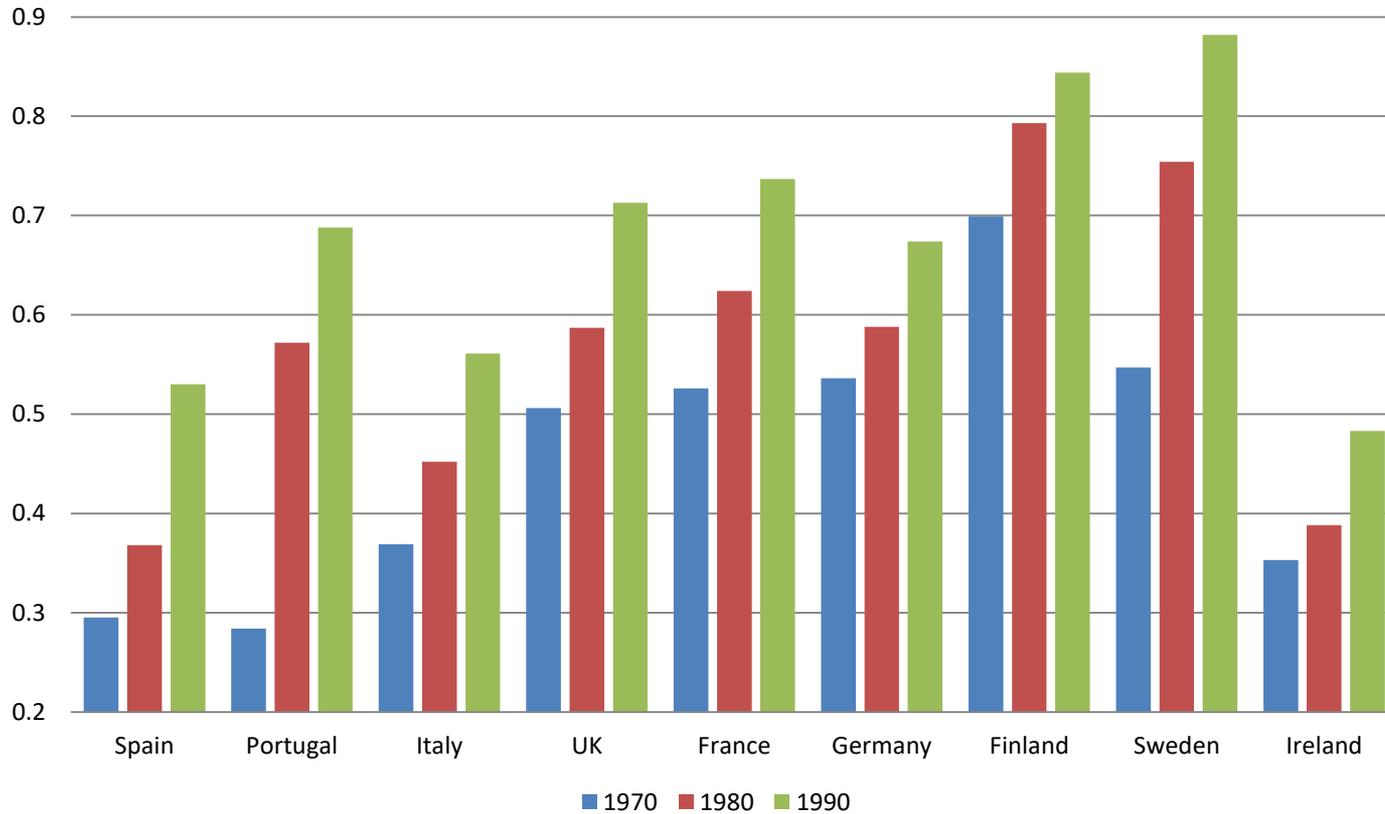
Gender Inequality and Growth

- Global (cross-country) perspective;

- Most important inequalities: Education and employment;

- Theoretical channels:
    - Distorts the labor force (lowers average human capital);
    - Men and women imperfect substitutes in production;
    - Positive effects of female employment (investment in families);
    - Working (and low-paid) women as competitive advantage;
    - Female employment and governance;

Empirical Evidence 1

- Impact of educational gender gaps on growth:
  - Systematic Review of Existing Studies;
  - Some 34 studies with nearly 374 regressions;
  - 75% of studies show significant effect of gender gaps hurting growth;
  - Currently performing meta-analysis to examine overall effect of gender gaps on growth;
  - Relevance for Europe limited (due to very small educational gender gaps);

Table 2: Descriptive Statistics on Regression Coefficients

Regressions where female and male education variables are included in a regression separately	
Number of regressions	158
Share of regressions where FemCoef>0 & p-value<0.1	32%
Share of regressions where FemCoef >MaleCoef & p-value<0.1	18%

| Regressions where female and male education variables are presented as a ratio or difference in years of education (gap)	
Number of regressions with ratio (F/M)	212
Number of regressions with difference *(log (M)-log(F))*	4
Share of regressions where F/M>0 & p-value<0.1	75%
Share of regressions where F-M>0 & p-value<0.1	50%

Empirical Evidence 2

- Fewer studies on gender gaps in employment on growth:
  - Esteva-Volart (2009): gender gap in employment and female leadership posts significantly reduce inequality;
  - Teignier and Cuberes (2016): estimating impact of selection/distortion mechanism: 10% lower GDP in Europe, larger effects elsewhere;
  - Klasen and Lamanna (2009): panel regressions on impact of initial gender gaps on subsequent decadal growth;
    - Data from 1960-2000
    - Controlling for initial income, education, investment, demographics, openness;
    - Gender gap in activity rates (ract)
  - Simulations of annual growth effects of ‚laggards‘ in gender gaps versus ‚leaders‘ (Finland, 1970,1980, Sweden: 1990);
    - Substantial (and sometimes growing) growth penalty, esp. for Southern Europe
    - Reaching 10% per decade for Spain, Italy or Ireland;

Table 5 Gender inequality and economic growth

	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
LOGGDP	-5.54***	-7.82***	-10.37***	-6.08***	-10.81***	-6.99***	-6.14***	-8.48***	-11.09***
	1.42	1.33	1.31	1.43	1.32	1.28	1.48	1.41	1.28
POPGRO	-0.57*	-0.44	-0.22	-0.47	-0.23	-0.47*	-0.59*	-0.45	-0.20
	0.42	0.35	0.40	0.40	0.39	0.37	0.42	0.37	0.39
LFG	0.31	0.46*	0.32	0.38	0.34	0.48*	0.45*	0.54**	0.29
	0.27	0.31	0.40	0.31	0.40	0.30	0.31	0.31	0.37
FLFT	–	–	–	7.86**	4.17	–	–	–	–
	–	–	–	3.49	3.36	–	–	–	–
OPEN	0.002	0.005	0.006	0.000	0.006	0.001	0.001	0.003	0.007
	0.004	0.005	0.008	0.005	0.007	0.005	0.004	0.005	0.007
INV	0.09***	0.10***	0.13***	0.10***	0.14***	0.12***	0.10***	0.10***	0.14***
	0.03	0.03	0.02	0.03	0.02	0.03	0.03	0.03	0.02
OED25+	0.00	0.08	–	0.00	–	–	0.00	0.05	–
	0.16	0.17	–	0.16	–	–	0.16	0.16	–
ORED25+	0.43	2.30**	–	1.01	–	–	1.14	3.09**	–
	1.45	1.28	–	1.43	–	–	1.51	1.41	–
YED15+	–	–	0.31**	–	0.31***	–	–	–	0.29***
	–	–	0.13	–	0.12	–	–	–	0.12
YRED15+	–	–	3.33**	–	3.66**	–	–	–	4.42***
	–	–	1.65	–	1.70	–	–	–	1.76
RACT	–	–	–	–	–	5.41***	3.72**	2.97**	1.93*
	–	–	–	–	–	1.48	1.51	1.37	1.49
MACT	–	–	–	–	–	-0.70	3.85	-0.91	-6.60
	–	–	–	–	–	6.69	6.90	7.03	5.73
1960S	0.12	-0.65	-1.32***	0.59	-0.97*	0.61	0.40	-0.21	-0.49
	0.57	0.59	0.51	0.61	0.59	0.58	0.70	0.76	0.74
1970S	0.04	-0.52	-1.04***	0.37	-0.80**	0.30	0.28	-0.18	-0.47
	0.38	0.41	0.38	0.41	0.44	0.37	0.46	0.51	0.54
1980S	-0.60**	-1.07***	-0.62***	-0.44*	-0.52**	-0.31	-0.46	-0.86***	-0.33
	0.26	0.29	0.25	0.27	0.26	0.26	0.29	0.33	0.30
Constant	20.20***	26.79***	34.93***	18.53***	34.58***	21.45***	16.04**	27.53***	40.98***
	4.87	4.78	4.73	4.89	4.55	7.80	8.03	7.51	6.32
R2	0.32	0.43	0.60	0.34	0.61	0.36	0.34	0.44	0.62
OBS	341	296	143	341	307	441	341	296	143

Notes: Heteroscedasticity-adjusted standard errors reported under the coefficient. *** Refers to 1 percent, ** to 5 percent, and * to 10 percent significance level using a one-tail test. In regressions 9 and 15, the sample excludes Sub-Saharan Africa and Latin America for the 1990s. In regressions 10, 12, and 16, only the OECD, East Asian, and South Asian countries are included.

Annual Growth Costs (%, Relative to Best)
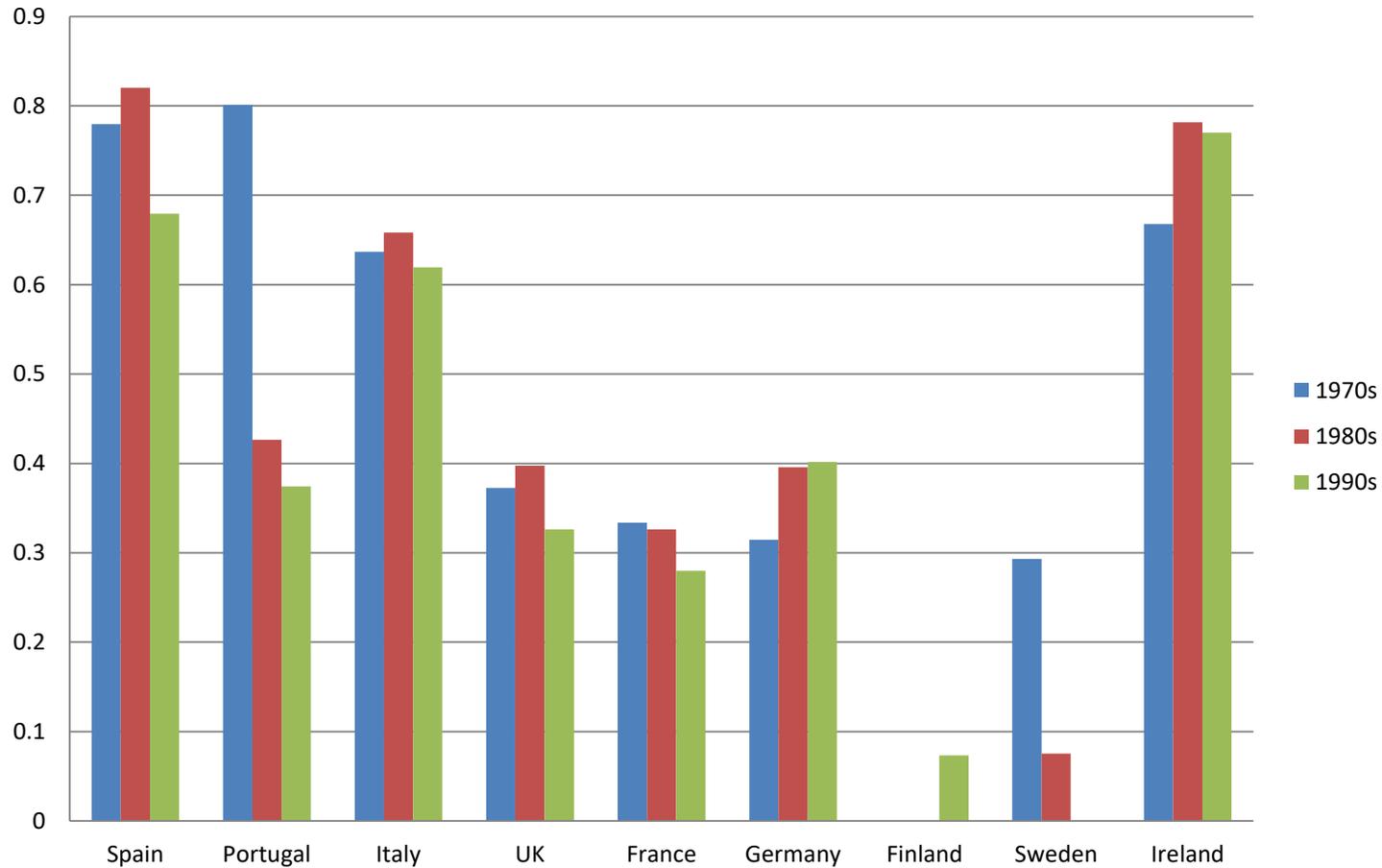
Policy Implications

- Gender gaps in employment reduce growth:
  - Effect sizable in Europe;
  - Can explain up to 10% of growth differences per decade;

- Many policies can play a role:
  - Policy support for childcare (see also Gehringer and Klasen, 2016);
  - Eliminating tax disincentive for secondary earners where it exists (see also Alesina, Ichino, and Karabarbounis (2007);
  - Improving school-work transition for women;

- But also redistribution of non-market work critical;

Female-Male Ratios of Market and Domestic Work
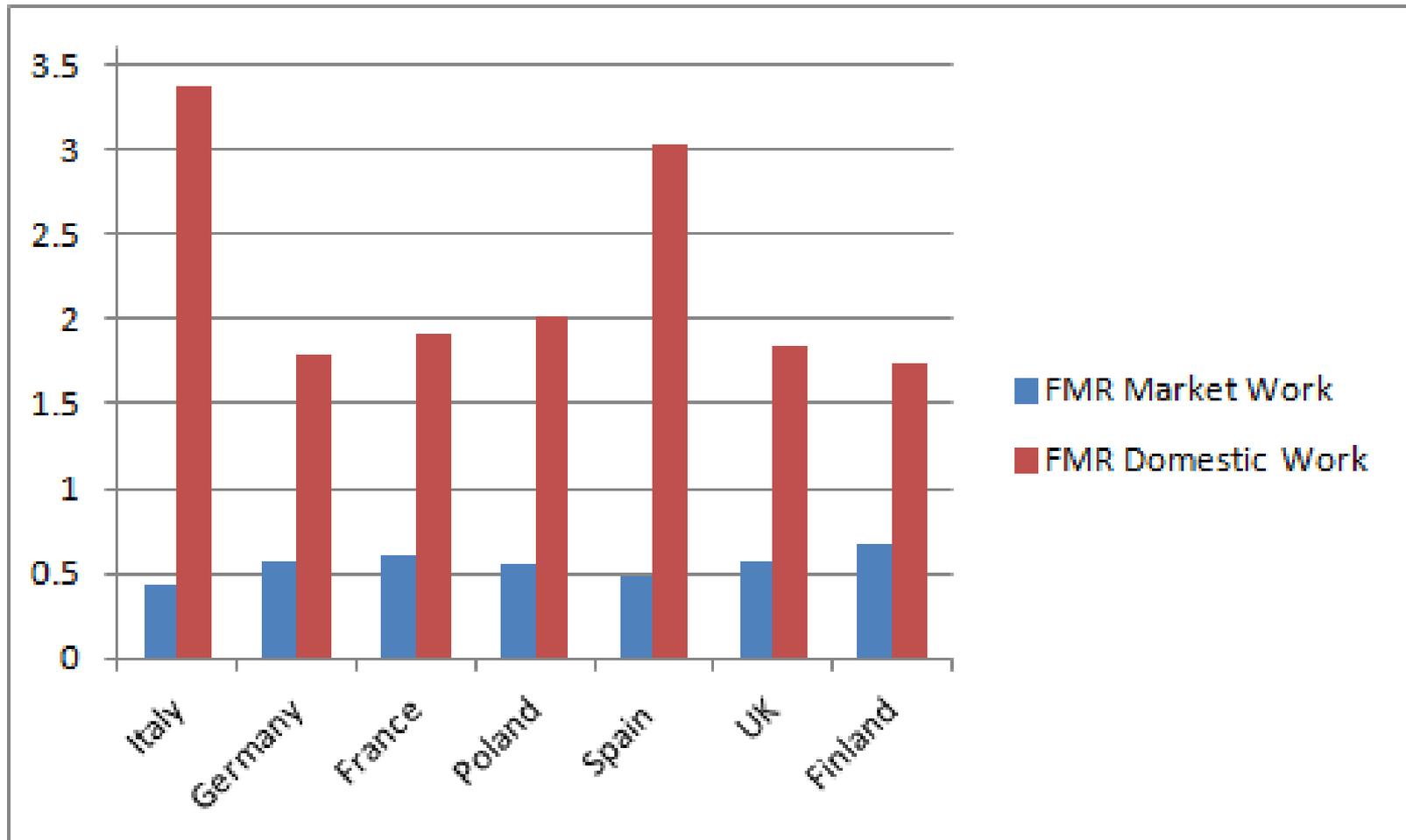
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