WHO BENEFITS FROM SOCIAL INVESTMENT?:

THE GENDERED EFFECTS OF FAMILY AND EMPLOYMENT POLICIES ON CARDIOVASCULAR DISEASE IN EUROPE

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Competing Interest

None declared.

ABSTRACT

Background: In the context of fiscal austerity in many European welfare states, policy innovation often takes the form of "social investment," a contested set of policies aimed at strengthening labor markets. Social investment policies include employment subsidies, skills training and job-finding services, early childhood education and childcare, and parental leave. Given that such policies can influence gender-equity in the labor market, we analyzed the possible effects of such policies on gender health equity.

Methods: Using age- and sex-stratified data from the Global Burden of Disease Study on cardiovascular disease (CVD) morbidity and mortality between 2005 and 2010, we estimated linear regression models of policy indicators on employment supports, childcare, and parental leave with country fixed effects.

Findings: We found mixed effects of social investment for men versus women. Whereas government spending on early childhood education and childcare was associated with lower CVD mortality rates for both men and women equally, government spending on paid parental leave was more strongly associated with lower CVD mortality rates for women. Additionally, government spending on public employment services was associated with lower CVD mortality rates for men but was not significant for women, while government spending on employment training was associated with lower CVD mortality rates for women but not for men.

Conclusions: Social investment policies were negatively associated with CVD mortality, but the ameliorative effects of specific policies were gendered. We discuss the implications of these results for the European social investment policy turn and for future research on gender health equity.

SUMMARY BOX

What is already known on this subject?

The European Commission advocates that its member states adopt a social investment strategy, referring to a contested set of government regulations, programs, and expenditures that together they expect to promote a more equitable and productive labor force. Specifically, several European welfare states adopted new policies and raised spending to support paid parental leave, public childcare for young children, job training programs to facilitate re-entry into the paid labor market after leave or unemployment, and public employment services to match the short- and long-term unemployed to job vacancies. While many of these policies have been shown to promote gender-equity in labor force participation and earnings, their effects for population health and gender health equity in particular are largely unknown.

What does this study add?

This study examined associations of these policies with cardiovascular disease morbidity and mortality among working-age men and women. This study found that social investment policies were marginally associated with lower cardiovascular disease mortality, but that these associations differed for men and women, with mixed implications for gender-equity in cardiovascular disease. The study points to future research on the implications of the social investment turn for gender health equity.

BACKGROUND

Many European states adopted or strengthened family and employment policies that reflect a social investment approach, referring to government regulations, programs, and expenditures designed to improve workers' human capital and productivity and to consequently improve labor markets and economic growth.[1,2] Social investment advocates argue welfare states should move from an expensive and *compensating* social safety net and introduce cost-efficient and *capacitating* interventions.[1] This approach adheres to three principles: to enact policies that invest in human capital; to enact policies that help reconcile work and family; and to target enacted policies toward traditionally socially excluded groups, including the young and old, racial and ethnic minorities, and women. Advocates argue these policies improve gender-equity, but critics contend paid parental leaves may still reinforce traditional gender norms or even discourage return to employment, and public employment services may benefit men disproportionately given occupational sex segregation and pay differentials.[3,4]

Nevertheless, effects of social investment policies are only beginning to be assessed.[5] One area that has not received attention is population health: social investment policies seek to enhance gender-equity in European labor markets, but what effects are they having on the health of men and women? This paper examines whether social investment policies in the areas of parental leave, early childhood education and childcare, and employment services differentially affect the health of women and men, and in so doing, inadvertently affect gender-equity.

Cardiovascular disease (CVD) in particular responds to employment and working conditions, which these social investment policies are designed to support. Since the first Whitehall study showed employment rank was strongly associated with CVD morbidity,[6]

decades of scholarship established a close connection between CVD and employment.[7] CVD is the leading cause of death in the majority of wealthy countries, accounting for almost 40% of total deaths annually.[8] In the European Union in 2017, CVD accounted for 22% of total deaths under age 65.[9]

There is substantial cross-national variation in CVD,[10,11] and differences cannot be explained by differences in social and demographic distributions, individual behaviours, or the environment.[12] As a result, scholars have called for research that investigates *social policy* as a potential root cause of CVD risk factors and outcomes.[13]

CVD is also highly gendered within and between countries. Men have higher CVD rates; however, due to higher female life expectancy, the average patient receiving treatment for CVD is female.[14] Additionally, while CVD rates are declining on average, the decline has slowed or even stalled amongst women,[9] especially where high job demands are coupled with traditional gender norms of care-work and low levels of support for work-family reconciliation.[12]

Gender differences in CVD mask the more general paradox. In high-income countries, men have shorter life expectancies and higher mortality rates across almost all causes of death and age-groups.[15] And yet, women—despite their lower mortality rates—report higher physical and mental morbidity across many surveys and multiple measures: “women get sick, men die.”[16,17]

Explanations for this paradox focus on variations in the behaviour of men and women, including those linked to constructions of masculinity and work-family role strain.[18,19] Men are more likely to engage in risk-taking behaviours such as excessive alcohol consumption.[20] They are also less likely to access healthcare services and more likely to present late with symptoms.[21] Further, psychosocial theories of health suggest men have been more exposed to

negative health effects from workplace hierarchies, persistent unemployment, and the need to be the main breadwinner—all factors associated with an increased risk of CVD.[7,22] Women in comparison are more likely to experience physical and mental health problems as a result of work-family strain.[18,19,23,24] They are also more likely to be single parents, to report un- or under-employment due to family responsibilities, or to be precariously employed,[25] which have been linked to health sequelae.[26,27]

We propose that CVD is mitigated by the social investment approach in gendered ways:[28]

- (1) Consistent with literature on work-family strain, we hypothesize that parental leave and early childhood education and childcare policies are more strongly associated with lower CVD morbidity and mortality for women compared to men because women are still more likely to be primary caregivers.[18,19,23,24]
- (2) We hypothesize that active labor market policies will have more mixed effects because while women are often further removed from the labor market due to caring responsibilities, previous studies found a stronger association between unemployment, economic inactivity, and poor health for men compared to women.[22]
    - (2a) In particular, we hypothesize that employment training programs and hiring incentives will benefit women relative to men given recent evidence of their gendered effects on labor market outcomes.[25,29]
    - (2b) We also hypothesize that spending on public employment services and administrative costs, including unemployment centers and job-finding services, would instead benefit men more than women as recent research found that both

men and women benefit from job search services, though men usually more so.[3,4,cf. 29]

As an initial test of these hypotheses, we modelled CVD morbidity and mortality as a function of six social investment policy indicators in 13 European countries for the 2005-2010 period. We draw from research documenting the beneficial effects of government social spending on health.[30,31] However, to our knowledge, this is the first study to assess gender differences in the association between CVD and social investment policies using data disaggregated by age and sex.[cf. 32]

DATA AND METHODS

Sample

We built a dataset that includes age- and sex-specific morbidity and mortality rates, and indicators of social investment in the areas of parental leave, early childhood education and childcare, and employment services. We examined whether changes in social investment indicators are associated with changes in CVD mortality and years lived with disability (YLD) between 2005 and 2010 in 13 European countries: Austria; Belgium; Denmark; Finland; France; Germany; Ireland; Italy; Netherlands; Norway; Sweden; Switzerland; and the United Kingdom. We were limited to the 2005-2010 period because of data availability on our social investment indicators. Because social investment policies are targeted toward young families, working-age people, and adults nearing retirement age, we excluded those under the age of 25 and over the age of 64.

CVD Morbidity and Mortality

We used data from the 2015 Global Burden of Disease Study (GBD).[10,33] The GBD CVD cause-group includes rheumatic and ischemic heart disease, cerebrovascular disease or aneurysm, hypertension, cardiomyopathy and myocarditis, atrial fibrillation and flutter, peripheral artery disease, and endocarditis. Rates were estimated separately for men and women in five-year age-groups for each year and country. YLD rate estimates were provided for every five years whereas mortality rate estimates are provided for every year. YLD rates were estimated by GBD using disease-specific prevalence multiplied by disability weights. Rates were reported per 100,000 persons. Figure 1 displays the age standardized CVD YLD and mortality rates by sex and country.

[Figure 1]

Social Investment Policy Indicators

We do not engage the debate of which policies constitute the social investment approach,[cf. 34] but focus on those with the greatest documented effects on gender-equity: parental leave, early childhood education and childcare, and active labor market policies.[cf. 35] We used six social investment policy indicators from two different sources. All are publicly-available. Table 1 describes the six social investment policy indicators and gross domestic product (GDP) per capita for all 13 countries.

First, we used public and mandatory private spending indicators from the OECD Social Expenditure Database within two policy areas related to our hypotheses: family and active labor market policies. We used five indicators measured using per capita at constant (2010) Purchasing Power Parity (PPP) rates in US dollars, including: early childhood education and childcare (ECEC); maternity and parental leave; public employment services (PES) and administration; employment training; and private sector employment incentives, including subsidies for private sector hiring and workers' mobility allowances. Second, we used a paid parental leave full-time equivalent (FTE) measure from the Social Policy Indicators' Parental Leave Benefit Dataset, calculated as the total maternal, paternal, and dual post-delivery weeks paid leave multiplied by the weekly net replacement rate for the average production workers' wage. This results in a summary measure of family-leave generosity that captures both the percentage of wages that can be replaced by family benefits, as well as the duration of such benefits.[36]

[Table 1]

Estimation

We estimated the association of each social investment indicator using separate linear regressions, given the overlap among the measures, and the fact that our study is an initial exploration. The correlations between the indicators are shown in the appendix. We estimated standardized beta coefficients. We controlled for gender and age and age-by-gender interactions. Because it may be associated with health and the capacity for social investment, we controlled for the log of expenditure-based real GDP in 2005 US dollars at chained PPP rates per capita

from the Penn World Table Version 8.1.[37] To test the association for men versus women, we included policy indicator-by-gender interactions. The policy indicators and GDP were lagged one year.

The observations were age-by-sex-by-country-by-year aggregate estimates. We limited our analysis to countries and years for which each indicator was available. For YLD models, this was 416 age-by-sex-by-country-by-year observations for years 2005 and 2010. For mortality models, this was 1,248 age-by-sex-by-country-by-year observations for all years between 2005 and 2010.

A motivation for cross-national analysis is to learn how policymakers shape health equity through social policy, but a major limitation of such analysis is national societies differ in more ways than can be incorporated into statistical analysis. To address this unmeasured heterogeneity, all models included country fixed-effects that leverage these panel data to "control" for cross-national differences that are unmeasured but can be assumed to have effects that are stable over time such as language, relative population sizes, and religious norms about family formation.[38]

RESULTS

The coefficients of interest, the main effect of the social investment indicator and its interaction with gender, are shown in Tables 2 and 3. The full models are in the appendix. The association between the policy indicator and the health outcome for men is represented by the main effect of the policy indicator since men are the omitted category. The association between the policy indicator and the health outcome for women is the sum of the main effect of the policy

indicator and the policy-by-gender interaction term. The last column displays the two-sided p-value from a Chow test of this association for women.

Table 2 displays estimates of interest for YLD. This table appears to show government spending on employment incentives, ECEC, and parental leave was more strongly associated with lower YLD rates among women. However, Chow tests of these effects were not statistically significant.

[Table 2]

Table 3 displays estimates of interest for mortality. An increase in government spending on employment training programs and the number of eligible weeks FTE paid leave were associated with lower CVD mortality for women. The magnitude of these associations was small. Using the standardized beta coefficients for government spending on employment training programs, the results show that a standard deviation increase in spending—equivalent to $65.07 per capita (Table 1)—was associated with a -0.056 ((-0.003)+(-0.053)) change in the standard deviation of the CVD mortality rate—equivalent to 88.94 deaths per 100,000—corresponding to 4.98 fewer deaths per 100,000 women. These results confirmed our hypotheses that women benefit, but did not confirm our hypotheses that women benefit more.

An increase in government spending on PES and administration was associated with lower CVD mortality for men. Similarly, the magnitude was small. A standard deviation increase in spending—equivalent to $36.81 per capita (Table 1)—was associated with a -0.069 change in the standard deviation of the CVD mortality rate, corresponding to 6.14 fewer deaths per 100,000 men. Additionally, an increase in government spending for ECEC was associated with

lower mortality for both men and women. A standard deviation increase in spending—equivalent to $161.94 per capita (Table 1)—was associated with a -0.104 change for men and a -0.094 ((-0.104)+(0.011)) change for women in the standard deviation of the CVD mortality rate, corresponding to 9.25 fewer deaths for men and 8.27 fewer deaths for women per 100,000. These results partially confirmed our hypotheses since we did not find gender differences in the associations.

Finally, the results show that an increase in government spending on paid maternity and parental leave was associated with lower mortality for men and women, and the association was greater among women. These results were larger in magnitude, though the difference in the effect between genders, while statistically significant, remained small. A standard deviation increase in spending equivalent to $110.4 per capita (Table 1) was associated with a -0.267 change for men and a -0.306 ((-0.267)+(-0.039)) change for women in the standard deviation of the CVD mortality rate, corresponding to 23.75 fewer deaths for men and 27.22 fewer deaths for women per 100,000.These results confirmed our hypotheses that women benefit more than men.

[Table 3]

DISCUSSION

The beneficial effects of compensatory social policies on health are well-established, both in terms of specific programs and in terms of social expenditure differences across types of welfare states.[39–41] This article follows from current policy debates and extends previous research by drawing attention to health effects of capacitating social investment policies similarly not explicitly designed to increase well-being. We hypothesized that family and active

labor market policy measures would have differential health effects for men and women and thereby influence gender health equity. We found mixed results in terms of who benefits from social investment policies and our hypotheses were only partially supported.

On the one hand, women clearly benefit. Government spending on employment training and on maternity and parental leave in addition to the number of eligible weeks FTE paid parental leave were associated with decreased CVD mortality for women. However, leave expenditures had a greater effect for women while training expenditures and weeks paid leave had no effect on the mortality experienced by men and so these aspects of social investment potentially increase gender-inequity in CVD mortality. These findings were as expected in terms of how these policies are beneficial for women who traditionally had the main care burden for young children and who are more likely to take parental leave and need to reenter the labor force.[25,29] However, the magnitude of the effects was quite small.

On the other hand, men also benefit. Government spending on PES and administration was associated with lower mortality for men, but this association was insignificant for women, potentially leading to greater gender-equity in CVD mortality. Additionally, government spending on ECEC benefited both men and women with no statistical gender difference in the association, resulting in no effect on gender-equity. These findings were somewhat expected in terms of our hypothesis on the effects of government spending on PES and administration; previous studies found that men experience greater benefit from the services included in this spending category.[29] However, the effect for women was insignificant and we cannot conclude whether men in fact benefit more. The findings for ECEC deviate from our hypothesis that women would benefit more and requires further exploration.

For ECEC indicators, it is possible men benefit from increased household earnings due to increased labor force attachment facilitated by children being supervised outside the home in childcare or pre-school. Additionally, while childcare provision effectively increased women's participation in paid work,[42] as a result they are then subject to the dual burden of both work and care.[43] Further, mothers are disproportionately likely to be employed part-time across Europe and so whilst their labor market activity rates increase as a result of childcare, their average earnings are lower than men's, contributing to the gender-pay gap.[44]

While these results provide initial evidence of our hypotheses, more research is needed using micro-level longitudinal data with finer-grained detail on social benefit eligibility and take-up and on physical and mental health outcomes, including more proximal CVD risk factors such as smoking and alcohol consumption or psychological stress. Future work should also analyze the life course timing of exposure to social investment policies, which are heterogeneous in their target age-groups.[1,2,34] We note that men and women in older age-groups in these analyses—where mortality rates are significantly higher—will not have benefited as much from social investment policies as those in younger age-groups due to their age and the recency of these policy innovations.[34,45]

We further acknowledge that the rise of more active welfare policies in the form of social investment have coincided with the decrease in more passive forms of welfare – including reductions in out of work benefits and stronger restrictions placed on their receipt.[7] The *recommodification* of the traditional welfare state has accompanied social investment with some documented negative consequences for population health, including socio-economic health inequalities.[46] It is possible that gender health equity is also influenced by these dual processes of investment and retrenchment, and this should be explored in future research.

Limitations

We interpret the results with caution in light of the limitations. First, we were restricted in the number of years of data we could include in the analysis because the social investment approach is relatively new, and because the creation of comparable policy indicators follows the establishment of relevant policies by several years. In future work, we will extend our analysis as data become available.

Second, we use observational data, and so our analyses are vulnerable to several threats to causal inference. We argue that year-to-year changes in social investment effort by the welfare state is plausibly exogenous to year-to-year changes in CVD morbidity and mortality because labor-market conditions exist outside and prior to individuals' entry into employment, and because labor-market programs have been shown to affect individuals' labor market attachment. Nevertheless, we cannot rule out all forms of endogeneity.

Third, while our models control for several predictors of CVD, a broader range of control covariates would strengthen our inferences. Unfortunately, few controls are available from the GBD data, but in our ongoing work we use individual-level data to address other forms of confounding. Still, we emphasize that our fixed-effects estimates can be interpreted as net of very general ceteris paribus conditions, where between-country differences that do not change over time in their levels or in their effects are held constant.

Fourth, we use data aggregated into age-by-sex-by-country-by-year categories, which means that we cannot draw inferences about processes or associations at the individual level. For the present paper, we note that an aggregated approach fits with our overarching aim of

evaluating effects of social investment policies for gender health equity—an inherently aggregated question.

Fifth, we note the results for CVD morbidity were insignificant, but caution interpreting the differences in these results from those for mortality. Unlike the GBD mortality estimates, the YLD estimates are calculated using disease-specific prevalence and disability weights, which allow for an estimate of disease burden that is sensitive to differences in the conditions captured by the GBD CVD category.[47] Critics have questioned the disability weights methodology, which might contribute to measurement error in the dependent variable, increasing the imprecision in our morbidity estimates.[48] Future work using individual-level data will examine effects of social investment policies on specific CVD risk factors and morbidities.

Sixth, since the data are cross-sectional, we are unable to explore the possibility that the identified associations may vary by the timing of exposure or accumulate over the length of exposure. We view our estimates as conservative, since the immediate effects of social investment should be smaller than the accumulated long-term and asynchronous effects of sensitive-periods. However, these estimates offer important insights for CVD among working-age populations, among whom it is a leading cause of morbidity and mortality.

CONCLUSION

Many European governments have enhanced citizenship rights and committed substantial spending in the domains of paid parental leaves, early childhood education and childcare, and employment services.[1,2] Advocates of social investment policies argue they enhance gender-equity by enhancing female labor market power and reducing the gendered burden of care-work.[49] We contribute to debate surrounding social investment policies by exploring their

implications for the cardiovascular health of women and men and corresponding gender health equity. We advance a recent turn in social epidemiology toward social policy and institutional factors in explaining the distribution of population health.[50] We found social investment policies are associated with reduced mortality for women and men, but these effects are small and not enough to explain CVD burden. Future work should use individual-level data to estimate their effects on specific outcomes and target populations.

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TABLES AND FIGURES

Table 1: Macro-Level Measures of Social Investment and GDP, 13 European Welfare States, 2005-2010

Country	Indicator	Mean	SD	Min.	Max.
All	PES and Administration Spending	91.16	36.81	31.07	164.87
	Employment Incentive Spending	53.94	50.4	4.35	204.1
	Training Spending	115.1	65.07	6.01	274.56
	ECEC Spending	315.04	161.94	113.08	710.8
	Weeks FTE Paid Leave	18.06	12.16	5.85	52
	Paid Leave Spending	132.08	110.44	0	384.41
	Expenditure-Based Real GDP per Capita	35631.02	5416.47	28351.94	53772.11
Austria	PES and Administration Spending	69.3	3.58	64.51	74.09
	Employment Incentive Spending	21.76	0.98	20.46	23.07
	Training Spending	168.69	31.76	126.25	211.12
	ECEC Spending	151.8	28.97	113.08	190.51
	Weeks FTE Paid Leave	31.31	15.48	10.63	52
	Paid Leave Spending	60.03	2.83	56.26	63.81
	Expenditure-Based Real GDP per Capita	35635.65	1277.5	33467.19	36903.02
Belgium	PES and Administration Spending	77.7	4.02	72.34	83.07
	Employment Incentive Spending	63.06	8.75	51.36	74.75
	Training Spending	61.94	0.16	61.73	62.15
	ECEC Spending	247.2	11.56	231.76	262.65
	Weeks FTE Paid Leave	10.44	0.78	9.39	11.49
	Paid Leave Spending	81.73	5.79	73.98	89.47
	Expenditure-Based Real GDP per Capita	33785.8	1291.92	31930.79	35519.02
Denmark	PES and Administration Spending	137.64	4.78	131.24	144.03
	Employment Incentive Spending	114.54	11.3	99.44	129.65
	Training Spending	241.99	24.37	209.43	274.56
	ECEC Spending	542.5	16.24	520.8	564.2
	Weeks FTE Paid Leave	10	0	10	10
	Paid Leave Spending	235.16	0.89	233.97	236.34
	Expenditure-Based Real GDP per Capita	34589.99	1536.43	32133.67	36154.02
Finland	PES and Administration Spending	64.07	1.01	62.72	65.42
	Employment Incentive Spending	51.77	3.81	46.67	56.87
	Training Spending	167.66	20.34	140.48	194.85
	ECEC Spending	367.1	21.87	337.88	396.32
	Weeks FTE Paid Leave	22.74	11.03	8	37.48
	Paid Leave Spending	254.03	17.27	230.95	277.1

Country	Indicator	Mean	SD	Min.	Max.
	Expenditure-Based Real GDP per Capita	32535.48	1687.65	30167.14	34755.36
France	PES and Administration Spending	93.96	9.68	81.02	106.9
	Employment Incentive Spending	29.94	4.34	24.13	35.74
	Training Spending	116.73	11.69	101.11	132.34
	ECEC Spending	425.92	0.28	425.54	426.3
	Weeks FTE Paid Leave	10.82	1.44	8.9	12.75
	Paid Leave Spending	113.76	5.22	106.78	120.74
	Expenditure-Based Real GDP per Capita	30672.3	956.98	29177.58	31502.98
Germany	PES and Administration Spending	133.04	14.25	113.99	152.09
	Employment Incentive Spending	28.42	6.5	19.73	37.11
	Training Spending	128.94	14.35	109.76	148.12
	ECEC Spending	161.84	16.76	139.45	184.24
	Weeks FTE Paid Leave	33.47	0.06	33.4	33.55
	Paid Leave Spending	101.72	9.93	88.45	114.99
	Expenditure-Based Real GDP per Capita	32488.73	1310.19	30482.34	33888.9
Ireland	PES and Administration Spending	63.15	7.77	52.76	73.54
	Employment Incentive Spending	23.02	0.14	22.84	23.2
	Training Spending	148.76	27.81	111.59	185.92
	ECEC Spending	167.72	31.26	125.94	209.49
	Weeks FTE Paid Leave	11.53	0.08	11.42	11.64
	Paid Leave Spending	60.12	18.4	35.53	84.71
	Expenditure-Based Real GDP per Capita	38852.1	2831.25	35977.13	43383.89
Italy	PES and Administration Spending	33.4	1.75	31.07	35.73
	Employment Incentive Spending	62.06	8.41	50.83	73.3
	Training Spending	60.25	7.49	50.24	70.25
	ECEC Spending	180.67	0.16	180.45	180.89
	Weeks FTE Paid Leave	6.44	0.38	5.93	6.95
	Paid Leave Spending	63.03	1.35	61.22	64.84
	Expenditure-Based Real GDP per Capita	29765.58	961.28	28351.94	31006.19
Netherlands	PES and Administration Spending	162.17	2.01	159.48	164.87
	Employment Incentive Spending	8.38	0.81	7.3	9.46
	Training Spending	52.87	3.11	48.72	57.02
	ECEC Spending	282.2	70.64	187.8	376.59
	Weeks FTE Paid Leave	6.12	0.2	5.85	6.39
	Paid Leave Spending	0	0	0	0
	Expenditure-Based Real GDP per Capita	36657.05	1692.4	34022.23	38562.1
Norway	PES and Administration Spending	72.42	1.78	70.04	74.8
	Employment Incentive Spending	60.31	1.11	58.83	61.78

Country	Indicator	Mean	SD	Min.	Max.
	Training Spending	169.38	32.81	125.54	213.22
	ECEC Spending	579.86	97.99	448.92	710.8
	Weeks FTE Paid Leave	41.5	1.12	40	43
	Paid Leave Spending	376.49	5.93	368.57	384.41
	Expenditure-Based Real GDP per Capita	49536.11	2942.79	44994.75	53772.11
Sweden	PES and Administration Spending	98.36	11.18	83.42	113.3
	Employment Incentive Spending	196.68	5.55	189.26	204.1
	Training Spending	59.05	13.98	40.37	77.74
	ECEC Spending	556.84	48.37	492.2	621.49
	Weeks FTE Paid Leave	12.61	1.05	11.2	14.02
	Paid Leave Spending	273.41	17.07	250.59	296.22
	Expenditure-Based Real GDP per Capita	33937.13	1709.08	31354.64	35441.97
Switzerland	PES and Administration Spending	58.24	0.07	58.15	58.34
	Employment Incentive Spending	36.93	0.53	36.22	37.64
	Training Spending	113.16	7.95	102.54	123.78
	ECEC Spending	147.44	2.92	143.53	151.35
	Weeks FTE Paid Leave	25.26	1.19	23.67	26.86
	Paid Leave Spending	47.53	8.09	36.71	58.34
	Expenditure-Based Real GDP per Capita	41984.09	3062.22	37124.35	44781.87
United Kingdom	PES and Administration Spending	121.67	6.78	112.6	130.73
	Employment Incentive Spending	4.36	0.01	4.35	4.38
	Training Spending	6.93	0.69	6.01	7.86
	ECEC Spending	284.38	4.01	279.02	289.73
	Weeks FTE Paid Leave	12.58	0.85	11.44	13.72
	Paid Leave Spending	50.1	9.31	37.66	62.53
	Expenditure-Based Real GDP per Capita	32763.18	946.34	31181.47	33958.74

Notes: Pooled data from 2005 to 2010. PES=public employment services. ECEC=early childhood education and childcare. FTE=full-time equivalent.

Table 2: Standardized Beta Coefficients for Effects of Social Investment Policy Indicators from Regression Models Predicting CVD YLD Rate per 100,000 in 13 European Countries, 2005 and 2010

Variables	Standardized Beta	Coefficient	Standard Error	Chow Test P-Value
PES and Administration Spending				
Indicator	0.001	0.007	0.136	0.596
Women ×Indicator	-0.014	-0.079	0.086	
Employment Incentive Spending				
Indicator	0.029	0.169	0.294	0.841
Women × Indicator	-0.036	-0.228***	0.066	
Employment Training Spending				
Indicator	-0.009	-0.036	0.074	0.586
Women × Indicator	-0.001	-0.004	0.049	
ECEC Spending				
Indicator	0.030	0.053	0.044	0.147
Women × Indicator	-0.079	-0.118***	0.019	
Weeks Full-time Equivalent Paid Leave				
Indicator	0.0027	0.064	0.543	0.211
Women × Indicator	-0.029	-0.745**	0.278	
Paid Leave Spending				
Indicator	-0.015	-0.040	0.125	0.101
Women × Indicator	-0.060	-0.166***	0.028	

Notes: PES = public employment services; ECEC = early childhood education and childcare. The models are run on 416 age-by-sex-by-country-by-year observations. *** $p<0.001$, ** $p<0.01$, * $p<0.05$, + $p<0.10$

Table 3: Standardized Beta Coefficients for Effects of Social Investment Policy Indicators from Regression Models Predicting CVD Mortality Rate per 100,000 in 13 European Countries, 2005-2010

Variables	Standardized Beta	Coefficient	Standard Error	Chow Test P-Value
PES and Administration Spending				
Indicator	-0.069	-0.169**	0.063	0.162
Women ×Indicator	0.047	0.081*	0.032	
Employment Incentive Spending				
Indicator	-0.009	-0.018	0.132	0.861
Women × Indicator	0.020	0.041+	0.024	
Employment Training Spending				
Indicator	-0.003	-0.004	0.036	0.052
Women × Indicator	-0.053	-0.066***	0.019	
ECEC Spending				
Indicator	-0.104	-0.059**	0.020	0.009
Women × Indicator	0.011	0.005	0.008	
Weeks Full-time Equivalent Paid Leave				
Indicator	-0.025	-0.199	0.152	0.038
Women × Indicator	-0.015	-0.118	0.105	
Paid Leave Spending				
Indicator	-0.267	-0.217**	0.068	0.000
Women × Indicator	-0.039	-0.034**	0.011	

Notes: PES = public employment services; ECEC = early childhood education and childcare. The models are run on 1,248 age-by-sex-by-country-by-year observations. *** $p<0.001$, ** $p<0.01$, * $p<0.05$, + $p<0.10$