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Open for Welfare: Openness to Trade and Social Spending in the West, 1920–1990

By

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SUMMARY

Openness to trade promotes economic growth and reduces poverty. In terms of its impact on welfare policies it has been said on the hand to reduced social spending, and on the other hand it has been argued that small open economies in Europe have opted for redistributive economic policies. In this paper we aim to test the hypothesis of whether economic openness has actually led to increased social spending. We do this with a sample of 20 countries from Europe, North America, and Oceania between 1920 and 1990. It was during this time when social spending increased dramatically and openness rapidly rose following its collapse during WWII. We divide the countries into small and large economies, in order to test Peter Katzenstein's hypothesis, but we also suggest that important differences can be found between regions/political economies. We find that countries in Southern Europe were both less open during this period and also had a lower degree of social spending compared to Northern and Western Europe. However, we find little statistically significant evidence that openness had a major positive impact on social spending. Rather, it seems that openness was strongly correlated with economic growth, which itself seems to be a better predictor of social spending.

KEYWORDS

social policy, trade policy, openness, social spending, foreign trade, welfare, economic development, OECD, Europe, North America, Oceania

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I Introduction

The dominating strand of scholars has it that openness to trade promotes economic growth, and reduces poverty, especially in low-income countries; and conversely, that barriers to trade hamper economic growth (for instance Dollar, 1992; Ben-David, 1993; Sachs and Warner, 1995; Edwards, 1998; Frankel and Romer, 1999). However, according to for instance Rodrik (1997) or Spilimbergo et al (1999), the choice to opt for liberal trade policies may have prevented policy makers to launch redistributing income policies, i.e. cut social spending, and income taxes, and in this respect, openness to trade may have entailed a race-to-the-bottom in terms of social spending. Even though openness to trade has promoted growth, it may thus have been accompanied by concentration of income, which has been one of the famous arguments of for instance Piketty (2014).

In Europe, openness to trade became a persistent policy principle already in the immediate post-war years. Openness to trade accompanied the industrialisation and was considered one of the cornerstones, which promoted both economic integration and long-run political stability (for instance Rodrik, 1997), and eventually it became a basis for the development and extension of the ECC (for instance Schmitter, 2000; Meunier, 2003). According to Katzenstein (1985), smaller European nations in particular have been especially prone to adopt liberal trade policies. Far from engaging in a race-to–the-bottom, argues Katzenstein, small open European economies like Switzerland, Austria or the Scandinavian countries have sought to safeguard

economic equality and political stability through redistributive economic policies, aimed at levelling inequality by compensating the losers of free trade policies (see also Cameron, 1978; Anderson, 2005). According to this view, increased openness to trade should, on the contrary, cause social spending to rise.

The purpose of this paper is thus to examine the relationship between openness to trade and social spending. Departure is taken from Katzenstein's argument, that small European countries have been more prone to adopt liberal trade policies in comparison to large countries, and secondly, whether openness to trade, other things being equal, have caused social spending to rise. Other studies have also investigated openness and its links with the welfare state, though openness has rarely been the sole focus, but rather used as a control variable. We use a broad sample of different countries from various regions and types of political economy to investigate the issue. We can hence assess whether certain political and economic systems have been more prone embrace openness to trade and adopt widespread social policies, or whether it has been a general trade in the western world. The study is temporally and spatially delimited to the 20th century OECD core. Focus is placed on the post-war period.

In the following (section II) we discuss determinants of social spending in brief. In section III we make clear the empirical narrative regarding openness and social spending during the 20th century. In section IV, we test whether economically open countries actually have been more prone to adopt welfare policies. In section V we conclude the paper.

II. Determinants of Social Spending

Most countries experienced a rise in social spending[1] during the period we examine, both in absolute real terms and as a percentage of GDP, but large differences nevertheless persisted between countries towards the end of the period. There have been many attempts to explain what drives social spending, as well as the considerable variation in levels of social spending that is observed across countries. The most commonly invoked driving force behind social spending is rising income levels. Borcherding (1985) and Mueller and Murrell (1986) both found that public demand for social spending have increased faster than income levels (i.e. has an income elasticity above one), yielding a continuous rise in social spending as a percentage of GDP over time. This is consistent with the argument of Olson (1982), that social spending policies have tended to be self-reinforcing (once instituted, coalitions of winners form with strong incentives for collective action, while the costs are diluted, being borne by all taxpayers). Others have argued for a negative relationship between GDP growth and social spending over time, one reason being that public expenditure is not indexed to economic growth or wages and may hence be deflated in fast-growing economies (Nyman, 2016).

As for the connection between the openness of trade and the welfare state the results are so far quite mixed. First, it has been shown that early social protection programs were more extensive in open

[1] We use ”social spending” and ”welfare state” interchangeably throughout, where the former denotes public spending on social transfers, grants, health care, pensions, elder care, unemployment, etc.

economies before World War I (Huberman and Lewchuk, 2003). Second, it seems as if openness to trade has had low or no impact on the growth of the welfare state through the 20th century (Epifani and Gancia, 2009; Brady et al, 2005). Espuelas (2012) however found that between 1950 and 1978 exports+imports as share of GDP was positively connected to spending in unemployment and health, but negatively connected to spending in education, pensions, and welfare programs. Overall, it had a small negative (but not significant) impact on social spending. The work by Espuelas also showed that differences in openness to trade could explain quite a large share of the differences in social spending when Spain was compared to more open economies (2012, p, 221). Lindert (2004) found that openness was positively linked to social spending on the aggregate and particularly so on unemployment and education, hence reaching partly different results than Espuelas.[2]

Furthermore, the openness of the economy was shown to have another important effect – namely that it seems as if countries which were open to trade were more likely to use general taxes as a way to finance welfare, while more closed-off economies rather relied more on social contributions to fund the welfare state. Openness may hence have had a positive impact on the growth of social spending in a more indirect way, through the way that programs are being paid for. It has been proven elsewhere that countries that have had a broad tax-base rather than social contributions also have had higher levels of social spending.

Another important determinant of social spending that is commonly invoked in the literature is democracy, or rather the degree of public political participation (Baldwin, 1990; Uusitalo, 1984). Espuelas showed that whether a country was democratic or dictatorship had a large

[2] However, when including country fixed effects Lindert found no positive effects of openness.

impact on the level of social spending, where dictatorships notably spent less. Arguably, the effect of public political participation on social spending varied considerably depending on the domestic distribution of incomes, with the most pronounced effects being felt in highly inegalitarian countries. Consequently, several authors have emphasised the degree of income inequality as an important determinant of social spending (for instance Peltzman, 1980; Meltzer and Richard, 1981; Persson and Tabellini, 1994).

According to Katzenstein (1985), the level of political participation is associated with country size; e.g. since small countries in Europe have developed a tradition of social partnership, which have incited interest groups to form up and coordinate, participation was encouraged and plausibly rewarded by way of redistributive policies. This view thus supports the notion that a relationship between country size, the level of political participation, and the level of social spending should be expected in the analyses below.

Finally, Lindert (1994, 1996) has argued that a prime determinant of social spending lays in the demographic makeup of a country, in particular the percentage of the population above age 65. Perhaps somewhat counter intuitively, Lindert finds that an older population have tended to be more prone to vote in favour of redistributive policies; not just those benefitting themselves directly (such as pensions), but across all categories of social spending.

We thus have discerned three main controls that can be used when testing the impact of trade openness on social spending, 1) income levels, 2) public political participation, and 3) demographic constitution. Unfortunately we have had to drop income inequality as too many data points were missing for too many countries in the sample we are using (see Roine, Vlachos, and Waldenström, 2007). We do not address the

"guns vs butter" issue of military spending specifically, even though there clearly could be a trade-off with spending on welfare programs.[3]

[3] See Eloranta, 2004. For an argument on a no trade-off between "guns and butter" see for instance Gifford, 2006.

III. Openness to Trade and Social Spending in the 20th century

Our sample consists of 20 countries from the present day OECD core. These will be divided into four regional clubs (see table 1): Northern Europe (Denmark, Finland, Norway, Sweden), Western Europe (Austria, Belgium, Germany[4], France, Ireland, the Netherlands, Switzerland, the United Kingdom), Southern Europe (Greece, Italy, Portugal, Spain), and the so-called European Offshoots (Australia, Canada, New Zealand, USA).[5] Unfortunately we have (so far) been forced to exclude countries in Central and Eastern Europe due to lack of data for a large part of the investigation period.[6]

Table 1. Division of Countries into Regional Clubs

North	West	South	Offshoots
Denmark, Finland, Norway, Sweden	Austria, Belgium, France, Germany, Ireland, the Netherlands, Switzerland, United Kingdom	Greece, Italy, Portugal, Spain	Australia, Canada, New Zealand, USA

[4] Denotes West Germany between 1946 and 1989.

[5] The division is our own, based on both shared geography and plausibly having political economy in common. The term "regional clubs" has for instance been used by Clemens and Williamson (2004), even though they use other names and divisions for the regions. There are several other ways to divide countries into groups done in the literature on the welfare state. For a collection of these groupings see Arts and Gelissen, 2010, table 39.1.

[6] We have so far also decided to exclude Japan even though it certainly falls into the core of the OECD. Japan has been excluded simply because it is difficult to fit into any of the political economy typologies we are working with in this paper. Hopefully this is something we can rectify moving forward.

We operationalise openness as the share of imports plus exports in total GDP, all in current prices. Even if this is not the most direct proxy for a country's trade policy, it is often preferred over the commonly used average tariff calculated as the share of customs revenue in total imports. This measure suffers from severe index number problems and tends to heavily undervalue protectionist goods with little or no import penetration (Findlay and O'Rourke, 2007; Anderson and Neary, 2005). Total trade as share of GDP has its own downsides (see O'Rourke, 1997) but is nevertheless a commonly used operationalisation for a country's openness (Roine, Vlachos, and Waldenström, 2007; Capie, 1994; Lindert, 2004; Espuelas, 2012).

Figure 1 shows openness between 1920 and 1990 for the aforementioned 20 countries, divided into small and large economies. The division by size of the economy is done by pure size of GDP, i.e. not GDP/capita.[7] Figure 2 shows the same but breaks the data down by regional clubs instead. We do this to argue for stepping away from Katzenstein's classification of economies in favour of looking at regional differences within Europe. According to Magee and Lee (in Bortolotti and Fiorentini, 1999), economic liberalism, i.e. openness to trade, was a distinctive regional feature of the advanced countries of the EEC. This line of argument draws from a Stolper-Samuelson theoretical framework (that advanced economies, e.g. industrialised countries and thus not necessarily large countries, presumably would favour policy

[7] This leads to the question of where to draw the line between "small" and "large". Some economies are unquestionably large in sheer size, such as the US and Germany, while others such as Ireland and New Zealand are unambiguously small. Four countries (Australia, Canada, the Netherlands, and Spain) fall somewhere in between the distinct group of large economies and the distinctly small. Australia and the Netherlands have been assigned to the small group simply because they lie closer to the cluster of small economies, while Canada and Spain have significantly larger economies (in absolute numbers, Canada's economy was for instance twice the size of the Australian in 1990). Another alternative would have been to label these four as "middle-sized" economies, but we have chosen to stick with the dichotomous categorization in relation to Katzenstein's (1985) categorization and argumentation.

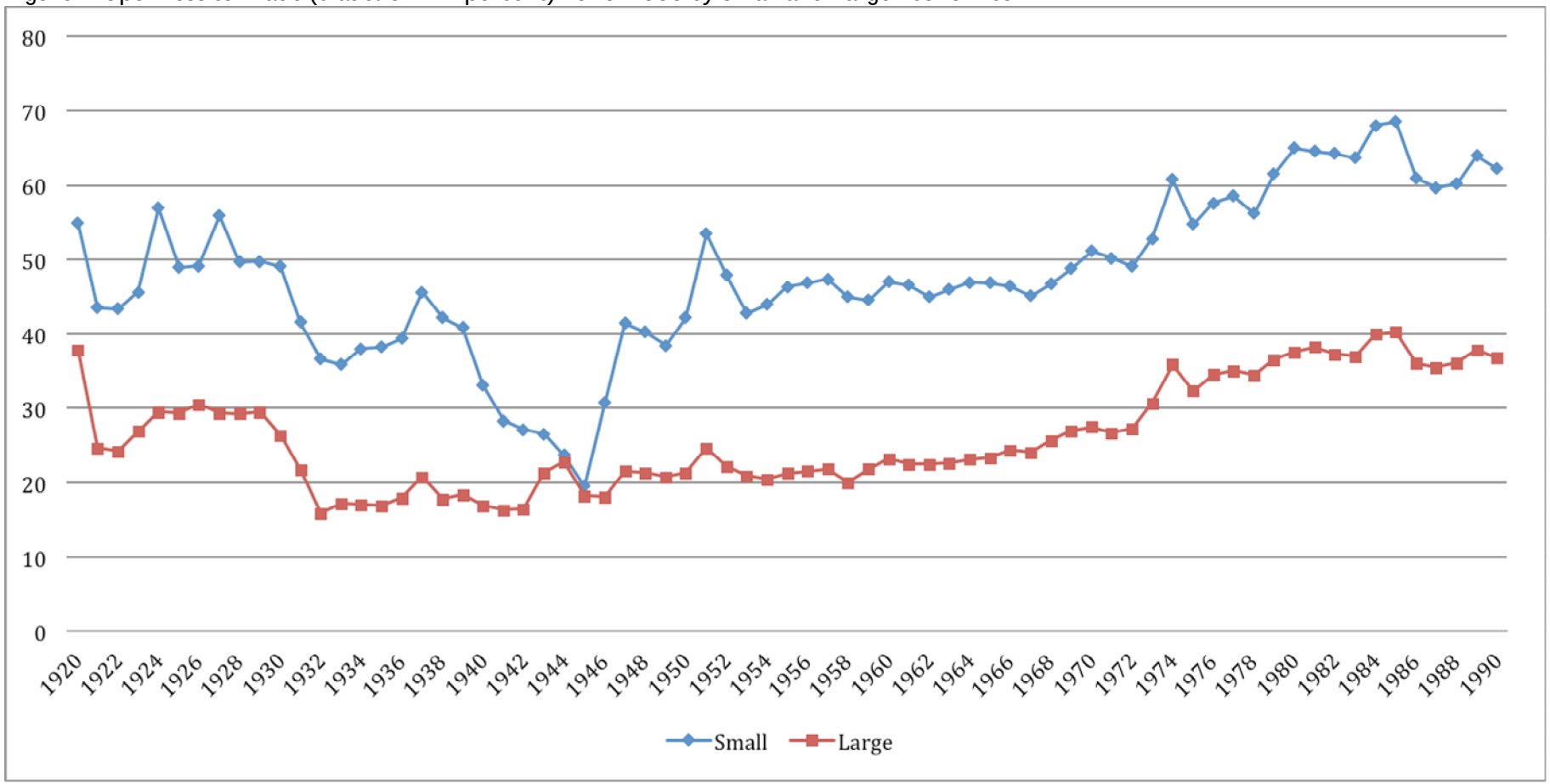
support to owners of abundant factors, and on this basis advanced countries are less prone to raise tariffs than developing countries). This thus lends support for a regional approach to analyse openness rather than only with regard to country size. This regional approach also would fetch support from the popular institutional literature on post-war European integration. It is well known that the pattern of integration pretty much followed institutional settings of the Coal and Steel Union, GATT, EEC, and EFTA, which clearly followed a geographically regional pattern (for instance Mattli, 1999; Aspinwall and Schneider, 2000; Pierson, 1996).

This could plausibly provide answers to the causes of the European divergence between North and South, while also putting an increased focus on the development in Southern Europe which has so far received limited attention in the comparative political economy literature (Esping-Andersen, 1990; Hall and Soskice, 2001; Pontusson, 2011).

Figure 1 below shows a discernible difference between small and large economies over the 20th century, giving empirical support to Katzenstein's argument of smaller economies as being more open and outward looking. There was a clear difference already in the beginning of the period, which was then accentuated after World War II (hereafter WWII). A clear drop in the trade share of GDP occurred first during the Great Depression and then dramatically during WWII as international trade collapsed. This drop was particularly steep for the small economies that apparently already had developed a relatively greater dependency on foreign trade for their growth. This is the only time during this period where we observe a "convergence" in openness between small and large economies. Thus, in practice, the convergence rather was an expression of foreign trade accounting for a dramatically

smaller share of GDP while the bilateralisation of international commerce committed trading economies to maintain trade at reciprocal levels, which tended to “harmonise” the terms and conditions, and the relative openness to trade (for instance Eichengreen and Irwin, 1998). As expected, openness increased everywhere after the war as trade routes were resumed and trade barriers were increasingly dismantled, but this period also saw a marked difference between the small and large economies.

Figure 1. Openness to Trade (trade/GDP in percent) 1920–1990 by Small and Large Economies



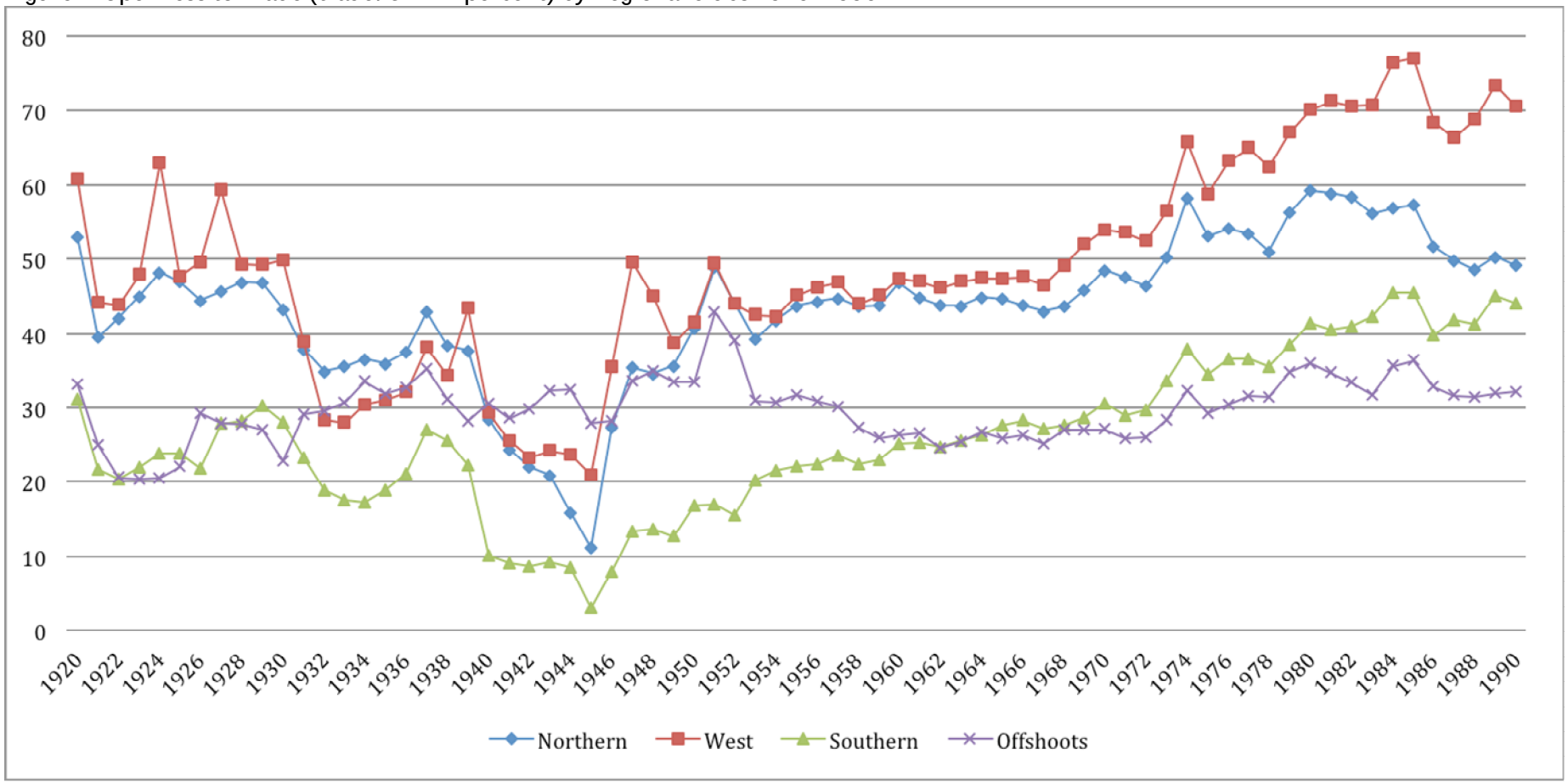
Source: Mitchell (2003a, table E1, table J1; 2003b, table E1, table J1; 2003c, table E1, table J1).

Note: Small: Australia, New Zealand, Denmark, Finland, Norway, Sweden, Austria, Belgium, Ireland, Netherlands, Switzerland, Greece, and Portugal. Large: Canada, USA, United Kingdom, Germany, France, Italy, and Spain. The measurements are unweighted averages.

A different story is apparent when economic openness is split up by regional clubs rather than by economic size. Here there was rather a very similar level and trend between Northern and Western Europe the entire period except for after 1980 when the trade share in GDP increased in Western Europe but rather decreased in the Northern countries. Here the real outlier is Southern Europe, which was economically less open the entire period, with particularly large differences between 1950 and the middle of the 1980s (and smaller difference during WWII). There was an increase in openness everywhere after WWII, but there was no Mediterranean "catch-up" until possibly towards the end of the 1980s, which times with Spain and Portugal entering the EEC. It is also noteworthy that there were differences within these categories. Finland was overall less open than its Scandinavian neighbours. Italy stood out as more open than the rest of Southern Europe, and in Western Europe we find the most openness in Belgium, Ireland, and the Netherlands. Among the European Offshoots, Canada and New Zealand generally had higher levels of openness to trade than did Australia and USA.[8]

[8] For a measure of the difference over time within the groups, see the coefficient of variation added in the appendix.

Figure 2. Openness to Trade (trade/GDP in percent) by Regional Clubs 1920–1990



Source: See figure 1.

Note: Northern: Denmark, Finland, Norway, and Sweden. West: Austria, Belgium, United Kingdom, France, Germany, Ireland, Netherlands, and Switzerland. Southern: Greece, Italy, Portugal, and Spain. Offshoots: Australia, Canada, New Zealand, USA. The averages for the regional clubs are unweighted.

Social Spending over the 20th Century

The analysis of social spending will be divided up in the same way as openness was, first by small and large economies and then by regional clubs. Social spending is measured in per cent of GDP, all in current prices. For 1920 and 1930 it consisted of spending on welfare such as social transfers and grants, unemployment, pensions, housing subsidies, and health care. Figures from 1960 and 1970 are collected from the old OECD series, while figures from 1980 and 1990 are from the new OECD series (Lindert, 2004, pp. 12–13). Note that social spending as defined here does not include expenditure on public education, regardless of time period. It is important to note that while the definition of social spending is consistent over the period, what is actually regarded as public changes over time within each of the welfare categories. During the 1920s and 1930s private welfare such as pensions, sick care, dental care, etc. was provided by individual private companies in several countries, such as Britain, France, Germany, and Canada (Prasad, 2012, pp. 159–166). These later became parts of the public welfare programs in most countries, meaning the state took responsibility of what were earlier private provisions. This means that the growth in social spending during the 20th century is not just due to an absolute increase on the spending side of the public sector, but also that many programs moved from being private to public. In some cases, such as in Germany, public welfare programs developed from the private that were in place during the beginning of the century.

Table 2. Social Spending (percent of GDP) in Small and Large Economies in Europe 1920–1990

	Small	Large
1920	1.0	0.5
1930	1.8	1.3
1960	9.8	10.7
1970	13.7	14.1
1980	18.6	16.4
1990	21.7	18.4

Source: Lindert, 2004, pp. 12–13, table 1.2. Espuelas, 2012, p. 214, table 1, for Spain and Portugal in 1962 and 1970.

Note: Same division of countries as in figure 1. Figures are missing for Ireland, Germany, and Switzerland in 1920. See appendix for further details on country-level.

As noted by Peter Lindert, social spending rose everywhere in the Western World over the course of the 20th century. It increased both in real terms and as shown in table 2 also as share of GDP. Social spending was comparatively low everywhere in 1920 and then increased rapidly from 1960. The difference in 1990 compared to 1920 was more than twentyfold. The difference in social spending between small and large economies was however quite small over time, even though there was a shift from 1960 to 1990 where the small economies take over as the leaders in social spending. While the large economies outspent the small by three percentage points in 1960, the reverse was true in 1990.

Table 3. Social Spending (percent of GDP) in Regional Clubs 1920–1990

	North	West	South	Offshoots
1920	1.4	0.7	0.0	1.1
1930	2.8	2.0	0.1	1.4
1960	9.9	12.0	8.1	8.5
1970	16.4	16.3	10.5	9.7
1980	23.3	20.5	12.2	12.9
1990	27.6	21.3	16.2	16.2

Source: Lindert, 2004, pp. 12–13, table 1.2. Espuelas, 2012, p.214, table 1, for Spain and Portugal in 1962 and 1970.

Note: Same division of countries as in figure 2. Figures are missing for Ireland, Germany, and Switzerland in 1920. See appendix for further details on country-level.

When social spending is analysed regionally in table 3, a clearer picture emerges. Most notable is again the position of the Southern European countries (as before, Greece, Italy, Portugal, and Spain). They were laggards in the 1920s and 1930s but were then on par with the offshoots in 1960. They were however behind the rest of Europe, and that trend only accelerated from 1970 and onwards. The picture in 1980 and 1990 shows three distinct categories. The Northern countries were leaders quite notably ahead of the Western European countries (while being on the same level in 1970), with the Southern European countries further behind.

Just as with openness there were also differences within the regional clubs. Sweden and Denmark stand out a few per cent ahead of Finland and Norway between 1960 and 1990. What accounts for the difference between the Nordic countries? All four have had a tradition of governments dominated by Social Democracy, but there still were noticeable differences. We do not supply a full answer, but when comparing some key factors a few things become obvious. First, Sweden

and Denmark came out substantially better from WWII and were able to increase their social spending during the 1950s and 1960s. Second, Norway and Finland were noticeably poorer then their Nordic neighbours in the aftermath of WWII. Norway did not catch up until late in the 1970s and Finland lagged in GDP/capita throughout the period. Both Norwegian and Finnish social spending didn't close the gap until the 1990s (see appendix for figures for individual countries). Third, it seems that at least for Finland military spending took up a relatively larger part of the central budget than for the three other Nordic countries. This was particularly the case during WWII, but also during the Cold War.[9]

Ireland and Switzerland accounted for the lowest social spending in the Western regional club, and just as with openness Italy's social spending was higher than its Mediterranean partners. What made Greece, Portugal, and Spain stand out during the period were their eras of authoritarian rule, which possibly could have had a retarding impact on social spending. It seems at least that there was such an effect on the revenue side.

Canada and New Zealand generally have had higher levels of socials spending than Australia and USA, particularly towards the end of the period. Coefficients of variation (reported in the appendix) however give the indication that differences between countries generally got smaller as the period progressed.

Small economies were generally more open than large economies, but there was a small difference in social spending when these categories were used. Rather, we have argued that it could be fruitful to look at regional clubs within Europe when gauging the link between

[9] See Eloranta and Kauppila, 2008, on Finnish government spending during the 20th century. The authors however find no evidence for a trade-off between military and social spending, but rather that central government spending increased overall.

openness and social spending. The countries in Southern Europe were behind the rest of Europe both in terms of openness and social spending for much of the 20th century. Both openness and social spending increased during this period, and particularly so after 1960. The question is whether it would be possible to find a link between the two?

IV. Does Openness Cause a Rise in Social Spending?

In this section we aim to test statistically whether there was any association between economic openness and social spending in the West between 1920 and 1990. We use decadal averages of every variable since the data on the dependent variable social spending is only available at the decade level (before 1980, after that the OECD series report annual data). As was shown in section III data on social spending is not available for the 1940s and 1950s; therefore we have been forced to exclude these decades in the regressions, leaving us with six decades in total.

The operationalization and definition of economic openness and social spending were described in section III. As control variables we use electoral participation, the demographic composition of each country, and the level of economic development. The decadal average will be used for each control variable (except for demography which usually only had data points for each decade). We use regional dummies to ensure robustness and we prefer regional to country dummies since we hypothesise that there might be substantial changes between regional divisions we proposed earlier. Time dummies (for each decade but one) have also been put in the model.[10]

We define electoral participation as the share of total votes in the voting age population (VAP turnout). The idea is that higher turnout will

[10] The regression analysis itself has been done using E-views 7.

have a positive impact on social spending.[11] The demography variable is the share of senior citizens (age 65 and over) in the total population. This should affect social spending in the sense that seniors tend to vote for social programs relatively more than other age groups, even programs not directly affecting that age group (pensions, elder care, etc.).[12] Economic development is expressed as the decadal average of growth in GDP/capita in international 1990 PPP adjusted US dollars. We hypothesise that higher rates of economic growth should lead to higher social spending over time (see also Lindert, 2004).[13] We also considered adding tax revenue as a fourth control variable, but decided against it since it pretty much will measure the same thing as the GDP variable. One of the reasons why GDP would have a positive impact on social spending is because as the economy grows, so would the tax-base and government revenue grow in absolute numbers. Hence, GDP can capture some of the impact that tax revenue would have without risking multicollinearity in the model, of which there were a risk since correlation between the variables was present when we tested for it. Interestingly however, a similar pattern is found in the tax revenue data as in that on social spending, where the North is a clear number one, while the West lags partly behind and Southern Europe and the Offshoots are at about the level of tax intake clearly behind the other two regional clubs.[14]

[11] Figures on turnout from 1945 available in Institute for Democracy and Electoral Assistance (IDEA) database: https://www.idea.int/data-tools/data/voter-turnout . Before 1945 this has been estimated using total votes in each election from Cook and Paxton (2001) divided by population figures from Mitchell (2003) (voting age population being that over the age of 20 here).

[12] Figures on population from Mitchell (2003a, table A2; 2003b, table A2; 2003c, table A2).

[13] Figures on GDP from the Maddison-project, http://www.ggdc.net/maddison/maddison-project/home.htm, 2013 version.

[14] Tax revenue seems however to have increased substantially in Portugal and Spain once the countries went from dictatorships to democracies during the 1970s.

Quite naturally there are missing data points for some of these variables. Some of these were specified in section III. It could further be added that there are no data available on openness for Portugal before 1960 (due to missing figures on nominal Portuguese GDP in Mitchell (2003)), and no data on voting in either Portugal or Spain before the 1970s (having to do with the respective dictatorships, which is also the case for Italy in the 1930s).[15] Since data on social spending is not available for the 1940s and 1950s those decades are dropped from the regressions. In total we then wind up with 6 decades and 20 cross sections (the number of countries in the study).

The results from the first regression can be seen in table 3. This model tests the level of each variable since we hypothesise that the for certain variables, for instance openness and GDP, we expect to find that higher levels will yield higher levels of social spending. Richer countries that are open to trade will have both revenue and incentives for welfare policies. The first regression uses the Ordinary Least Squares (OLS) estimation method. The variables "Northern", "Southern", and "Offshoots" denote the regional dummies used, and the decades are the time dummies.

[15] We could code voting as zero in these cases, but since this would create problems for the regression (with values being bound at zero) we have decided to leave it as missing data instead.

Table 4. Cross Section OLS Regression Results for Model 1 (1920–1990)

Variable	Coefficient	Std error	T-stat	Prob
C	-25.5767	3.7478	-6.8244	0.0000***
OPENNESS	0.0209	0.0174	1.2030	0.2320
GDP	0.0007	0.0001	4.8342	0.0000***
VOTE	0.0949	0.0227	4.1742	0.0001***
DEMOGRAPHY	1.2221	0.2534	4.8220	0.0000***
Northern	2.3383	1.6726	1.3980	0.1654
Southern	5.9219	2.7982	2.1163	0.0370**
Offshoots	7.7543	3.2322	2.3991	0.0184**
1920	6.3393	3.9783	1.5935	0.1144
1930	9.2458	3.6751	2.5158	0.0136**
1960	8.5640	3.5053	2.4432	0.0164**
1970	10.1084	3.4475	2.9321	0.0042***
1980	3.7365	2.1839	1.7110	0.0904*
Observations	107			
R^2	0.8637			
Adjusted R^2	0.8463			
S.E. of regr	3.3207			
Durbin-Watson	1.0440			

Openness was here positively associated with social spending, as we would assume, even though the effect is very slight, but the variable was not significant on any of the critical levels so the results cannot really be trusted. GDP does have the expected sign, and instead show a slight positive impact with a statistically significant result on the 99 per cent confidence level. Democratic participation and demography display a positive effect on social spending and both coefficients are statistically significant on the 99 per cent level, and demography show an impact of quite a large order.

However, when running diagnostic tests on this model we found that it suffered from a severe case of autocorrelation, as indicated by the reported Durbin-Watson statistic. Furthermore, the autocorrelation

coefficient was as high as 0.45, indicating a high degree of autocorrelation. Given this severity we decided that in order to have a model that would make un-corrupted predictions we needed to make away with this autocorrelation. We did so by transforming all quantitative variables using the formula Ln (Y_t – (Y_{t-1} x P)), where P is the autocorrelation coefficient that was obtained from the OLS-model (see Lewis-Beck, 1986, pp. 229–238).

After this exercise we wind up with a Generalised Least Squares (GLS) regression and a second model where the variables instead of testing levels tests changes over time. The results from this regression can be seen in table 4.

Table 5. Cross Section GLS Regression Results for Model 2 (1920–1990)

Variable	Coefficient	Std error	T-stat	Prob
C	-13.5847	1.4821	-9.1660	0.0000***
OPENNESS	0.1732	0.1017	1.7033	0.0927*
GDP	1.0185	0.1965	5.1830	0.0000***
VOTE	1.0815	0.1923	5.6235	0.0000***
DEMOGRAPHY	1.2381	0.3519	3.5181	0.0007***
Northern	0.1702	0.2689	0.6329	0.5287
Southern	-0.2347	0.3958	-0.5929	0.5551
Offshoots	-0.3268	0.4965	-0.6582	0.5124
1920	-0.6348	0.5988	-1.0602	0.2925
1930	-0.3217	0.5570	-0.5776	0.5653
1960	-0.4927	0.5224	-0.9430	0.3488
1970	-0.2124	0.5253	-0.4043	0.6872
1980	-0.2468	0.3584	-0.6887	0.4932
Observations	87			
R^2	0.8406			
Adjusted R^2	0.8147			
S.E. of regr	0.4610			
Durbin-Watson	2.0160			

The second model changes things a bit for the openness variable, where the coefficient is now at least significant on the 90 per cent confidence level and has the expected sign. The positive impact that we find is however smaller than for the control variables, meaning that for each percent's increase in growth in openness, social spending would increase by 0.17 per cent. This compared to the GDP, voting and demography variables (all significant on the 99 per cent confidence level) which all show impacts of greater magnitude. For each percent's increase in GDP growth (since we are not measuring levels here) social spending would increase by over 1 per cent, meaning that countries which would have had higher economic growth would also have seen a more rapidly expanding welfare state. The impact of democratic participation and the demographic constitution of the countries were similar, and even slightly higher than that for economic growth. It hence seems as if countries where voter turnout increased more and where the senior citizen share of the population grew more rapidly experienced a more rapid expansion of welfare programs, benefits and entitlements.

It was somewhat puzzling to find that openness and social spending were not more strongly correlated since the analyses presented in section III certainly indicated that both indicators increased simultaneously over the 20th century, and particularly so after 1960. We ran a couple of other models where variables were left out and found that when GDP per capita was left out there was a clear and significant impact of openness on social spending. Openness itself does not explain a great deal of the variation in social spending, but it rather seems as if economically open countries were richer and richer countries have tended to spend more of their wealth on welfare programs. A further

indication of this is that openness and economic development have been strongly correlated with one another over the period, especially after 1960. The correlation coefficient was as high as 0.9 for several countries in the sample. There is hence some impact of openness on social spending, but that possible effect is better explained by GDP per capita growth in this model.

What about the regional differences? Well, the dummy variables in the second model indicate what we already saw in the empirical section, which is that social spending grew faster in Northern Europe and slower in Southern Europe and the Offshoots (here compared to Western Europe). It should be noted however that one of these coefficients are statistically significant on any of the critical confidence levels.

Even though adjusted R^2 and the standard error of regression are not comparable across the models, since we changed the variables from measuring levels to change over time, the high adjusted R^2 and the low standard error of regression in model 2 indicate that it does not suffer from any major problems and that we have a healthy goodness of fit. The high R^2 suggest that our model can explain a great deal of the variation in the growth of social spending over the 20th century, even though this figure should be interpreted carefully since it is somewhat inflated due to the inclusion of several dummy variables. The Durbin-Watson statistic shows that we were able to remove most of the problems of autocorrelation between the first and the second model. The autocorrelation coefficient is also close to zero in the second model.

V. Gauging Openness and Social Spending in the 20th Century

The basic findings of this paper are, first, that social spending in post-war Europe seems to have been determined by economic growth, rather than by absolute size of the economy, and that openness to trade has strongly influenced GDP growth. It may not come as a surprise that the relative abundance of resources has determined the degree to which a country was likely to spend socially, but it is nevertheless worth noting that the results of the paper concurs with the view that openness to trade have created wealth, and that wealth may have opened for the redistributive (compensation) policies.

Secondly, it seems that the continental countries, at the centre of the Western and the European post-war integration, were more open to trade than the Mediterranean countries (Southern Europe). Italy, which alongside of most of the Western and the Northern European countries belonged to the core of the EEC, displayed a larger propensity to open up their economies to trade. Drawing from Huberman (2012), openness and transnational trade increase has been interrelated to the processes of industrialisation and the emergence of the welfare states, and the harmonisation of domestic and international labour and capital, which was paradoxically facilitated and fostered a tradition of egalitarianism, especially among trading partners. In this respect, as regards the level of social spending seems to have been "determined" by such political traditions and culture, which developed regionally, in the Western economies alongside the industrialisation and later on the trading zones. Considering that liberalism was one of the guiding principles of the post-war European integration policies, this thus goes in line with the claims of for instance Magee and Lee rather than with that of

Katzenstein. But also, as figure 2 showed, openness to trade in Western and Northern Europe began immediately after that WWII had ended. Greece, Portugal, and Spain, did not join EEC until the 1980s; Greece in 1981 and Portugal and Spain in 1986. More importantly, it seems that even though openness to trade might have benefitted certain interests, this may well have been offset by the increasing room for compensation, provided for by the higher growth rates that followed from the openness.

We conclude with a few words on how we are reasoning when moving forward. We will be aiming towards collecting and using yearly (or, failing that then at least bi-yearly) on social spending as well as dividing it by type of expenditure. The latter also means we will be adding expenditure on public education. If at all possible, we want to add more countries to our sample; countries from Central and Eastern Europe for instance.

Appendix of all key variables

Table A.1 Openness in the North, in per cent, 1920–1990

	Sweden	Finland	Denmark	Norway
1920	45.4	47.8	61.3	57.1
1921	25.0	43.3	51.1	38.6
1922	29.7	47.7	48.7	42.2
1923	31.9	47.3	57.1	43.5
1924	34.0	48.2	63.9	46.7
1925	33.0	51.1	60.6	43.1
1926	33.5	50.0	53.1	41.0
1927	35.9	50.2	56.9	39.4
1928	36.2	52.2	58.6	40.4
1929	37.3	50.7	57.4	42.0
1930	32.9	44.3	55.7	40.0
1931	29.9	37.2	49.7	34.6
1932	26.2	37.8	42.8	32.6
1933	27.3	39.9	43.4	31.6
1934	29.9	42.1	41.6	32.3
1935	29.6	42.1	39.2	32.8
1936	30.9	44.3	41.4	33.2
1937	37.0	51.9	44.7	37.9
1938	33.4	43.9	42.1	34.0
1939	34.3	40.9	40.8	34.8
1940	23.7	28.1	33.6	
1941	19.3	27.3	26.5	
1942	18.4	26.9	20.5	
1943	16.5	25.6	20.5	
1944	13.3	16.1	18.3	
1945	13.7	8.2	11.4	

1946	26.1	21.6	30.2	31.5
1947	33.8	30.0	33.1	44.4
1948	32.3	29.7	34.8	41.6
1949	29.3	29.4	41.1	42.7
1950	37.0	31.1	48.6	46.3
1951	46.5	42.3	54.7	52.2
1952	39.4	41.7	50.0	45.1
1953	35.8	27.7	49.4	44.1
1954	36.8	30.7	53.3	46.4
1955	37.8	32.4	53.7	50.8
1956	38.9	31.1	54.9	52.0
1957	40.2	33.3	53.5	51.7
1958	36.9	33.8	52.9	50.9
1959	36.1	33.8	55.6	49.5
1960	39.2	40.7	56.3	51.1
1961	37.5	38.6	51.8	51.1
1962	36.7	37.6	51.6	49
1963	37.1	35.5	52.1	49.9
1964	37.8	36.9	53.7	51
1965	38.1	37.2	52	51.3
1966	37.2	36	50.3	51.2
1967	35.9	35.1	48.4	52.5
1968	36.7	37.9	49.4	50.5
1969	39.2	41	51.3	51.8
1970	41.5	45.5	52.1	54.9
1971	40	42.9	54.9	52.4
1972	39.4	43	51.9	51.2
1973	43.8	43.7	56.7	56.3
1974	56	51.5	63.2	62.5
1975	48.5	46.3	58	59.3
1976	51.2	45	59.6	60.7
1977	47.5	47.4	58.3	60.4
1978	46.3	47.1	55.4	55.1

1979	52.2	52.5	60.4	60.2
1980	52	57.5	65.8	61.5
1981	50.8	55.5	70.1	59.1
1982	54.5	52	68.3	58.8
1983	57.7	52.1	57.7	57.1
1984	58	51	59.6	58.9
1985	58.2	50	60.5	60.8
1986	52.6	45.1	53.6	55.3
1987	52.5	43.9	49.9	52.9
1988	52.5	42.2	48.6	50.9
1989	52.7	42.2	49.7	56.4
1990	48.8	39.7	50.2	57.8

Source: Mitchell (2003a, table E1, table J1).

Table A.2 Openness in the West, in per cent, 1920–1990

	Austria	Belgium	France	Ireland	Netherlands	Switzerland	UK
1920			43.8		80.6		58.2
1921			31.8		63.2		37.8
1922			29.3		60.6		41.6
1923			33.7		62.8		47.4
1924	58.5	100.9	38.0		73.2	56.1	52.1
1925	46.2		36.2		74.5		49.7
1926	43.5		36.8	66.9	71.6		48.0
1927	46.1	115.8	35.5	66.5	74.6		46.6
1928	46.5		31.7	67.1	73.6		46.1
1929	45.1		31.3	67.1	73.4	48.3	45.9
1930	39.4	86.1	28.5	66.2	66.6	43.5	38.2
1931	33.3		24.3	58.5	58.5	39.3	30.7
1932	22.5		18.6	48.9	43.8	31.5	13.2
1933	21.3		18.9	41.0	42	29.9	27.6
1934	22.4	56.3	17.8	39.6	38.2	28.1	28.1
1935	23.0	66.2	17.8	39.6	36.1	26.2	28.1
1936	23.6	69.3	16.6	40.9	38.8	26.8	29.6
1937	27.2	81.8	19.1	42.9	52.9	35.2	32.9
1938		68.6	18.5	35.3	47.1	33	27.9
1939		64.2			49.3	35.3	24.9
1940					31.8	32.7	23.7
1941		27.4			23.3	32.8	19.4
1942					19.7	31.5	18.9
1943		26.6			18.8	27	24.7
1944						17.9	29.7
1945						19.4	22.5
1946		44.9			32.5	39.6	25.3
1947		67.5		51.5	51	46.5	31.6
1948	18.3	65.2		51.0	54.1	46.6	35.5
1949	23.1	46.7	19.4	48.8	54.7	41.4	37.3
1950	30.3	51.1	21.1	58.0	68	42.2	42.1
1951	34.2	64.0	24.8	68.3	79.5	49.1	51.6

1952	31.0	57.3	20.5	57.3	73.7	43.6	44.2
1953	32.1	54.3	18.7	56.5	72.3	43.5	39.6
1954	35.1	57.0	18.7	44.5	75.6	43.4	38.2
1955	38.6	61.7	19.7	57.0	75.4	40.9	40.2
1956	39.8	66.3	18.6	52.1	77.7	47.8	38.3
1957	41.4	64.2	19.2	54.2	78.1	49.5	37.6
1958	37.8	59.5	18.1	54.9	73.4	44.6	34.2
1959	37.7	62.9	19.8	53.8	75.9	46.4	34.3
1960	40.4	68	21.9	56.1	76.7	48.4	35.8
1961	38.6	67.2	21.3	60.8	77	49.8	33.2
1962	38.1	68.7	20.4	57.1	74.8	49.5	32.5
1963	37.7	71.6	20.5	60.1	75.9	49	32.7
1964	37.9	74.2	21	60	75.6	49	33.2
1965	39.1	76	20.8	59.4	72.9	48.7	31.6
1966	38.8	76.8	21.5	58.7	71.3	49.1	33.7
1967	37.4	73.4	20.8	59	68.8	48.7	32.8
1968	38	79.3	21.4	63.8	71	49	37.5
1969	40.7	86.6	23.7	64.4	74.4	52.4	38.9
1970	44.3	89	26.3	65	79.3	55.1	38.7
1971	43.6	88.5	26.6	68.8	78.5	51.7	37.7
1972	43.9	88.1	27.2	65.8	74.4	49.9	37.1
1973	44.2	96.3	29.3	73.7	79.5	51.2	43.3
1974	48.6	107.5	37.2	91.3	92.5	55.5	52.2
1975	44.8	94.1	31.3	83	84.5	48.4	45.2
1976	49.4	99.4	34.2	91.5	88.2	52	49
1977	49.9	97.7	34.3	101.4	83.9	58.4	52.5
1978	48.5	95.7	32.7	102.3	74.7	55.3	49.9
1979	51.8	105.6	35.1	108.8	83.2	58.3	50.6
1980	54.5	115.6	37.1	105.6	88.7	65	48.4
1981	55.6	120.1	38	104.6	94.9	61	46.5
1982	52.9	126.7	37.6	100.4	93.2	56.5	47.3
1983	52	132.6	37.3	96.8	94	56.3	48.6
1984	55.4	139.5	39.4	108.5	102.5	60.9	53.4
1985	58.2	136.7	39	107.8	105.7	62	53.1

1986	52.7	122.8	34.6	95.3	87.4	57.8	48.5
1987	50.9	119.1	34.4	91.6	84.4	56	48.1
1988	53.3	121.8	35.8	99.4	87.5	58.2	47.1
1989	56.4	129.8	37.7	105.9	93	61.9	48.8
1990	56.7	123.9	37	98.9	90.7	58.9	48

Source: Mitchell (2003a, table E1, table J1).

Table A.3 Openness in the South, in per cent, 1920–1990

	Greece	Italy	Portugal	Spain
1920		40.6		21.8
1921		25.9		17.3
1922		23.5		17.2
1923		24.4		19.7
1924		28		19.8
1925		29.6		18.1
1926		27.8		15.8
1927	42.4	25.8		15.5
1928	40.8	26		17.9
1929	45	25.9		20.1
1930	38	23.6		22.7
1931	33.1	19.7		17.2
1932	28.3	14.1		14.4
1933	27.7	13.5		11.5
1934	27	12.9		12.1
1935	32.5	11.6		12.8
1936	32.6	9.7		
1937	36.9	17.3		
1938	37.2	14.2		
1939	32.1	12.5		
1940		12.7		7.5
1941		11.4		6.8
1942		10.6		6.7
1943				9.3
1944				8.5
1945				3.2
1946	11.2			4.7
1947	12.9	21.3		5.8
1948	14.4	20.1		6.4
1949	12	20		6
1950	10.1	19.9	32.9	4.7
1951	24.6	22.7		3.9

1952	22.1	20.6		4
1953	24.7	19.6	32.1	4.3
1954	29.5	19.2	34.5	3.2
1955	29.2	19.6	36.9	2.8
1956	29	20.9	37.1	2.8
1957	30.9	22.9	37.8	2.6
1958	31.6	19.8	35.7	2.3
1959	26.7	20.2	33.4	11.7
1960	29.4	24.1	34.7	12.8
1961	26.8	24.3	36.6	13.9
1962	25.9	24.7	33	15.3
1963	27.3	25.4	34.9	15.1
1964	26.2	24.3	38.8	16
1965	28.4	24.9	40.4	17
1966	28.9	26.2	40.3	17.9
1967	27.6	26.6	38.7	16.3
1968	28.3	27.2	38	17.5
1969	29.3	29.2	38.1	18.4
1970	31.6	30.6	41.1	19.3
1971	29	26.4	41.5	18.9
1972	29.2	28	41.6	19.9
1973	34.1	37.2	42.8	20.9
1974	38	38.1	50.2	25.3
1975	41.6	34.6	39.1	22.8
1976	43.5	38.8	39.8	24.2
1977	41.8	38.5	42.9	23.2
1978	40.5	37.6	42.7	21.7
1979	40.2	40.2	51.2	22.3
1980	44.2	39.3	56.1	26
1981	35.7	40.5	57.7	28.5
1982	37	39.5	58.7	28.9
1983	40.3	36.8	61.2	31.2
1984	42.7	38.2	68.3	32.9
1985	44.2	39.8	65.2	32.5

1986	42.5	32.7	57.1	26.9
1987	42.1	31.7	65.2	28.3
1988	33.5	31.9	70.7	29.2
1989	43.8	33.8	72.9	30
1990	41.9	32.2	73	29

Source: Mitchell (2003a, table E1, table J1).

Table A.4 Openness in the Offshoots, in per cent, 1920–1990

	Australia	Canada	New Zealand	USA
1920	37.4	47.5		15
1921	39.9			10.2
1922	31.6			9.6
1923	31.3			9.5
1924	31.2			9.9
1925	34.1			10
1926	33.9	44.4		9.7
1927	32.6	41.7		9.7
1928	31.3	42.7		9.7
1929	31.4	40.3		9.4
1930	27.7	33.1		7.7
1931	23.6	26.2	60.9	6
1932	24.3	24.9	64.1	5.1
1933	25.8	26.8	64.7	5.7
1934	26.8	29.5	72.2	6
1935	26.1	29.9	65.1	6.5
1936	27.8	34.2	63	6.1
1937	29.2	34.7	70.2	7.2
1938	29	28.9	60.5	6.2
1939	25.9	30	50.9	6.1
1940	28.5	33.9	53.5	6.7
1941	24.1	37.3	46.3	6.8
1942	26.4	39.2	46.8	6.8
1943	25.9	42.8	52	8.5
1944	26.9	44.2	50.4	8.7
1945	26	40.7	38.6	6.6
1946	25.6	35.4	45.4	7
1947	33.1	40	52.7	9
1948	39.7	37.1	55.6	7.6
1949	44.3	34.4	48.2	7.2
1950	45.1	34.2	48.3	6.7
1951	50.9	37.2	75.8	7.8

1952	47.3	34.1	67.5	7.4
1953	33	33.1	50.5	7.2
1954	33.2	31	52.2	6.8
1955	33.3	31.8	55.2	6.7
1956	30.6	33	52.5	7.5
1957	29.9	31.5	51.5	7.6
1958	27.6	29.1	45.9	6.8
1959	25.7	29.4	42.2	6.7
1960	27	28.3	43.5	6.9
1961	27.3	29.1	43.7	6.7
1962	25.7	29	37.2	6.6
1963	26.3	29	40.2	6.7
1964	28.4	30.8	41.1	7
1965	27.7	30.8	38.2	6.9
1966	27.3	32.2	38.8	7.3
1967	27	32.9	34	7.2
1968	27	35	38.8	7.6
1969	26.6	35.5	38.5	7.7
1970	27.7	35.1	37.8	8.1
1971	25.9	34.9	34.7	8.1
1972	24.7	36.2	35.1	8.6
1973	26.5	38.8	38.1	10.2
1974	29.9	42.8	43.1	13.9
1975	26.5	39.6	37.8	13.4
1976	26	39	43.2	13.9
1977	26.5	40.7	45.4	14.1
1978	26.2	43.8	41.3	14.7
1979	29.5	47.8	46.1	16.1
1980	30.2	48.1	48.4	17.5
1981	28.3	47.4	46.8	16.6
1982	28.8	42.1	48.2	14.8
1983	25.9	42.2	45.4	13.8
1984	27.7	48.2	51.7	15
1985	30.8	48.3	52.1	14.5

1986	29.1	46.5	41.5	14.4
1987	28.8	44.1	38.9	15
1988	28.2	44.8	36.7	16
1989	26.7	44.4	41.3	15.7
1990	25.3	44.2	43.5	15.8

Source: Mitchell (2003b, table E1, table J1; 2003c, table E1, table J1).

Table A.5 Social Spending by Country, in percent of GDP, 1920–1995

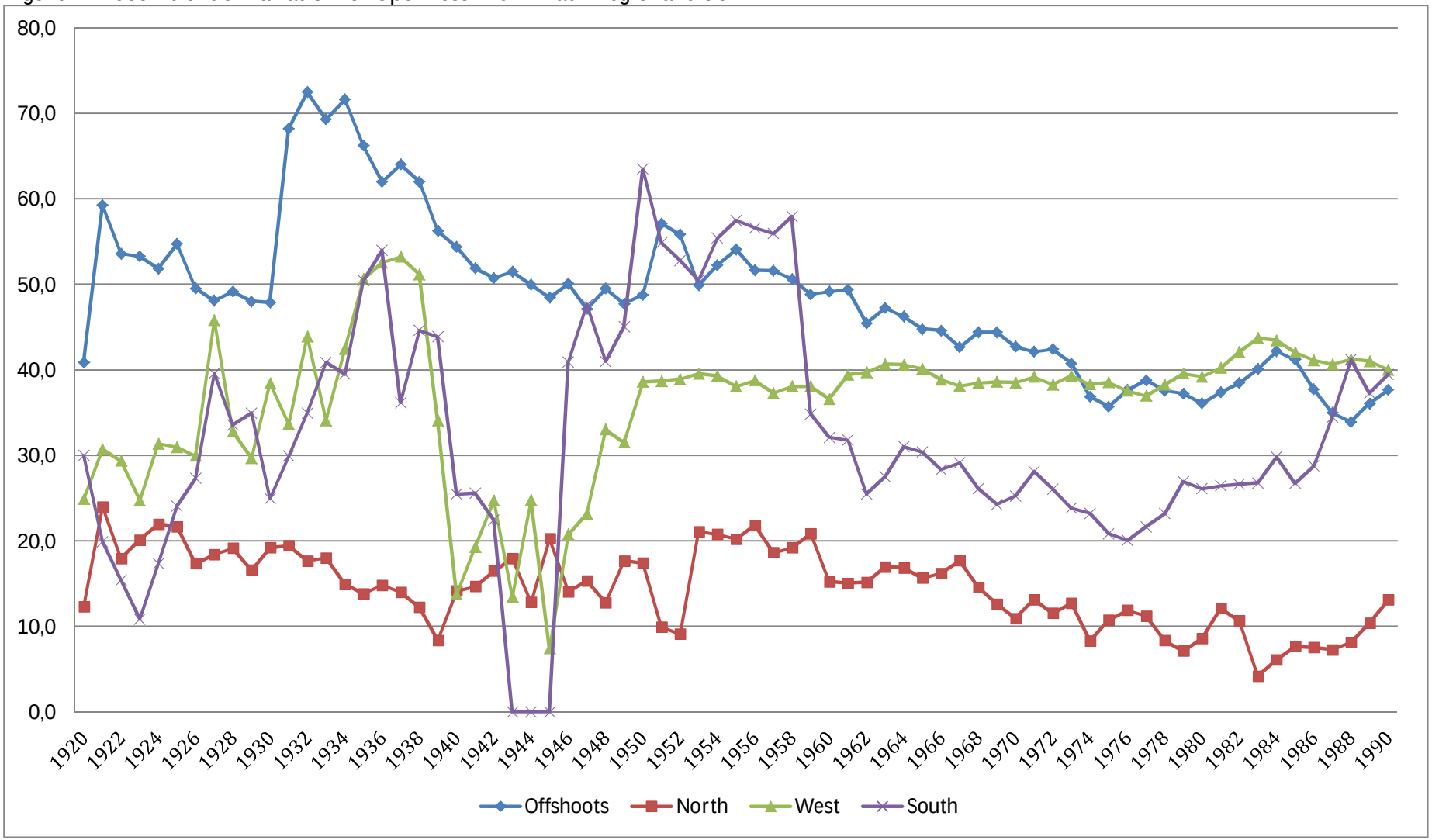
	North					West							
	Sweden	Norway	Denmark	Finland		Austria	Belgium	France	Germany	Ireland	Netherlands	Switzerland	UK
1920	1.1	1.1	2.7	0.9		0.0	0.5	0.6			1.0		1.4
1930	2.6	2.4	3.1	3.0		1.2	0.6	1.1	4.8	3.7	1.0	1.2	2.2
1960	10.8	7.9	12.3	8.8		15.9	13.1	13.4	18.1	8.7	11.7	4.9	10.2
1970	16.8	16.1	19.1	13.6		18.9	19.3	16.7	19.5	11.9	22.5	8.5	13.2
1980	29.8	18.5	26.4	18.3		23.4	22.5	23.0	20.4	16.2	26.9	14.3	16.9
1990	32.2	26.4	27.0	24.7		24.5	23.1	23.7	19.9	18.1	27.6	15.7	18.1
1995	33.0	27.6	30.9	31.7		21.4	27.1	26.9	24.9	18.3	25.7	18.9	22.5

	South					Offshoots			
	Greece	Italy	Portugal	Spain		USA	Canada	Australia	New Zeeland
1920	0.0	0.0	0.0	0.0		0.7	0.1	1.7	1.8
1930	0.1	0.1	0.0	0.1		0.6	0.3	2.1	2.4
1960	10.4	13.1	4.7	4.0		7.3	9.1	7.4	10.4
1970	9.0	16.9	6.1	10.0		10.4	11.8	7.4	9.2
1980	8.7	17.1	10.1	13.0		11.4	12.9	10.9	16.2
1990	14.0	21.3	12.6	17.0		11.7	17.4	13.6	22.1

1995	14.4	23.7	15.2	19.0		13.7	18.1	14.8	18.6

Source: Lindert, 2004, pp. 12–13, table 1.2. Espuelas, 2012, p. 214, table 1, for Spain and Portugal in 1962 and 1970.

Figure A.1. Coefficient of Variation for Openness within Each Regional Club



Source: Calculated based on the data in table A.1, table A.2, table A.3, and table A.4.

Table A.6 Coefficient of Variation for Social Spending within Each Regional Club

	North	West	South	Offshoots
1920	50.9	60.1	0.0	60.8
1930	10.4	68.1	53.9	61.4
1960	17.3	30.4	42.7	13.5
1970	12.1	25.4	33.8	15.0
1980	21.5	18.5	23.6	14.4
1990	10.2	16.6	18.5	22.1

Source: Calculated based on the data in table A.5

Table A.7 Elderly Population (Aged 65 and over) as Share of Total Population

	Sweden	Denmark	Norway	Finland	Austria	Belgium	France	Germany	UK[16]	Ireland
1920	8.4	6.8	7.7	6.5	6.4	6.5	9.3	6.3	6	9.2
1930	9.2	7.3	8.3	6	7.7	7.6	9.8	7.4	7.4	9.6
1940	9.4	5.5	9.3	6.4			11.1			
1950	10.3	9.1	9.7	6.6	10.6	10.6	11.4	9.4	10.9	10.7
1960	12	11.4	11.1	7.4	12.4	12.2	12.6	11.1	11.8	11.2
1970	13.7	12.2	13	9.2	14.2	13.5	14.3	13.1	13.2	11.1
1980	16.6	14.4	14.8	12.1	15.2	14.4	13.9	15.5	14.9	10.7
1990	17.8	15.6	16.3	13.4	15.2	15	15	15	15.5	11.4

	Netherlands	Switzerland	Greece	Italy	Portugal	Spain	Canada	USA	Australia	New Zealand
1920	5.7	5.8	5.6	6.7	5.9	5.7	4.8	4.7	4.4	4.9
1930	6.2	6.9	5.9	7.4	6.2	6	5.6	5.4	6.5	6.6
1940	7	8.6	6.5		6.5	6.5	6.7	6.7	8	8.6
1950	7.1	9.6	6.6	8.2	7.3	7.2	7.8	8.2	8.3	9.2
1960	9	10.4	8.2	9.5	8.2	8.2	7.7	9.3	8.5	8.6
1970	10.6	11.4	11.1	11.3	9.7	12.3	8.1	9.9	8.3	8.6
1980	10.8	13.9	12.7	10.6	11.4	11.3	9.7	11.7	9.8	9.9

[16] Excluding Northern Ireland

1990	12.9	15	14.2	14.8	13.3	13.4	11.6	13.2	11.3	11.5

Source: Mitchell (2003a, table A2; 2003b, table A2; 2003c, table A2).

Table A.8 Voter turnout in parliamentary elections in North, West, South and the Offshoots, as share of voting age population (VAP)

North	Sweden	Denmark	Finland	Norway
1920	57.5	59.6	42.8	60.4
1930	71.1	68.5	55.5	70.8
1960	83.9	86.8	85.3	82.6
1970	87.1	85.3	85.3	79.6
1980	85.8	85.2	79.2	82.5
1990	82.8	80.4	71.9	74.5

West	Austria	Belgium	France	Germany	Ireland	Netherlands	Switzerland	UK
1920	84.6	40.0	33.2	74.2	63.5	71.4	26.5	73.7
1930	89.5	40.8	33.6	82.2	78.2	75.0	28.3	73.8
1960	90.1	87.4	67.2	82.5	74.2	90.0	53.3	74.5
1970	87.8	88.0	67.0	86.3	81.5	84.7	43.1	74.7
1980	87.0	89.0	64.0	79.3	76.1	81.9	40.4	73.4
1990	80.5	85.1	61.3	73.1	73.7	75.2	39.7	75.4

Offshoots	Canada	USA	Australia	New Zealand
1920	64.4	36.2	75.9	89.0
1930	69.2	45.6	84.8	87.1
1960	71.9	56.3	84.7	83.5
1970	68.0	46.2	84.7	83.1
1980	66.9	46.4	83.4	85.9
1990	63.9	36.5	82.1	78.6

South	Greece	Italy	Portugal	Spain
1920	29.0	30.2		
1930	29.8			
1960	85.1	94.2		
1970	83.9	94.3	87.1	75.8
1980	85.9	93.1	80.8	76.0
1990	85.6	92.3	77.7	77.4

Source: https://www.idea.int/data-tools/data/voter-turnout . Before 1945: Total votes from Cook and Paxton, 2001, and population by age from Mitchell (2003a, table A2; 2003b, table A2; 2003c, table A2).

Literature

Anderson, J. E. and Neary P. J. (2005), *Measuring the Restrictiveness of International Trade Policy* Cambridge, Mass: MIT Press.

Arts, W. A. and Gelissen, J. (2010), "Models of the Welfare State", in Castles, F. G., et al. (Eds.), *Oxford Handbook of the Welfare State*, Oxford: Oxford University Press

Aspinwall, M. and Schneider, G. (2000), *The Rules of Integration: The Institutionalist Approach to European Studies*, Manchester: Manchester University Press.

Ben-David, D. (1993), "Equalizing Exchange: Trade Liberalization and Income Convergence" Quarterly Journal of Economics 108(3), 653-679.

Brady, D., Seeleib-Kaiser, M. and Beckfield, J. (2005), "Economic globalization and the welfare state in affluent democracies, 1975–2001". *American Sociological Review* 70 (6), 921–48.

Capie, F. (1994), *Tariffs and Growth: Some Illustrations from the World Economy, 1850–1940*, Manchester: Manchester University Press.

Clemens, M. A. and Williamson, J. G. (2004), "Why did the Tariff-Growth Correlation Change after 1950?", *Journal of Economic Growth* 9, 5–46.

Cook, C., and Paxton, J., (2001), *European Political Facts of the Twentieth Century, Fifth Edition*, New York: Palgrave.

Dollar, D. and Kraay, A. (2002), "Trade, Growth, and Poverty", *Economic Journal* 114(493): F22-F49.

Edwards, S. (1998), "Openness, Productivity and Growth: What Do We Really Know?" *Economic Journal* 108(447): 383-398.

Eichengreen, B. and Irwin, D. (1998), "The Role of History in Bilateral Trade Flows" in J. A. Frankel (Ed.), *The Regionalization of the World Economy*. Chicago: University of Chicago Press

Eloranta, J. (2004), "Warfare and Welfare? Understanding 19th and 20th Century Central Government Spending", *Warwick Economic Research Papers*, No 699.

Eloranta, J. and Kauppila, J. (2008), "Beyond Guns and Butter: Finnish Central Government Spending Patterns in the Twentieth Century", *Essays in Economic and Business History*, Vol. 26, 73–88.

Epifani, P. and Gancia, G. (2009), "Openness, government size and terms of trade", *The Review of Economic Studies* 76, 629–68.

Esping-Andersen, G. (1990), *The Three Worlds of Welfare Capitalism*, Cambridge: Polity.

Espuelas, S. (2012), "Are dictatorships less redistributive? A comparative analysis of social spending in Europe, 1950–1980", *European Review of Economic History*, 16, pp. 211–32.

Findlay, R. and O'Rourke, K. (2007), *Power and Plenty: Trade, War and the World Economy in the Second Millenium* (Princeton, NJ: Princeton University Press)
Frankel, J. and Romer, D. (1999), "Does Trade Cause Growth?" *American Economic Review* 89(3), 379–399.
Gifford, B. (2006), "Why No Trade-off between 'Guns and Butter'? Armed Forces and Social Spending in the Advanced Industrial Democracies, 1960–1993", *American Journal of Sociology* 112, no 2 (September 2006), 473–509.
Hall, P. A. and Soskice, D. (Eds.), (2001), *Varieties of Capitalism: The Institutional Foundations of Comparative Advantage*, (Oxford: Oxford University Press).
Huberman, M. (2012), *Odd Couple. International Trade and Labour Standards in History*, New Haven, Conn : Yale University Press
Huberman, M. and Lewchuk, W. (2003), "European economic integration and the labour compact, 1850–1913". *European Review of Economic History* 7 (1), 3–41.
Katzenstein, P. (1985), *Small States in World Markets: Industrial Policy in Europe*, Ithaca: Cornell University Press.
Lewis-Beck, M. (1986), "Interrupted Time Series", in Berry, W D, Lewis-Beck M S (Eds.), *New Tools for Social Scientists: Advances and Applications in Research Methods*, Beverly Hills: Sage Publications.
Lindert, P. (1994), "The Rise of Social Spending 1880–1930", *Explorations in Economic History* 31 (1), 1–37.
Lindert, P. (1996), "What Limits Social Spending?", *Explorations in Economic History* 33 (1), 1–34.
Lindert, P. (2004), *Growing Public: Social Spending and Economic Growth Since the Eighteenth Century*, (Cambridge: Cambridge University Press).
Magee, S. and Lee, H-L. (1999), "Endogenous Regionalism's Free-Trade Bias", in Bartolotti, B., Fiorentini, G., Mattei, E. (Eds.), *Organized Interests and Self-Regulation: An Economic Approach*, Oxford: Oxford University Press.
Mattli, W. (1999), *The Logic of Regional Integration: Europe and Beyond*, Cambridge, Mass: Cambridge University Press.
Mitchell, B. R. (2003a), *International Historical Statistics: Europe, 1750–2000*, New York: Palgrave Macmillan.
Mitchell, B. R. (2003b), *International Historical Statistics: the Americas, 1750–2000*, New York: Palgrave Macmillan.
Mitchell, B. R. (2003c), *International Historical Statistics: Africa, Asia & Oceania, 1750–2000*, New York: Palgrave Macmillan.
McCulloch, N, Winters, A. L. and Cirera, X. (2015), *Trade Liberalization and Poverty: A Handbook*. London: CEPR.
Meunier, S. (2003), "Trade Policy and Political Legitimacy in the European Union", *Comparative European Politics* (2003) 1**,** 67–90.
Nyman, P. (2016), *Austerity Politics: Is the Electorate Responsible?*, Uppsala: Acta Universitatis Upsaliensis.
O'Rourke, K. H. (1997), "Measuring Protection: A Cautionary Tale", *Journal of Development Economics* 53, 169–183.
Pierson, P. (1996), "The Path to European Integration. A Historical Institutionalist Analysis", *Comparative Political Studies*. Vol. 29 no. 2 123-163.

Piketty, T. (2014), *Capital in the Twenty-First Century*, Cambridge, Mass: Harvard University Press.
Pontusson, J. (2011), "Once Again a Model: Nordic Social Democracy in a Globalized World", in Cronin, J.E., Ross, G., and Schoch, J. (Eds.), *What's Left of the Left: Democrats and Social Democrats in Challenging Times*, Durham, NC: Duke University Press.
Prasad, M. (2012), *The Land of Too Much: American Abundance and the Paradox of Poverty*, Cambridge, Massachusetts: Harvard University Press.
Rodríguez, F. R. (2007), "Openness and growth: What Have We Learned?", *DESA Working Papers 51*, New York: United Nations, Department of Economics and Social Affairs.
Rodrik, D. (1997), *Has Globalization Gone Too Far?* Washington, DC: Peterson Institute for International Economics.
Rodríguez, F. and Rodrik, D. (1999), "Trade Policy and Economic Growth: A skeptic's guide to the cross-national evidence." NBER Working Paper #7081.
Rodríguez, F. and Rodrik, D. (2001), "Trade Policy and Economic Growth: A Skeptic's Guide to the Cross-National Evidence". *NBER Macroeconomics Annual 2000*. Bernanke & Rogoff. Cambridge, MA, National Bureau of Economic Research. 2000.
Roine, J., Vlachos, J., and Waldenström, D., (2007), "What Determines Top Income Shares? Evidence from the Twentieth Century", *IFN Working Paper*, No. 721.
Sachs, J.D. and Warner, A (1995), "Economic Reform and the Process of Global Integration", *Brookings Papers on Economic Activity* (no. 1)
Schmitter, P. (2000) *How to Democratize the European Union...And Why Bother?*, Lanham, Md: Rowman & Littlefield.

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