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Globalization and social justice in OECD countries

Björn Kauder · Niklas Potrafke

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Abstract Social justice is a topic of importance to social scientists and also political decision makers. We examine the relationship between globalization and social justice as measured by a new indicator for 31 OECD countries. The results show that countries that experienced rapid globalization enjoy social justice. When the KOF index of globalization increases by one standard deviation, the social justice indicator increases by about 0.4 points (on a scale from 1 to 10). The policy implication is that permitting a national economy to become globally integrated is consistent with and promotes social justice.

Keywords Globalization · Social justice · Economic integration

JEL Classification D63 · F61

1 Introduction

For social scientists, social justice is a topic of prime concern, because of the quest for social justice in itself and because of the trade-off between efficiency and social justice (e.g., Hillman 2009: chapter 7). Social justice is also a prominent topic in public discourse and political attention: politicians promise to achieve social justice

B. Kauder (✉) · N. Potrafke
Ifo Center for Public Finance and Political Economy, Ifo Institute, Poschingerstr. 5, 81679 Munich, Germany
e-mail: kauder@ifo.de

N. Potrafke
e-mail: potrafke@ifo.de

N. Potrafke
University of Munich, Munich, Germany

when elected to office. Political parties use the term justice frequently in their party platforms.

Globalization has been a much studied phenomenon and there have been concerns whether globalization is consistent with social justice. The debate has been controversial (for an overview of the debate see Hillman 2008). We examine the relationship between globalization and social justice as measured by a new social justice indicator.

John Rawls' "Theory of justice" in 1971 viewed social justice in terms of a social contract chosen behind a veil of ignorance when individuals do not yet know the positions they will have in society. The citizens thus decide from a neutral perspective. Rawls endorses equal rights "to the most extensive basic liberty compatible with a similar liberty for others" and inequalities that are "to be of the greatest benefit of the least-advantaged members of society" while "offices and positions must be open to everyone under conditions of fair equality of opportunity". Rawls thus considers both procedural and distributive aspects of social justice.[1]

In response to Rawls' egalitarian position Robert Nozick took a libertarian view of social justice ("Anarchy, state and utopia" 1974). Starting from a state of nature, a "dominant protection agency" emerges based on voluntary contracts. This dominant protection agency is the minimal state. Nozick thus considers an allocation as fair when the allocation is based on free and mutual exchange, even if large inequalities result. Nozick thus views social justice as procedural justice.[2]

Friedrich August von Hayek took the position that only procedural justice is possible in a market economy ("The mirage of social justice" 1976). A fair distribution is not achievable as in a market economy no one distributes income. Social justice is thus a superstition that has to be opposed when the term is used to justify coercion of some by others. Amartya Sen ("Equality of what?" 1980 and "Development as freedom" 2000) suggests basic capability equality. The capability approach focuses on what individuals are capable of and thus includes for example political freedom and social opportunities rather than solely income.

The different concepts of social justice show that social justice is difficult to define and consequently difficult to measure unambiguously. Moreover, social justice ex post is multifaceted. The Bertelsmann Stiftung has compiled new data on social justice in OECD countries. The data include quantitative and qualitative indicators based on expert opinions. The social justice indicator of the Bertelsmann Stiftung received prominent attention in the public debate on social justice.[3]

An important question concerns what gives rise to or impedes social justice. We focus on how globalization is associated with social justice. Advocates of the dark side of globalization believe that globalization exerts negative effects on social

[1] Formally, Rawls' view of social justice as focused on the well-being of the worst-off in a society requires behavioral assumptions because a rational expected-utility maximizing individual would choose a Bentham social welfare function behind a veil of ignorance. See Hillman (2009, chapter 6).

[2] Mezzetti (1987) portrays the nexus between Pareto efficiency and the theories of Rawls and Nozick. For an experimental investigation of distributive justice see Traub et al. (2005). On equality of opportunity see Hansson (2004), Roemer (2002), Roemer et al. (2003), and Sugden (2004).

[3] The article in the German newspaper *Frankfurter Allgemeine Zeitung* (3 January 2011): "Lücken in der sozialen Gerechtigkeit" elaborated on the social justice indicator in detail.

justice. Joseph Stiglitz, for example, proposes that poor people are left behind and so disadvantaged in the course of globalization. "Also in industrialized countries unskilled workers learn what is going on."[4] Paul Krugman, by contrast, does not hold globalization responsible for social injustice in the United States, but claims that, for example, tax cuts increased inequality: "Growing international trade plays some role in growing inequality, but it is, literally, a fraction of a fraction of the story."[5] Indeed, income inequality is often used as synonym for social injustice. We elaborate on theoretical predictions and empirical findings on why globalization is expected to threaten or promote social justice in Sect. 2.

Social justice encompasses sub-dimensions such as distributive justice and procedural justice. Poverty prevention, access to education, or intergenerational justice are also sub-dimensions of social justice. Globalization may well influence sub-dimensions of social justice differently. By using the KOF index of globalization and the social justice indicators of the Bertelsmann Stiftung, we examine how globalization is associated with different dimensions of social justice.

2 Globalization and social justice

The standard Heckscher–Ohlin model of international trade predicts that a country's relatively abundant factors gain and a country's relatively scarce factors lose from globalization. In high-income countries, skilled workers should thus gain from globalization, and unskilled workers should lose from globalization. Social injustice in consequence of globalization should thus be prevalent in high-income countries (see Hillman 2008: 181). The relation between globalization and social justice is, however, controversial.[6]

Some commentators believe that global trade and changing power relations in the course of globalization are inimical to social justice. The market economy is only legitimized if institutions ensure redistribution; but growing "authorities beyond the state" result in erosion of such institutions (Strange 1996: 197). The social-welfare maximizing redistributive state may thus be indefensible against globalization. "From Sweden through Austria to Spain, there is essentially the same programme of reducing public expenditure, cutting real wages and eliminating social services" (Martin and Schumann 1997: 6). Advocates of the dark side of globalization have tended to assume that social justice is jeopardized when social expenditures and thus income redistribution decrease or labor markets are deregulated (e.g., through lax minimum wage legislation and employment protection). The "most serious challenge for the world economy" may thus lie "in making globalization compatible with domestic social and political stability" (Rodrik 1997: 2). Some commentators also believe that trade liberalization has been "pushed too far, too

[4] Interview with *Die Welt* on 30 September 2006.

[5] Blog entry on *The conscience of a liberal* (*New York Times*) on 13 March 2006.

[6] See Jones (2010) for an overview of "key thinkers" of globalization. On "dark sides" of globalization, focusing on non-economic issues in developing countries, see Heine and Thakur (2011). On inequality and social justice see, for example, Arrow et al. (2000) and Gandolfo and Marzano (1999).

fast", and at the expense of increased unemployment (Stiglitz 2002: 53–54, 59). The problem "is not with globalization itself, but in the way globalization has been managed" (Stiglitz 2006: 4). The policy prescription is thus that governments "have the right to protect their social arrangements, and when this right clashes with the requirements of the global economy, it is the latter that should give way" (Rodrik 2011: xix).

The opponents of globalization, however, may well hold globalization responsible for developments not caused by globalization: it is conceivable that technical change rather than globalization has caused declining real wages (Bhagwati 2004: 29–30, 122–123; see also Wolf 2005: 170; Norberg 2003: 140). Advocates of the positive side of globalization propose that globalization has reduced the number and share of people living in extreme poverty, and that globalization has improved indicators of human welfare, such as life expectancy or literacy (Wolf 2005: 157–166, 171, see also Norberg 2003: 25–30). People may also enjoy lower prices for goods and services in the course of globalization and thus a higher standard of living (Kitching 2001: 30–31). It is conceivable that globalization improves the situation of women, as measured for example by education or labor-market participation (Norberg 2003: 43–46, see also Bhagwati 2004: chapter 7); "environmental standards are actually rising" in the course of globalization (World Bank 2002: 3, see also Kitching 2001: 310). Labor standards may not be eroded by globalization as the "pressures from trade and outgoing investments on our standards are simply not substantial enough" (Bhagwati 2004: 131).

We now elaborate on how globalization has influenced attributes associated with social justice. The efficiency hypothesis is that globalization reduces the size of the government and the welfare state: countries compete for mobile factors by reducing tax rates and thus reduce public expenditures. Consequently, globalization is expected to reduce social cohesion (see, for example, Sinn 1997, 2003). The compensation hypothesis, by contrast, is that higher demand for social insurance because of risks from international competition induces an extended welfare state. Globalization may thus well increase government size. Empirical studies provide mixed evidence. In (western) OECD countries, social expenditures increased in the course of globalization (Rodrik 1998, 2011, see also Meinhard and Potrafke 2012). Using social expenditure data for 25 OECD countries over the period 1980–2008, the results of Gaston and Rajaguru (2013) indicate, however, that economic globalization was negatively correlated with welfare state spending. In Western Europe, globalization was positively correlated with the share of social expenditures in public spending; in Eastern Europe, globalization was negatively correlated with the share of social expenditures (Leibrecht et al. 2011).[7] The results of Dreher et al. (2008b), by contrast, did not show that globalization influenced budget composition.[8]

[7] The share of low-skilled workers and thus the labors' bargaining power may also influence how globalization affects welfare spending, in particular in developing countries (Rudra 2002).

[8] On the globalization-welfare state nexus see Schulze and Ursprung (1999) and Ursprung (2008). On how globalization has influenced capital tax rates see Dreher (2006a).

Income equality is usually viewed one of the most important determinants of social justice. Studies of how globalization influences inequality find mixed evidence.[9] Freedom to trade, social globalization, and deregulation have—in contrast to political globalization—exacerbated income inequality (Bergh and Nilsson 2010). In OECD countries, in particular, previous studies have shown that globalization was positively correlated with income inequality (Dreher and Gaston 2008). However, Doerrenberg and Peichl (2014) use Gini coefficients based on micro data and do not conclude that globalization has been positively correlated with income inequality in OECD countries. Berggren (1999) shows that trade liberalization and financial deregulation were negatively correlated with income inequality. Also Savvides (1998) finds that globalization was not correlated with income inequality in developed countries, but was positively correlated with income inequality in developing countries. The results of Edwards (1997), in turn, do not show that trade liberalization induced income inequality in developing countries.

Studies also examine how globalization influences social cohesion and equality in other dimensions than income inequality. Opponents of globalization maintain that globalization jeopardizes gender equality and human rights. Governments are required to reduce social standards to improve global competitiveness. Proponents of globalization, by contrast, see globalization as improving gender equality and human rights. Economic globalization is expected to reduce discrimination as investors are concerned with productivity and governments are concerned with tax bases independently of gender or race. Social globalization may also improve gender equality and human rights because increasing information flows (e.g., through the internet) enable societies to learn about living conditions in other countries (see, for example, De Soysa and Vadlamannati 2011; Dreher et al. 2012). Empirical studies show that globalization had positive effects by promoting gender equality and improving human rights. Globalization and gender income inequality show an inverted u-shaped relationship (Kilby and Scholz 2011). In low-income countries, globalization has increased gender equality as measured by the OECD Social Institutions and Gender Index (Potrafke and Ursprung 2012). Globalization as measured by trade openness and foreign direct investment has improved conditions for women such as participation in parliamentary office, literacy, and life expectancy (Gray et al. 2006). By using the Cingranelli–Richards (CIRI) Human Rights Dataset, globalization has been shown to improve women's economic and social rights and human rights as measured by physical integrity rights (Cho 2013; De Soysa and Vadlamannati 2011; Dreher et al. 2012). Globalization has also been shown to enhance the willingness to transmit tolerance (Berggren and Nilsson 2014).

The efficiency and the compensation hypothesis may also explain how globalization influences labor market institutions. Globalization may induce a "race to the bottom" in labor market regulation as governments compete e.g. for

[9] On how to measure inequality see, for example, Milanovic (2005). See Acosta and Montes-Rojas (2008) for how trade reforms have influenced inequality in Mexico and Argentina, and Kumar and Mishra (2008) for how trade liberalization has influenced inequality in India. Das (2005) portrays the nexus between globalization and inequality theoretically. For further discussions see, for example, Richardson (1995) and Wood (1995).

foreign direct investment (Sinn 2003). It is, however, also conceivable that globalization induces a higher demand for labor market regulation because of increased uncertainty in a global market. The results of Potrafke (2010, 2013) do not show that globalization has reduced labor market regulation. The results of Davies and Vadlamannati (2013), however, show that countries compete in labor practices (enforcement), but not in labor laws. In low-income countries, globalization has been shown to improve labor rights (Vadlamannati 2015).[10] Poverty prevention is another important aspect of social justice. Absolute income poverty has been shown to be lower in more globalized countries (Bergh and Nilsson 2014).

Overall, how globalization affects social justice remains as an undetermined empirical question.

3 Data and empirical strategy

3.1 Data on social justice

We use the dataset collected by the Bertelsmann Stiftung on social justice (http://www.sgi-network.org). The data are available for 31 countries: Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, South Korea, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States.

The social justice indicator is based on five sub-indicators: poverty prevention, equitable access to education, labor market inclusiveness, social cohesion and equality, and intergenerational justice.

These five sub-indicators are based on 18 quantitative measures such as the Gini coefficient, unemployment rates, public expenditures on research and development, and seven qualitative measures such as expert opinions on education policy. Table 4 shows the individual measures and their descriptions. The quantitative measures relate to data for the years 2008–2010 and are mostly taken from OECD databases. The Bertelsmann Stiftung asked 70 experts from several countries to collect opinions on qualitative social justice measures. Both the quantitative and the qualitative measures are normalized and aggregated. Following Merkel (2007) and Merkel and Giebler (2009), the Bertelsmann Stiftung attaches a higher weight to the first three sub-dimensions describing social justice (poverty prevention, equitable access to education, and labor market inclusiveness) to distinguish a weighted and an unweighted social justice measure. The overall indicator of social justice (weighted and unweighted) and the five sub-indicators take on values between 0 (minimum of social justice) and 10 (maximum of social justice). For a more encompassing portrait of the indicators see Bertelsmann Stiftung (2010). We acknowledge that the social justice indicator, as any indicator, may capture social justice roughly and thus serves only as a proxy for social justice.

[10] Globalization also increased protection in the agricultural sector (Garmann 2014).

The indicators reveal that social justice was most pronounced in the Scandinavian countries. The weighted social justice indicator is highest for Iceland (8.54), Sweden (8.41), Denmark (8.36), Norway (8.05), and Finland (7.94), and lowest for Turkey (3.85), Greece (5.03), Mexico (5.05), Chile (5.29), and Ireland (5.35). Table 5 reports the data in detail.

3.2 Data on globalization

We measure globalization with the help of the KOF index. The KOF index explicitly acknowledges that globalization is a multifaceted concept that cannot be entirely captured by an individual "representative" economic indicator such as international trade as a share of GDP, the volume or stock of received foreign direct investments per capita, or the severity of capital account restrictions. The KOF index (see Dreher 2006b; Dreher et al. 2008a) represents an attempt to measure globalization in the broad sense that has been accepted in the empirical literature (see Potrafke 2014).[11] The 2013 KOF index covers 207 countries, includes 23 variables, and portrays the economic, social, and political dimensions of globalization. Each of these three dimensions is composed of further sub-dimensions. For example, economic globalization is measured by actual flows and stocks (trade, foreign direct investments, portfolio investments, and income payments to foreign nationals, each measured as a percentage of GDP) and restrictions (mean tariff rates, hidden import barriers, taxes on international trade, and capital account restrictions). Social globalization covers, among others, items such as international tourism, the number of internet users, and the number of McDonald's restaurants and IKEA stores (per capita). Political globalization is measured by the number of foreign embassies, membership in international organizations, the participation in U.N. Security Council missions, and international treaties (see Dreher et al. 2008a, 43–44, for further details). The KOF index measures globalization on a scale of 1–100, where higher values represent higher levels of globalization. We use the 2013 KOF index of globalization.

3.3 Correlation of globalization and social justice

To illustrate the association of globalization and social justice, we present correlations of the social justice indicators with averaged globalization. Since the components of the social justice indicators are based on data from the 2008–2010 period, we relate the social justice indicators to averaged globalization over the 1991–2007 period.[12] For robustness tests we also relate the social justice indicators to averaged globalization over the 1975–2007 period and to globalization in the year 2007. The disadvantage of using data over the 1975–2007 period is that the sample

[11] See Martens et al. (2014) on new directions in measuring globalization.

[12] The KOF index is not available for the Czech Republic and the Slovak Republic until 1992. We thus average the KOF index over 15 rather than 17 years for the Czech Republic and the Slovak Republic.

is reduced to only 23 countries because of lacking data for government ideology for some countries.[13]

Globalization was positively correlated with overall social justice: the correlation coefficients between globalization and the weighted and unweighted social justice indicators are 0.63 and 0.64 (Figs. 1, 2). The correlation coefficient between globalization and the poverty prevention sub-indicator is 0.65. The correlation coefficient between globalization and the equitable access to education sub-indicator is 0.23, 0.10 with the labor market inclusiveness sub-indicator, 0.73 with the social cohesion and equality sub-indicator, and 0.54 with the intergenerational justice sub-indicator.

3.4 The empirical model

The base-line econometric model has the following form:

$$Social\,justice_{ij} = \alpha_j\, Globalization_i + \Sigma_k \beta_{jk} X_{ik} + u_{ij}$$

$$\text{with } i = 1,\ldots,31;\ j = 1,\ldots,7,\ k = 1,\ldots,6$$

where the dependent variable $Social\ justice_{ij}$ denotes the social justice indicator j in country i. $Globalization_i$ describes the globalization variable. $\Sigma_k\ X_{ik}$ contains six economic control variables. Political parties may well promote different concepts of social justice.[14] We include the ideology indices by Potrafke (2009) and Bjørnskov and Potrafke (2011), which are based on the index of governments' ideological positions by Budge et al. (1993) and updated by Woldendorp et al. (1998, 2000). These indices place the cabinet on a left–right scale with values between 1 (right-wing government) and 5 (left-wing government). Data for Chile, Mexico, South Korea, and Turkey are not available in the datasets by Potrafke (2009) and Bjørnskov and Potrafke (2011). We therefore follow their coding procedure to code government ideology in Chile, Mexico, South Korea, and Turkey.[15] We use averaged government ideology over the 1991–2007 period.

[13] The countries with lacking data are Chile, the Czech Republic, Hungary, Mexico, Poland, the Slovak Republic, South Korea, and Turkey. The ideology index is not available for Portugal until 1975 and Spain until 1976. We thus average the ideology index over 32 and 31 rather than 33 years for Portugal and Spain.

[14] Raphael (2001) distinguishes between concepts of distributive justice that focus on merit and concepts that focus on equality. "As in the days of Plato and Aristotle, right-wing political parties tend to stress the merit conception, while left-wing political parties stress the equality conception" (Raphael 2001: 6). Left-wing governments appeal more to their labor base; right-wing governments appeal more to capital owners (Hibbs 1977; Alesina 1987). Left-wing governments have expanded the welfare state (e.g., Hicks and Swank 1984; Bradley et al. 2003). Under left-wing governments, inequality has reduced growth rates; under right-wing governments, inequality has increased growth rates (Bjørnskov 2008). Growth rates have been higher in right-wing societies (Bjørnskov 2005). Government ideology has not explained life satisfaction (Bjørnskov et al. 2008).

[15] Coding governments in OECD countries on a left–right scale is not controversial. Experts have used several indicators for government ideology in OECD countries to investigate the influence on economic policy-making and stressed that results are not sensitive to the choice of the government ideology indicator (e.g., Pickering and Rockey 2011).

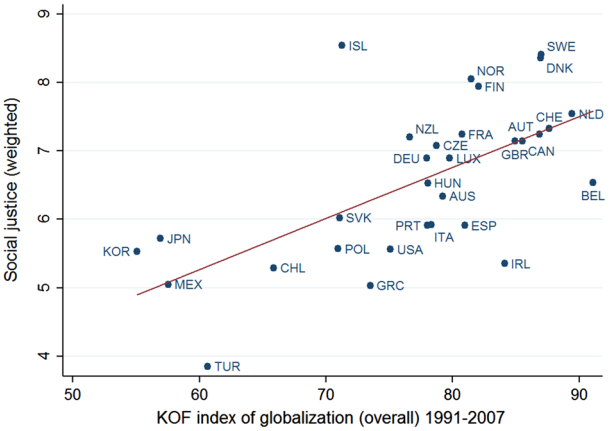

Fig. 1 Social justice (weighted) and overall globalization. 31 OECD countries. Correlation coefficient: 0.63. Source: Bertelsmann Stiftung (2010), Dreher (2006b), and Dreher et al. (2008a)

We include the logarithm of real GDP per capita (PPP converted, average over the 1991–2007 period) and the legal origin variables by La Porta et al. (1999). We distinguish between five different legal origins: British (reference category), French, German, Socialist, and Scandinavian. Table 6 shows descriptive statistics. We estimate the model by using OLS with standard errors robust to heteroskedasticity (Huber/White/sandwich standard errors—see Huber 1967; White 1980).

To be sure, we acknowledge that 31 observations describe a small sample and that the properties of the OLS estimator (as nearly all estimators) only hold for a large number of observations. We therefore keep the number of explanatory variables small to not further reduce the degrees of freedom.

4 Results

4.1 Basic results

Table 1 reports the regression results when we use the weighted social justice indicator. We include the explanatory variables separately to show that inferences regarding the globalization variable do not change when individual explanatory variables are included/excluded. The KOF index of globalization is statistically significant at the 5 or 1 % level in columns (1) to (5). The numerical meaning of the coefficients is that when the KOF index of globalization increases by one point (on a scale from 1 to 100), the social justice indicator increases by about 0.04–0.08 points (on a scale from 1 to 10). In other words, when the KOF index of globalization increases by one standard deviation, the social justice indicator increases by about 0.37–0.76 points (on a scale from 1 to 10). Globalization thus had a numerically important effect on social justice. Government ideology, by contrast, has not been associated with the weighted social justice indicator. The coefficients of the

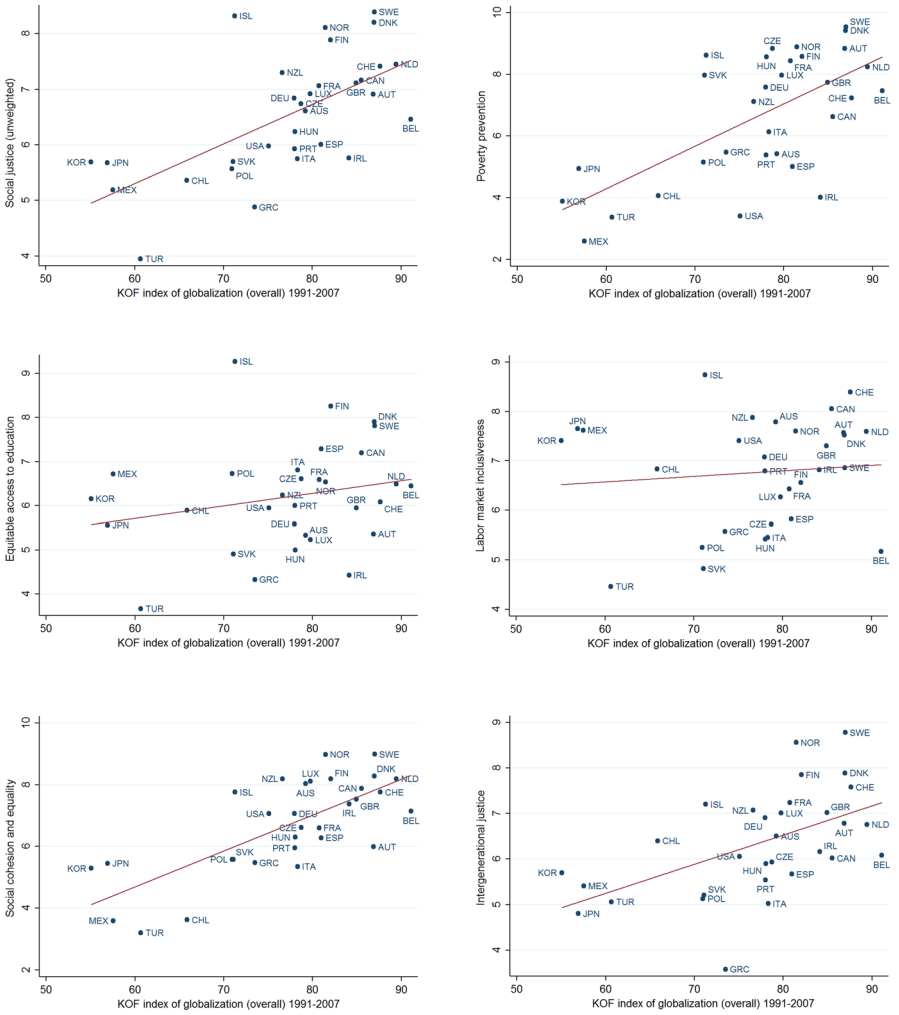

Fig. 2 Social justice (unweighted), sub-indicators, and overall globalization. 31 OECD countries. Source: Bertelsmann Stiftung (2010), Dreher (2006b), and Dreher et al. (2008a)

government ideology variable lack statistical significance in columns (2) to (5). The coefficients of the log real GDP per capita variable are statistically significant at the 5 % level in columns (4) and (5) and have a positive sign. The numerical meaning of the coefficients is that the social justice indicator increases by about 0.009 points, when real GDP per capita increases by 1 %. The French, German, and Socialist legal origin variables in column (5) lack statistical significance, whereas the Scandinavian legal origin variable is statistically significant at the 1 % level with the expected positive sign. The numerical meaning is that, compared to countries with British legal origin, the weighted social justice indicator was about 1.7 points

Table 1 Regression results

Dependent variable: social justice (weighted)					
OLS model with standard errors robust to heteroskedasticity (Huber/White/sandwich standard errors)					
	(1)	(2)	(3)	(4)	(5)
KOF index of globalization	0.075***		0.078***	0.046**	0.038**
	(0.016)		(0.015)	(0.021)	(0.015)
Ideology (left-wing)		0.303	−0.278	0.105	0.320
		(0.652)	(0.514)	(0.495)	(0.337)
log GDP per capita (real)				0.937**	0.850**
				(0.435)	(0.328)
Legal origin (French)					−0.092
					(0.416)
Legal origin (German)					0.535
					(0.388)
Legal origin (Socialist)					0.784
					(0.489)
Legal origin (Scandinavian)					1.684***
					(0.415)
Constant	0.796	5.664***	1.320	−6.734*	−6.330*
	(1.261)	(1.950)	(1.863)	(3.928)	(3.250)
Observations	31	31	31	31	31
R-squared	0.400	0.012	0.409	0.496	0.804

Robust standard errors in parentheses

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

higher in countries with Scandinavian legal origin.[16] This effect is numerically important and perfectly corresponds with the descriptive statistics.

Column (1) of Table 2 reports the regression results when we use the unweighted social justice indicator. The results are very similar to the results in Table 1. Columns (2) to (6) of Table 2 show the results for the social justice sub-indicators. Globalization has been associated with the sub-indicators on poverty prevention, social cohesion and equality, and intergenerational justice, while government ideology has not. Both globalization and government ideology have not been associated with the sub-indicators on equitable access to education and labor market inclusiveness.

Our results support the compensation hypothesis (see Sect. 2). Countries that experienced rapid globalization enjoy social justice. Regarding the sub-indicators our results support the compensation hypothesis for poverty prevention, social cohesion and equality, and intergenerational justice. The poverty prevention and

[16] Scandinavian countries may enjoy higher levels of social justice as social trust has been shown to induce larger welfare states (Bergh and Bjørnskov 2011). We include social trust for robustness tests (see Sect. 4.2).

Table 2 Regression results

OLS model with standard errors robust to heteroskedasticity (Huber/White/sandwich standard errors)						
	Social justice (unweighted) (1)	Poverty prevention (2)	Equitable access to education (3)	Labor market inclusiveness (4)	Social cohesion and equality (5)	Inter-generational justice (6)
KOF index of globalization	0.032**	0.111***	−0.011	−0.028	0.045**	0.043**
	(0.013)	(0.030)	(0.026)	(0.022)	(0.019)	(0.018)
Ideology (left-wing)	0.351	−0.025	0.627	0.589	0.205	0.355
	(0.270)	(0.600)	(0.634)	(0.416)	(0.225)	(0.325)
log GDP per capita (real)	0.842***	1.117*	0.558	0.674	1.796***	0.061
	(0.281)	(0.595)	(0.801)	(0.484)	(0.323)	(0.547)
Legal origin (French)	−0.350	1.080	0.123	−1.370***	−1.055**	−0.515
	(0.357)	(0.841)	(0.490)	(0.364)	(0.378)	(0.488)
Legal origin (German)	0.257	1.742*	0.006	0.047	−0.821	0.317
	(0.322)	(0.886)	(0.367)	(0.395)	(0.500)	(0.310)
Legal origin (Socialist)	0.300	3.542***	0.335	−1.873***	0.124	−0.628
	(0.406)	(1.047)	(0.823)	(0.453)	(0.380)	(0.492)
Legal origin (Scandinavian)	1.412***	3.105***	2.032***	−0.152	0.564*	1.523***
	(0.327)	(0.768)	(0.631)	(0.428)	(0.323)	(0.288)
Constant	−5.628*	−14.729**	−0.811	1.165	−15.128***	1.364
	(2.809)	(5.549)	(7.914)	(5.036)	(2.753)	(4.706)
Observations	31	31	31	31	31	31
R-squared	0.829	0.768	0.480	0.637	0.899	0.679

Robust standard errors in parentheses

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

intergenerational justice indicators are based on economic-policy measures which governments directly influence. Governments are likely to design these economic-policy measures to gratify their electorate. Globalization has already been shown to increase social cohesion and equality (Gray et al. 2006; Potrafke and Ursprung 2012). The equitable access to education indicator consists of future-oriented measures and the labor market inclusiveness indicator consists of market outcomes. It is conceivable that governments are less future-oriented but election-motivated and that governments do not directly influence market outcomes.

4.2 Robustness tests

We tested the robustness of our results in several ways. When we consider only the 24 established industrialized countries over the 1991–2007 period (that is excluding Chile, the Czech Republic, Hungary, Mexico, Poland, the Slovak Republic, and Turkey), globalization lacks statistical significance in two more specifications (replicating the specifications including globalization in Tables 1, 2) as compared to our baseline model. When we consider only the 24 oldest OECD member states over the 1991–2007 period (that is excluding Chile, the Czech Republic, Hungary, Mexico, Poland, the Slovak Republic, and South Korea), globalization lacks statistical significance in one more specification (replicating the specifications including globalization in Tables 1, 2) as compared to our baseline model. Inferences regarding globalization and social justice do however not change.

We also tested whether the results depend on the time period considered. We therefore replaced the averaged globalization, government ideology, and log real GDP per capita variables over the 1991–2007 period by averaged globalization, government ideology, and log real GDP per capita variables over the 1975–2007 period. The sample is reduced to only 23 countries because we cannot code government ideology for Chile, the Czech Republic, Hungary, Mexico, Poland, the Slovak Republic, South Korea, and Turkey for the entire period. The sample thus resembles the sample when we consider only the established industrialized countries or the oldest OECD member states. The effect of globalization on social justice in the 1975–2007 period is less pronounced as compared to the 1991–2007 period, indicating that the positive effect of globalization on social justice has become stronger over time. As compared to our baseline model, globalization lacks statistical significance in four more specifications (replicating the specifications including globalization in Tables 1, 2), when we consider the 1975–2007 period. We also replaced the averaged globalization, government ideology, and log real GDP per capita variables over the 1991–2007 period by globalization, government ideology, and log real GDP per capita variables in the year 2007. Inferences regarding globalization and social justice do however not change as compared to the 1991–2007 period.

We replaced the overall KOF index of globalization by the sub-indices on economic, social, and political globalization. Social globalization was most strongly associated with social justice. The coefficients of the KOF index of social globalization are statistically significant in most regressions, but lack statistical significance when we use the social justice sub-indicators on equitable access to

education, labor market inclusiveness, and intergenerational justice as the dependent variable (similar to the results of the overall KOF index of globalization). The KOF index of economic globalization shows a similar pattern to the KOF index of social globalization but has an overall somewhat weaker effect in terms of statistical significance and numerical meaning of the coefficients: as compared to our baseline model, globalization lacks statistical significance in three more specifications (replicating the specifications including globalization in Tables 1, 2). The KOF index of political globalization, by contrast, does not turn out to be statistically significant in any regression equation (except column 4 of Table 2).

We tested whether the results are sensitive to including social trust by using the data on social trust compiled by Bjørnskov and Méon (2013). Table 3 shows the results for the weighted social justice indicator (compare Table 1). Social trust is statistically significant at the 1 % level in columns (1) to (4), but lacks statistical significance in column (5). Including social trust renders the globalization variable to be statistically significant only at the 10 % level in column (4), but does not

Table 3 Regression results (including social trust)

Dependent variable: social justice (weighted)					
OLS model with standard errors robust to heteroskedasticity (Huber/White/sandwich standard errors)					
	(1)	(2)	(3)	(4)	(5)
KOF index of globalization	0.039***		0.040***	0.037*	0.034**
	(0.012)		(0.014)	(0.019)	(0.015)
Ideology (left-wing)		0.236	−0.047	−0.005	0.243
		(0.365)	(0.399)	(0.432)	(0.342)
log GDP per capita (real)				0.126	0.720*
				(0.412)	(0.415)
Legal origin (French)					0.128
					(0.428)
Legal origin (German)					0.553
					(0.377)
Legal origin (Socialist)					0.981*
					(0.488)
Legal origin (Scandinavian)					1.437**
					(0.606)
Social trust	0.045***	0.057***	0.045***	0.043***	0.016
	(0.008)	(0.007)	(0.008)	(0.008)	(0.020)
Constant	1.855**	3.748***	1.939*	0.829	−5.166
	(0.759)	(1.180)	(1.126)	(3.660)	(3.745)
Observations	31	31	31	31	31
R-squared	0.671	0.594	0.671	0.672	0.812

Robust standard errors in parentheses

*** $p < 0.01$; ** $p < 0.05$; * $p < 0.1$

change the inferences regarding the globalization variable in columns (1), (3), and (5). These findings perfectly correspond with our expectations, as the correlation coefficient between social trust and the weighted social justice indicator is 0.77, the correlation coefficient between social trust and globalization is 0.50, and social trust and legal origin are highly correlated (the correlation coefficient between social trust and the Scandinavian legal origin, for example, is 0.69).

It is conceivable that the global financial crisis influenced social justice in individual countries. For most of the OECD countries, the effects of the crisis were most pronounced in 2009. We tested whether the crisis influenced social justice by including the annual real GDP per capita growth rate in 2009 (PPP converted) as a control variable. Replicating Tables 1 and 2, inferences regarding globalization do not change. The annual real GDP per capita growth rate in 2009 does not turn out to be statistically significant in any specification, except when we replicate column (5) of Table 2 (results not shown).

We tested whether the reported effects are driven or mitigated by idiosyncratic circumstances in individual countries. For this reason, we tested whether the results are sensitive to including/excluding individual countries. Our results (not reported here) indicate that this is not the case. Only when we exclude Japan globalization lacks statistical significance in two more specifications (replicating the specifications including globalization in Tables 1, 2) as compared to our baseline model.

5 Conclusions

By employing the new social justice indicators of the Bertelsmann Stiftung, we have investigated the relationship between globalization and social justice in OECD countries. The results show that countries that experienced rapid globalization enjoy social justice. The results are important because advocates of the dark side of globalization propagate the view that globalization reduces social justice.

It is conceivable that globalization enhances social justice because voters demand more active governments when globalization is proceeding rapidly. The relationship between globalization and social justice is pronounced for poverty prevention, social cohesion and equality, and intergenerational justice, and thus supports the compensation hypothesis.

Globalization, however, was not associated with the indicators on equitable access to education and labor market inclusiveness. These findings are plausible because the equitable access to education indicator is based on future-oriented measures and election-motivated governments are more concerned about the present than the future. Governments also do not directly influence market outcomes on which the labor market inclusiveness indicator is based.

Future studies may corroborate our findings by using survey/micro data. An issue is who is adamant in maintaining that globalization induces social justice. Per capita income and political preferences are likely to influence views on social justice. When micro data including personal views on social justice are available, studies may well include the KOF globalization indices and interact the KOF globalization

indices with personal characteristics such as per capita income and political preferences to describe views on social justice.

Our results suggest that governments should not be influenced by social-justice arguments to adopt policies that impede or counter globalization. Of course, with policy determined by political competition (Ursprung 1991), the policy implications relate to perceptions by voters of their personal costs and benefits from globalization. Voters concerned with their own welfare and with broad objectives of social justice may well support pro-globalization policies.

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Appendix

See Tables 4, 5 and 6.

Table 4 Social justice sub-indicators consist of quantitative measures and expert opinions

Indicator	Description
Poverty prevention	
Poverty rate	Share of population with <50 % of the average national net household income
Child poverty	Share of population below 18 with <50 % of the average national net household income
Old-age poverty	Share of population above 65 with <50 % of the average national net household income
Equitable access to education	
Education policy	Political performance in providing valuable, efficient, and just education
Socioeconomic background	Product of strength and slope of the socioeconomic gradient
Early childhood education	Public expenditures for pre-school education in percent of GDP
Labor market inclusiveness	
Employment rate	Employed population relative to population of working age (15–64)
Employment rate (older people)	Employed population 55–64 relative to total population 55–64
Employment relation (immigrants/natives)	Employment rate of migrants relative to employment rate of native population
Employment relation (sex)	Employment rate of women relative to employment rate of men
Unemployment	Number of unemployed relative to dependent civil labor force
Long-term unemployment	Long-term unemployed (above 12 months) relative to labor force 15–64
Youth unemployment	Unemployment rate 15–24 relative to unemployment rate of total population
Unemployment (low-skilled)	Unemployment rate without higher school or university degree relative to total unemployment rate
Social cohesion and equality	
Social inclusion	Assessment of social policy regarding strengthening social cohesion

Table 4 continued

Indicator	Description
Gini coefficient	Income distribution
Non-discrimination	Assessment of public measures for avoiding discrimination
Income differences (women/men)	Incomes of women relative to incomes of men
Integration policy	Assessment of political performance regarding the integration of migrants
Inter-generational justice	
Family policy	Political performance regarding compatibility of family and work
Pension policy	Political performance regarding poverty avoiding, generationally just, and fiscally sustainable pensions
Environmental policy	Political performance regarding sustainable dealing with resources and the environment
CO_2 emissions	CO_2 emissions per unit of GDP
Expenditures for research and development	Public expenditures for research and development in percent of GDP
Debt level	Debt of public households in percent of nominal GDP

Source: Bertelsmann Stiftung (2010)

Measures based on expert opinions are underlined

Table 5 Social justice indicators are highest in Northern Europe

Country	Social justice (weighted)	Social justice (unweighted)	Poverty prevention	Equitable access to education	Labor market inclusiveness	Social cohesion and equality	Inter-generational justice
1. Iceland	8.54	8.32	8.62	9.27	8.74	7.76	7.20
2. Sweden	8.41	8.39	9.53	7.81	6.86	8.99	8.78
3. Denmark	8.36	8.20	9.42	7.90	7.52	8.28	7.89
4. Norway	8.05	8.11	8.89	6.54	7.60	8.98	8.56
5. Finland	7.94	7.89	8.58	8.26	6.56	8.19	7.85
6. Netherlands	7.54	7.45	8.24	6.49	7.59	8.19	6.76
7. Switzerland	7.33	7.41	7.23	6.08	8.39	7.76	7.58
8. France	7.24	7.06	8.44	6.59	6.43	6.60	7.24
9. Austria	7.24	6.91	8.84	5.36	7.57	5.99	6.78
10. New Zealand	7.20	7.30	7.11	6.24	7.88	8.19	7.07
11. Canada	7.14	7.16	6.63	7.20	8.05	7.88	6.02
12. United Kingdom	7.14	7.11	7.73	5.95	7.30	7.53	7.02
13. Czech Republic	7.08	6.74	8.83	6.61	5.72	6.61	5.93
14. Luxembourg	6.89	6.92	7.97	5.23	6.27	8.11	7.01
15. Germany	6.89	6.84	7.58	5.59	7.08	7.06	6.91
16. Belgium	6.54	6.46	7.46	6.45	5.17	7.14	6.08
17. Hungary	6.53	6.24	8.57	5.00	5.42	6.30	5.90
18. Australia	6.34	6.61	5.42	5.33	7.79	8.03	6.50
19. Slovak Republic	6.02	5.70	7.97	4.91	4.82	5.58	5.21
20. Italy	5.92	5.75	6.13	6.81	5.45	5.35	5.02

Table 5 continued

Country	Social justice (weighted)	Social justice (unweighted)	Poverty prevention	Equitable access to education	Labor market inclusiveness	Social cohesion and equality	Inter-generational justice
21. Portugal	5.91	5.93	5.38	6.00	6.79	5.95	5.54
22. Spain	5.91	6.01	5.01	7.29	5.82	6.28	5.67
23. Japan	5.72	5.68	4.94	5.56	7.65	5.45	4.80
24. Poland	5.57	5.57	5.15	6.73	5.25	5.58	5.13
25. United States	5.56	5.98	3.41	5.95	7.41	7.06	6.06
26. South Korea	5.53	5.69	3.88	6.16	7.41	5.29	5.70
27. Ireland	5.35	5.76	4.02	4.43	6.82	7.38	6.16
28. Chile	5.29	5.36	4.06	5.89	6.83	3.62	6.40
29. Mexico	5.05	5.19	2.59	6.72	7.62	3.59	5.41
30. Greece	5.03	4.88	5.48	4.33	5.57	5.47	3.58
31. Turkey	3.85	3.95	3.37	3.67	4.46	3.20	5.06

Source: Bertelsmann Stiftung (2010)

Table 6 Descriptive statistics

Variable	Obs.	Mean	Std. Dev.	Min	Max	Source
Social justice (weighted)	31	6.55	1.14	3.85	8.54	Bertelsmann Stiftung (2010)
Social justice (unweighted)	31	6.54	1.08	3.95	8.39	Bertelsmann Stiftung (2010)
Poverty prevention	31	6.66	2.05	2.59	9.53	Bertelsmann Stiftung (2010)
Equitable access to education	31	6.21	1.19	3.67	9.27	Bertelsmann Stiftung (2010)
Labor market inclusiveness	31	6.77	1.11	4.46	8.74	Bertelsmann Stiftung (2010)
Social cohesion and equality	31	6.69	1.54	3.20	8.99	Bertelsmann Stiftung (2010)
Intergenerational justice	31	6.35	1.15	3.58	8.78	Bertelsmann Stiftung (2010)
KOF index of globalization (overall) 1991–2007	31	77.21	9.69	55.06	91.10	Dreher (2006b), Dreher et al. (2008a)
KOF index of globalization (economic) 1991–2007	31	74.26	12.59	42.60	96.24	Dreher (2006b), Dreher et al. (2008a)
KOF index of globalization (social) 1991–2007	31	73.48	12.86	41.98	88.44	Dreher (2006b), Dreher et al. (2008a)
KOF index of globalization (political) 1991–2007	31	86.60	9.59	58.12	96.91	Dreher (2006b), Dreher et al. (2008a)
KOF index of globalization (overall) 1975–2007	23	74.19	8.47	50.06	85.50	Dreher (2006b), Dreher et al. (2008a)
KOF index of globalization (economic) 1975–2007	23	70.75	12.63	36.05	95.21	Dreher (2006b), Dreher et al. (2008a)
KOF index of globalization (social) 1975–2007	23	70.80	9.62	45.93	85.41	Dreher (2006b), Dreher et al. (2008a)
KOF index of globalization (political) 1975–2007	23	83.77	11.61	53.96	96.26	Dreher (2006b), Dreher et al. (2008a)
Ideology (left-wing) 1991–2007	31	2.93	0.42	2.18	4.00	Potrafke (2009), Bjørnskov and Potrafke (2011), further own calculations

Table 6 continued

Variable	Obs.	Mean	Std. Dev.	Min	Max	Source
Ideology (left-wing) 1975–2007	23	2.88	0.29	2.09	3.39	Potrafke (2009), Bjørnskov and Potrafke (2011), further own calculations
GDP per capita (real) 1991–2007	31	26,640.51	11,277.71	8061.47	61,060.84	PWT 7.1: Heston et al. (2012)
GDP per capita (real) 1975–2007	23	27,082.80	6515.87	15,043.55	46,706.39	PWT 7.1: Heston et al. (2012)
Legal origin (British)	31	0.19	0.40	0	1	La Porta et al. (1999)
Legal origin (French)	31	0.36	0.49	0	1	La Porta et al. (1999)
Legal origin (German)	31	0.16	0.37	0	1	La Porta et al. (1999)
Legal origin (Socialist)	31	0.13	0.34	0	1	La Porta et al. (1999)
Legal origin (Scandinavian)	31	0.16	0.37	0	1	La Porta et al. (1999)
Social trust	31	37.05	15.30	8.99	68.08	Bjørnskov and Méon (2013)
Annual GDP per capita (real) growth rate 2009	31	−0.05	0.03	−0.13	0.02	PWT 7.1: Heston et al. (2012)

References

Acosta, P., & Montes-Rojas, G. V. (2008). Trade reform and inequality: The case of Mexico and Argentina in the 1990s. *World Economy, 31*, 763–780.

Alesina, A. (1987). Macroeconomic policy in a two-party system as a repeated game. *Quarterly Journal of Economics, 102*, 651–678.

Arrow, K., Bowles, S., & Durlauf, S. (2000). *Meritocracy and economic inequality*. Princeton: Princeton University Press.

Berggren, N. (1999). Economic freedom and equality: Friends or foes? *Public Choice, 100*, 203–223.

Berggren, N., & Nilsson, T. (2014). *Globalization and the transmission of social values: The case of tolerance*. IFN Working Paper 1007.

Bergh, A., & Bjørnskov, C. (2011). Historical trust levels predict the current size of the welfare state. *Kyklos, 64*, 1–19.

Bergh, A., & Nilsson, T. (2010). Do liberalization and globalization increase income inequality? *European Journal of Political Economy, 26*, 488–505.

Bergh, A., & Nilsson, T. (2014). Is globalization reducing absolute poverty? *World Development, 62*, 42–61.

Bertelsmann Stiftung (2010). *Soziale Gerechtigkeit in der OECD—Wo steht Deutschland? Sustainable Governance Indicators 2011*. Gütersloh. http://www.sgi-network.org

Bhagwati, J. (2004). *In defense of globalization*. Oxford: Oxford University Press.

Bjørnskov, C. (2005). Does political ideology affect economic growth? *Public Choice, 123*, 133–146.

Bjørnskov, C. (2008). The growth-inequality association: Government ideology matters. *Journal of Development Economics, 87*, 300–308.

Bjørnskov, C., Dreher, A., & Fischer, J. A. V. (2008). Cross-country determinants of life satisfaction: Exploring different determinants across groups in society. *Social Choice and Welfare, 30*, 119–173.
Bjørnskov, C., & Méon, P.-G. (2013). Is trust the missing root of institutions, education, and development? *Public Choice, 157*, 641–669.
Bjørnskov, C., & Potrafke, N. (2011). Politics and privatization in Central and Eastern Europe: A panel data analysis. *Economics of Transition, 19*, 201–230.
Bradley, D., Huber, E., Moller, S., Nielsen, F., & Stephens, J. D. (2003). Distribution and redistribution in postindustrial democracies. *World Politics, 55*, 193–228.
Budge, I., Keman, H., & Woldendorp, J. (1993). Political data 1945–1990. Party government in 20 democracies. *European Journal of Political Research, 24*, 1–119.
Cho, S.-Y. (2013). Integrating equality: Globalization, women's rights, and human trafficking. *International Studies Quarterly, 57*, 683–697.
Das, S. P. (2005). Gradual globalization and inequality between and within countries. *Canadian Journal of Economics, 38*, 852–869.
Davies, R. B., & Vadlamannati, K. C. (2013). A race to the bottom in labor standards? An empirical investigation. *Journal of Development Economics, 103*, 1–14.
De Soysa, I., & Vadlamannati, K. C. (2011). Does being bound together suffocate, or liberate? The effects of economic, social, and political globalization on human rights, 1981–2005. *Kyklos, 64*, 20–53.
Doerrenberg, P., & Peichl, A. (2014). The impact of redistributive policies on inequality in OECD countries. *Applied Economics, 46*, 2066–2086.
Dreher, A. (2006a). The influence of globalization on taxes and social policy: An empirical analysis for OECD countries. *European Journal of Political Economy, 22*, 179–201.
Dreher, A. (2006b). Does globalization affect growth? Evidence from a new index of globalization. *Applied Economics, 38*, 1091–1110.
Dreher, A., Gassebner, M., & Siemers, L.-H. R. (2012). Globalization, economic freedom, and human rights. *Journal of Conflict Resolution, 56*, 516–546.
Dreher, A., & Gaston, N. (2008). Has globalization increased inequality? *Review of International Economics, 16*, 516–536.
Dreher, A., Gaston, N., & Martens, P. (2008a). *Measuring globalisation: Gauging its consequences*. Berlin: Springer.
Dreher, A., Sturm, J. E., & Ursprung, H. W. (2008b). The impact of globalization on the composition of government expenditures: Evidence from panel data. *Public Choice, 134*, 263–292.
Edwards, S. (1997). Trade policy, growth, and income distribution. *American economic review (Papers and proceedings of the hundred and fourth annual meeting of the American Economic Association*), *87*, 205–210.
Gandolfo, G., & Marzano, F. (1999). *Economic theory and social justice*. London: Macmillan Press.
Garmann, S. (2014). Does globalization influence protectionism? Empirical evidence from agricultural support. *Food Policy, 49*, 281–293.
Gaston, N., & Rajaguru, G. (2013). International migration and the welfare state revisited. *European Journal of Political Economy, 29*, 90–101.
Gray, M. M., Kittilson, M. C., & Sandholtz, W. (2006). Women and globalization: A study of 180 countries, 1975–2000. *International Organization, 60*, 293–333.
Hansson, S. O. (2004). What are opportunities and why should they be equal? *Social Choice and Welfare, 22*, 305–316.
Heine, J., & Thakur, R. (2011). *The dark side of globalization.* Tokyo, New York, Paris: United Nations University Press.
Heston, A., Summers, R., & Aten, B. (2012). *Penn world table version 7.1*. Center for International Comparisons of Production, Income and Prices at the University of Pennsylvania.
Hibbs, D. A, Jr. (1977). Political parties and macroeconomic policy. *American Political Science Review, 71*, 1467–1487.
Hicks, A., & Swank, D. (1984). On the political economy of welfare expansion: A comparative analysis of 18 advanced capitalist democracies, 1960–1971. *Comparative Political Studies, 17*, 81–119.
Hillman, A. L. (2008). Globalization and social justice. *Singapore Economic Review, 53*, 173–189.
Hillman, A. L. (2009). *Public finance and public policy* (2nd ed.). Cambridge: Cambridge University Press.
Huber, P. J. (1967). The behavior of maximum likelihood estimates under nonstandard conditions. *Proceedings of the Fifth Berkeley Symposium on Mathematical Statistics and Probability, 1*, 221–233.

Jones, A. (2010). *Globalization: Key thinkers*. Cambridge and Malden: Polity Press.
Kilby, C., & Scholz S. J. (2011). *The impact of globalization on women: Testing Vandana Shiva's critique of development*. Villanova School of Business Economics Working Paper 15.
Kitching, G. (2001). *Seeking social justice through globalization: Escaping a nationalist perspective*. Pennsylvania: Pennsylvania State University Press.
Kumar, U., & Mishra, P. (2008). Trade liberalization and wage inequality: Evidence from India. *Review of Development Economics, 12*, 291–311.
La Porta, R., Lopez-de-Silanes, F., Shleifer, A., & Vishny, R. (1999). The quality of government. *Journal of Law Economics and Organization, 15*, 222–279.
Leibrecht, M., Klien, M., & Onaran, O. (2011). Globalization, welfare regimes and social protection expenditures in Western and Eastern European countries. *Public Choice, 148*, 569–594.
Martens, P., Caselli, M., De Lombaerde, P., Figge, L., & Scholte, J. A. (2014). New directions in globalization indices. *Globalizations*. doi:10.1080/14747731.2014.944336.
Martin, H.-P., & Schumann, H. (1997). *The global trap: Globalization and the assault on prosperity and democracy*. London and New York: Zed Books.
Meinhard, S., & Potrafke, N. (2012). The globalization-welfare state nexus reconsidered. *Review of International Economics, 20*, 271–287.
Merkel, W. (2007). Soziale Gerechtigkeit im OECD-Vergleich. In S. Empter & R. B. Vehrkamp (Eds.), *Soziale Gerechtigkeit—eine Bestandsaufnahme* (pp. 233–257). Gütersloh: Bertelsmann Stiftung.
Merkel, W., & Giebler, H. (2009). Measuring social justice and sustainable governance in the OECD. In Bertelsmann Stiftung (Ed.), *Sustainable governance indicators 2009, policy performance and executive capacity in the OECD* (pp. 187–215). Gütersloh: Bertelsmann Stiftung.
Mezzetti, C. (1987). Paretian efficiency, rawlsian justice and the Nozick theory of rights. *Social Choice and Welfare, 4*, 25–37.
Milanovic, B. (2005). *Worlds Apart: Measuring international and global inequality*. Princeton and Oxford: Princeton University Press.
Norberg, J. (2003). *In defense of global capitalism*. Washington, DC: Cato Institute.
Nozick, R. (1974). *Anarchy*. New York and Utopia: Basic Books.
Pickering, A., & Rockey, J. (2011). Ideology and the growth of government. *Review of Economics and Statistics, 93*, 907–919.
Potrafke, N. (2009). Did globalization restrict partisan politics? An empirical evaluation of social expenditures in a panel of OECD countries. *Public Choice, 140*, 105–124.
Potrafke, N. (2010). Labor market deregulation and globalization: Empirical evidence from OECD countries. *Review of World Economics/Weltwirtschaftliches Archiv, 146*, 545–571.
Potrafke, N. (2013). Globalization and labor market institutions: International empirical evidence. *Journal of Comparative Economics, 41*, 829–842.
Potrafke, N. (2014). The evidence on globalisation. *World Economy*. doi:10.1111/twec.12174.
Potrafke, N., & Ursprung, H. W. (2012). Globalization and gender equality in the course of development. *European Journal of Political Economy, 28*, 399–413.
Raphael, D. D. (2001). *Concepts of justice*. Oxford: Clarendon Press.
Rawls, J. (1971). *A theory of justice*. Cambridge: Belknap Press of Harvard University Press.
Richardson, J. D. (1995). Income inequality and trade: How to think, what to conclude. *Journal of Economic Perspectives, 9*, 33–55.
Rodrik, D. (1997). *Has globalization gone too far?*. Washington, DC: Institute for International Economics.
Rodrik, D. (1998). Why do more open economies have bigger governments? *Journal of Political Economy, 106*, 997–1032.
Rodrik, D. (2011). *The globalization paradox: Democracy and the future of the world economy*. New York and London: W. W. Norton & Company.
Roemer, J. E. (2002). Equality of opportunity: A progress report. *Social Choice and Welfare, 19*, 455–471.
Roemer, J. E., Aaberge, R., Colombino, U., Fritzell, J., Jenkins, S. P., Lefranc, A., et al. (2003). To what extent do fiscal regimes equalize opportunities for income acquisition among citizens? *Journal of Public Economics, 87*, 539–565.
Rudra, N. (2002). Globalization and the decline of the welfare state in less-developed countries. *International Organization, 56*, 411–445.
Savvides, A. (1998). Trade policy and income inequality: New evidence. *Economics Letters, 61*, 365–372.

Schulze, G. G., & Ursprung, H. W. (1999). Globalisation of the economy and the nation state. *World Economy, 22*, 295–352.
Sen, A. (1980). *Equality of what?*. In *The tanner lecture on human values I* (pp. 197–220). Cambridge: Cambridge University Press.
Sen, A. (2000). *Development as freedom*. New York: Anchor Books.
Sinn, H.-W. (1997). The selection principle and market failure in systems competition. *Journal of Public Economics, 66*, 247–274.
Sinn, H.-W. (2003). *The new systems competition*. Oxford: Blackwell.
Stiglitz, J. E. (2002). *Globalization and its discontents*. London: Allen Lane The Penguin Press.
Stiglitz, J. E. (2006). *Making globalization work*. New York and London: W. W. Norton & Company.
Strange, S. (1996). *The retreat of the state: The diffusion of power in the world economy*. Cambridge: Cambridge University Press.
Sugden, R. (2004). Living with unfairness: The limits of equal opportunity in a market economy. *Social Choice and Welfare, 22*, 211–236.
Traub, S., Seidl, C., Schmidt, U., & Levati, M. V. (2005). Friedman, Harsanyi, Rawls, Boulding—Or somebody else? An experimental investigation of distributive justice. *Social Choice and Welfare, 24*, 283–309.
Ursprung, H. W. (1991). Economic policies and political competition. In A. L. Hillman (Ed.), *Markets and politicians: Politicized economic choice* (pp. 1–25). Boston: Kluwer.
Ursprung, H. W. (2008). Globalization and the welfare state. In S. N. Durlauf & L. E. Blume (Eds.), *The new Palgrave dictionary of economics* (2nd ed.). Köln: Palgrave Macmillan.
Vadlamannati, K. C. (2015). Rewards of (dis)integration: Economic, social, and political globalization and freedom of association and collective bargaining rights of workers in developing countries. *ILR Review, 68*, 3–27.
von Hayek, F. A. (1976). *The mirage of social justice*. Chicago: University of Chicago Press.
White, H. (1980). A heteroskedasticity-consistent covariance matrix estimator and a direct test for heteroskedasticity. *Econometrica, 48*, 817–838.
Woldendorp, J., Keman, H., & Budge, I. (1998). Party government in 20 democracies: An Update 1990–1995. *European Journal of Political Research, 33*, 125–164.
Woldendorp, J., Keman, H., & Budge, I. (2000). *Party Government in 48 Democracies 1945–1998: Composition, Duration, Personnel*. Dordrecht: Kluwer.
Wolf, M. (2005). *Why globalization works*. New Haven and London: Yale University Press.
Wood, A. (1995). How trade hurt unskilled workers. *Journal of Economic Perspectives, 9*, 57–80.
World Bank (2002). *Globalization, growth, and poverty: Building an inclusive world economy*. New York: World Bank.