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The Globalisation-Welfare State Nexus: Evidence from Asia

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The Globalisation-Welfare State Nexus: Evidence from Asia

Abstract

How globalisation influences social expenditure has been examined for industrialized countries. Globalisation has often been shown to be positively associated with social expenditure in established industrialized countries, a finding that corroborates the compensation hypothesis. Scholars have focused on industrialised countries, because social expenditure is difficult to measure in developing countries. I use new data on social expenditure for Asian non-OECD countries. Globalisation is measured by the new KOF Globalisation Index. My results do not suggest that globalisation influenced social expenditures in Asia. Neither do the results suggest that the nexus between globalisation and social expenditures varied across high-income countries, such as Hong Kong and Singapore, and lower-income Asian countries or across Asian regions. It is conceivable that Asian citizens did not demand increasing social support when globalisation proceeded rapidly because they enjoyed family and other private assistance. Asian countries also have weaker tax and labour market institutions than OECD countries and have therefore more difficulties in increasing social expenditure.

JEL-Codes: I380, O110, O570, C230.

Keywords: globalisation-welfare state nexus, compensation hypothesis, race-to-the-bottom hypothesis, social expenditure, Asia.

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1. Introduction

Two competing hypotheses describe how globalisation influences the welfare state: the race-to-the-bottom hypothesis predicts declining welfare states in the course of globalisation and the compensation hypothesis rather predicts strong welfare states which protect citizens against the risks of globalisation. Welfare states have not yet disappeared, and many studies indeed corroborated the compensation hypothesis proposed by Cameron (1978) and Rodrik (1998). The evidence in favour of the compensation hypothesis is based on data for industrialised countries (OECD). Scholars have mostly focused on industrialised countries because industrialised countries have encompassing social policy programs (e.g., social security, public health services, unemployment benefits and active labour market policies etc.). Moreover, data on social expenditure has traditionally been available only for industrialised countries. There is thus a clear need for research investigating the globalisation-welfare state nexus in developing countries.

Asian countries are especially interesting to examine because citizens in Asian countries tend to enjoy family or other in-group assistance and can therefore be expected to be less inclined to demand public social expenditure than citizens in OECD countries. The new study by Lim and Burgoon (2018) examines the globalisation-welfare state nexus in Asia by using micro-data but evidence at the macro-level is lacking. In 2017, the OECD has published new data on social expenditure for selected Asian non-OECD countries that I use to examine the effects of globalisation on social expenditure at the macro-level. Using this new data, I investigate whether the compensation hypothesis generalises to other middle- and lower-income countries. Compensation is likely to be less pronounced in middle- and lower-income countries than in high-income countries because compensation requires that governments have financial opportunities to increase social expenditure and institutions, such as strong trade unions, which are able to demand an increase in social expenditure.

The OECD compiled social protection expenditure for 21 Asian non-OECD countries that I use. Globalisation is measured by the new KOF Globalisation Index (Dreher 2006, Dreher et al. 2008a, Gygli et al. 2018).[2] The results do not suggest that globalisation influenced social expenditure in Asia. The results do also not suggest that the nexus between globalisation and social expenditure varied between high-income countries such as Hong Kong and Singapore compared to other lower-income Asian countries.

2. The globalisation-welfare state nexus: previous studies

2.1 Theories

The race-to-the-bottom hypothesis holds that globalisation puts pressure on national governments to reduce the size and scope of government. In the course of increasing competition among countries, national governments may well decrease tax rates, especially corporate tax rates and tax rates on interest incomes in order to attract foreign investors (e.g., Sinn 1997 and 2003). Locations of corporations and investments in financial assets are mobile in a globalised world, and national governments have understood to not tax mobile factors. Trade regulations and tariffs declined, capital account restrictions were abolished, information spreads rapidly via the internet, national governments collaborate in international organizations, and countries have become more similar (westernisation). Globalisation indeed increased competition between national governments. The more competition between national governments there is, the more tax rates are expected to decrease. Corporate tax rates and tax rates on interest income might converge to zero. Some commentators conjecture that small tax rates on interest income and small corporate tax rates give rise to drastically declining tax revenues. When tax revenues decline drastically, government expenditure, in turn, needs to also

[2] Scholars now use the new KOF index to re-examine effects of globalisation that have been examined based on previous versions of the KOF index. An example is the effect of globalisation on tax rates (Gozgor and Ranjan 2018).

decrease. In particular, market-oriented governments, which have been active in lowering business taxation, will cut social expenditure. Advocates of the dark side of globalisation fear that (western) welfare states erode in the course of globalisation.

The compensation hypothesis portrays a more optimistic view of globalisation (Cameron 1978, Rodrik 1998). Because of increasing uncertainty in the course of globalisation, national governments may want to protect citizens against the risks of globalisation and increase size and scope of government. In particular, social expenditure is likely to be increased to compensate for uncertainty and risks. Important examples include generous unemployment health insurance that may well help those citizens who do not enjoy other benefits of globalisation.

2.2 Industrialised countries

The empirical evidence on how globalisation influences tax rates and public (social) spending tends to support the compensation hypothesis rather than the race-to-the-bottom hypothesis (Cameron 1978, Dreher et al. 2008b, Potrafke 2009, Walter 2010, Meinhard and Potrafke 2012, Gaston and Rajaguru 2013a and 2013b, Herwartz and Theilen 2014, Gozgor and Ranjan 2017, Yay and Aksoy 2018, Gründler and Köllner 2018 – for surveys see Schulze and Ursprung 1999, Ursprung 2008, Potrafke 2015). Social expenditure has, for example, drastically increased in OECD countries and dominates fiscal policies – proceeding globalisation notwithstanding. Social expenditure tends to undermine economic growth and fiscal sustainability. Schuknecht and Zemanek (2018) describe the trend of increasing social expenditure and its consequences as "social dominance". There is, however, some heterogeneity across OECD countries regarding globalisation-induced effects. Social expenditure tended to increase in high-income (West) European countries and to decrease in low-income (East) countries when globalisation was proceeding rapidly (Leibrecht et al. 2011, Onaran et al. 2012 and 2014). The globalisation-induced effects also differed across welfare state regimes supporting the compensation effect

in social democrat, conservative and Mediterranean welfare state regimes and the efficiency effect in liberal welfare state regimes (Yay and Aksoy 2018).

2.3 Asian developing countries

Globalisation is expected to put more pressure on welfare states in developing than developed countries (Rudra 2002, Wibbels 2006). The important reason being that industrialised countries have manifold institutions at hand to compensate for risks and threats of globalisation which governments in many developing countries do not have at hand. Labour power and strong trade unions in industrialised countries may prevent governments from decreasing social expenditure in the course of globalisation (Rudra 2002). Workers' bargaining power is weaker in developing than developed countries. Strong trade unions require skilled workers such as workers in heavy industries and white-collar professions. Workers have been skilled and, in turn, trade unions have been strong in developed countries. In developing countries, by contrast, workers have been quite unskilled and trade unions weak (Rudra 2002).

Governments in developing countries have more difficulties to borrow on capital markets (to countercyclically spend on social affairs) than governments in industrialised countries (Wibbels 2006). Fiscal policies in Latin American countries, for example, have been described to be rather pro-cyclical.

There is hardly any empirical evidence on the globalisation-welfare state nexus in developing countries – the most important reason being a lack of data for policy measures. In particular, social expenditure has been difficult to measure in developing countries, because social protection programs are quite encompassing and vary across countries.

Scholars regressed measures of welfare expenditure on variables measuring facets of economic globalisation. For example, Rudra (2002) uses social expenditure as the dependent variable. Globalisation is measured by trade openness and capital flows. The sample includes 53 least developed countries over the period 1972-1995. She regresses social expenditure on

trade openness and capital flows, potential labour power (which considers high and low-skilled labour) and the interaction between potential labour power and both trade openness and capital flows. The results show that trade openness and capital flows are positively and both interaction terms negatively correlated with social expenditure.[3] Wong (2016) uses data for 16 Asian and Pacific countries (including Australia, New Zealand and South Korea) over the period 1960-2012. Globalisation is measured by trade openness and FDI. The results suggest that trade openness was negatively correlated with health expenditure and FDI was positively correlated with overall welfare expenditure.

Many Asian countries may not have the financial resources, nor the cultural inclination to support large welfare states. In East Asian countries, for example, social assistance is often provided by families or firms. It is therefore likely that the effect of globalisation on social expenditure is less pronounced in Asian non-OECD than OECD countries.

Micro-data evidence suggests that citizens' views on whether governments should provide welfare spending in the course of globalisation depends on income (Lim and Burgoon 2018). In high-income Asian countries such as Japan and Singapore, citizens exposed to economic globalisation were more likely to support welfare spending than citizens who were less exposed to globalisation. In low-income countries, by contrast, being exposed to globalisation did not predict support for welfare spending (Lim and Burgoon 2018). In a similar vein, the effect of being exposed to globalisation was pronounced in countries which do not have generous private severance pay systems. Being exposed to globalisation did not influence welfare spending preferences of those citizens who enjoy family or other private social assistance. The effect of globalisation on social expenditure is therefore also likely to differ across Asian countries, especially being conditioned on a country's income.

[3] A new study by Desai and Rudra (2018) examines how types of international trade, especially agricultural and manufacturing trade, influence individual groups of citizens.

3. Data and descriptive statistics

3.1 Social expenditure

I use the data by the OECD (2017) for 21 Asian countries (no OECD member states) for the years 2000 and 2014 and the data by the OECD (2014) for the year 2009.[4] The data is only available for the three years 2000, 2009 and 2014. The countries included are: Armenia, Azerbaijan, Bangladesh, Cambodia, China, Fiji, Hong Kong, India, Indonesia, Lao PDR, Malaysia, Mongolia, Myanmar, Nepal, Pakistan, Papua New Guinea, Philippines, Singapore, Sri Lanka, Thailand, Vietnam. My sample thus contains 61 country-year observations. Averaged social expenditure was 4.1% of GDP in the overall sample. The minimum was 0.3% in Pakistan in the year 2000, the maximum was 13.7% in Mongolia in the year 2014. Averaged social expenditure was 3.0% in 2000, 4.6% in 2009, and 4.8% in 2014. Social expenditure includes spending on health, pensions, active labour market policies, disability benefits etc. The OECD's social expenditure data for the Asian countries does, however, not disentangle types of social expenditure for the full sample, just for some countries and years. Against the background of the already small sample, I focus on overall social expenditure.

Social expenditure increased in 18 out of the 21 countries from 2000 to 2014 and decreased in three countries: Azerbaijan (8.6% to 7.6%), Lao PDR (1.7% to 1.0%), Sri Lanka (4.4% to 3.8%).

The 21 countries in my sample are quite heterogenous (e.g., Tohyama 2015). Heterogeneity relates to income per capita (Singapore, for example, is the by far most developed country in the sample) and also to social protection. The OECD (2017: 48) concludes: "Overall, it seems that in South Asia and the Pacific social protection systems are still at a relatively early stage of development in contrast to Armenia, Azerbaijan, China, Mongolia, Thailand and the OECD countries in the region". Heterogeneity across countries also means that the SOCX data

[4] The OECD (2014) published data for 19 out of these 21 countries for the year 2009 (no data for 2009 is available for Hong Kong and Myanmar).

do not include expenditure for every individual social policy type in every country. In countries such as Bangladesh, there is no statutory program on invalidity, survivors or family allowances. The SOCX data is, however, the best attempt to measure social expenditure and the OECD (2017) describes in detail number and type of social policy areas covered.

China is also an interesting case to discuss. In particular, income inequality has been a major issue in China and globalisation has been shown to increase income inequality in China (Dorn et al. 2018). Social expenditure increased, however, from 4.7% in 2000, to 6.98% in 2009 and 8.0% in 2014. The OECD (2017: 44) reports: "some countries have tried to extend coverage of social insurance programs, and such efforts were arguably most successful in China".

3.2 New KOF Globalisation Index

The KOF Globalisation Index has been introduced by Dreher (2006) and Dreher et al. (2008a) and was now revised by Gygli et al. (2018). The KOF Globalisation Index considers that globalisation is a multifaceted concept and combines economic, social, and political aspects of globalisation. I use the new 2019 version of the KOF Globalisation Index. Innovations of the new version include disentangling de facto and de jure measures of globalisation and the differentiation between trade and financial globalisation within the economic dimension of globalisation. The KOF Globalisation Index assumes values between 1 (minimum of globalisation) and 100 (maximum of globalisation). The KOF Globalisation Index has been used in some hundreds of studies (for a survey on the consequences of globalisation as measured by the KOF index see Potrafke 2015, on the robustness on the economic globalisation index see Gozgor 2018).

3.3 Unconditional correlation

Social expenditure is positively correlated with the overall KOF Globalisation Index (Figure 1). The unconditional coefficient of correlation is 0.33. The correlation is especially pronounced

in countries such as Mongolia. A country like Singapore enjoys large levels of globalisation, but the government spends relatively small amounts of GDP on social expenditure. I will now examine the correlation between social expenditure and globalisation conditional to some other variables.

4. Empirical model

The baseline panel data model has the following form:

$$\text{Social Expenditure}_{it} = \alpha\, \text{Globalisation}_{it} + \Sigma_k \gamma_k X_{ikt} + \eta_i + \varepsilon_t + u_{it}$$

$$\text{with } i=1,\ldots,21;\ k=1,\ldots,3;\ t=1,...,3 \qquad (1)$$

where the dependent variable $\text{Social Expenditure}_{it}$ describes public social expenditure (in % of GDP) in country i and year t (2000, 2009, and 2014). $\text{Globalisation}_{it}$ is the KOF Globalisation Index. In section 5.2, I replace the overall KOF Globalisation Index by the three subindices (economic, social, political). $\Sigma_k X_{ikt}$ contains three control variables. I include the unemployment rate and expect it to be positively correlated with social expenditure: governments are likely to increase public social expenditure when the unemployment rate is high. The shares of the population aged below 15 and above 64 (as a share of total population) are included to control for the effect of demographic change on social expenditure. The higher the share of the non-working age population, especially old-age population, the higher social expenditure is expected to be. I keep the number of explanatory variables to be quite small because the sample includes 61 country-year observations. For robustness checks, I also include GDP per capita (in levels and growth) and measure young and old population by the share of population aged between 15 and 64. Inferences regarding the globalisation variables do not change. I return to including government ideology and economic freedom in the robustness

tests section because government ideology and economic freedom are not available for my full sample. Table 1 shows descriptive statistics of all variables included. η_i is a fixed country effect, ε_t is a fixed period effect and u_{it} is an error term. I estimate the model using Ordinary Least Squares (OLS) with standard errors robust to heteroskedasticity (Huber/White/sandwich standard errors – see Huber 1967 and White 1980).

5. Results

5.1 Baseline model

Table 2 shows the results of the baseline model. The estimated coefficient of the overall globalisation index is positive in columns (1) to (4). The coefficient estimate is statistically significant when no fixed period effects (column 1) are included. The coefficient of the KOF Globalisation Index lacks statistical significance in columns (2) to (4).

The fixed period effects are positive and statistically significant in columns (2) and (3) indicating that social expenditure (in % of GDP) was by about 1.4 percentage points higher in the year 2009 and by about 1.7 percentage points higher in the year 2014 than in the year 2000. The estimates of the fixed period effects are much smaller and lack statistical significance when the shares of the population aged below 15 and above 65 are included. This result reflects the demographic change, hence correlation between the fixed period effects and the increasing share of old age population and decreasing share of young population. The coefficient estimate of the unemployment rate has the expected positive sign and is statistically significant at the 10% level in columns (3) and (4). The coefficient estimates of the shares of the population aged below 15 and above 65 do not turn out to be statistically significant.[5]

[5] One may want to estimate the causal effect of globalisation on social expenditure by using instrumental variables. I have used lagged values of the KOF index as instrumental variables. F-statistics on the excluded instrument are above the critical values and show that the lagged KOF indices are strong instruments. The second stage results are similar to the OLS results in Table 2. The exclusion restriction is, however, rather unlikely to be fulfilled. On instrumenting the KOF index see, for example, Eppinger and Potrafke (2016).

5.2 Sub indices

I estimate the four specifications of the baseline model shown and Table 2 and replace the overall KOF Globalisation Index by subindices on economic, social and political globalisation. The results show that the conditional correlations between the three KOF subindices and public social expenditure do not turn out to be statistically significant (Table 3). I have also used the more fine-grained subindices that distinguish between de facto and de jure globalisation and the detailed subindices on economic globalisation (trade and financial). The results do also not suggest that these subindices were correlated with social expenditure (not shown).

5.3 Time-invariant explanatory variables

The Asian countries in my sample are quite heterogenous, and the amount of social expenditure and the effect of globalisation on social expenditure is likely to differ across the countries (Tohyama 2015 and Lim and Burgoon 2018). I therefore estimate regressions excluding fixed country effects and including time-invariant explanatory variables by using a GLS estimator with random effects. First, I include regional dummy variables based on the World Bank's classification:[6] Central Asia (Armenia and Azerbaijan), East Asia (Cambodia, China, Fiji, Hong Kong, Indonesia, Lao PDR, Malaysia, Mongolia, Myanmar, Papua New Guinea, Philippines, Singapore, Thailand, Vietnam), and South Asia (Bangladesh, India, Nepal, Pakistan, Sri Lanka). The results do not suggest that social expenditure differed across regions when I control for time fixed effects, unemployment and the population share variables (results not shown). I have also included interaction terms between the regional dummy variables and the KOF Globalisation Index and computed marginal effects (coefficient estimates shown in Table 4). The results do also not suggest that the effect of globalisation on social expenditure differed across regions.

[6] https://datahelpdesk.worldbank.org/knowledgebase/articles/906519 (accessed on 1 October 2018).

Second, I include dummy variables for income groups following the OECD's (2017: page 66) classification: high income (Hong Kong and Singapore), upper middle income (Azerbaijan, China, Fiji, Malaysia, Thailand), lower middle income (Armenia, India, Indonesia, Lao PDR, Mongolia, Myanmar, Pakistan, Papua New Guinea, Philippines, Sri Lanka, Vietnam), low-income (Bangladesh, Cambodia, Nepal).[7] I have also included interaction terms between the income group variables and the KOF Globalisation Index (Table 5). The results do not suggest that both the amount of social expenditure and the effect of globalisation on social expenditure differed across income groups.

5.4 Other robustness tests

The partisan theories suggest that leftwing governments spend more on social welfare than rightwing governments (for new studies see, for example, Bove et al. 2017, Herwartz and Theilen 2017, Potrafke 2017, Savage 2018, Schuknecht and Zemanek 2018). One may therefore like to include government ideology as an explanatory variable. I use the data by Cruz et al. (2016) to measure the political ideology of the chief executive. Data is available for 22 out of my 61 country-year observations. The government ideology variable (leftwing) is negative indicating that social expenditure was lower under leftwing than rightwing chief executives – a result that is not in line with the partisan theories. Including the government ideology variables renders the globalisation variable to be statistically significant with a positive sign. In any event, these results are based on a sample of 22 country-year observations and 11 countries only.

Countries with a small size and scope of government are likely to spend little on social expenditure and to be prone to globalisation. I have therefore included the economic freedom index by Gwartney et al. (2018) as an explanatory variable. The economic freedom index is available for 53 country-year observations in my sample. It has the expected negative sign but

[7] Hong Kong and Myanmar were included not in the OECD's list, but in the list of the World Bank: https://datahelpdesk.worldbank.org/knowledgebase/articles/906519 (accessed on 1 October 2018).

does not turn out to be statistically significant. Including it does not change the inferences regarding the globalisation variables.

Democracies are likely to have higher social expenditure than dictatorships. I use the new data on political institutions by Bjørnskov and Rode (2018) that updates the data by Cheibub et al. (2010). Countries are coded as democratic when elections are contested. The democracy dummy variable assumes the value one for democracies and zero for dictatorships. The data is available for my full sample and suggests that some countries have changed political institutions within the period 2000-2014. I have therefore estimated my panel data model including fixed country effects (as the baseline model) and excluding fixed country effects (GLS with random effects). Using both empirical strategies, the democracy variable has the expected positive sign but lacks statistical significance. Including the democracy variable does not change the inferences regarding the globalisation variable.

6. Conclusion

Reliable data on public social expenditure used to be available only for industrialised countries. Scholars have employed this data to examine the globalisation-welfare state nexus and reported that the effect of globalisation on social expenditure is not negative as advocates of the dark side of globalisation maintain: we certainly did not observe a race-to-the-bottom in social service provision. By contrast, there has been evidence in favour of the compensation hypothesis which predicts that governments increase social expenditure when globalisation is proceeding rapidly. It is correct, however, that this evidence for industrialised countries does not help to estimate effects of globalisation on social expenditure in low-income countries. The available evidence on globalisation-induced social spending patterns in low-income countries is so meagre because of a lack of data.

I have used new macro data on social expenditure in 21 Asian non-OECD countries. The results do not suggest that globalisation had any influence on social expenditure. It is

conceivable that we do not observe evidence in favour of the compensation hypothesis because Asian low-income countries have fewer financial opportunities and weaker labour market institutions that help to increase social expenditure. Societal structures in low-income countries put more emphasis on family ties and other private assistance networks than in OECD countries.

My result is in line with new evidence based on Asian micro-data by Lim and Burgoon (2018) suggesting that citizens in low-income countries do not advocate more welfare spending in the course of globalisation – the level of being exposed to globalisation notwithstanding. The micro evidence by Lim and Burgoon (2018) moreover suggests that, in high-income Asian countries, citizens who are exposed to globalisation advocate more welfare spending than citizens who are less exposed. My macro-data sample only includes the high-income countries Singapore and Hong Kong and not others such as Japan and South Korea. In any event, my results based on macro data do not suggest heterogenous effects of globalisation on social expenditures across high- and low-income countries and across Asian regions. Against the background that the result by Lim and Burgoon (2018) for high-income Asian countries also translates to my smaller sample, it is conceivable that citizens being especially exposed to globalisation did not have political majorities in Singapore and Hong Kong to successfully demand an increase social expenditure.

Social expenditure may just be one component of expansionary policies. It is possible, and needs to be examined in more detail for developing countries, that governments aim at compensating their citizens' increased risk exposure by policy measures other than social expenditure. An example is tinkering with labour market institutions, for example by increasing minimum wages. Globalisation as measured by the KOF Globalisation Index has however not been shown to influence labour market institutions in OECD countries and in larger samples of countries (Potrafke 2010 and 2013). More fine-grained data may help to disentangle effects of globalisation on labour market institutions in Asia.

Future research should also examine how globalisation influenced income distributions in Asia. Globalisation has been shown to increase income inequality in various samples of countries (Dreher and Gaston 2018, Bergh and Nilsson 2010, Gozgor and Ranjan 2017, Dorn et al. 2018, Dorn and Schinke 2018, Lang and Tavares 2018). An important question is whether the social protection programs in Asia helped to mitigate globalisation-induced income inequality.[8]

[8] On income inequality and redistribution see also Gründler and Köllner (2016).

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Figure 1. The correlation between public social expenditure (in % of GDP) and the KOF Globalisation Index (r=0.33). 21 Asian countries for the years 2000, 2009 and 2014.

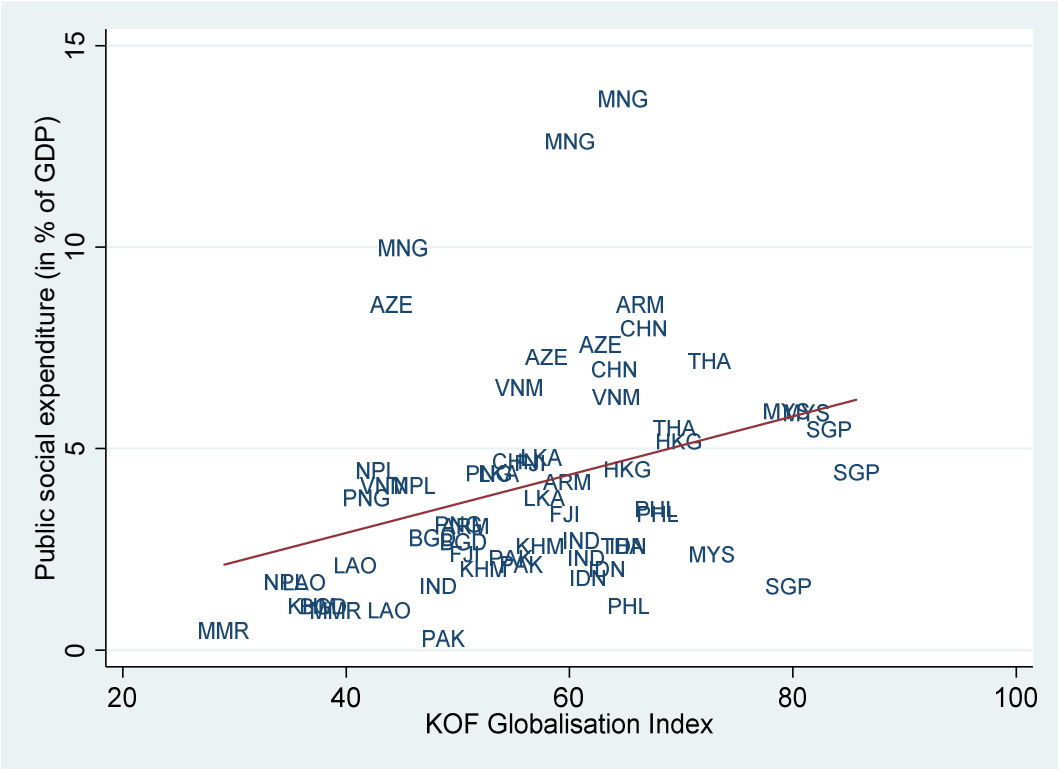

Table 1: Descriptive statistics and data sources.

	N	Mean	Std. Dev.	Min	Max	Source
Public Social Expenditure (in % of GDP)	61	4.14	2.79	0.30	13.70	OECD (2014, 2017)
KOF Globalisation Index	61	57.08	12.69	29.08	85.69	Gygli et al. (2018), Dreher (2006)
KOF Globalisation Index, de facto	61	55.26	14.99	28.19	91.53	Gygli et al. (2018), Dreher (2006)
KOF Globalisation Index, de jure	61	58.87	11.62	29.91	81.46	Gygli et al. (2018), Dreher (2006)
KOF Economic Globalisation Index	61	54.59	16.99	23.50	95.02	Gygli et al. (2018), Dreher (2006)
KOF Economic Globalisation Index, de facto	61	55.50	20.19	20.94	97.92	Gygli et al. (2018), Dreher (2006)
KOF Trade Globalisation Index, de facto	61	55.50	22.11	20.60	98.61	Gygli et al. (2018), Dreher (2006)
KOF Financial Globalisation Index, de facto	61	55.50	20.40	16.32	98.08	Gygli et al. (2018), Dreher (2006)
KOF Economic Globalisation Index, de jure	61	53.52	16.07	21.36	92.11	Gygli et al. (2018), Dreher (2006)
KOF Trade Globalisation Index, de jure	61	54.43	17.34	14.14	94.74	Gygli et al. (2018), Dreher (2006)
KOF Financial Globalisation Index, de jure	61	52.43	18.56	16.06	89.80	Gygli et al. (2018), Dreher (2006)
KOF Social Globalisation Index	61	50.51	17.99	12.30	89.86	Gygli et al. (2018), Dreher (2006)
KOF Social Globalisation Index, de facto	61	46.87	21.15	8.80	98.13	Gygli et al. (2018), Dreher (2006)
KOF Social Globalisation Index, de jure	61	54.00	15.67	15.13	84.37	Gygli et al. (2018), Dreher (2006)
KOF Political Globalisation Index	61	66.13	18.79	29.00	94.75	Gygli et al. (2018), Dreher (2006)
KOF Political Globalisation Index, de facto	61	63.13	23.84	22.32	96.32	Gygli et al. (2018), Dreher (2006)
KOF Political Globalisation Index, de jure	61	69.12	15.95	29.68	93.18	Gygli et al. (2018), Dreher (2006)
Unemployment rate	61	4.98	3.93	0.10	18.70	International Labour Organization (2017)
Population aged younger 15 (share of total)	61	29.26	7.40	11.06	43.37	World Bank (2018a)
Population aged older 65 (share of total)	61	5.86	2.53	3.08	14.70	World Bank (2018a)
Population aged between 15 and 64 (share of total)	61	64.88	5.34	53.05	74.24	World Bank (2018a)
GDP per capita (real)	61	5370.19	10130.74	346.77	51865.72	World Bank (2018b)
GDP per capita growth (real)	61	3.42	4.18	-13.57	12.37	World Bank (2018b)
Democracy	61	0.49	0.50	0	1	Bjørnskov and Rode (2018)
Central	61	0.10	0.30	0	1	Worldbank
East	61	0.66	0.48	0	1	Worldbank
South	61	0.25	0.43	0	1	Worldbank
High income	61	0.08	0.28	0	1	OECD (2017)
Upper-middle income	61	0.25	0.43	0	1	OECD (2017)
Lower-middle income	61	0.52	0.50	0	1	OECD (2017)
Low income	61	0.15	0.36	0	1	OECD (2017)
Government ideology	22	2.64	0.73	1	3	Cruz et al. (2016)
Economic freedom	53	6.69	0.90	4.42	9	Gwartney et al. (2018)

Table 2: Regression results. Dependent variable: Social expenditure (as a share of GDP). **Baseline model.**

	(1)	(2)	(3)	(4)
Globalisation Index (overall)	0.142***	0.026	0.020	0.070
	(0.036)	(0.068)	(0.057)	(0.080)
2009		1.296**	1.485**	0.622
		(0.613)	(0.644)	(0.697)
2014		1.556*	1.864**	0.553
		(0.756)	(0.767)	(0.938)
Unemployment rate			0.261*	0.261*
			(0.143)	(0.150)
Population aged below 15 (share of total)				-0.008
				(0.171)
Population aged above 64 (share of total)				0.527
				(0.333)
Fixed country effects	Yes	Yes	Yes	Yes
Observations	61	61	61	61
Countries	21	21	21	21
R2 within	0.410	0.492	0.541	0.583
R2 between	0.088	0.097	0.089	0.118
R2 overall	0.108	0.131	0.150	0.150

Robust standard errors in parentheses
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 3: Regression results. Dependent variable: Social expenditure (as a share of GDP). **KOF subindices.**

	(1)	(2)	(3)
Globalisation Index (economic)	-0.005		
	(0.036)		
Globalisation Index (social)		0.013	
		(0.049)	
Globalisation Index (political)			0.072
			(0.045)
2009	0.967	0.861	0.398
	(0.717)	(0.872)	(0.675)
2014	1.071	0.913	0.232
	(1.057)	(1.322)	(0.908)
Unemployment rate	0.281**	0.277*	0.267*
	(0.130)	(0.135)	(0.149)
Population aged below 15 (share of total)	-0.085	-0.067	-0.020
	(0.146)	(0.136)	(0.149)
Population aged above 64 (share of total)	0.377	0.409	0.656*
	(0.323)	(0.380)	(0.349)
Fixed country effects	Yes	Yes	Yes
Observations	61	61	61
Countries	21	21	21
R2 within	0.570	0.570	0.610
R2 between	0.125	0.132	0.066
R2 overall	0.170	0.173	0.093

Robust standard errors in parentheses
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 4: Regression results. Dependent variable: Social expenditure (as a share of GDP).
Interactions with regional dummy variables (East Asia reference category).
GLS with random effects.

	(1)	(2)	(3)	(4)
Globalisation Index (overall)	0.126***	0.048	0.030	0.018
	(0.020)	(0.030)	(0.029)	(0.046)
Center Asia	4.558	4.903	0.432	-0.965
	(9.303)	(9.000)	(8.688)	(8.544)
South Asia	-0.451	0.934	0.895	0.904
	(1.814)	(1.809)	(1.726)	(1.600)
Globalisation*Center	-0.034	-0.044	0.002	0.016
	(0.144)	(0.141)	(0.114)	(0.109)
Globalisation*South	0.001	-0.040	-0.045	-0.042
	(0.037)	(0.038)	(0.035)	(0.032)
2009		1.258**	1.466***	1.263***
		(0.499)	(0.509)	(0.473)
2014		1.483**	1.798***	1.465**
		(0.634)	(0.648)	(0.651)
Unemployment rate			0.204	0.209
			(0.135)	(0.135)
Population aged below 15 (share of total)				-0.031
				(0.127)
Population aged above 64 (share of total)				0.182
				(0.308)
Fixed country effects	No	No	No	No
Observations	61	61	61	61
Countries	21	21	21	21
R2 within	0.419	0.498	0.543	0.569
R2 between	0.180	0.227	0.180	0.180
R2 overall	0.189	0.264	0.230	0.234

Robust standard errors in parentheses
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Table 5: Regression results. Dependent variable: Social expenditure (as a share of GDP). **Interactions with income dummy variables (High income countries reference category).** GLS with random effects.

	(1)	(2)	(3)	(4)
Globalisation Index (overall)	0.207**	0.045	0.036	0.022
	(0.103)	(0.121)	(0.116)	(0.102)
Upper-middle income countries	9.810	4.391	1.771	3.971
	(12.028)	(11.328)	(9.819)	(9.427)
Lower-middle income countries	7.520	0.466	0.696	1.311
	(9.503)	(9.473)	(8.820)	(8.457)
Low income countries	8.710	0.862	0.823	2.777
	(9.412)	(9.412)	(8.683)	(8.393)
Globalisation* Upper-middle	-0.098	-0.043	-0.008	-0.018
	(0.148)	(0.148)	(0.127)	(0.125)
Globalisation* Lower-middle	-0.066	-0.001	-0.017	0.010
	(0.109)	(0.120)	(0.111)	(0.106)
Globalisation*Low	-0.095	-0.031	-0.030	-0.024
	(0.109)	(0.117)	(0.107)	(0.109)
2009		1.285**	1.469**	0.947**
		(0.558)	(0.594)	(0.449)
2014		1.536**	1.833**	1.057
		(0.705)	(0.726)	(0.666)
Unemployment rate			0.220	0.142
			(0.138)	(0.151)
Population aged below 15 (share of total)				-0.071
				(0.135)
Population aged above 64 (share of total)				0.202
				(0.366)
Fixed country effects	No	No	No	No
Observations	61	61	61	61
Countries	21	21	21	21
R2 within	0.424	0.495	0.541	0.559
R2 between	0.120	0.184	0.182	0.228
R2 overall	0.146	0.228	0.230	0.271

Robust standard errors in parentheses
* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$