

Appendix

Table A.1: Overview of all variables used to construct the KOF Globalisation Indices

Dimension	Variable Name	Variable Definitions	Source
<i>Trade Globalisation, de facto</i>	Trade in goods	Exports and imports of goods (% of GDP).	World Bank WDI (2018)
	Trade in services	Exports and imports of services (% of GDP).	World Bank WDI (2018)
	Trade partner diversity	Average of the Herfindahl-Hirschman market concentration index for exports and imports of goods (inverted).	IMF DOTS (2018a) and own calculations
<i>Trade Globalisation, de jure</i>	Trade regulations	Average of two subcomponents: Prevalence of non-tariff trade barriers and compliance costs of importing and exporting.	Gwartney et al. (2018)
	Trade taxes	Income from taxes on international trade as percentage of revenue (inverted).	World Bank WDI (2018)
	Tariffs	Unweighted mean of tariff rates.	Gwartney et al. (2018)
	Trade agreements	Number of bilateral and multilateral free trade agreements.	Egger and Larch (2008) and WTO (various years)
<i>Financial Globalisation, de facto</i>	Foreign direct investment	Sum of stocks of assets and liabilities of foreign direct investments (% of GDP).	Lane and Milesi-Ferretti (2018) and IMF IIP (2018b)
	Portfolio investment	Sum of stocks of assets and liabilities of international equity portfolio investments (% of GDP).	Lane and Milesi-Ferretti (2018) and IMF IIP (2018b)
	International debt	Sum of inward and outward stocks of international portfolio debt securities and international bank loans and deposits (% of GDP).	Lane and Milesi-Ferretti (2018) and IMF IIP (2018b)
	International reserves	Includes foreign exchange (excluding gold), SDR holdings and reserve position in the IMF (% of GDP).	Lane and Milesi-Ferretti (2018) and IMF IIP (2018b)
	International income payments	Sum of capital and labour income to foreign nationals and from abroad (% of GDP).	World Bank WDI (2018)
<i>Financial Globalisation, de jure</i>	Investment restrictions	Prevalence of foreign ownership and regulations to international capital flows.	Gwartney et al. (2018)
	Capital account openness	Chinn-Ito index of capital account openness.	Chinn, Ito (2006, 2008)
	International investment agreements	Number of Bilateral Investment Agreements (BITs) and Treaties with Investment Provisions (TIPs).	UNCTAD (2018)
<i>Interpersonal Globalisation, de facto</i>	International voice traffic	International incoming and outgoing fixed and mobile telephone traffic in minutes (% of population).	ITU (2018)
	Transfers	Secondary income paid and received. Gross inflows and outflows of goods, services, income or financial items without a quid pro quo (% of population).	World Bank WDI (2018)
	International tourism	Arrivals and departures of international tourists (% of population).	World Bank WDI (2018)
	International students	Inbound and outbound number of tertiary students (% of population).	World Bank WDI (2018)
	Migration	Number of foreign or foreign-born residents (% of population).	World Bank WDI (2018)
<i>Interpersonal Globalisation, de jure</i>	Telephone subscriptions	Fixed telephone and mobile subscriptions (% of population).	World Bank WDI (2018)
	Freedom to visit	Percentage of countries for which a country requires a visa from foreign visitors.	Czaika et al. (2018) and IATA (2018)
	International airports	Number of airports that offers at least one international flight connection (% of population).	ICAO (2018)
	Used internet bandwidth	Total used capacity of international internet bandwidth in bits per second (% of population).	ITU (2018)
<i>Informational Globalisation, de facto</i>	International patents	Patent applications by non residents filed through the Patent Cooperation Treaty procedure or with a national patent office (% of population).	World Bank WDI (2018)
	High technology exports	Exports of high R&D intensity products in current US\$ (% of population).	World Bank WDI (2018)
	Television access	Share of households with a television set.	ITU (2018)
<i>Informational Globalisation, de jure</i>	Internet access	Individuals using the internet (% of population).	World Bank WDI (2018)
	Press freedom	Quantification of the legal environment for the media, political pressure that influence reporting and economic factor that affect access to news and information.	Freedom House (2018a)
<i>Cultural Globalisation, de facto</i>	Trade in cultural goods	Exports and imports of cultural goods defined as in UNESCO (2009) (% of population).	UN Comtrade (2018)
	Trade in personal services	Exports and imports of personal, cultural and recreational services (% of population).	IMF BOPS (2018c)
	International trademarks	Applications to register a trademark with a national or regional Intellectual Property (IP) office by non residents in percent of all applications.	World Bank WDI (2018)
<i>Cultural Globalisation, de jure</i>	McDonald's restaurant	Number of McDonald's restaurants (% of population).	McDonald's (various years)
	IKEA stores	Number of IKEA stores (% of population)	IKEA (various years)
	Gender parity	Ratio of girls to boys enrolled in primary education level in public and private schools.	World Bank WDI (2018)
	Human capital	Human capital index based on the average years of schooling and an assumed rate of return to education.	Feenstra et al. (2015) / Penn World Table 9.0
	Civil liberties	Quantification of aspects on freedom of expression and belief, associational and organizational rights, rule of law and personal autonomy and individual rights.	Freedom House (2018b)
<i>Political Globalisation, de facto</i>	Embassies	Absolute number of embassies in a country.	Europe World Yearbook (various years)
	UN peace keeping missions	Personnel contributed to U.N. Security Council Missions (% of population).	UN Department of Peacekeeping Operations (various years)
	International NGOs	Number of internationally oriented nongovernmental organisations (NGO) operating in that country.	Yearbook of International Organizations (various years)
<i>Political Globalisation, de jure</i>	International organisations	Number of international inter-governmental organisations in which a country is member.	CIA World Factbook (various years)
	International treaties	International treaties signed between two or more states and ratified by the highest legislative body of each country since 1945.	United Nations Treaty Collection (various years)
	Treaty partner diversity	Number of distinct treaty partners of a country with bilateral investment treaties (BITs).	UNCTAD (2018)

Table A.2: Coverage ratios of variables for selected years (in percent)

Variable	1975	1985	1995	2005	2015
Trade in goods	59.6	72.4	89.7	92.6	91.1
Trade in services	24.6	59.6	70.4	83.7	83.7
Trade partner diversity	62.1	75.9	87.7	96.1	97.0
Trade regulations	0.0	0.0	25.1	68.0	77.8
Trade taxes	23.6	26.1	48.3	60.1	50.2
Tariffs	13.8	46.3	48.3	69.0	77.3
Trade agreements	100.0	100.0	100.0	100.0	100.0
Foreign direct investment	50.7	67.5	85.7	91.6	89.7
Portfolio investment	48.3	65.5	85.2	92.6	88.2
International debt	50.2	67.5	87.2	94.1	89.7
International reserves	52.2	68.0	86.7	92.1	89.7
International income payments	24.6	59.6	70.4	83.7	83.7
Investment restrictions	0.0	0.0	25.1	58.1	74.4
Capital account openness	53.7	69.0	74.9	87.7	85.7
International Investment Agreements	100.0	100.0	100.0	100.0	100.0
International voice traffic	0.5	1.0	1.0	26.1	66.0
Transfers	26.6	64.0	70.9	83.7	85.2
International tourism	0.0	0.0	86.7	93.1	89.2
International students	0.0	0.0	0.0	95.1	96.6
Migration	87.7	87.7	99.5	99.5	99.5
Telephone subscriptions	73.9	90.6	95.6	97.0	98.5
Freedom to visit	75.9	76.4	87.2	89.7	0.0
International airports	0.0	0.0	0.0	95.6	95.6
Used internet bandwidth	0.0	0.0	18.7	91.1	94.6
International patents	37.4	41.4	51.2	49.3	55.7
High technology exports	0.0	0.0	54.2	77.3	68.5
Television access	13.8	24.1	66.5	86.2	11.8
Internet access	0.0	0.0	62.6	96.6	98.5
Press freedom	0.0	0.0	90.1	93.1	94.1
Trade in cultural goods	0.0	0.0	54.7	81.3	74.9
Trade in personal services	0.0	0.0	0.0	60.6	71.4
International trademarks	38.9	41.9	56.2	63.1	66.0
McDonald's restaurant	57.1	60.6	60.6	100.0	98.0
IKEA stores	99.0	99.0	100.0	100.0	99.5
Gender parity	62.1	64.0	70.4	82.8	77.3
Human capital	62.6	62.6	70.4	70.4	0.0
Civil liberties	72.4	76.4	92.1	92.6	93.6
Embassies	66.0	86.2	98.5	99.5	93.1
UN peace keeping missions	100.0	100.0	100.0	100.0	100.0
International NGOs	0.0	0.0	0.0	97.5	100.0
International organisations	2.0	2.0	96.1	98.5	99.5
International treaties	98.0	98.0	98.0	98.0	98.0
Treaty partner diversity	100	100	100	100	100
<i>Mean</i>	<i>40.4</i>	<i>47.8</i>	<i>66.6</i>	<i>85.7</i>	<i>81.5</i>
<i>Std</i>	<i>36.2</i>	<i>37.8</i>	<i>32.4</i>	<i>16.5</i>	<i>25.0</i>

Notes: Coverage ratios refer to the share of countries for which the observations for the variable are available (in percent).

Table A.3: Weights of variables for selected years

Globalisation Index, de facto						Globalisation Index, de jure					
<i>Economic Globalisation, de facto</i>	1975	1985	1995	2005	2015	<i>Economic Globalisation, de jure</i>	1975	1985	1995	2005	2015
<i>Trade Globalisation, de facto</i>						<i>Trade Globalisation, de jure</i>					
Trade in goods	38.3	38.8	40.0	38.0	38.7	Trade regulations	29.6	25.0	19.5	21.7	26.8
Trade in services	41.9	42.1	42.3	43.8	44.9	Trade taxes	33.5	31.2	30.3	27.8	24.7
Trade partner diversity	19.8	19.1	17.7	18.2	16.4	Tariffs	20.1	22.7	25.1	26.7	25.3
<i>Financial Globalisation, de facto</i>						<i>Financial Globalisation, de jure</i>					
Foreign direct investment	16.5	17.2	22.9	29.6	26.9	Investment restrictions	33.0	38.9	33.9	35.2	32.9
Portfolio investment	8.1	9.0	7.2	14.1	16.5	Capital account openness	33.2	30.2	35.5	36.3	38.5
International debt	27.8	25.8	22.3	20.3	27.0	International Investment Agreements	33.8	30.9	30.5	28.5	28.7
International reserves	10.9	10.6	9.6	0.1	2.5	<i>Social Globalisation, de jure</i>					
International income payments	36.7	37.4	38.0	35.8	27.2	<i>Interpersonal Globalisation, de jure</i>					
<i>Social Globalisation, de facto</i>						<i>Informational Globalisation, de jure</i>					
<i>Interpersonal Globalisation, de facto</i>						<i>Informational Globalisation, de jure</i>					
International voice traffic	24.7	23.8	22.4	21.2	20.8	Telephone subscriptions	37.9	39.8	41.7	41.6	40.2
Transfers	19.3	20.0	20.1	20.9	21.9	Freedom to visit	29.6	27.8	26.8	30.7	32.7
International tourism	20.3	19.9	20.3	20.2	21.1	International airports	32.5	32.4	31.6	27.7	27.1
International students	23.0	23.3	24.2	23.1	19.4	<i>Cultural Globalisation, de jure</i>					
Migration	12.7	13.0	13.0	14.6	17.0	<i>Cultural Globalisation, de jure</i>					
<i>Informational Globalisation, de facto</i>						<i>Political Globalisation, de jure</i>					
Used internet bandwidth	29.9	29.2	29.1	33.1	36.9	International organisations	39.5	40.0	36.6	36.1	36.1
International patents	35.5	36.0	35.9	33.4	28.7	International treaties	39.8	38.9	37.8	34.6	33.5
High technology exports	34.6	34.8	35.0	33.5	34.4	Treaty partner diversity	20.7	21.1	25.6	29.3	30.4
<i>Cultural Globalisation, de facto</i>											
Trade in cultural goods	35.4	30.8	27.7	27.0	27.9						
Trade in personal services	25.6	22.1	21.7	22.9	24.4						
International trademarks	20.0	16.6	16.1	14.4	10.5						
McDonald's restaurant	8.8	15.2	17.9	21.1	21.4						
IKEA stores	10.3	15.3	16.7	14.5	15.7						
<i>Political Globalisation, de facto</i>											
Embassies	37.7	37.7	35.8	34.2	36.4						
UN peace keeping missions	23.0	22.5	26.9	28.9	25.9						
International NGOs	39.3	39.8	37.2	36.9	37.7						

Notes: Weights in percent for selected years. Weights for the individual variables are time variant. Overall indices for each aggregation level are calculated by the average of the respective de facto and de jure indices. The weights for all years are available on the website: www.kof.ethz.ch/globalisation.

Figure A.1: Robustness of KOF Globalisation Index calculated with time-varying and constant variable weights

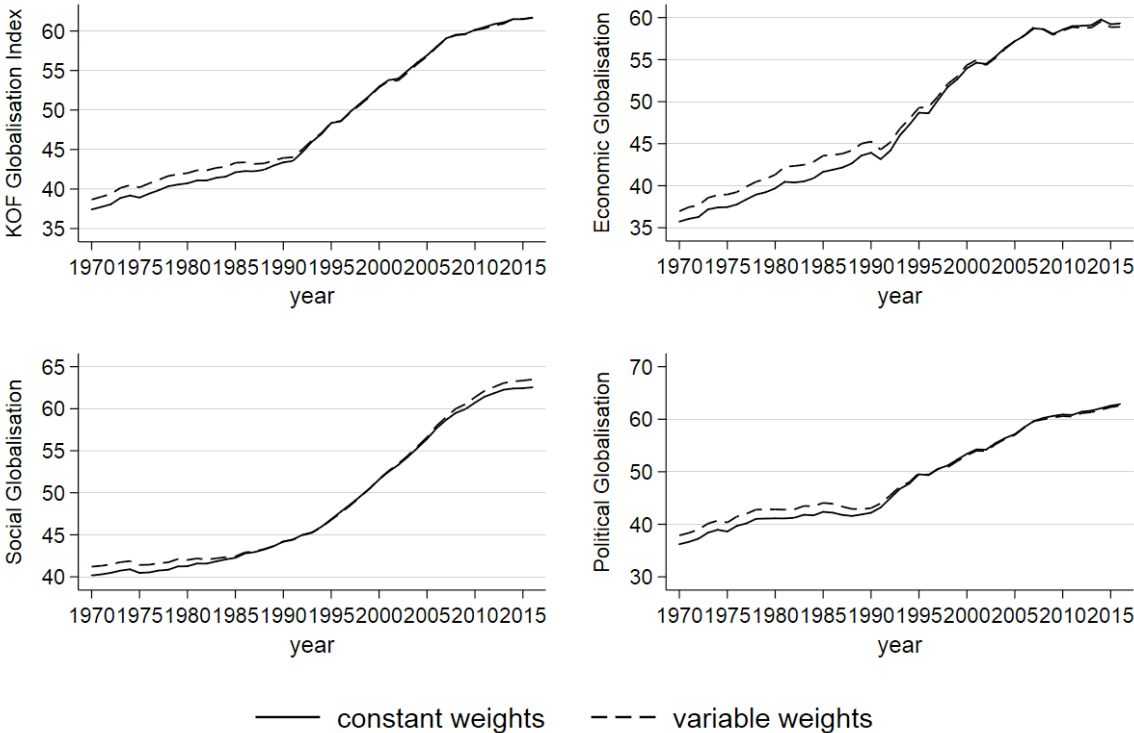


Figure A.2: Overlap statistics of KOF Globalisation Index calculated with time-varying and constant variable weights

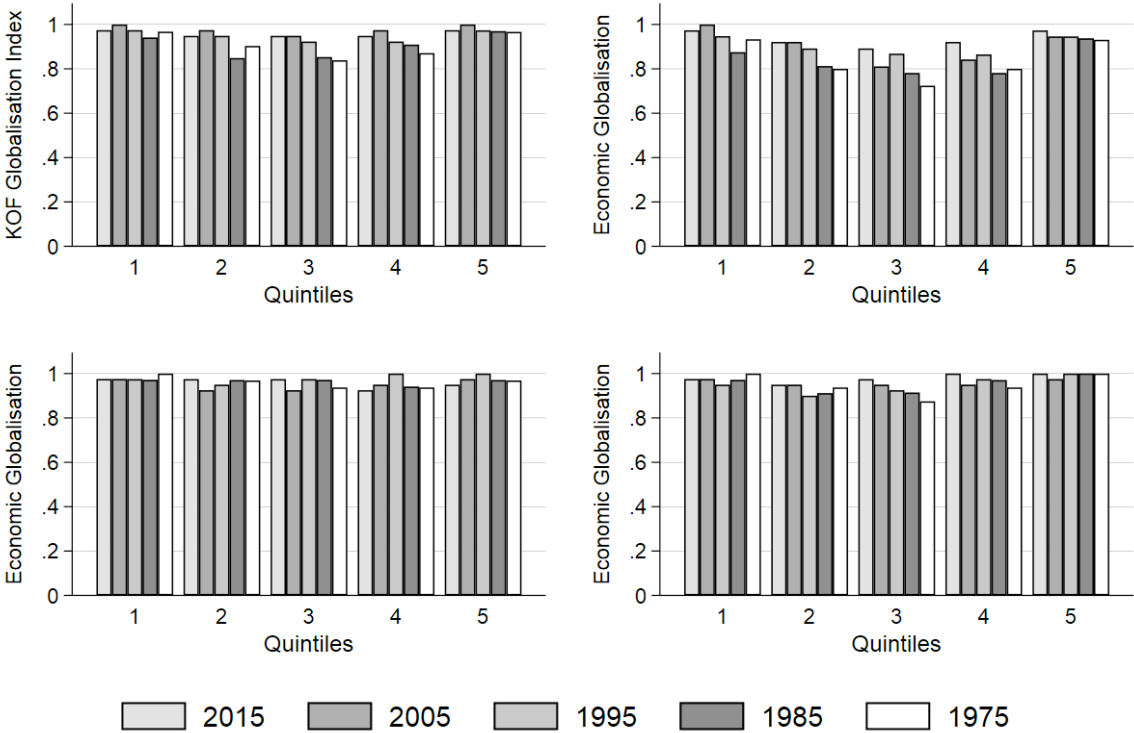


Figure A.3: Robustness of the KOF Globalisation Index with and without the cultural globalization dimension

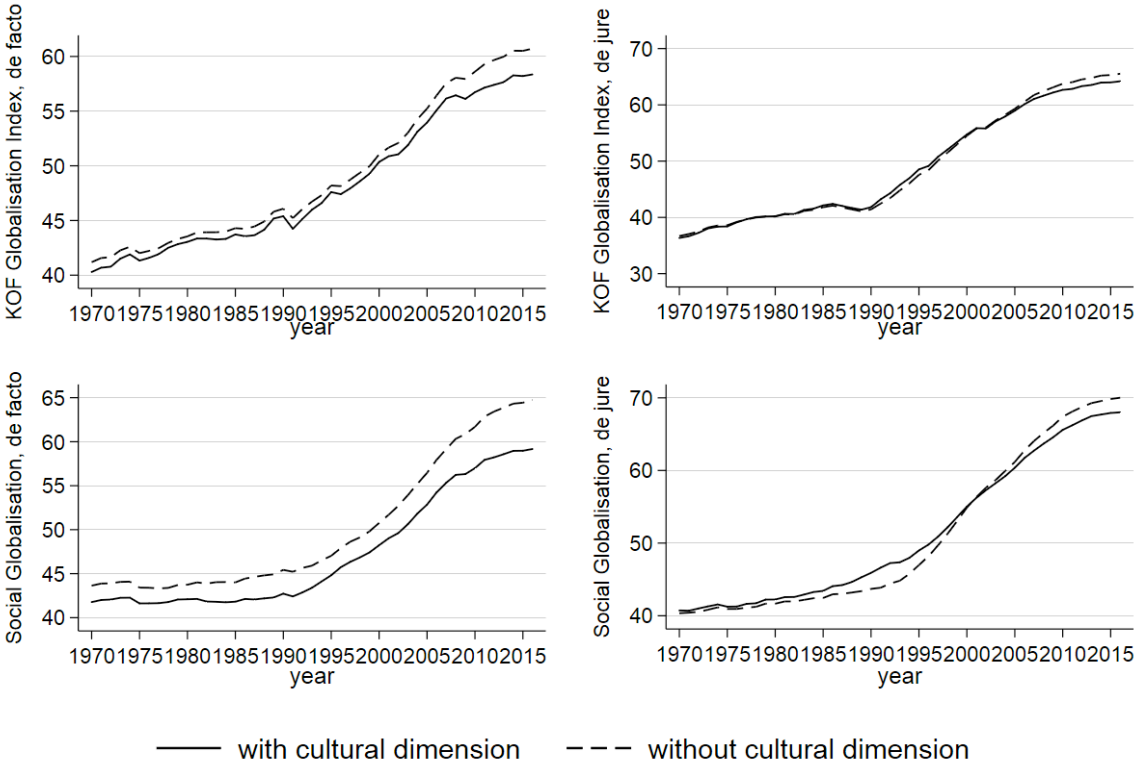
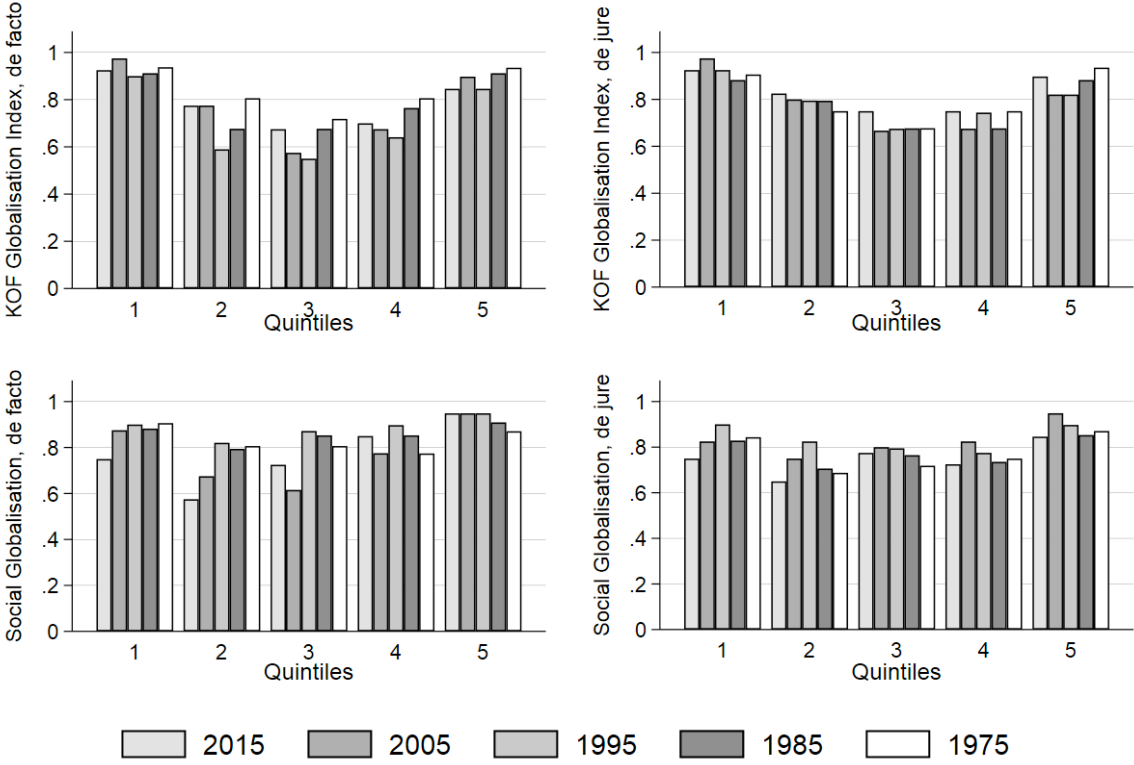


Figure A.4: Overlap statistics of KOF Globalisation Index with and without the cultural globalization dimension



References

- Chinn, M. and Ito, H. (2006). What Matters for Financial Development? Capital Controls, Institutions, and Interactions. *Journal of Development Economics*, 81(1).
- Chinn, M. and Ito, H. (2008). A New Measure of Financial Openness. *Journal of Comparative Policy Analysis*, 10(3).
- Czaika, M., de Haas, H., and Villares-Varela, M. (2018) The Global Evolution of Travel Visa Regimes. *Population and Development Review*, 44(3): 589-622.
- Egger, P. and Larch M. (2008). Interdependent Preferential Trade Agreement Memberships: An Empirical Analysis. *Journal of International Economics*, 76(2).
- Feenstra, R. C., Inklaar, R. and Timmer, M. P. (2015). The Next Generation of the Penn World Table, *American Economic Review*, 105(10): 3150-3182.
- Freedom House (2018a). Freedom of the Press 2018.
- Freedom House (2018b). Freedom in the World 2018.
- Gwartney, J., Lawson, R., and Hall, J. (2018). Economic Freedom of the World.
- International Air Transport Association (IATA) (2018). Travel Information Manual (TIM).
- International Civil Aviation Organization (ICAO) (2018). *Aerodrome statistics*.
- International Labour Organization (2018a). *ILOSTAT database*.
- International Monetary Fund (2018a). *Direction of Trade Statistics (DOTS)*. Washington DC.
- International Monetary Fund (2018b). *International Investment Position (IIP)*. Washington DC.
- International Monetary Fund (2018c). *Balance of Payments Statistics (BOPS)*. Washington DC.
- International Telecommunications Union (ITU) (2018). *World Telecommunication and ICT Indicators database*.
- Lane, P. R. and Milesi-Ferretti, G. M. (2018). The External Wealth of Nations Revisited; International Financial Integration in the Aftermath of the Global Financial Crisis. *IMF Economic Review*, 66(1): 189–222.
- UNESCO (2009). *The 2009 UNESCO Framework for Cultural Statistics (FCS)*. UNESCO.
- UNCTAD (2018). *Investment Policy Hub*.
- World Bank (2018). *World Development Indicators (WDI)*. Washington DC.