2019 KOF Globalisation Index: Variables description

Dimension	Variable Name	Variable Definitions	Source
Trade Globalisation, de	Trade in goods	Exports and imports of goods (% of GDP).	World Bank WDI (2019)
facto (KOFTrGIdf)	Trade in services Trade partner diversity	Exports and imports of services (% of GDP). Average of the Herfindahl-Hirschman market concentration index for exports and imports of goods (inverted).	World Bank WDI (2019) IMF DOTS (2019a) and own calculations
Trade Globalisation, de jure (KOFTrGldj)	Trade regulations	Average of two subcomponents: Prevalence of non-tariff trade barriers and	Gwartney et al. (2019)
	Trade taxes Tariffs Trade agreements	compliance costs of importing and exporting. Income from taxes on international trade as percentage of revenue (inverted). Unweighted mean of tariff rates. Number of bilateral and multilateral free trade agreements.	World Bank WDI (2019) Gwartney et al. (2019) Egger and Larch (2008)
Financial Globalisation, de facto (KOFFiGIdf)	Foreign direct investment	Sum of stocks of assets and liabilities of foreign direct investments (% of GDP).	Lane and Milesi-Ferretti (2018) and IMF IIP (2019b)
	Portfolio investment	Sum of stocks of assets and liabilities of international equity portfolio investments (% of Lane and Milesi-GDP). Sum of inward and outward stocks of international portfolio debt securities and international bank loans and deposits (% of GDP). Includes foreign exchange (excluding gold), SDR holdings and reserve position in the Lane and Milesi-	Lane and Milesi-Ferretti (2018)
	International debt		Lane and Milesi-Ferretti (2018) and IMF IIP (2019b) Lane and Milesi-Ferretti (2018) and IMF IIP (2019b) World Bank WDI (2019)
	International reserves		
	International income payments	Sum of capital and labour income to foreign nationals and from abroad (% of GDP).	
Financial Globalisation, de jure (KOFFiGldj)	Investment restrictions	Prevalence of foreign ownership and regulations to international capital flows.	Gwartney et al. (2019)
	Capital account openness International investment agreements	Chinn-Ito index of capital account openness. Number of Bilateral Investment Agreements (BITs) and Treaties with Investment Provisions (TIPs).	Chinn, Ito (2006, 2008) UNCTAD (2019)
Interpersonal Globalisation, de facto	International voice traffic	International incoming and outgoing fixed and mobile telephone traffic in minutes (% of population).	ITU (2019)
(KOFIpGIdf)	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 (2019)
	International tourism International students Migration	Arrivals and departures of international tourists (% of population). Inbound and outbound number of tertiary students (% of population). Number of foreign or foreign-born residents (% of population).	World Bank WDI (2019) World Bank WDI (2019) World Bank WDI (2019)
Interpersonal Globalisation, de jure	Telephone subscriptions	Fixed telephone and mobile subscriptions (% of population).	World Bank WDI (2019)
(KOFIpGIdj)	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 (2019)
Informational Globalisation, de facto (KOFInGIdf)	Used internet bandwidth	Total used capacity of international internet bandwidth in bits per second (% of population).	ITU (2019)
(Nor molal)	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 (2019)
	High technology exports	Exports of high R&D intensity products in current US\$ (% of population).	World Bank WDI (2019)
Informational Globalisation, de jure (KOFInGIdj)	Television access	Share of households with a television set.	ITU (2019)
	Internet access Press freedom	Individuals using the internet (% of population). Quantification of the legal environment for the media, political pressure that influence reporting and economic factor that affect access to news and information.	World Bank WDI (2019) Freedom House (2019a)
Cultural Globalisation,	Trade in cultural goods	Exports and imports of cultural goods defined as in UNESCO (2009) (% of population).	UN Comtrade (2019)
de facto (KOFCuGldf)	Trade in personal services	Exports and imports of personal, cultural and recreational services (% of population).	IMF BOPS (2019c)
	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 (2019)
	McDonald's restaurant IKEA stores	Number of McDonald's restaurants (% of population). Number of IKEA stores (% of population)	McDonald's (various years) IKEA (various years)
Cultural Globalisation, de jure (KOFCuGldj)	Gender parity	Ratio of girls to boys enrolled in primary education level in public and private schools.	World Bank WDI (2019)
	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 9.1
	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 (2019b)
Political Globalisation, de facto (KOFPoGldf)	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)
Political Globalisation, de jure (KOFPoGldj)	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)

References:

Chinn, M. and H. Ito (2006), What Matters for Financial Development? Capital Controls, Institutions, and Interactions, Journal of Development Economics, 81(1).

Chinn, M. and H. Ito (2008), A New Measure of Financial Openness, *Journal of Comparative Policy Analysis*, 10(3).

Czaika M., H. de Haas and M. Villares-Varela, The Global Evolution of Travel Visa Regimes, *Population and Development Review.* 44(3): 589-622.

Egger P. and M. Larch (2008), Interdependent Preferential Trade Agreement Memberships: An Empirical Analysis, Journal of International Economics, 76(2).

Feenstra, R. C., R. Inklaar and M. P. Timmer (2015), The Next Generation of the Penn World Table, American Economic Review, 105(10).

Freedom House (2019a), Freedom of the Press 2019.

Freedom House (2019b), Freedom in the World 2019.

Gwartney, J.; J.C. Hall and R. Lawson (2019), 2019 Economic Freedom Dataset.

IATA (2019), Travel Information Manual (TIM)

International Civil Aviation Organization (ICAO) (2019)

IMF (2019), Balance of Payments Statistics (BOPS)

IMF (2019), Direction of Trade Statistics (DOTS)

IMF (2019), International Investment Position (IIP)

International Telecommunications Union (ITU) (2019), World Telecommunication/ ICT Indicators Database

Lane, P. R. and G. M. Milesi-Ferretti (2018), The External Wealth of Nations Revisited, IMF Economic Review, 66(1).

UNESCO (2009), The 2009 UNESCO Framework for Cultural Statistics (FCS)

UNCTAD (2019), Investment Policy Hub

World Bank (2019), World Development Indicators (WDI)