Notes and sources

[H]	High value promotes global trade
[L]	Low value promotes global trade
[Sum]	Indicator has sub-indicators

Background data	Source	Definition
Population	IMF WEO	Population in millions (estimates for 2024)
GDP per capita	IMF WEO	The total value at current prices of final goods and services produced within a country (in USD) during a specified time period divided by the average population for the same one year.

	Indicator	Source	Definition
1.01	Consumer price inflation	WEO	Harmonized inflation rates, year average. [L]
1.02	Real GDP Growth per capita, % GDP	WEO, Taiwan: DGBAS	GDP is expressed in current US dollars per person. Data is derived by first converting GDP in national currency to US dollars and then dividing it by total population. [H]
1.03	Growth in labor force, %	WEO, Taiwan: DGBAS	People aged 15+, who are currently employed and people who are unemployed but seeking work as well as first-time jobseekers. Unpaid workers, family workers, and students are often omitted, and some countries do not count members of the armed forces. [H]
1.04	Foreign direct investment, net inflows, % GDP	World Bank, Taiwan: Central Bank, Balance of Payments Quarterly	Net inflows of foreign investment to acquire a lasting management interest (10%+ of voting stock) in an enterprise. Sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. [H]
1.05	Gross fixed capital formation, % GDP	World Bank, Taiwan: DGBAS	Includes land improvements; plant, machinery, and equipment purchases; construction of roads, railways, schools, offices, hospitals, private residences, and commercial & industrial buildings. Net acquisitions of valuables are considered capital formation. [H]
1.06	Tariff & non-tariff barriers	Global Trade Alert	Six indicators measuring tariff and non-tariff barriers. [sum]
1.06.01	Tariff barriers	Global Trade Alert	Three indicators measuring tariff barriers. [sum]
1.06.01.a	Tariff barriers in force	Global Trade Alert	Count of 'harmful' tariff measures currently in force. [L]
1.06.01.b	New tariff barriers 2024	Global Trade Alert	Count of new (2024) 'harmful' tariff measures currently in force. [L]
1.06.01.c	Net percentage of imports affected by new tariff barriers (2023)	Global Trade Alert	Estimates of the import shares potentially affected by 'harmful' tariff measures currently in force. [L]
1.06.02	Non-tariff barriers	Global Trade Alert	Three indicators measuring non-tariff barriers. [sum]
1.06.02.a	Non-tariff barriers in force	Global Trade Alert	Count of 'harmful' non-tariff measures currently in force. [L]

	Indicator	Source	Definition
1.06.02.b	New non-tariff barriers 2024	Global Trade Alert	Count of new (2024) 'harmful' non-tariff measures currently in force. [L]
1.06.02.c	Net percentage of imports affected by new non-tariff barriers (2023)	Global Trade Alert	Estimates of the import shares potentially affected by 'harmful' non-tariff measures currently in force. [L]
1.07	Trade liberalization	WTO, KAOPEN, Freedom House	Three indicators measuring trade liberalization. [sum]
1.07.01	Regional Trade Agreements, number in force	WTO	Any reciprocal trade agreement between two or more partners, not necessarily belonging to the same region. [H]
1.07.02	Capital account liberalization, Index	KAOPEN	The Chinn-Ito index (KAOPEN) is an index measuring a country's degree of capital account openness. The index was initially introduced by Chinn and Ito (*Journal of Development Economics*, 2006). KAOPEN is based on the binary dummy variables that codify the tabulation of restrictions on cross-border financial transactions reported in the IMF's Annual Report on Exchange Arrangements and Exchange Restrictions (AREAER). [H]
1.07.03	Investment Freedom, Index	Heritage Foundation	Investment freedom evaluates a variety of regulatory restrictions that typically are imposed on investment. Points are deducted from the ideal score of 100 for each of the restrictions found in a country's investment regime. [H]
1.08	Exchange rate stability, parity change from national currency to SDR, 2024/2022	IFS	Parity changes are in absolute values. Period average for all countries. [L]
1.09	Domestic credit to private sector, % of GDP	IMF (via World Bank)	Domestic credit to private sector refers to financial resources provided to the private sector by financial corporations, such as through loans, purchases of nonequity securities, and trade credits and other accounts receivable, that establish a claim for repayment. For some countries, these claims include credit to public enterprises. The financial corporations include monetary authorities and deposit money banks, as well as other financial corporations where data is available (including corporations that do not accept transferable deposits but do incur such liabilities as time and savings deposits). Examples of other financial corporations are finance and leasing companies, money lenders, insurance corporations, pension funds, and foreign exchange companies. [H]
1.10	Foreign trade and payments risk	IMF, SP, Moody's, Fitch	Two indicators measuring foreign trade and payment risk. [sum]
1.10.01	Country credit rating	SP, Moody's, Fitch	IMD WCC created an Index of three country credit ratings (Fitch, Moody's, S&P). Each, including the outlook, is converted to a numerical score, and averaged for each country, with a possible range of 0-60. [H]
1.10.02	Gross debt, % GDP	WEO	Private nonguaranteed external debt comprises long-term external obligations of private debtors that are not guaranteed for repayment by a public entity. Data is in current US dollars. [L]

	Indicator	Source	Definition
1.11	Trade costs	Transparency International, World Bank	Three indicators measuring country-specific external, indirect costs on trade (rule of law, corruption, logistics) [sum]
1.11.01	Logistics performance, index	World Bank	LPI ranks countries on six dimensions of trade, including customs performance, infrastructure quality, and timeliness of shipments. The data used in the ranking comes from a survey of logistics professionals. [H]
1.11.02	Corruption perceptions, index	Transparency International	The CPI is calculated using 13 different data sources from 12 different institutions that capture perceptions of corruption within the past two years. The data sources are standardized to a scale of 0-100 where 0 equals the highest level of perceived corruption and 100 equals the lowest level of perceived corruption. [H]
1.11.03	Rule of law, index	World Bank	Perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular the quality of contract enforcement, property rights, the police, and the courts, as well as the likelihood of crime and violence. [H]
1.12	Monetary policy intervention	IMF	Two indicators measuring an economy's potential capacity to intervene in and influence exchange rates. [sum]
1.12.01	Current account balance, % GDP	IMF	Current account balance is the sum of net exports of goods and services, net primary income, and net secondary income. [L]
1.12.02	Change (1-year) in total reserves (includes gold), % GDP	IMF	Total reserves comprise holdings of monetary gold, special drawing rights, reserves of IMF members held by the IMF, and holdings of foreign exchange under the control of monetary authorities. The gold component of these reserves is valued at year-end (December 31) London prices. Data is in current US dollars. [L]
1.13	Export concentration	UNCTAD	Two indicators measuring the export concentration in markets and products. [sum]
1.13.01	Export market concentration, Top 5 as % total	UNCTAD	The top five named export countries as a percentage of total exports. [L]
1.13.02	Export product concentration, Top 5 as % total	UNCTAD	The top five named export products, as a percentage of total exports, using the UNCTAD product data based on the SITC commodity classification, Revision 3, at the two-digit level: giving 65 product categories. [L]
1.14	Exports of goods and services	WTO	Two indicators measuring merchandise and commercial services exports. [sum]
1.14.01	Merchandise exports, US$ millions	WTO	Compiled from national data sources, WTO, IMF International Financial Statistics, and the Trade Data Monitor online database. If data from national sources are not available at the time of release, estimates are produced based on partner trade statistics. [H]
1.14.02	Commercial services exports, US$ millions	WTO	Commercial services include transport, travel, and other private services (communication; construction; insurance; financial; computer and information (including news), royalties and license fees; other business services (legal, accounting, consulting, public relations, advertising, market research, architectural, engineering, and other technical services) [H]
1.15	Technological innovation	UNESCO, WIPO, COMTRADE, NSF	Five indicators measuring research and development. [sum]

	Indicator	Source	Definition
1.15.01	R&D expenditure, % GDP	UNESCO, Taiwan: OECD MSTI	The sum of financial resources (national and foreign) used for the execution of research and experimental development (R&D) works on the national territory by the public sector and by the business enterprise sector. It includes current expenditure (annual wages and salaries of R&D personnel and operating expenses) and capital expenditure (purchases of equipment required for R&D). [H]
1.15.02	Researchers in R&D, per 1,000 inhabitants	UNESCO, Taiwan: OECD MSTI & WEO, Peru: National Council for Science, Technology and Technological Innovation	Researchers in R&D are professionals engaged in the conception or creation of new knowledge. Products, processes, methods, or systems and in the management of the projects concerned. [H]
1.15.03	Patent applications, per million inhabitants	WIPO, WEO, Taiwan: TIPO	Total patent applications (Direct and PCT national phase entries per million inhabitants. [H]
1.15.04	High-technology exports, % of manufactured exports	COMTRADE	High-technology exports are products with high R&D intensity, such as in aerospace, computers, pharmaceuticals, scientific instruments, and electrical machinery. [H]
1.15.05	Scientific articles, per million people	NSF National Science & Engineering Indicators Hong Kong, SAR: University Grants Committee	Article counts are from a selection of journals, books, and conference proceedings in S&E from Scopus. [H]
1.16	Technological infrastructure	ITU (via World Bank), Ookla, M-Labs, The Bandwidth Place	Four indicators measuring the technological infrastructure, internet quality and penetration, and mobile penetration. [sum]
1.16.01	Fixed internet speed, Mbps	Ookla, M-Labs/ cable.co.uk, The Bandwidth Place	Average connection speed in Mbps: data transfer rates for Internet access by end users. The values presented are a weighted average of three internet speed tests Ookla, M-Lab, SpeedTestNet.io. [H]
1.16.02	Internet users, % population	ITU via World Bank, Taiwan: National Communications Commission	Internet users are individuals who have used the Internet (from any location) in the last 3 months. The Internet can be used via a computer, mobile phone, personal digital assistant, games machine, digital TV, etc. [H]
1.16.03	Fixed broadband subscriptions (per 100 people)	ITU via World Bank, Taiwan: National Communications Commission	Fixed broadband subscriptions refer to fixed subscriptions to high-speed access to the public Internet (a TCP/IP connection), at downstream speeds equal to, or greater than, 256 kbit/s. This includes cable modem, DSL, fiber-to-the-home/building, other fixed (wired)-broadband subscriptions, satellite broadband, and terrestrial fixed wireless broadband. This total is measured irrespective of the method of payment. It excludes subscriptions that have access to data communications (including the Internet) via mobile-cellular networks. It should include fixed WiMAX and any other fixed wireless technologies. It includes both residential subscriptions and subscriptions for organizations. [H]

	Indicator	Source	Definition
1.16.04	Mobile subscriptions (per 100 people)	ITU via World Bank, Taiwan: National Communications Commission	Mobile cellular telephone subscriptions are subscriptions to a public mobile telephone service that provides access to the PSTN using cellular technology. The indicator includes (and is split into) the number of post-paid subscriptions, and the number of active prepaid accounts (i.e., that have been used during the last three months). The indicator applies to all mobile cellular subscriptions that offer voice communications. It excludes subscriptions via data cards or USB modems, subscriptions to public mobile data services, private trunked mobile radio, telepoint, radio paging, and telemetry services. [H]
2.01	Inequality (Gini coefficient)	World Bank, Taiwan: Report on the Survey of Family Income and Expenditure, R.O.C., 2020, Hong Kong, SAR: Census and Statistics Department, New Zealand, Canada, Japan: OECD	The Gini index measures the extent to which the distribution of income (or, in some cases, consumption expenditure) among individuals or households within an economy deviates from a perfectly equal distribution. A Lorenz curve plots the cumulative percentages of total income received against the cumulative number of recipients, starting with the poorest individual or household. The Gini index measures the area between the Lorenz curve and a hypothetical line of absolute equality, expressed as a percentage of the maximum area under the line. Thus, a Gini index of 0 represents perfect equality, while an index of 100 implies perfect inequality. [L]
2.02	Educational attainment	HDR, THES, World Bank	Three indicators measuring the attainment and quality of education. [sum]
2.02.01	Mean years of schooling	UN HDR, Taiwan: Directorate-General of Budget, Accounting, and Statistics, Taiwan (ROC)	The average number of years of education received by people ages 25 and older, converted from education attainment levels using official durations of each level. [H]
2.02.02	University education Index	THES	IMD constructed index to capture the quality of universities. Measures the (1) number, (2) score, (3) score per capita, of the universities in THES 1'000. [H]
2.02.03	Tertiary enrollment	World Bank, Taiwan: Ministry of Education	Gross enrollment ratio is the ratio of total enrollment, regardless of age, to the population of the age group that officially corresponds to the level of education shown. Tertiary education, whether to an advanced research qualification, normally requires, as a minimum condition of admission, the successful completion of education at the secondary level. [H]
2.03	Labor standards	World Bank, Global State of Democracy Indices	Two indicators measuring employee rights, including gender equality and collective bargaining. [sum]
2.03.01	Gender non-discrimination in hiring	World Bank Women, Business and the Law	Two indicators measuring employee rights, including gender equality and collective bargaining. [sum]
2.03.02	Freedom of association and assembly	Global State of Democracy Indices	Existence and enforcement of laws that allow citizens the right to assemble freely and associate into groups such as political parties and trade unions among others. [H]

	Indicator	Source	Definition
2.04	Political stability and absence of violence	World Bank Political Stability and Absence of Violence	Political Stability and Absence of Violence/Terrorism measures perceptions of the likelihood of political instability and/or politically motivated violence, including terrorism. [H]
2.05	Goods produced by forced labor or child labor	US Bureau of International Labor Affairs (ILAB), Global Slavery Index	Three indicators measuring the extent of forced labor or child labor. [sum]
2.05.01	Goods produced by forced labor	US Bureau of International Labor Affairs (ILAB), Global Slavery Index	Two indicators measuring the extent of forced labor. [sum]
2.05.01.a	Goods produced by forced labor, number of goods categories	US Bureau of International Labor Affairs (ILAB), Global Slavery Index	Matrix of goods and their source countries which ILAB has reason to believe are produced by child labor or forced labor in violation of international standards, as required under the Trafficking Victims Protection Reauthorization Act (TVPRA). [L]
2.05.01.b	% population in forced labor	Global Slavery Index	% population in forced labor. [L]
2.05.02	Goods produced by child labor, number of goods categories	US Bureau of International Labor Affairs (ILAB), Global Slavery Index	Matrix of goods and their source countries which ILAB has reason to believe are produced by child labor or forced labor in violation of international standards, as required under the Trafficking Victims Protection Reauthorization Act (TVPRA). [L]
2.06	Government response to human trafficking	US Department of State, Global Slavery Index	Three indicators measuring the government response to human trafficking. [sum]
2.06.01	Government response to human trafficking, Criminalization	US Department of State	Number of conventions Ratified or Accession. [H]
2.06.02	Government response to human trafficking, Strategy	Global Slavery Index	Government response score. [H]
2.06.03	Government response to human trafficking, Action	US Department of State	The country’s tier ranking is based on the government’s efforts to combat trafficking as measured against the TVPA minimum standards and compared to its efforts in the preceding year. Score 1-4 corresponding to countries Tier. [L]
2.07	Trade in goods at risk of modern slavery	Comtrade + Global Slavery Index	Two indicators measuring the extent to which imports and exports adhere to international labor standards. [sum]
2.07.01	Imports of goods at risk of modern slavery, US$ millions	Comtrade + Global Slavery Index, Taiwan: Comtrade recorded as ‘Other Asia, nes’	Value of imports in goods and country combinations identified as at risk of modern slavery. [L]

	Indicator	Source	Definition
2.07.02	Exports of goods at risk of modern slavery, US$ millions	Comtrade + Global Slavery Index, Taiwan: Comtrade recorded as 'Other Asia, nes'	Value of exports in goods and country combinations identified as at risk of modern slavery. [L]
2.08	Social mobility, Index	World Economic Forum	The Index measures the intergenerational social mobility in different countries in relation to socioeconomic outcomes. [H]
2.09	Life expectancy at birth	UN HDR	Life expectancy at birth indicates the number of years a newborn infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life. [H]
2.10	Uneven Economic Development	The Fund for Peace - Fragile States Index	The Uneven Economic Development Indicator considers inequality within the economy, irrespective of the actual performance of an economy. It considers perceptions of inequality as well as the opportunities for groups to improve their economic status.
2.11	Universal Health Coverage Index;	The Global Health Observatory, WHO	Coverage of essential health services (defined as the average coverage of essential services based on tracer interventions that include reproductive, maternal, newborn, and child health, infectious diseases, non-communicable diseases, and service capacity and access, among the general and the most disadvantaged population). The indicator is an index reported on a unitless scale of 0 to 100, which is computed as the geometric mean of 14 tracer indicators of health service coverage. The tracer indicators are organized by four components of service coverage: 1. Reproductive, maternal, newborn, and child health 2. Infectious diseases 3. Noncommunicable diseases 4. Service capacity and access
3.01	Air pollution	OECD, Taiwan: EPA, Hong Kong, SAR: Environmental Protection Department, South Korea: World Bank	Levels of particulate matter 2.5 (PM 2.5), to capture the air pollution in a country. [L]
3.02	Deforestation	Yale Environmental Performance Index	Index of the change in a country's forest cover. (NOTE: index, not the value of change). [H]
3.03	% of wastewater treated	UN SDG Indicators Database, Taiwan: The Statistical Yearbook of Construction and Planning Agency, Ministry of the Interior	% of wastewater treated. [H]
3.04	Energy intensity, energy consumed for each US$1,000 of GDP in TOE	IEA	Refers to the Total Primary Energy Supply (TPES) per US$1,000 of Gross Domestic Product. Represents the amount of energy consumed (production + imports - exports - bunkers - stock changes) per output, expressed in tons of oil equivalent per US$1,000 of GDP.

	Indicator	Source	Definition
3.05	Ecological footprint, global hectares per person	Global Footprint Network	The Ecological Footprint adds up all the productive areas for which a population, a person or a product competes. It measures the ecological assets that a given population or product requires to produce the natural resources it consumes (including plant-based food and fiber products, livestock and fish products, timber and other forest products, space for urban infrastructure) and to absorb its waste, especially carbon emissions. [L]
3.06	Renewable energy	IEA	Share of renewables in total energy requirements, %. [H]
3.07	Environmental standards in trade	UN Treaty Collection, Taiwan: Management Regulations for the Import and Export of Industrial Waste	Count of whether seven conventions are ratified, implemented, or not. [sum]
3.07.01	Convention: Hazardous Wastes	UN Treaty Collection, Taiwan: Management Regulations for the Import and Export of Industrial Waste	Count of whether the convention is (1) ratified, (2) implemented, or (0) not. [H]
3.07.02	Convention: Prevention of Marine Pollution	UN Treaty Collection, Taiwan: Marine Pollution Control Act	Count of whether the convention is (1) ratified, (2) implemented, or (0) not. [H]
3.07.03	Convention: Protection of the Ozone Layer (Vienna)	UN Treaty Collection, Taiwan: Air Pollution Control Act	Count of whether the convention is (1) ratified, (2) implemented, or (0) not. [H]
3.07.04	Convention on Climate Change (Kyoto)	UN Treaty Collection	Count of whether the convention is (1) ratified, (2) implemented, or (0) not. [H]
3.07.05	The International Timber Agreement	UN Treaty Collection, Taiwan: Regulations for Management of Protection Forest	Count of whether the convention is (1) ratified, (2) implemented, or (0) not. [H]
3.07.06	Convention: International Trade in Endangered Species	UN Treaty Collection, Taiwan: Regulations on Import and Export of Endangered Species of Wild Fauna, Flora and Related Products	Count of whether the convention is (1) ratified, (2) implemented, or (0) not. [H]

	Indicator	Source	Definition
3.07.07	Convention: Prior Informed Consent - Hazardous Chemicals (Rotterdam)	UN Treaty Collection	Count of whether the convention is (1) ratified, (2) implemented or (0) not. [H]
3.08	Transfer emissions, million tonnes carbon	Global Carbon Project	Transfer emissions, in million tonnes carbon. Countries with dirty export industries contribute to an unsustainable model for global trade. [L]
3.09	Share of natural resources in trade, %	UNCTAD	Natural resources (ores and metals, mineral fuels, lubricants, and related materials) as a percentage of a country's total trade. [L]
3.10	Carbon	World Bank, EDGAR	Two indicators measuring the extent of CO^2 emissions, and accounting for the externalities. [sum]
3.10.1	Carbon pricing	World Bank Carbon Pricing Dash Board	Count of whether the (2) Carbon pricing is currently in effect at the national level, (1) Carbon pricing is scheduled for implementation but is not currently in effect, or (0) Carbon pricing is neither scheduled for implementation nor currently in effect. [H]
3.10.2	CO^2 emissions per capita, tonnes per person	EDGAR - Emissions Database for Global Atmospheric Research	CO^2 emissions by country/region name and include all human activities leading to climate-relevant emissions, except biomass/ biofuel combustion (short cycle carbon). [L]