

Annex to chapter 16

1. Data for SDG 16

SDG 16 comprises 12 targets and a total of 23 indicators (three of which contain multiple subindicators). Of these indicators, six are tier I, 10 are tier II, and seven are tier III for which data are not available, as the indicators are still in the process of methodological definition.

The United Nations Statistics Division provides data sets for a total of 11 indicators: 16.1.1 - Number of victims of intentional homicide per 100,000 population, by sex and age; 16.2.1 - Proportion of children aged 1–17 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month; 16.2.2 - Number of victims of human trafficking per 100,000 population, by sex, age and form of exploitation; 16.2.3 - Proportion of young women and men aged 18–29 years who experienced sexual violence by age 18; 16.3.2 - Unsensenced detainees as a proportion of overall prison population; 16.5.2 - Proportion of businesses that had at least one contact with a public official and that paid a bribe to a public official, or were asked for a bribe by those public officials during the previous 12 months; 16.8.1 - Proportion of members and voting rights of developing countries in international organizations; 16.9.1 - Proportion of children under 5 years of age whose births have been registered with a civil authority, by age; 16.10.1 - Number of verified cases of killing, kidnapping, enforced disappearance, arbitrary detention and torture of journalists, associated media personnel, trade unionists and human rights advocates in the previous 12 months; 16.10.2 - Number of countries that adopt and implement constitutional, statutory and/or policy guarantees for public access to information; and 16.a.1 - Existence of independent national human rights institutions in compliance with the Paris Principles.

None of the provided data sets include sex disaggregated data.

The data used in the analysis of SDG 16 was downloaded on 25 June 2018. After a country level data check following a major update of the Global SDG Indicators Database of the United Nations Statistics Division on 8 July 2019, no large differences were found, and thus none of the data series needed to be replaced or amended.

We examine data availability in the Arab region and implement data substitution, when needed, based on the criteria of having to cover half or more of the total population of the Arab region and at least one third of the Arab countries for an indicator/subindicator to be kept in the analysis. This leads us to omit indicators 16.2.2, 16.2.3, 16.3.2 and 16.10.1, 8 of the 22 series of indicator 16.8.1, as well as two of the six series of 16.a.1 (Proportion of countries with independent National Human Rights Institutions in compliance with the Paris Principles and Proportion of countries that applied for accreditation as independent National Human Rights Institutions in compliance with the Paris Principles) which merely cover regions or country groupings as it also could be inferred from their definitions. When there are many subindicators that mean the same but are expressed differently (like in the case of the two series under indicator 16.1.1), we choose the subindicator that is more representative and easier to interpret and has more data availability. This leads us to omit one of the two series of 16.1.1, keeping “Number of victims of intentional homicide per 100,000 population (victims per 100,000 population)”.

Indicator 16.8.1 is the exact repetition of 10.6.1 (Proportion of members and voting rights of developing countries in international organizations). We evaluate the data in both chapters.

The rest of the indicators/subindicators are subject to our data substitution scheme for the year 2017, considering the data spanning 2009–2018. Table 16.1 shows the number of substituted data points for each year, including those from Arab countries.

Table 16.1 Data substitution scheme for selected indicators and subindicators

Indicator or subindicator	Number of substituted data points (Arab)	Year
	69 (3)	2016
	68 (9)	2015
	24 (4)	2014
16.1.1 (Number of victims of intentional homicide per 100,000 population (victims per 100,000 population))	5 (1)	2013
	26 (3)	2012
	9 (0)	2011
	3 (1)	2010
	10 (0)	2016
	7 (1)	2015
	19 (3)	2014
16.2.1 (Proportion of children aged 1–14 years who experienced physical punishment and/or psychological aggression by caregivers in last month)	8 (2)	2013
	13 (3)	2012
	7 (1)	2011
	4 (0)	2010
	2 (1)	2009
	17 (1)	2016
	9 (0)	2015
	11 (2)	2014
16.5.2 (Proportion of firms experiencing at least one bribe payment request (bribery incidence))	46 (7)	2013
	2 (0)	2012
	4 (1)	2011
	25 (0)	2010
	13 (0)	2009

	14 (0)	2016
	20 (2)	2015
	56 (3)	2014
16.9.1 (Proportion of children under 5 years of age whose births have been registered with a civil authority)	18 (2)	2013
	22 (4)	2012
	10 (2)	2011
	11 (0)	2010
	5 (1)	2009

The data series corresponding to 16.10.2 only includes countries that have ever adopted and implemented constitutional, statutory and/or policy guarantees for public access to information and assigns these countries the year in which the guarantees in question were enacted as a value. Therefore, we use this series to create a dummy variable that takes a value of 1 if the country is included in the original data set (i.e. the country is assigned an enactment year, meaning it has ever adopted and implemented a law/policy for public access to information) and value of 0 if not. The data of the original series is reported in 2018 only, informing about enactments that happened between 1766 and 2017. This means that there is no need for data substitution as the dummy variable we create includes all countries of the world and indicates if a certain country has or still lacks guarantees for public access to information which came to place before or during our base year (2017).

Moreover, the four remaining subindicators of 16.a.1 are dummy variables indicating which countries have National Human Rights Institutions that are fully compliant with the Paris Principles, which ones have National Human Rights Institutions that are not fully compliant with the Paris Principles, which ones have National Human Rights Institutions but no status with the Paris Principles (fully compliant, partially compliant or observer status, according to the metadata), and which ones have National Human Rights Institutions but have not applied for accreditation with the Paris Principles (i.e. have not applied to have their status with the Paris Principles determined). We note that each of these dummy variables only includes the countries that take a value of 1 as per its definition and that there is no country that overlaps between any of the four variables in a certain year. Knowing that a country that has no status or has not even applied for accreditation with the Paris Principles can be fully compliant, partially compliant or non-compliant, there is no clear, objective and undisputable criterion to compare the four categories depicted by the four dummies and to rank them ordinally in terms of performance. However, being compliant or at least partially compliant with the Paris Principles is unequivocally an aim in the framework of the development agenda and the SDGs. Therefore, we create a dummy variable that takes a value of 1 if the country is fully or partially compliant in 2017 (using the first two series which inform on the full and partial compliance statuses) and a value of 0 if not; meaning that we disregard the series informing on the absence of a status or of an application for accreditation as well as the data corresponding to all years except for 2017. This generates a binary data series that reports on the full/partial compliance with the Paris Principles in our base year (2017) and covers all countries of the world, including Arab countries. Therefore, we do not attempt to take into account any data pertaining to years other than 2017.

Indicator 16.8.1 includes 22 subindicators. Eleven of them represent “the proportion of members” in each of 11 different international organizations, where the proportion of members is calculated by the data source as the membership seat of the country or territory divided by the total available membership seats for a certain international organization or, in the case of regional observations, as the number of members from a certain region in that organization divided by the total number of members (percentage). The other 11 subindicators represent “the proportion of voting rights” in each of 11 different international organizations, where the proportion of voting rights is calculated by the data source as the share of voting rights of a country, territory or region in a certain organization, which sometimes depends on the share or contribution in this organization, divided by the total voting rights granted (percentage). We omit all the series corresponding

to region-based international organizations (i.e. the Asian Development Bank, the African Development Bank and the Inter-American Development Bank) as they only cover a specific sample of the world's countries or territories, unlike the rest of the organizations. We also omit the series corresponding to the Financial Stability Board which has 24 members that are developed countries or territories (with China being the only emerging country) and are entitled to provide mentorship and advice to developing countries on financial issues and related international standard-setting mechanisms. All these omitted series also have poor data availability for Arab countries throughout their time spans. Consequently, only seven data series are left for each of the memberships and the voting rights dimensions, informing on the rest of the seven international organizations.

We transform each of the seven remaining subindicators that report on the memberships of countries or territories in the considered international organizations into a dummy variable, merely considering the year 2017, where a country or territory takes a value of 1 if it is a member of the organization in question in 2017 and a value of 0 otherwise. In other terms, countries or territories that have a missing value instead of a proportion of membership value in the original data series for 2017 are all assigned zeros. We create our own dummy variables because the calculation method provided by the original data source only provides the share of developing countries in each organization, which does not vary from observation to observation, while what we need is to know whether or not a certain country or territory is a member of a certain organization and to develop a score showing the situation of countries or territories at this level across all organizations. The seven dummy variables are then aggregated using a simple arithmetic mean, yielding mean scores that are specific to the country or territory.

As for the seven remaining subindicators that report on the voting rights, we keep them as they are and only for the year 2017, and then we replace the missing values by zeros, since a country or territory has a missing value for its voting right in a certain organization when it is not a member of this institution, meaning also that its voting rights are non-existent or zero. The seven data series on voting rights are also aggregated using a simple arithmetic mean that is divided by 100 to get the share instead of the percentage of voting rights, for the purpose of getting to the same range of 0–1 used in the previous variable for this indicator. After that, the Arab, subregional and regional means of the two subindicators/created indices of 16.8.1 are generated and visualized separately but in the same chart.

Accordingly, there is no need to apply our data substitution scheme for year 2017 on indicator 16.8.1 either since, logically and technically, the two created and evaluated aggregates do not suffer any problem of data availability and also fully cover the World and the Arab region. We note that the series depicting the voting rights at the IFC mistakenly has a value of 4.053E-06 for Luxembourg, which is an IFC member, though. By referring to the original data source, as advised by the SDG Indicators Metadata Repository of the United Nations Statistics Division, this close-to-null value is corrected to 0.11 per cent. Moreover, we note that the State of Palestine does not exist in any of the data series under 16.8.1 and is assigned a value of 0 in all of them.

Finally, we note that, for 16.2.1, the age group addressed in the provided data series is only children aged 1–14 years and that the age group addressed in the data series for 16.9.1 is children under 5 years of age.

This leaves us with 21 integral indicators/subindicators with which we can assess the position of the region by 2030, as noted in box 16.1.

Box 16.1	Summary list of preserved and examined indicators/subindicators
<ul style="list-style-type: none"> • Indicator 16.1.1 – 1 series out of 2 – Number of victims of intentional homicide per 100,000 population, by sex and age • Indicator 16.2.1 – Proportion of children aged 1–17 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month • Indicator 16.5.2 – Proportion of businesses that had at least one contact with a public official and that paid a bribe to a public official, or were asked for a bribe by those public officials during the previous 12 months • Indicator 16.8.1 – 14 series out of 22 – Proportion of members and voting rights of developing countries in international organizations • Indicator 16.9.1 – Proportion of children under 5 years of age whose births have been registered with a civil authority, by age • Indicator 16.10.2 – Number of countries that adopt and implement constitutional, statutory and/or policy guarantees for public access to information • Indicator 16.a.1 – 2 series out of 6 – Existence of independent national human rights institutions in compliance with the Paris Principles 	

However, we lose the ability to determine the region's position on the rest of the targets, indicators and subindicators as noted in box 16.2, including those in table 16.2 on targets, indicators, tiers and data availability in Arab countries for SDG 16, but that do not have sufficient data.

Box 16.2	Summary list of omitted targets
<ul style="list-style-type: none"> • 16.3 Promote the rule of law at the national and international levels and ensure equal access to justice for all • 16.4 By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime • 16.6 Develop effective, accountable and transparent institutions at all levels • 16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels • 16.b Promote and enforce non-discriminatory laws and policies for sustainable development 	

Annex 16.2 for a graph for each of the evaluated series/indicators, showing the country level data values of the series/indicator for the years whose data points were used for every included country.

The global, regional and subregional aggregates of 16.5.2, 16.10.2, each of the two subindicators or created indices of 16.8.1, and the created dummy variable of 16.a.1 are calculated using a simple arithmetic mean. The aggregates of all the other series and indicators are calculated using a weighted average. The method of aggregation, in general, as well as the weighting variables to be used for the weighted averages and the weighting variables' properties are all chosen based on what is advised by the corresponding SDG Indicators Metadata Repository of the United Nations Statistics Division or by the original source of the corresponding data that is referred to by this metadata. If none of these two references advise on the aggregation methods or weights, the decisions are made based on the most common scientific logic fitting the case and its feasibility (e.g. the availability of the needed data for the weighting variables). The year of the weighting variable data is the most commonly used year for the data of the respective series/indicator. The following weights were actually used for the series/indicator whose global, regional and subregional aggregates are weighted averages: Total population in 2015 (from the World Population Prospects), Total population of

children under 5 years of age in 2015 (from the World Population Prospects), and Total population of children aged 1–14 years in 2015 (from the World Population Prospects). The chapter includes more details about the weighting variables, including which weight was used for which series or indicator. We note that, when a certain series or indicator need a population-related weighting variable in 2016 or 2017, we use the latest available data for this variable, i.e. data for 2015, that is provided by the World Population Prospects (WPP).

We calculate the world, regional and subregional aggregates for each indicator and include the target value – when available – to facilitate comparability. For 16.2.1, whose target aims is to “End abuse, exploitation, trafficking and all forms of violence against and torture of children”, we consider the target value as 0 per cent of children aged 1–14 years who experienced physical punishment and/or psychological aggression by caregivers in last month. For 16.9.1, whose target aims is to “Provide legal identity for all, including birth registration, by 2030”, we set the target value as 100 per cent of children under 5 years of age whose births have been registered with a civil authority. As for 16.10.2, whose target aims is to “Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements”, we consider the target value as 1 since the corresponding indicator consists of a dummy variable that takes a value of 1 when a country has ever adopted and implemented constitutional, statutory and/or policy guarantees for public access to information. Similarly, for 16.a.1, whose target seeks to “Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime”, we set the target value as 1 since the corresponding indicator consists of a dummy variable that takes a value of 1 when a country has National Human Rights Institutions that are fully or partially compliant with the Paris Principles. However, we remain unable to determine the desired target values for the rest of the indicators (16.1.1, 16.5.2 and 16.8.1) since it is not possible to infer them from the official titles of the corresponding targets, and thus they are not shown.

Table 16.2 Targets, indicators, tiers and data availability for Arab countries – SDG 16 (Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels)

Target	Indicator	Number of subindicators	Tier	Data availability*
16.1 Significantly reduce all forms of violence and related death rates everywhere	16.1.1 Number of victims of intentional homicide per 100,000 population, by sex and age	1 chosen out of 2	Tier I	21
	16.1.2 Conflict-related deaths per 100,000 population, by sex, age and cause	(No data)	Tier III	x
	16.1.3 Proportion of population subjected to physical, psychological or sexual violence in the previous 12 months	(No data)	Tier II	x
	16.1.4 Proportion of population that feel safe walking alone around the area they live	(No data)	Tier II	x

16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children	16.2.1 Proportion of children aged 1–17 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month	1 chosen out of 1	Tier II	11
	16.2.2 Number of victims of human trafficking per 100,000 population, by sex, age and form of exploitation	(Dropped) 1	Tier II	x
	16.2.3 Proportion of young women and men aged 18–29 years who experienced sexual violence by age 18	(Dropped) 1	Tier II	x
16.3 Promote the rule of law at the national and international levels and ensure equal access to justice for all	16.3.1 Proportion of victims of violence in the previous 12 months who reported their victimization to competent authorities or other officially recognized conflict resolution mechanisms	(No data)	Tier II	x
	16.3.2 Unsentenced detainees as a proportion of overall prison population	(Dropped) 1	Tier I	x
16.4 By 2030, significantly reduce illicit financial and arms flows, strengthen the recovery and return of stolen assets and combat all forms of organized crime	16.4.1 Total value of inward and outward illicit financial flows (in current United States dollars)	(No data)	Tier III	x
	16.4.2 Proportion of seized, found or surrendered arms whose illicit origin or context has been traced or established by a competent authority in line with international instruments	(No data)	Tier III	x
16.5 Substantially reduce corruption and bribery in all their forms	16.5.1 Proportion of persons who had at least one contact with a public official and who paid a bribe to a public official, or were asked for a bribe by those public officials, during the previous 12 months	(No data)	Tier II	x
	16.5.2 Proportion of businesses that had at least one contact with a public official and that paid a bribe to a public official, or were asked for a bribe by those public officials during the previous 12 months	1 chosen out of 1	Tier II	11

16.6 Develop effective, accountable and transparent institutions at all levels	16.6.1 Primary government expenditures as a proportion of original approved budget, by sector (or by budget codes or similar)	(No data)	Tier I	x
	16.6.2 Proportion of population satisfied with their last experience of public services	(No data)	Tier III	x
16.7 Ensure responsive, inclusive, participatory and representative decision-making at all levels	16.7.1 Proportions of positions (by sex, age, persons with disabilities and population groups) in public institutions (national and local legislatures, public service, and judiciary) compared to national distributions	(No data)	Tier III	x
	16.7.2 Proportion of population who believe decision-making is inclusive and responsive, by sex, age, disability and population group	(No data)	Tier III	x
16.8 Broaden and strengthen the participation of developing countries in the institutions of global governance	16.8.1 Proportion of members and voting rights of developing countries in international organizations	14 chosen out of 22	Tier I	22
16.9 By 2030, provide legal identity for all, including birth registration	16.9.1 Proportion of children under 5 years of age whose births have been registered with a civil authority, by age	1 chosen out of 1	Tier I	14
16.10 Ensure public access to information and protect fundamental freedoms, in accordance with national legislation and international agreements	16.10.1 Number of verified cases of killing, kidnapping, enforced disappearance, arbitrary detention and torture of journalists, associated media personnel, trade unionists and human rights advocates in the previous 12 months	(Dropped) 1	Tier II	x
	16.10.2 Number of countries that adopt and implement constitutional, statutory and/or policy guarantees for public access to information	1 chosen out of 1	Tier II	22
16.a Strengthen relevant national institutions, including through international cooperation, for building capacity at all levels, in particular in developing countries, to prevent violence and combat terrorism and crime	16.a.1 Existence of independent national human rights institutions in compliance with the Paris Principles	2 chosen out of 6	Tier I	22

16.b Promote and enforce non-discriminatory laws and policies for sustainable development	16.b.1 Proportion of population reporting having personally felt discriminated against or harassed in the previous 12 months on the basis of a ground of discrimination prohibited under international human rights law	(No data)	Tier III	x
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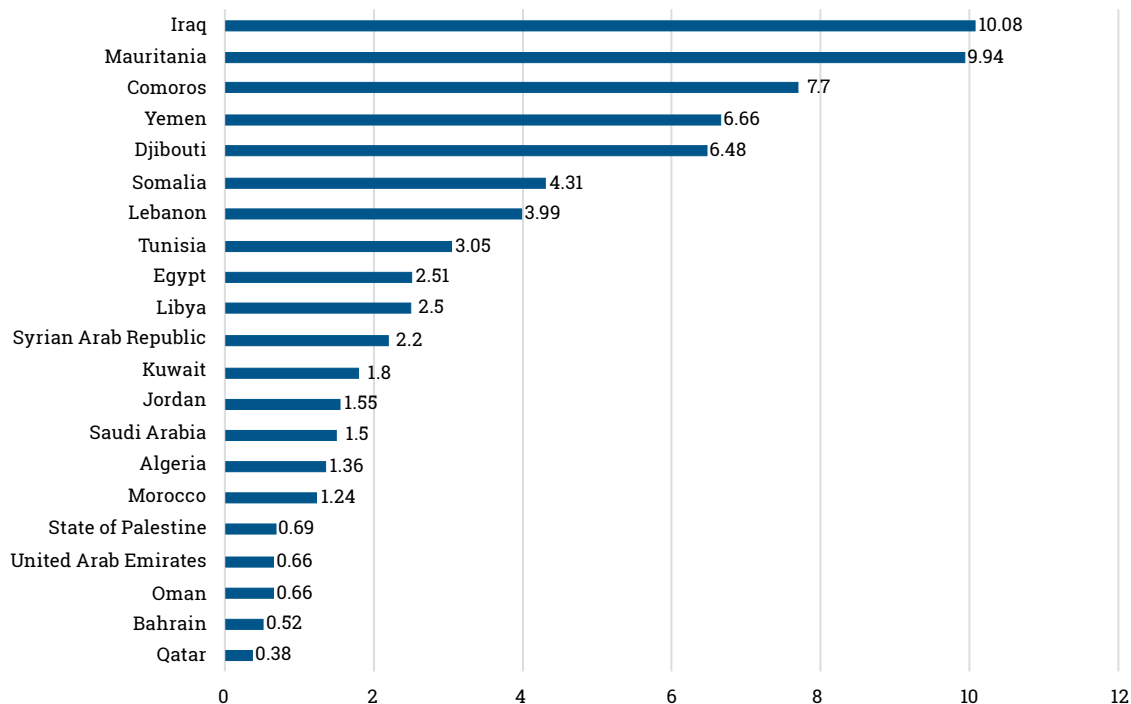
Note: * Figures refer to the number of Arab countries with data for the indicator, while x means there are no data or the indicator was dropped.

Source: <https://unstats.un.org/sdgs/indicators/indicators-list/> and author's calculations.

2. Country graphs

Figure 16.1 Indicator 16.1.1 - Number of victims of intentional homicide per 100,000 population, by sex and age

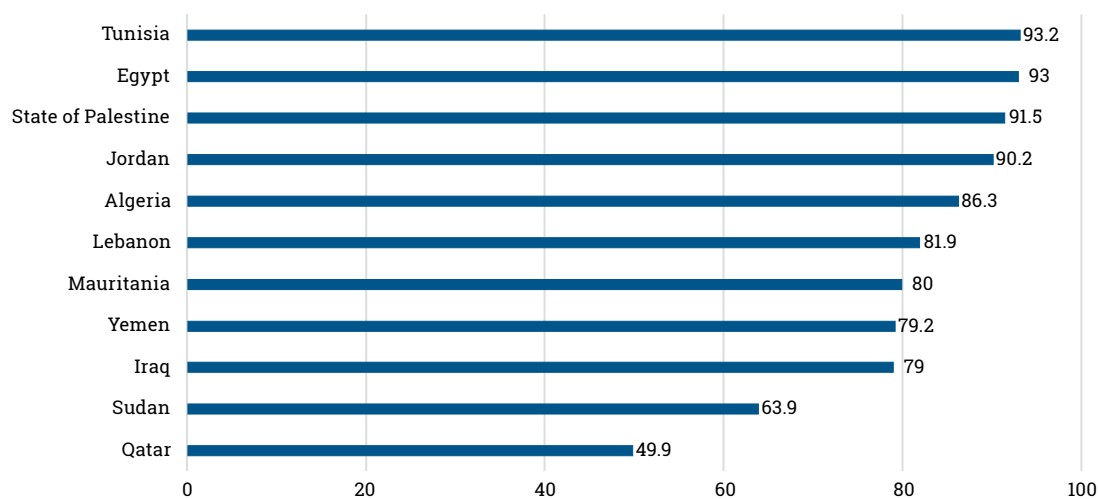
Number of victims of intentional homicide per 100,000 population



Note: Data are from various years as follows: Syrian Arab Republic (2010), Egypt, Kuwait, Tunisia (2012), Yemen (2013), Bahrain, Iraq, Oman, Qatar (2014), Algeria, Comoros, Djibouti, Libya, Mauritania, Morocco, Saudi Arabia, Somalia, United Arab Emirates (2015), Jordan, Lebanon, State of Palestine (2016).

Figure 16.2 Indicator 16.2.1 - Proportion of children aged 1–17 years who experienced any physical punishment and/or psychological aggression by caregivers in the past month

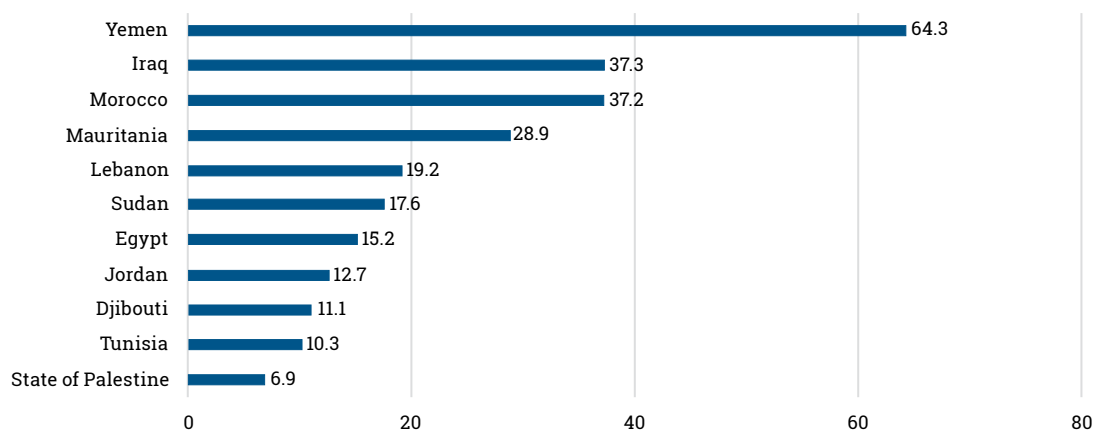
Proportion of children aged 1–14 years who experienced physical punishment and/or psychological aggression by caregivers in last month (percentage)



Note: Data are from various years as follows: Lebanon (2009), Iraq (2011), Jordan, Qatar, Tunisia (2012), Algeria, Yemen (2013), Egypt, State of Palestine, Sudan (2014), Mauritania (2015).

Figure 16.3 Indicator 16.5.2 - Proportion of businesses that had at least one contact with a public official and that paid a bribe to a public official, or were asked for a bribe by those public officials during the previous 12 months

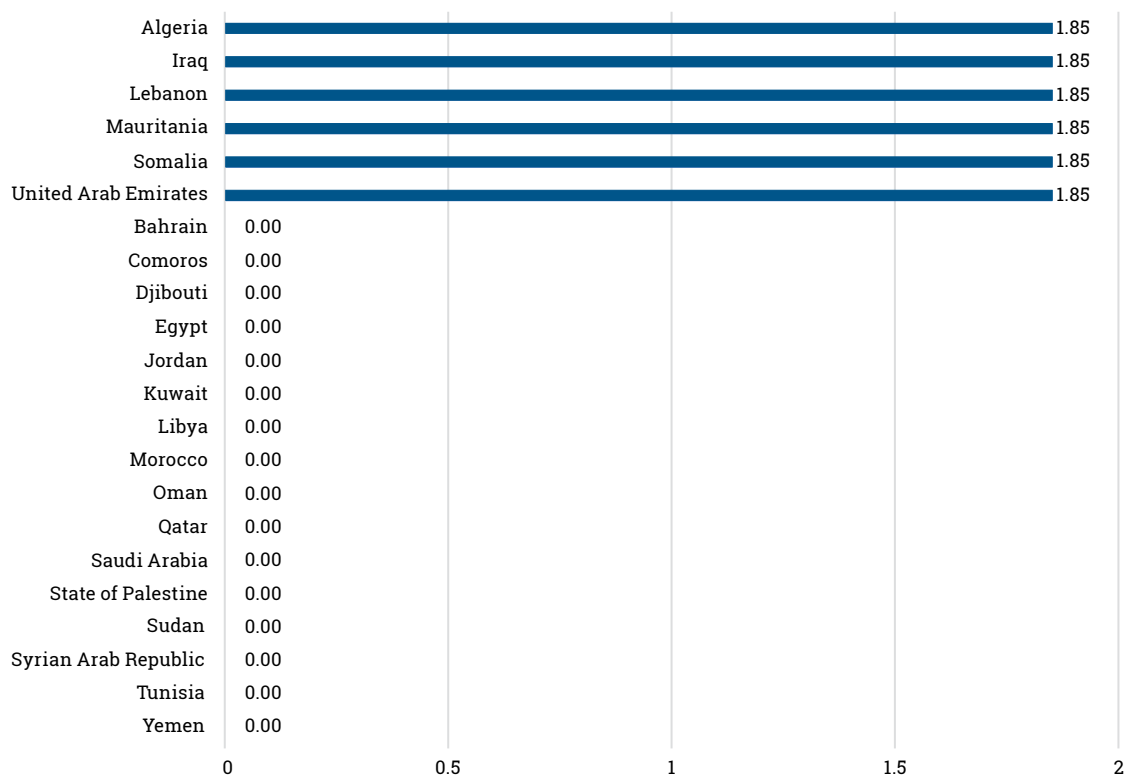
Bribery incidence/proportion of firms experiencing at least one bribe payment request (percentage)



Note: Data are from 2013 apart from Iraq (2011), Sudan (2014) and Egypt (2016).

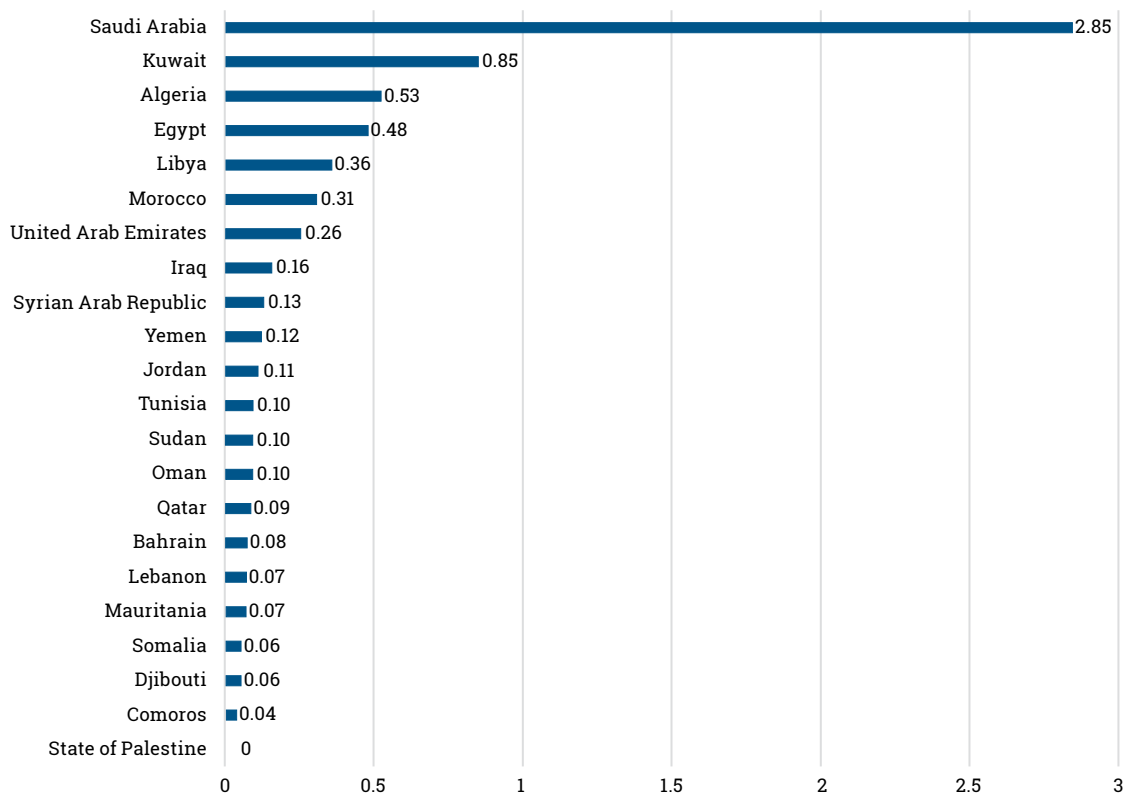
Figure 16.4 Fourteen series of Indicator 16.8.1 - Proportion of members and voting rights of developing countries in international organizations

Proportion of voting rights in the United Nations Economic and Social Council (percentage)



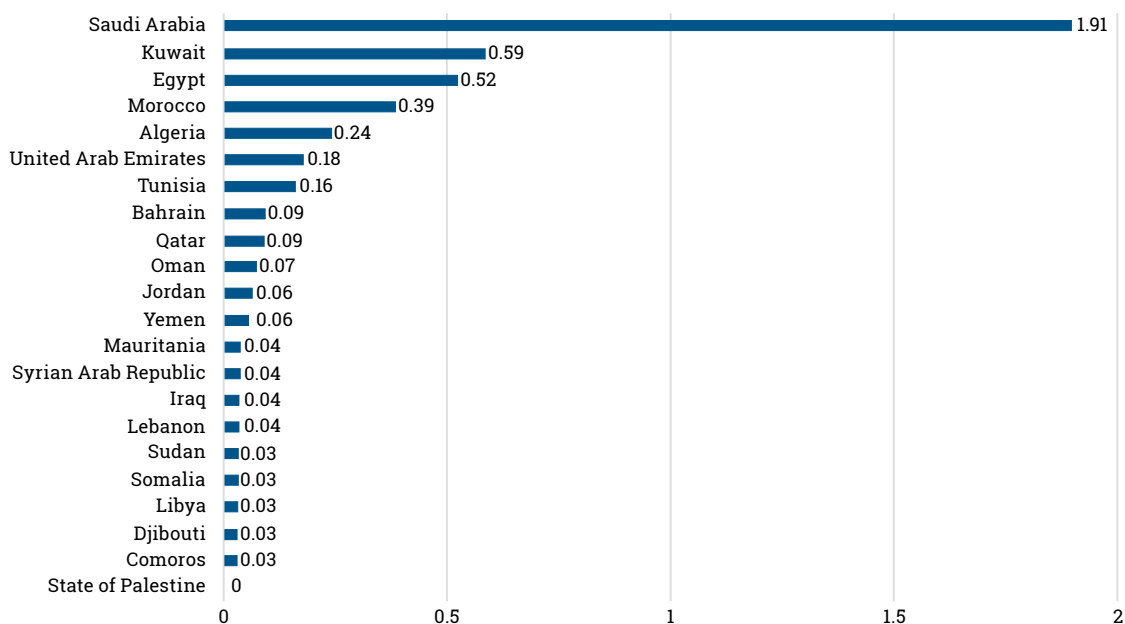
Note: All data are from 2017.

Proportion of voting rights in the International Bank for Reconstruction and Development (percentage)



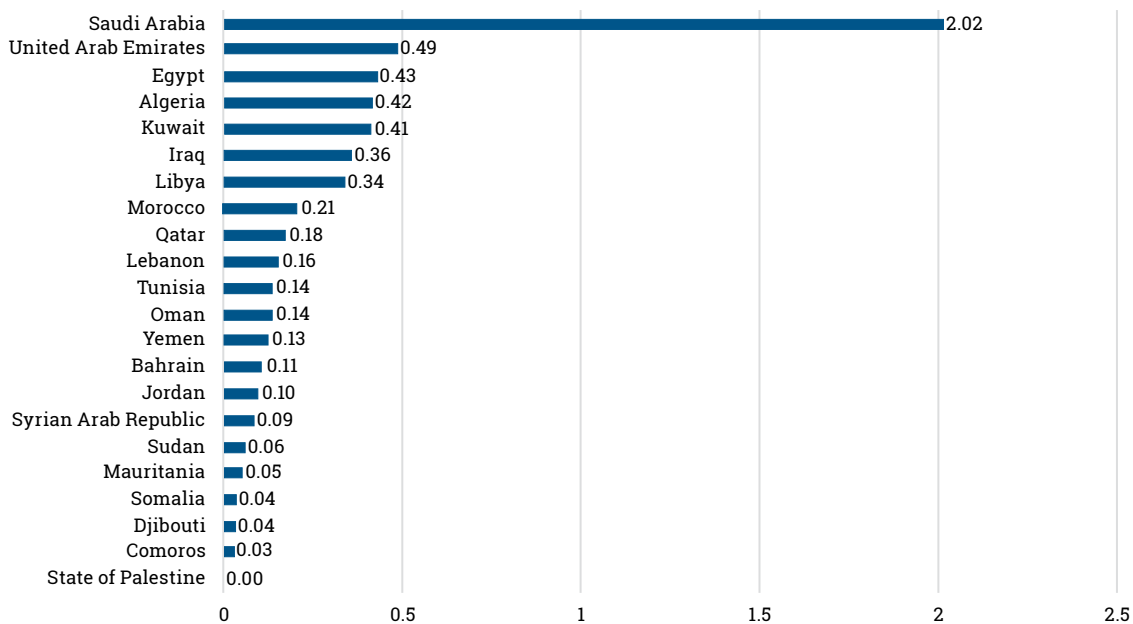
Note: All data are from 2017.

Proportion of voting rights in the International Finance Corporation (percentage)



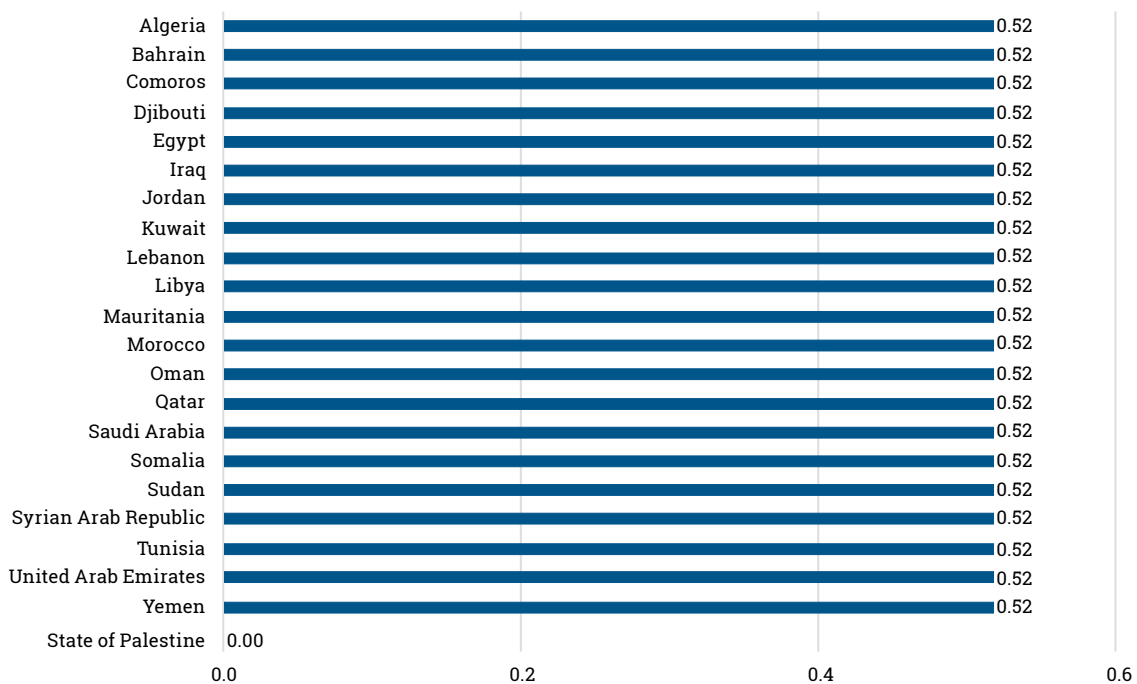
Note: All data are from 2017.

Proportion of voting rights in the International Monetary Fund (percentage)



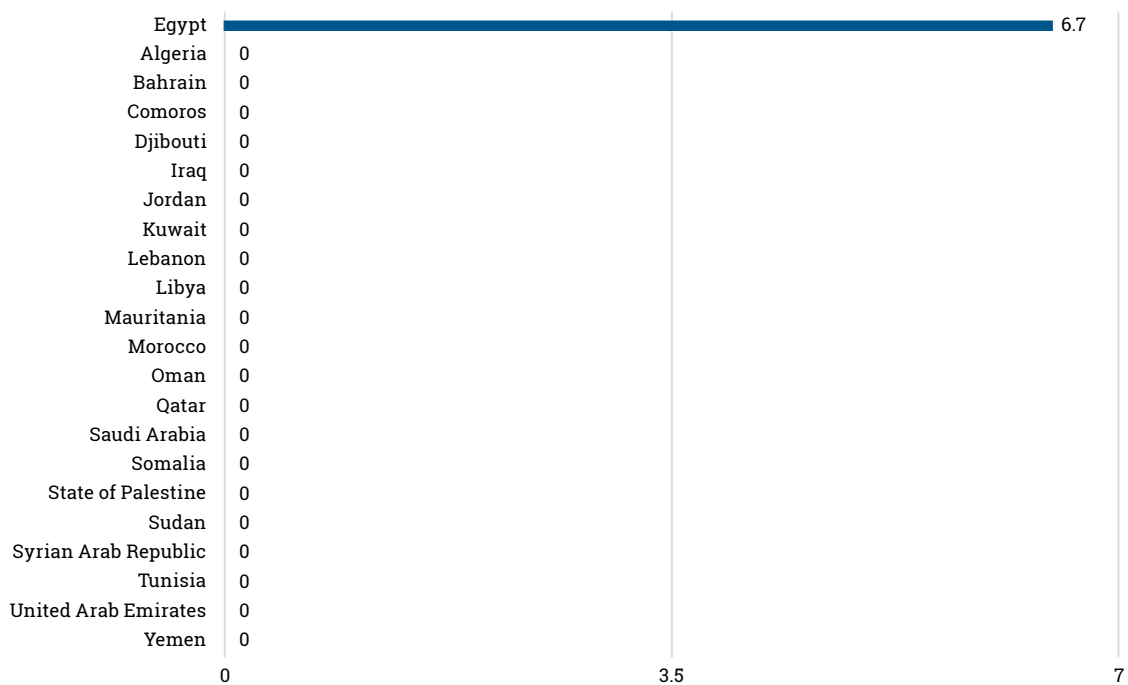
Note: All data are from 2017.

Proportion of voting rights in the United Nations General Assembly (percentage)



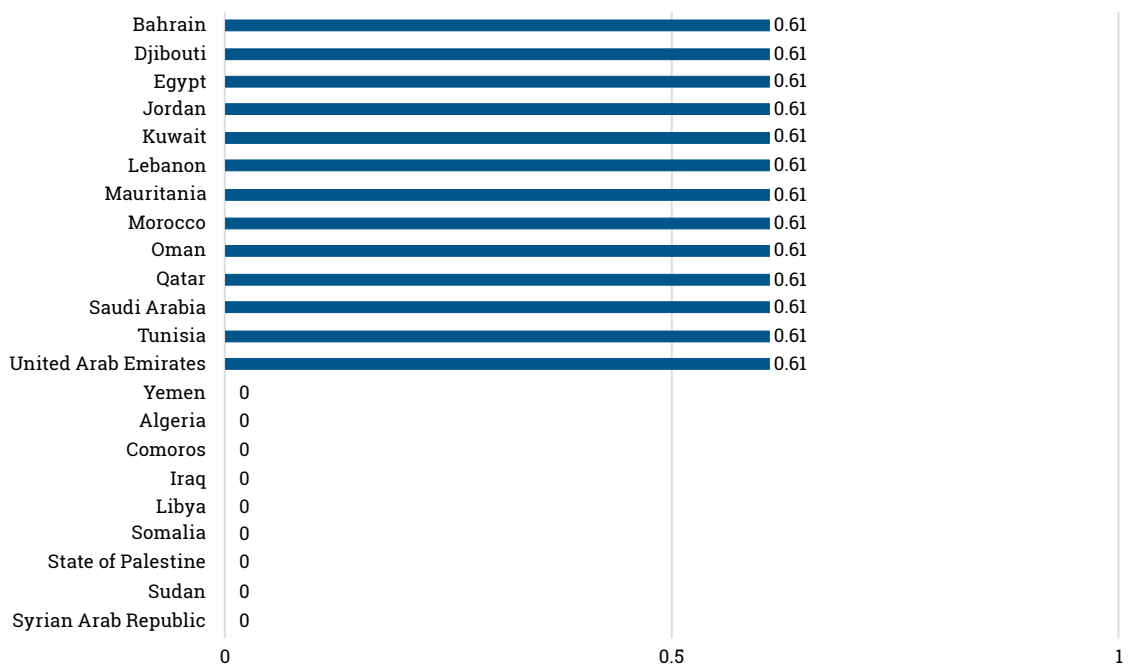
Note: All data are from 2017.

Proportion of voting rights in the United Nations Security Council (percentage)



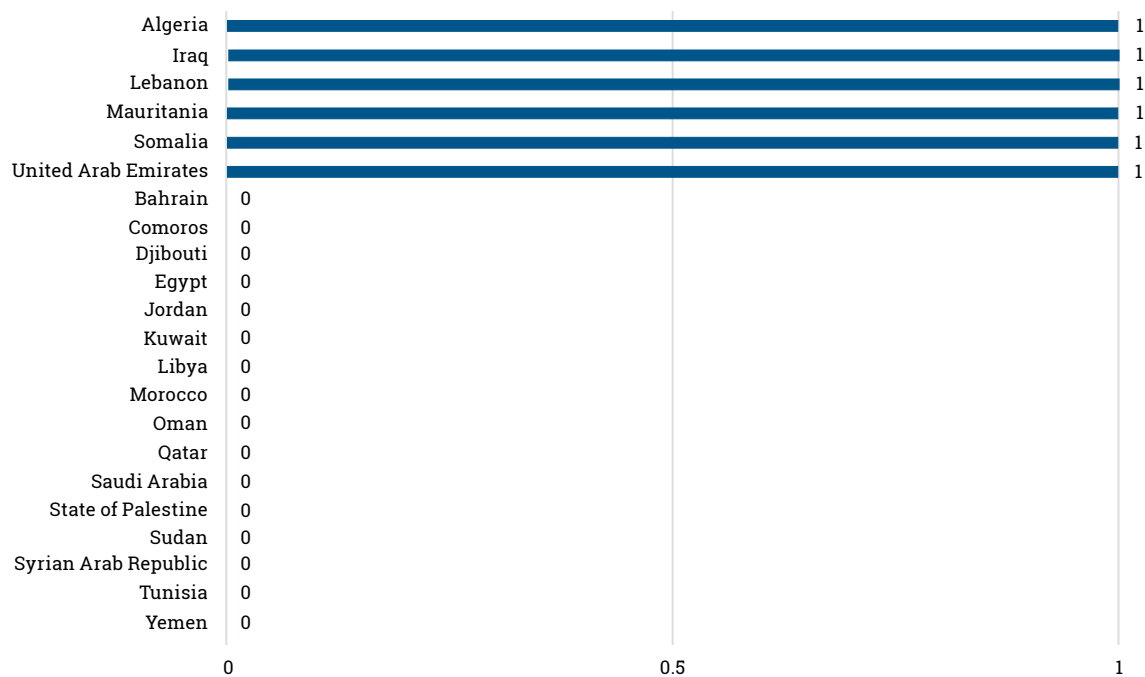
Note: All data are from 2017.

Proportion of voting rights in the World Trade Organization (percentage)



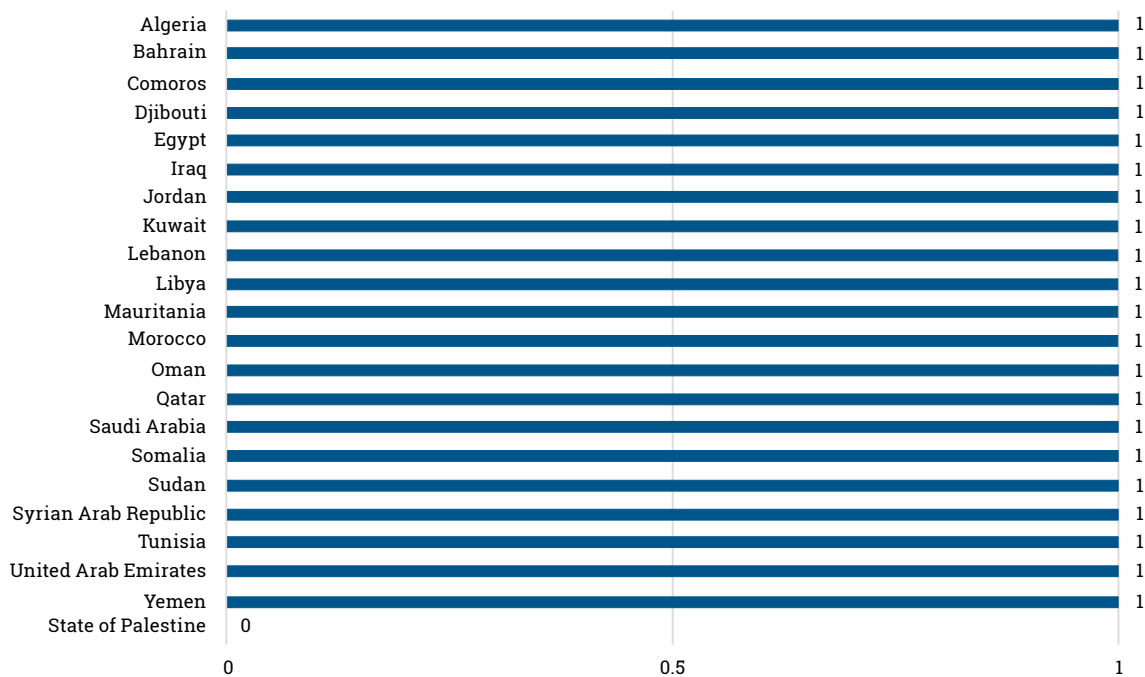
Note: All data are from 2017.

Membership in the United Nations Economic and Social Council (0-1 dummy variable)



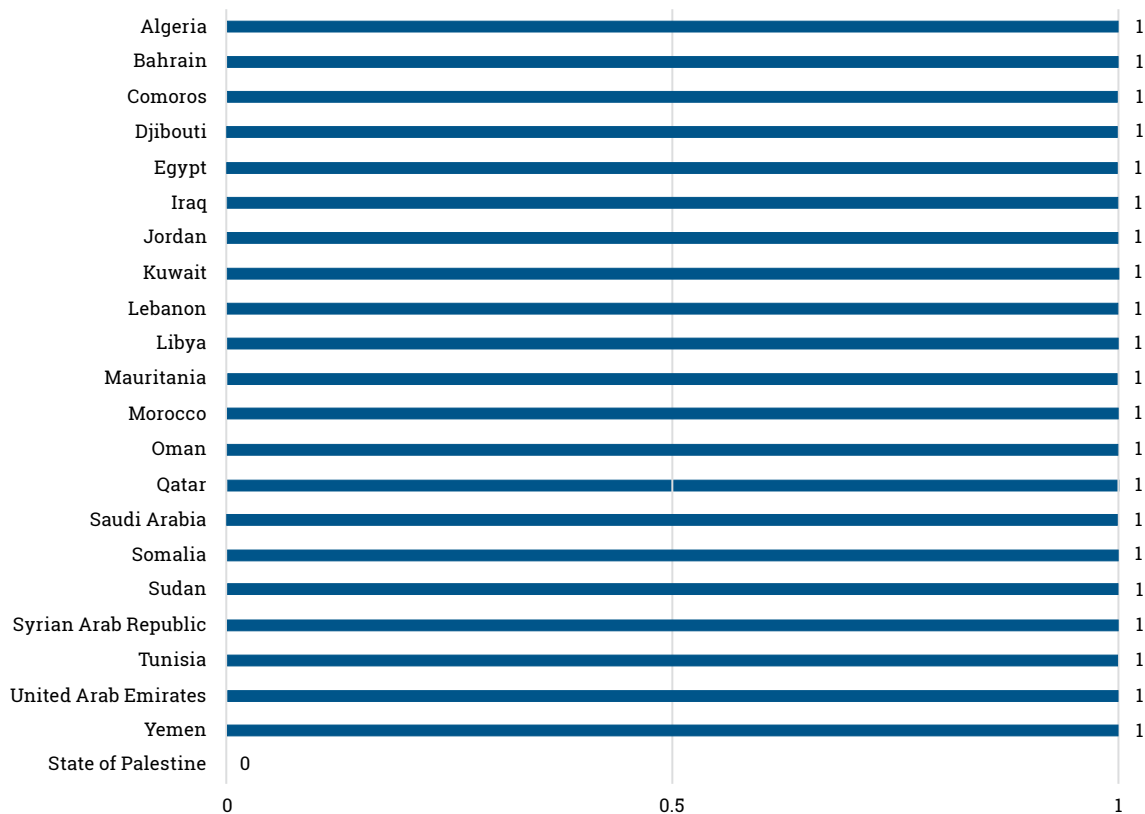
Note: All data are from 2017.

Membership in the International Bank for Reconstruction and Development (0-1 dummy variable)



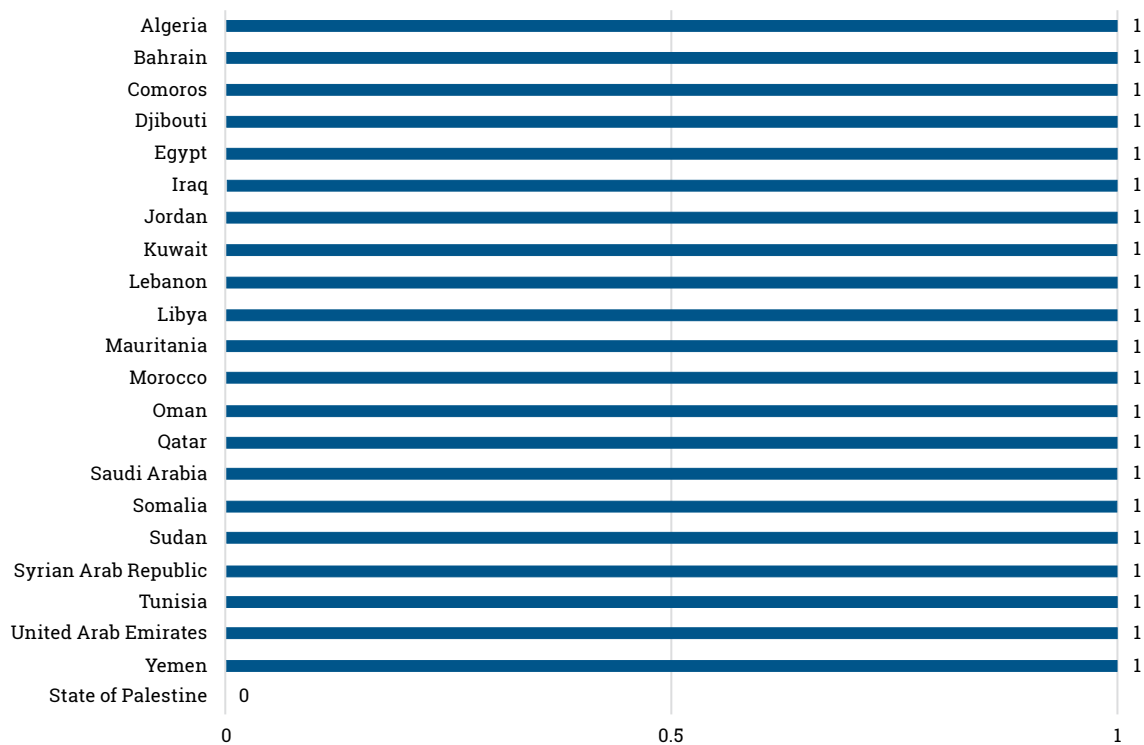
Note: All data are from 2017.

Membership in the International Finance Corporation (0-1 dummy variable)



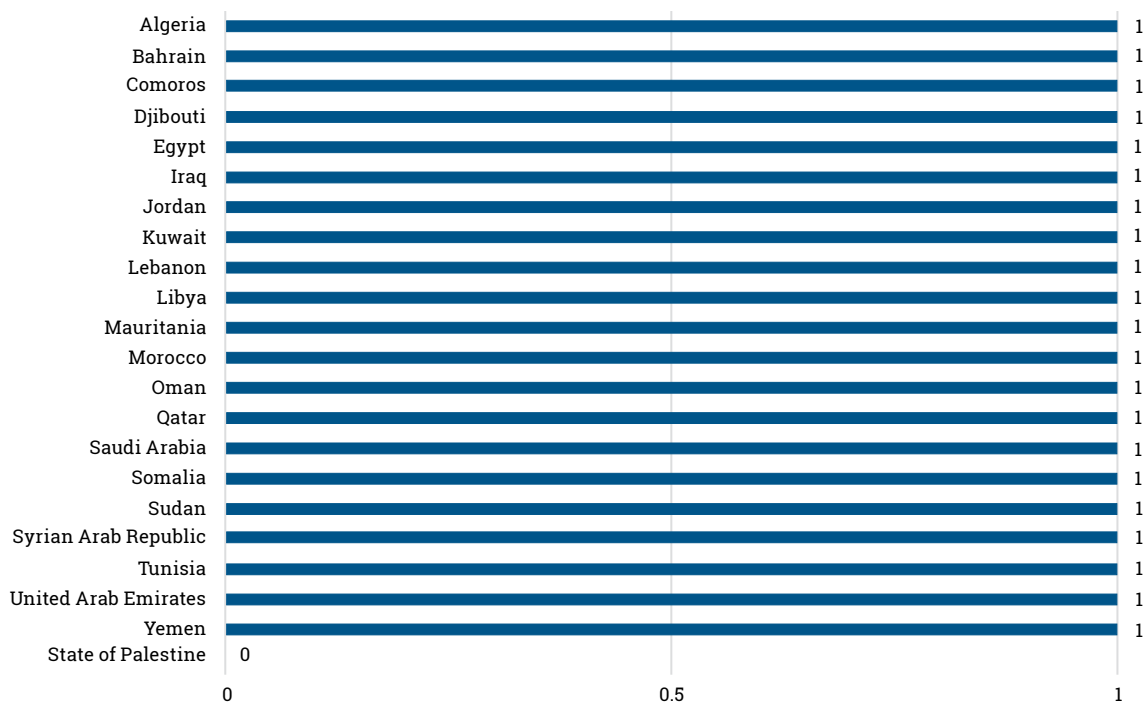
Note: All data are from 2017.

Membership in International Monetary Fund (0-1 dummy variable)



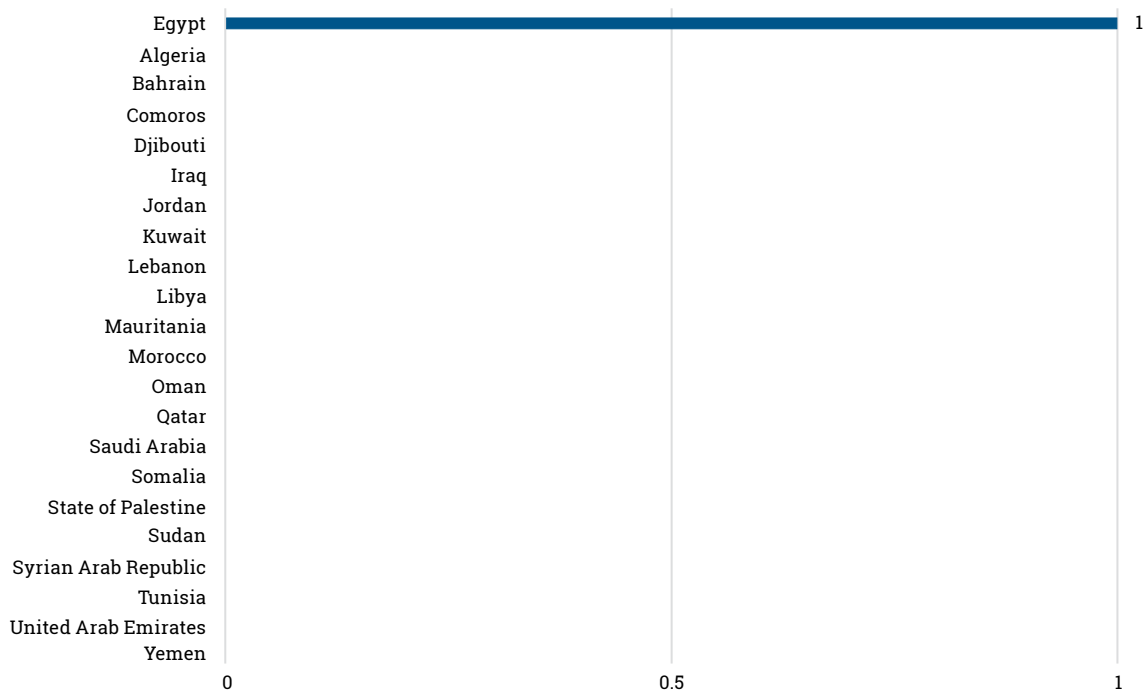
Note: All data are from 2017.

Membership in the United Nations General Assembly (0-1 dummy variable)



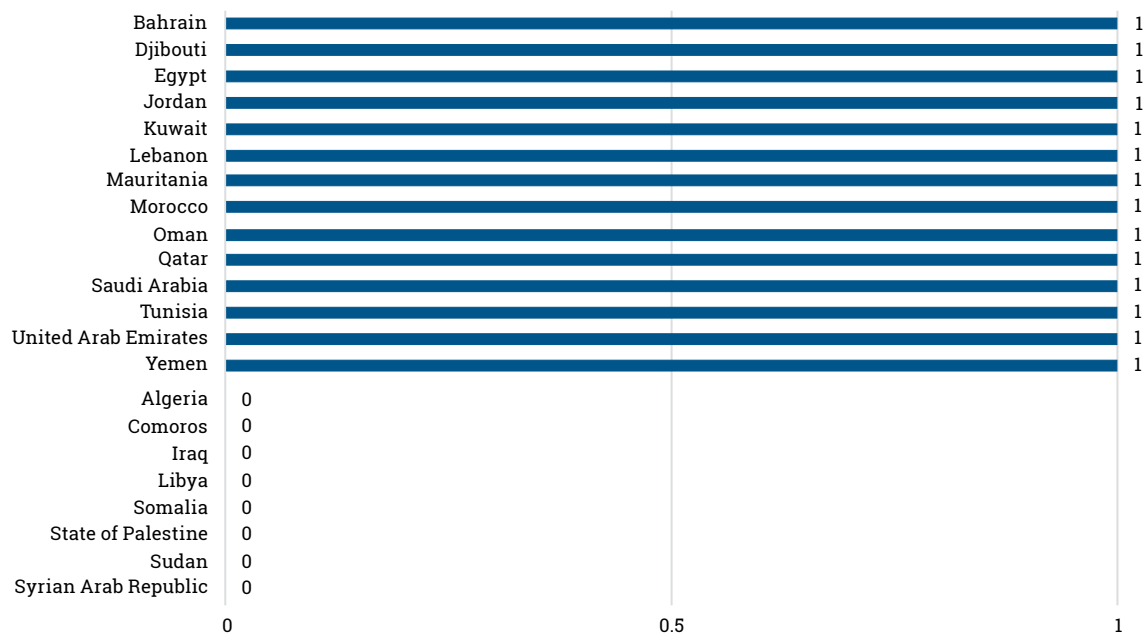
Note: All data are from 2017.

Membership in the United Nations Security Council (0-1 dummy variable)



Note: All data are from 2017.

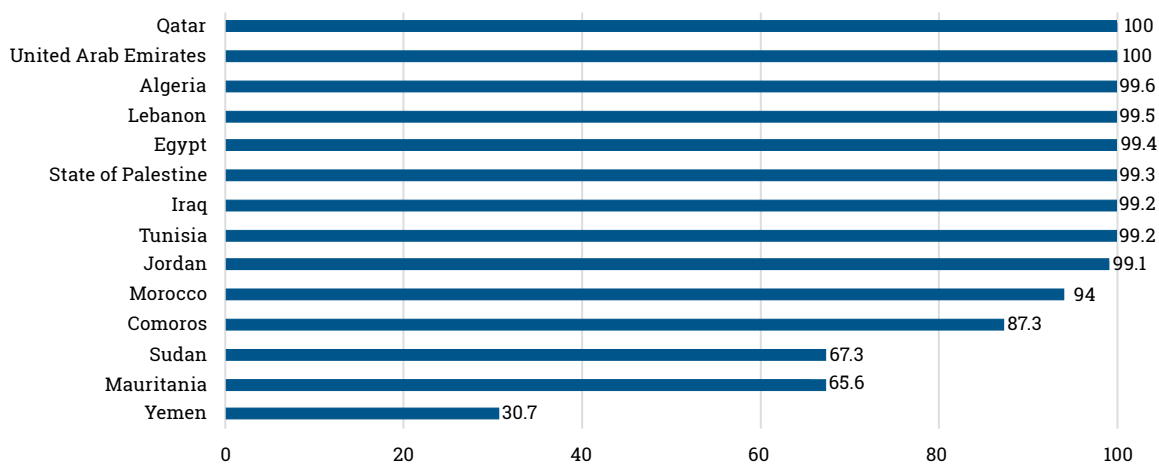
Membership in the World Trade Organization (0-1 dummy variable)



Note: All data are from 2017.

Figure 16.5 Indicator 16.9.1 - Proportion of children under 5 years of age whose births have been registered with a civil authority, by age

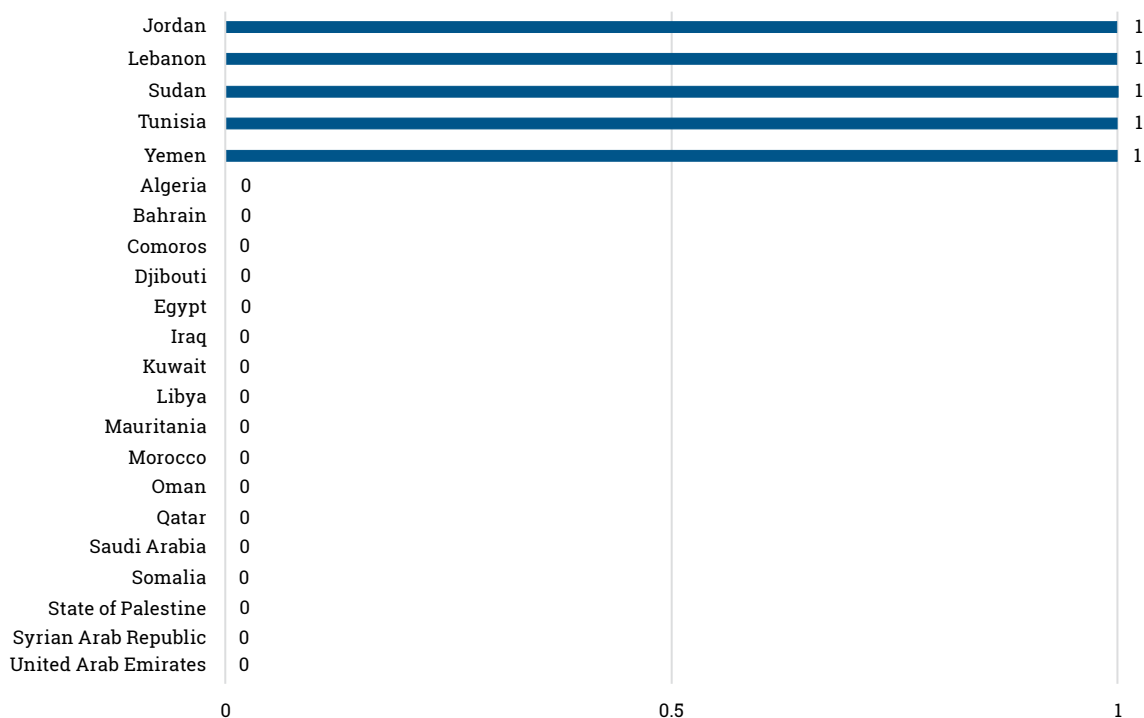
Proportion of children under 5 years of age whose births have been registered with a civil authority (percentage)



Note: Data are from various years as follows: Lebanon (2009), Iraq, Morocco (2011), Comoros, Jordan, United Arab Emirates, Tunisia (2012), Algeria, Yemen (2013), Egypt, State of Palestine, Sudan (2014), Mauritania, Qatar (2015).

Figure 16.6 Indicator 16.10.2 - Number of countries that adopt and implement constitutional, statutory and/or policy guarantees for public access to information

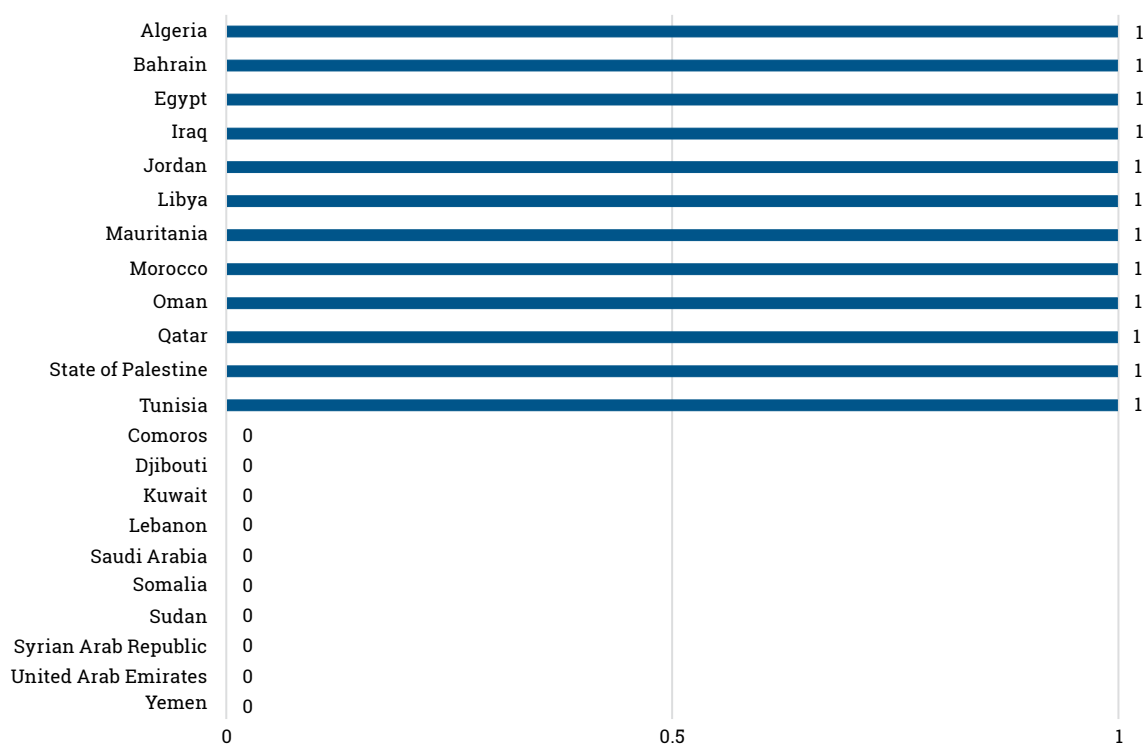
Countries that adopt and implement constitutional, statutory and/or policy guarantees for public access to information (0-1 dummy variable)



Note: All data are from 2018.

Figure 16.7 Indicator 16.a.1 - Existence of independent national human rights institutions in compliance with the Paris Principles

Countries with independent national human rights institutions in compliance (fully or partially) with the Paris Principles (0-1 dummy variable)



Note: All data are from 2017.