

## CODEBOOK

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## 1 Conceptualization of ownership

We distinguish between four main types of owner identities: the state, a single individual or family, a corporation, and a financial institution. For each company, we consider all shareholders and their exact shares (first shareholder level), plus, if applicable, the shareholders owning each of these shareholders and their exact shares (second shareholder level). If an individual/family is the ultimate beneficiary, we add a third level.

### **State government.**

This category includes both direct and indirect state ownership.

- *Direct state ownership*: Shares are directly held and managed through authorized state agencies at the national or regional levels. Examples include the government itself, government agencies (including the ministries of information or communication), intergovernmental bodies (e.g. the Cooperation Council for the Arab States of the Gulf), the military, and individuals that rule a country (e.g. King Mswati II in the absolute monarchy Swaziland).
- *Indirect state ownership*: The state holds shares through other organizations or chains of organizations, such as pension funds, sovereign wealth funds, and other (investment) companies that are majority-owned by the state government, or the ruling political party.

### **Individual/family.**

Shares can be traced back directly to an individual or a family, which is known by name.

*Note*: In several cases, family ownership is closely associated with the state. We follow Djankov et al. (2003: 353) and classify a company as state-owned if there is direct family relationship between the ultimate owner and the head of state, and the governing system is a single-party state or an absolute monarchy. For example, we code the shares of King Mswati II, the absolute monarch of Swaziland, in MTN Swaziland as state-owned.

### **Financial Institution.**

Shares are held by entities whose primary business is in the area of (investment) banking, insurance, brokerage, mutual and pension fund management, and other non-collective investment schemes, such as private equity funds, venture capital funds, hedge funds (Li et al., 2006:279).

### **Corporation.**

Shares are held by a conventional, non-financial business corporation, with a distinct legal entity.

### **Unknown.**

This category applies if it was impossible to determine the owner (identity) of a company.

## 2 Variables

### General information

*year*

Year of observation, ranging from 2000 to 2019. Response: Date.

*country*

Name of coded country, written in full letters. Many countries go by different names in different time-periods, for example due to name changes. We refer to the latest common name. Response: Text.

*cc*

The Correlates of War (COW) code for each country according to the Correlates of War Project, [www.correlatesofwar.org/data-sets/cow-country-codes](http://www.correlatesofwar.org/data-sets/cow-country-codes). Response: Numeric.

### Companies

*Company.code*

Unique company ID designated for each company. It is composed of the unique country ID *cc* of the respective country and an integer assigned in ascending order of the country alphabet. Response: Text.

*TOSCO\_company\_name*

Name of the company, as it is called in the most recent coded year. Previous names of the company are in brackets, for example before mergers or change in ownership. This allows to trace a company albeit it might operate under varying names over a given period. Response: Text.

*commercial\_name*

Name under which the company operates in the market in a given country-year. Response: Text.

*Note:* We code commercial names as changing the same year in which we observe a change in ownership. There might have been a slight delay between a change of ownership and a new commercial name, however, notably due to logistics and costs of rebranding. In some rare cases the brand name reflects a minority owner, often because it is better known as the majority owner (e.g. Orange in Equatorial Guinea 2006-2017).

*AFRINIC\_id\**

Unique organization ID that the African Network Information Centre (AFRINIC), the region internet registry for the African continent, assigns to each internet service provider (ISP) operating in the territory for which it is responsible. Response: Numeric.

*Note:* Since there is no historical data available, we have no information for companies that closed before 2019. Missing information is coded with NA.

*ASN\**

Autonomous System Number (ASN) as provided by AFRINIC. Response: Numeric.

*Note:* Data is only available for companies for which there exists an AFRINIC ID. Missing information is coded with NA.

\* Data will be made available through the web platform [www.tosco-data.com](http://www.tosco-data.com)

## **First shareholder level**

*sh\_group\_name*

Name of the shareholder. Shareholders that separately own less than 5 percent but are listed on the stock market (and for which we do not know the names) are coded as 'Float'. If we have no information about a shareholder, we code it as 'unknown'; otherwise, we enter the information that was available (e.g. 'Private investors'). Response: Text.

*sh\_group\_hq*

Country in which the headquarter of the shareholder is officially registered. Missing information is coded as 'NA'. Response: Text.

*sh\_majority\_type*

Owner identity of shareholder if ultimate beneficiary, that is if no second-level shareholder exists; otherwise left blank. Coding in line with conceptualization of ownership along the four main categories: state, individual/family, finance (i.e. financial institution), and corporate, plus 'unknown'. Response: Text.

*sh\_share*

Total amount of shares the shareholder owns in the company in percent or as descriptive approximation (i.e. around 50, almost 50, almost 100, majority, minority). Due to unknown data, the total of the shares may not add up to 100 percent. Response: Numeric/Text.

*sh\_share\_r*

Total amount of shares the shareholder owns in the company in (estimated) percent. Response: Numeric.

The following rules apply:

Shareholder(s)	Information about shareholder(s)	sh_share	sh_share_r
Known	One shareholder.	majority	51
Known	One shareholder.	minority	49
Known	One shareholder is coded as majority; two shareholders are coded as minority.	Shareholder 1: majority Shareholder 2: minority Shareholder 3: minority	Shareholder 1: 51 Shareholder 2: 24.5 Shareholder 3: 24.5
Known	No information on any of the shareholders.	unknown	100 is divided by the number of shareholders
Known	No information on some of the shareholders.	unknown	The known shares are subtracted from 100; the remaining unknown shares are equally distributed among the shareholders for which the shares were unknown.
Unknown	No information on any of the shareholders.	unknown	NA
Unknown	No information on some of the shareholders.	unknown	The known shares are subtracted from 100; the remaining shares are shown.

#### *sh\_group\_pol\_entourage*

Dummy (=1) for an individual/family shareholder who belongs to the ruling family, or is member of the government, legislative, judiciary, or military; 'NA' if *sh\_majority\_type* is no individual/family. Response: Numeric.

#### *sh\_group\_pol\_type*

Type of political entourage if *sh\_group\_pol\_entourage* = 1, along five categories: family (of the ruling incumbent); government (president, minister, ambassadors), legislative (member of parliament, political party), judiciary (chair of constitutional court), and military (army, colonels, lieutenants). If more than one category applies, only one of them is used, with family member given first priority. Response: Text.

## Second shareholder level

#### *sh\_mother\_group\_name*

Name of the shareholder. Shareholders that separately own less than 5 percent but are listed on the stock market are coded as 'Float'. If we have no information about a shareholder, we code it as 'unknown'; otherwise, we enter the information we have (e.g. 'Private investors'). Response: Text.

#### *sh\_mother\_group\_hq*

Country in which the headquarter of the shareholder is officially registered. Missing information is coded as 'NA'. Response: Text.

#### *sh\_mother\_type*

Owner identity of ultimate beneficiary. Coding in line with conceptualization of ownership along the four main categories: state, individual/family, finance (i.e. financial institution), and corporate, plus 'unknown'. Response: Text.

*sh\_mother\_share*

Total amount of shares the shareholder owns in the company in percent or as descriptive approximation (i.e. around 50, almost 50, almost 100, majority, minority). Due to unknown data, the total of the shares may not add up to 100 percent. Response: Numeric/Text.

*sh\_mother\_share\_r*

Total amount of shares the shareholder owns in the company in (estimated) percent (see rule for *sh\_share\_r*). Response: Numeric.

*sh\_mother\_pol\_entourage*

Dummy (=1) for an individual/family shareholder who belongs to the ruling family, or is member of the government, legislative, judiciary, or military; 'NA' if *sh\_mother\_type* is no individual/family. Response: Numeric.

*sh\_mother\_pol\_type*

Type of political entourage if *sh\_mother\_pol\_entourage* = 1, along five categories: family (of the ruling incumbent); government (president, minister, ambassadors), legislative (member of parliament, political party), judiciary (chair of constitutional court), and military (army, colonels, lieutenants). If more than one category applies, only one of them is used, with family member given first priority. Response: Text.

### **Third shareholder level (individual/family)**

In this section, we focus only on observations for which we know that the ultimate beneficiary is an individual/family owner, which would not be known based on the information provided at the first and second shareholder levels.

*ind\_name*

Name of the individual or family that owns a majority of the shares of companies at the 2nd level. Response: Text.

*ind\_hq*

Country from which the individual or family originates, or in which they were born. For example, Mo Ibrahim has made his career in the UK, but since he was born in Sudan, *ind\_hq* is classified as Sudan. Response: Text.

*ind\_type*

Type of political entourage if *ind\_pol\_entourage* = 1, along five categories: family (of the ruling incumbent); government (president, minister, ambassadors), legislative (member of parliament, political party), judiciary (chair of constitutional court), and military (army, colonels, lieutenants). If more than one category applies, only one of them is used, with family member given first priority. Response: Text.

*ind\_share*

Total amount of shares the shareholder owns in the company in percent or as descriptive approximation (i.e. around 50, almost 50, almost 100, majority, minority). Due to unknown data, the total of the shares may not add up to 100 percent. Response: Numeric/Text.

*ind\_share\_r*

Total amount of shares the shareholder owns in the company in (estimated) percent (see rule for *sh\_share\_r*). Response: Numeric.

*ind\_pol\_entourage*

Dummy (=1) for an individual/family shareholder who belongs to the ruling family, or is member of the government, legislative, judiciary, or military; 'NA' if *sh\_majority\_type* is no individual/family. Response: Numeric.

### 3 Sources

Sources for the ownership of the first-level and the second-level shareholders, respectively, are saved as .pdf or .doc-file. Source types include: Annual Report (AR), TeleGeography (TG), Reuters, Orbis. For multinational companies with subsidiaries in at least three African countries, we save the sources in a specific company file that allows to harmonize all sources referring to that group (e.g. an annual report that applies to all Orange subsidiaries is saved as *Orange\_2017\_AR*, while a document that only applies to Orange Botswana is saved as *Botswana\_Orange\_2010\_other*).

The sources can be accessed through the web platform [www.tosco-data.com](http://www.tosco-data.com).

### 4 References

- Djankov, S., Mcliesh, C., Nenova, T. & Shleifer, A. 2003. Who Owns the Media? *Journal of Law and Economics* 46(2): 341-381.
- Li, D., Moshirian, F., Kien Pham, P. & Zein, J. 2006. When Financial Institutions Are Large Shareholders: The Role of Macro Corporate Governance Environments. *Journal of Finance* 61(6): 2975-3007.