Data Article

Dataset for audit dimensions in an emerging market: Developing a panel database of audit effectiveness and efficiency

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ABSTRACT

Audit is an indispensable mechanism for developing and sustaining trust in accounting information and thus in efficient capital markets. In emerging markets, current practices require the auditor to be effective and efficient because users rely heavily and need the timely information certified by auditors. However, these practices do not meet expectations, and more research into the development and strengthening of audit practices is required. Given that audit effectiveness and efficiency are crucial components for most accounting/auditing research models and the lack of readily available data in well-known databases (e.g., DataStream; OSIRIS; Audit Analytics), this dataset consists of longitudinal data for the variables most used in prior research for measuring the effectiveness and efficiency of audit. The dataset includes data for audit report lag, audit fees, auditor type, auditor tenure, and audit opinion for firms listed in the Omani capital market. It also details data for audit firms' names and industry affiliations to extract further related variables such as industry expertise, client importance, independence, and big4/second-tier audit firms analysis, which are measured from the researcher's perspective. The collection process identifies all listed firms for the period 2005-2019 (1,865 observations), with 1,117 observations in the final sample. Sources such as audit reports, corporate governance reports,

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Specifications Table

Subject area	Accounting, audit, and corporate governance.
Specific subject area	Auditing.
Type of data	Panel Data Table (Excel file).
How data was acquired	Data has been collected from audit reports, corporate governance reports, the OSIRIS database, and the capital market's website.
Data format	Raw and filtered.
Parameters for data collection	Firms listed on the Muscat Security Market were used as the sample.
Description of data collection	Using pooled panel data, audit fees, auditor type, tenure, and, opinion are incorporated to proxy audit effectiveness, while audit report lag and audit fees are used to proxy audit efficiency. These data can also be used to build other proxies for audit effectiveness (e.g., industry expertise; independence) but we leave the construction of these proxies to the choice of potential users of the data.
Data source location	Oman, an emerging market, is the source of the data. In particular, sources such as audit reports, corporate governance reports, the OSIRIS database, and the capital market website are the primary sources of the data.
Data accessibility	To obtain the data, a supplementary document is attached to this article.

Value of the Data

- This dataset is important as it contains data for variables that, collectively or individually, are rarely ignored in accounting, auditing, and corporate governance research models, and still attract a wide range of stakeholders.
- The dataset is useful for research across different disciplines to examine the role of these variables in a particular phenomenon or the factors explaining audit effectiveness and efficiency.
- The dataset enables capital market regulators, standards setters, practitioners, and financial report users to easily access long-term data assessing the effectiveness and efficiency status of auditors in an emerging market.
- The dataset covers 15 years, providing an opportunity for temporal dynamics and structural breaks analyses.
- The dataset complements prior published data on internal corporate governance mechanisms [1], thus allowing a comprehensive assessment of the role of corporate governance in Oman.

1. Data Description

The dataset included with this article contains three tables describing and defining the sample and variables for audit effectiveness and efficiency, and one spreadsheet (Excel file) including all raw and filtered data for the variables. It depicts time-series and cross-sectional data for non-financial firms listed on the Omani capital market over the period 2005-2019. Table 1 presents the summary of sample selection process which indicates that the final sample comprises 1,117 observations (on average 75 firms per year). We note that given the missing data for some firms,

Table 1

Descriptive for the sample characteristics.

Panel A: Sample selection	
Total observations for sampled firms over period 2005-2019	1865
Less: Observations for financial and investment firms	(693)
Less: Missing observations due to unavailable audit report lag data	(21)
Less: Missing observations due to unavailable audit fees data	(34)
Final observations with available data for all variables	1117

Panel B: Sample distribution by industries	
By Major sectors	
Industrial	670
Services	447
By 1-digit GSIC Codes	
Industrial	170
Energy	195
Consumer discretionary	214
Materials	232
Consumer staples	269
Telecommunication	23
Health care	14

Table 2

Descriptive for the audit effectiveness and efficiency variables.

Panel A: Statistics based on the full sample

Variable	Min	25%	Mean	Median	75%	Max	Std
ARL	12.00	44.00	51.92	53.00	59.00	170.00	13.42
LARL	2.49	3.78	3.92	3.97	4.08	5.14	0.27
ADEFF#	1200	4250	11776	6500	9500	221344	26787
LADEFF	7.09	8.36	8.86	8.78	9.16	12.62	0.78
TYPE	0.00	0.00	0.63	1.00	1.00	1.00	0.48
TENURE	1.00	1.00	2.32	2.00	3.00	4.00	1.12
OPINION	0.00	0.00	0.00	0.00	0.09	1.00	0.29

Panel B: Means based on the auditor type

Variable	ARL	LARL	ADEFF	LADEFF	TENURE	OPINION	Obs.
BIG4	51.51	3.91	15720	9.11	2.36	0.05	703
NBIG4	52.61	3.92	5079	8.42	2.25	0.16	414
KPMG	52.20	3.93	12838	8.94	2.33	0.03	234
E&Y	51.19	3.89	17589	9.33	2.35	0.07	146
D&T	48.85	3.86	16339	9.08	2.38	0.07	176
PWC	53.92	3.97	17710	9.21	2.37	0.05	147
BDO	51.94	3.92	5024	8.42	2.19	0.13	70
GRANT	64.98	4.14	5005	8.33	2.04	0.31	52
HORWATH	53.38	3.94	4149	8.30	2.09	0.21	34

The reported amounts are based on Omani Rial. On average Omani Rial equals 2.60 US$.

we opt to maintain available observation(s) for each firm, resulting in unbalanced panel data as this type of data is more advantageous [1]. In the supplementary file (Excel file) labeled "Dataset for audit effectiveness and efficiency in Oman", these firms are grouped by three types of industry classification: major industries, 1-digit GSIC, and 2-digit US industry classifications. Tables 2 and 3 provide definitions and statistical description for the variables included in the dataset; the Excel file comprises the raw and filtered data for all variables reported in Table 2, in addition to the names of firms, industry classifications, and audit firms' names. We use the same acronyms for the main variables in the supplementary file as reported in Tables 2 and 3. For brevity, we

Table 3
Definitions of Variables.

Variable	Definitions for main variables
ARL	Number of days between yearend date and the date of issuing the audit report.
LARL	Natural log of days between yearend date and the date of issuing the audit report.
ADFEE	Amount of fees paid to external auditor for statuary audit.
LADFEE	Natural log of fees paid to external auditor for statuary audit.
TYPE	Indicator variable equals 1 if the company is audited by one of big4 audit firms, 0 otherwise.
TENURE	Number of consecutive years the auditor continues to audit the company's financial reports.
OPINION	Indicator variable equals 1 if the company is audited by one of big4 audit firms, 0 otherwise.
	Definitions for auditor type
BIG4	Indicator for external auditor if this auditor is classified as KPMG, E&Y, D&T, or PWC.
NBIG4	Indicator for external auditors other than big4 audit firms.
KPMG	Indicator for the KPMG audit firm.
E&Y	Indicator for the Ernst & Young audit firm.
D&T	Indicator for the Deloitte Touche audit firm.
PWC	Indicator for the PricewaterhouseCoopers audit firm.
BDO	Indicator for the BDO audit firm.
GRANT	Indicator for the Grant Thornton audit firm.
HORWATH	Indicator for the Crowe Horwath International audit firm.

detail the names of big4 and second-tier audit firms because they are more focused types of auditors; the names of other audit firms can be found in the supplementary file.

Referring to Table 2, the descriptive statistics such as mean, median, standard deviation, minimum, maximum, 25 percentile, and 75 percentile for audit report lag, audit fees, auditor type, tenure, and audit opinion are reported. These descriptive statistics were extended (using means) to describe these variables based on the type of auditor (e.g., big4; non-big4). Table 3 shows the definitions of these variables.

2. Experimental Design, Materials and Methods

This dataset article includes proxies for audit effectiveness and efficiency as used by several prior researchers [2,3]. The proxies for audit effectiveness and efficiency were manually collected and built using secondary data obtained from publicly available data for the period 2005 to 2019. In particular, audit report lag (*ARL*), auditor type (*TYPE*), and audit opinion (*OPINION*) data were collected from audit reports, while audit fees (*ADFEE*) and auditor tenure (*TENURE*) were obtained from corporate governance reports. Following prior research, two further variables were extracted from audit report lag and audit fees, namely natural log of audit report lag (*LARL*) and natural log of audit fees (*LADFEE*). As in the supplementary file, three industry classifications were included (Industrial and Service classification, 1-digit GSIC classification, and 2-digit US classification), in addition to the name of each auditor in a particular year. Collectively, these classifications were based on data available in the Omani capital market's website and OSIRIS database. These supplementary data in the file can be helpful for building additional audit effectiveness variables, such as industry expertise auditor, client importance, auditor independence, and firm-specific expertise. However, we have left the construction of these further variables to the choice of potential users, as the literature does not provide an agreed definition or measure. Thus, this dataset allows users to build these measures from their own perspectives.

Ethics Statement

No ethical issues are associated with this work.

CRediT Author Statement

Baatwah Saeed: Methodology, data curation, writing results and discussion; **Aljaaidi Khaled:** Writing - original draft preparation, writing - reviewing and editing.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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Supplementary Materials

Supplementary material associated with this article can be found in the online version at doi:10.1016/j.dib.2021.107061.

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