

RegData India Technical Documentation

Purpose:

RegData India is part of the RegData project that looks to quantify the regulation in a given jurisdiction's regulatory and legislative code and other regulatory documents. RegData India currently includes federal legislation promulgated in the form of Acts of Parliament by the Government of India, as well as all state legislation related to education promulgated by the relevant state authorities. The quantified legislative documents will provide accurate and informative regulatory data that can be used in a wide variety of research applications.

Content:

RegData India currently quantifies the Acts of Parliament for the Government of India in force as of 2020, and all state legislation related to education in force as of 2020.

Technical Notes:

Federal and State:

- The text included in this dataset was provided in its original form by India's [Centre for Civil Society](#) (CCS).
- Even though each dataset has gone through extensive quality assurance checks, the data is only as good as the source documents. Some source documents could have been not uploaded by government officials, uploaded to incorrect areas, or scanned in a format unreadable by computers. While the data is highly accurate, it is always recommended to spot check source documents when the data is not being used in aggregate.
 - Original data consists entirely of documents stored as PDFs, the majority of which contained an embedded text layer from which we gathered the text, but a number of which needed the application of optical character recognition (OCR) technology to recognize text from scanned images. A number of the PDFs also suffered quality issues in terms of encoding errors occurring when attempting to collect text from the PDF's embedded text layer, resulting in distorted text.
 - As a result of the above quality issues, the India dataset was aggregated through processing all of the original documents in two ways, one where all documents have OCR applied to them, and one where only documents that do not have embedded text layers have OCR applied. We then compare which version of the cleaned document text has the higher restriction count and select that version.
 - This process increased total restriction count over our normal procedure by a small amount, reflecting better results of applying OCR to some documents that we normally would have simply the embedded text layer

from. This new process underwent internal QA to ensure that these increased restrictions were not false positives.

- We manually removed Hindi language content from one document after cleaning, as it decoded into garbled text that artificially inflated the word count of that document. There may be other documents with minor amounts of Hindi in the title or preface of the page, but these incidents were not severe enough to be detected by two separate language detection algorithms applied to each document.
- Note: This branch of RegData includes a set of unique restrictive terms that were identified by the team at CCS. The methodology for deriving these particular terms can be found [here](#).
 - Due to the conceptual nature of these unique terms, which searches not only for terms that restrict private action like ours, but also for terms to do with punishment or penalizing individuals, we will divide these terms and terms used for other RegData projects into two series.
 - The first series contains only the restrictive terms used in other jurisdictions covered by the RegData projects, while a separate data series contains the particular terms used by the team at CCS, which is labeled “Restrictions and Punishments.” Analysts seeking to make direct comparisons between India and other jurisdictions should use the standard restrictive terms for their analysis. See the variable descriptions section for a complete list of terms used in each data series.

Citation:

If you use federal India data, please cite:

McLaughlin, Patrick A. and Walter Stover. RegData India (dataset). QuantGov, Mercatus Center at George Mason University, Arlington, VA, 2020.
<https://quantgov.org/regdata-india/>.

If you use state India data, please cite:

McLaughlin, Patrick A. and Walter Stover. RegData India (dataset). QuantGov, Mercatus Center at George Mason University, Arlington, VA, 2020.
<https://quantgov.org/regdata-india/>.

RegData India Federal:

Current Version: 1.0

Release Date: 01-20-2021

RegData India State:

Current Version: 1.0

Release date: 01-20-2021

Variable Descriptions:

Dataset	Variable	Description
Metadata	document_id	The unique identifier for a document. This variable appears in each dataset and should be used to merge data.
	document_name	The title of the document.
	words	Total number of words in the document.
	shall, must, may not, required, prohibited	Standard restrictive terms used across all RegData projects.
	prohibited, prohibition, prohibit, shall be punishable, shall be punished, imprisonment, fine, restrictions, shall be liable, cancel, impose, guilty of	Restrictions and Punishment terms used by the team at CCS for analyzing documents at the national level.
	bound, binding, deemed to be guilty, comply, impose, shall be punishable, punished, fine, withdrawal, withdraw, suspended, suspend, supersede, shall be liable, discontinue, contravenes, contravene, seize	Restrictions and Punishment terms used by the team at CCS to analyze documents at the state level.
	restrictions	Total aggregate amount of terms in a given series, either Standard Restrictive terms or Restrictions and Punishments. This will never represent any addition between the two series.

Complexity	document_id	The unique identifier for a document. This variable appears in each dataset and should be used to merge data.
	shannon_entropy	Measurement of the likelihood of encountering new words and concepts in a given document.
	conditionals	Total count of the number of "branching words" such as "if", "but", and "provided" that identify logical branches in a document.
	sentence_length	Measurement of the average length of sentences in a document.
	flesch_reading_ease	Readability of a document with a higher score meaning the document is more readable. Metric information found here .