

# Package ‘WDI’

January 20, 2025

**Title** World Development Indicators and Other World Bank Data

**Description** Search and download data from over 40 databases hosted by the World Bank, including the World Development Indicators (‘WDI’), International Debt Statistics, Doing Business, Human Capital Index, and Sub-national Poverty indicators.

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**LazyData** yes

**Type** Package

**LazyLoad** yes

**Encoding** UTF-8

**Version** 2.7.8

**URL** <https://vincentarelbundock.github.io/WDI/>

**Depends** R (>= 3.5.0)

**Imports** jsonlite

**Suggests** curl, testthat, tidyr (>= 0.8.0)

**RoxygenNote** 7.2.1

**License** GPL-3

**NeedsCompilation** no

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**Repository** CRAN

**Date/Publication** 2022-09-25 11:10:02 UTC

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WDI-package	<i>Search, extract, and format data from the World Bank</i>
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**Description**

Search, extract and format data from the World Bank's World Development Indicators

**Details**

The WDI function provides convenient access to over 40 databases hosted by the World Bank, including the World Development Indicators (WDI), International Debt Statistics, Doing Business, Human Capital Index, and Sub-national poverty indicators. For fast searching, the WDI package ships with a local list of available data series. This local list can be updated to the latest version using the WDIcache function.

**Author(s)**

Vincent Arel-Bundock <vincent.arel-bundock@umontreal.ca>

**References**

<http://arelbundock.com> <https://github.com/vincentarelbundock/WDI>

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languages_supported	<i>List of supported languages</i>
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**Description**

This prints two lists of languages, the fully supported ones and the locally supported ones: \* the languages in the category "fully" will return translated names and other info for all countries. \* the languages in the category "partially" will return translated names and other info only for the country they represent.

**Usage**

```
languages_supported()
```

**Details**

For example, choosing "vi" (for Vietnamese) will translate "Vietnam" in the dataset but other country names won't be translated and will be empty.

**Value**

A list of fully and partially supported languages.

**Description**

Downloads the requested data by using the World Bank's API, parses the resulting XML file, and formats it in long country-year format.

**Usage**

```
WDI(
  country = "all",
  indicator = "NY.GDP.PCAP.KD",
  start = 1960,
  end = NULL,
  extra = FALSE,
  cache = NULL,
  latest = NULL,
  language = "en"
)
```

**Arguments**

country	Vector of countries (ISO-2 character codes, e.g. "BR", "US", "CA") for which the data is needed. Using the string "all" instead of individual iso codes pulls data for every available country.
indicator	Character vector of indicators codes. See the <code>WDIsearch()</code> function. If you supply a named vector, the indicators will be automatically renamed: <code>'c('women_private_sector' = 'BI.PWK.PRVS.FE.ZS')</code>
start	Start date, usually a year in integer format. Must be 1960 or greater.
end	End date, usually a year in integer format. Must be greater than the 'start' argument. If 'NULL', the end date is set to 5 years in the future.
extra	TRUE returns extra variables such as region, iso3c code, and incomeLevel. See Details.
cache	NULL (optional) a list created by <code>WDIcache()</code> to be used with the <code>extra=TRUE</code> argument.
latest	Integer indicating the number of most recent non-NA values to get. Default is NULL. If specified, it overrides the start and end dates.
language	ISO-2 code in lower case indicating in which language the characters should be provided. List of languages available with <code>'WDI::languages_supported()'</code> . Default is English.

## Details

It is possible to only specify the ‘indicator‘ and the ‘country‘ arguments, in which case ‘WDI()‘ will return data from 1960 to the last year available on World Bank’s website. It is also possible to get only the most recent non-NA values, with ‘latest‘.

If ‘extra = TRUE‘, additional variables are provided:

- status: observation status, e.g is the observation a forecast?
- iso3c
- region
- capital: name of the capital city
- latitude, longitude
- income: income categories of the World Bank
- lending

## Value

Data frame with country-year observations. You can extract a data.frame with indicator names and descriptive labels by inspecting the ‘label‘ attribute of the resulting data.frame: ‘attr(dat, ‘label’)‘

## Author(s)

Vincent Arel-Bundock <vincent.arel-bundock@umontreal.ca>

## Examples

```
## Not run:

WDI(country="all", indicator=c("AG.AGR.TRAC.NO", "TM.TAX.TCOM.BC.ZS"),
      start=1990, end=2000)
WDI(country=c("US", "BR"), indicator="NY.GNS.ICTR.GN.ZS", start=1999, end=2000,
      extra=TRUE, cache=NULL)

# Rename indicators on the fly
WDI(country = 'CA', indicator = c('women_private_sector' = 'BI.PWK.PRVS.FE.ZS',
                                  'women_public_sector' = 'BI.PWK.PUBS.FE.ZS'))

# Get the 5 latest non-NA values
WDI(country=c("US", "BR"), indicator="NY.GNS.ICTR.GN.ZS", latest = 5)

## End(Not run)
```

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WDIbulk

*Download all the WDI indicators at once.*

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**Description**

Download all the WDI indicators at once.

**Usage**

```
WDIbulk(timeout = 600)
```

**Arguments**

timeout            integer maximum number of seconds to wait for download

**Value**

Data frame

a list of 6 data frames: Data, Country, Series, Country-Series, Series-Time, FootNote

**Author(s)**

Vincent Arel-Bundock <vincent.arel-bundock@umontreal.ca>

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WDIcache

*Update the list of available WDI indicators*

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**Description**

Download an updated list of available WDI indicators from the World Bank website. Returns a list for use in the WDIsearch function.

**Usage**

```
WDIcache()
```

**Value**

Series of indicators, sources and descriptions in two lists list

**Note**

Downloading all series information from the World Bank website can take time. The WDI package ships with a local data object with information on all the series available on 2012-06-18. You can update this database by retrieving a new list using WDIcache, and then feeding the resulting object to WDIsearch via the cache argument.

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WDIsearch	<i>Search names and descriptions of available WDI series</i>
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**Description**

Data frame with series code, name, description, and source for the WDI series which match the given criteria

**Usage**

```
WDIsearch(string = "gdp", field = "name", short = TRUE, cache = NULL)
```

**Arguments**

string	Character string. Search for this string using <code>grep</code> with <code>ignore.case=TRUE</code> .
field	Character string. Search this field. Admissible fields: <code>'indicator'</code> , <code>'name'</code> , <code>'description'</code> , <code>'sourceDatabase'</code> , <code>'sourceOrganization'</code>
short	TRUE: Returns only the indicator's code and name. FALSE: Returns the indicator's code, name, description, and source.
cache	Data list generated by the <code>WDIcache</code> function. If omitted, <code>WDIsearch</code> will search a local list of series.

**Value**

Data frame with code, name, source, and description of all series which match the criteria.

**Examples**

```
## Not run:
WDIsearch(string='gdp', field='name', cache=NULL)
WDIsearch(string='AG.AGR.TRAC.NO', field='indicator', cache=NULL)

## End(Not run)
```

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WDI_data	<i>World Development Indicators series and country information</i>
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**Description**

A list of two character matrices.

**Usage**

```
WDI_data
```

**Format**

List of 2 data frames

**Details**

The first character matrix includes a full list of WDI series. This list is updated semi-regularly. Users can refresh the list manually using the 'WDIcache()' function and search in the updated list using the 'cache' argument.

- id WDI indicator code
- name Short name of the series
- sourceNote Detailed description provided by the source
- source Source database
- sourceOrganization Source organization

The second character matrix includes extra country information (updated 2012-06-18):

- iso3c ISO 3-letter country code
- iso2c ISO 2-letter country code
- country Country name (long English form)
- region Region
- capital Capital
- longitude Longitude
- latitude Latitude
- income Income level as defined by the World Bank
- lending Lending category, as defined by the World Bank

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