

## Databank API Response Schema

---

### *JSON Response Object Types*

Authored by	Software Development team
Abstract	JSON Response Object Types
Document type	Technical Design
Classification	Public
Document reference	Databank API Response Schema
Version	Version 2
Status	Final
Date of issue	22/04/2020
File location	N/A

## Data Response Entity

Field Name	Field Type	Description	Primary key?	Is nullable	Max value
<b>Results</b>	Array<>Dataserie>	An array of data series	No	No	N/A
<b>Count</b>	long	The number of data series in this data response	No	No	Unrestricted

## Dataserie Entity

Field Name	Field Type	Description	Primary key?	Is nullable	Max value
<b>DatabankCode</b>	string	The databank code of the databank this dataserie is part of	No	No	N/A
<b>ProductTypeCode</b>	string	Product type code of the product this dataserie is part of	No	No	N/A
<b>LocationCode</b>	string	The location code this dataserie is part of	No	No	N/A
<b>VariableCode</b>	string	The Variable code for this data series	No	No	N/A
<b>MeasureCode</b>	string	The measure that has been applied on this data series	No	No	N/A

<b>Quarter</b>	number	The quarter for this dataserie if applicable	No	Yes	4
<b>AnnualData</b>	Dictionary<string,float>	The annual data in a key value store where the Key is the Year and the value is the raw data value	No	No	N/A
<b>QuarterlyData</b>	Dictionary<string,float>	The annual data in a key value store where the Key is the {Year}0{Quarter} and the value is the raw data value	No	No	N/A
<b>MonthlyData</b>	Dictionary<string,float>	The annual data in a key value store where the Key is the Year:Month and the value is the raw data value	No	No	N/A
<b>Metadata</b>	<b>Metadata</b>	A rich metadata object for the dataserie	No	No	N/A

## Metadata Entity

Field Name	Field Type	Description	Primary key?	Is nullable	Max value
MeasureName	string	Indicates transformation applied to data. Possible values: Level, % change y/y, % change q/q, Difference y/y, Difference q/q, Annualised q/q.	No	No	N/A
AdditionalSourceDetails	string	Describes the composition of the variable.	No	No	N/A
Source	string	Original data provider	No	No	N/A
Units	string	Units of measure for variable data	No	No	N/A
SourceDetails	string	Abbreviated variable composition.	No	No	N/A
BaseYearIndex	string	Base year for index (where applicable).	No	No	N/A
SectorCoverage	string		No	No	N/A

<b>SeasonallyAdjusted</b>	bool	Indicators whether or not the dataserie is seasonally adjusted	<b>No</b>	<b>No</b>	<b>N/A</b>
<b>LastUpdate</b>	string	Indicates when this variable was last updated in the databank. E.g. 17 March 2018	<b>No</b>	<b>No</b>	<b>N/A</b>
<b>BaseYearPrice</b>	string	Base year for constant prices (where applicable).	<b>No</b>	<b>No</b>	<b>N/A</b>
<b>ImposedEndQuarter</b>	number		<b>No</b>	<b>Yes</b>	<b>N/A</b>
<b>ImposedEndYear</b>	number		<b>No</b>	<b>Yes</b>	<b>N/A</b>
<b>HistoricalEndQuarter</b>	number	The last quarter where the dataserie has historical data	<b>No</b>	<b>Yes</b>	<b>N/A</b>
<b>HistoricalEndYear</b>	number	The last year where the dataserie has historical data	<b>No</b>	<b>Yes</b>	<b>N/A</b>
<b>Author</b>	string	The economist responsible for the data series	<b>No</b>	<b>No</b>	<b>N/A</b>
<b>AuthorTelephone</b>	string	Contact number for the economist responsible for the data series	<b>No</b>	<b>No</b>	<b>N/A</b>
<b>AuthorEmail</b>	string	Email for the economist responsible for the data series	<b>No</b>	<b>No</b>	<b>N/A</b>

<b>ScaleFactor</b>	string	The scale factor of the dataserie	<b>No</b>	<b>No</b>	<b>N/A</b>
<b>DatabankName</b>	string	The databank name of the databank this dataserie is part of	<b>No</b>	<b>No</b>	<b>N/A</b>
<b>Location</b>	string	The location name this dataserie is part of	<b>No</b>	<b>No</b>	<b>N/A</b>
<b>Description</b>	string		<b>No</b>	<b>No</b>	<b>N/A</b>
<b>HasQuarterly</b>	bool	Indicating whether or not this dataserie contains quarterly data	<b>No</b>	<b>No</b>	<b>N/A</b>
<b>CategoryDescription</b>	string		<b>No</b>	<b>No</b>	<b>N/A</b>

## Natural Key

A natural key for each data series row can be created by concatenating the column values of various columns which together serve to uniquely identify each series.

For a data table containing horizontal year/year-quarter data values, these will be: **LocationCode**, **IndicatorCode**, **MeasureCode**, **Units**, and **ScaleFactor**.

If quarterly data series are stacked on a **Period** column, then concatenate **Period** values to the natural key.

If the horizontal year values are unpivoted (i.e. the data table is reshaped) to have one column of year values (call it **Year**) and another with their values (call it **Value**), then concatenate **Year** values to the natural key.

Similarly, if you unpivot horizontal year-quarter values, you will have three columns, **Year**, **Quarter**, and **Value**, so should concatenate **Year** and **Quarter** values to the natural key.

API Json Response Field	Excel Add-in Column	Generic Data Type	Power Query/Pivot Type	SQL Field Type	Note
DatabankCode	+++NOT SUPPLIED+++	String	String	VARCHAR(16)	
ProductTypeCode	+++NOT SUPPLIED+++	String	String	VARCHAR(16)	
Metadata.Location	Location	String	String	VARCHAR(512)	
Metadata.IndicatorName	Indicator	String	String	VARCHAR(512)	
Metadata.Units	Units	String	String	VARCHAR(32)	
Metadata.ScaleFactor	Scale	String	String	VARCHAR(128)	
Metadata.MeasureName	Measurement	String	String	VARCHAR(16)	
Metadata.Source	Source	String	String	VARCHAR(256)	
Metadata.SeasonallyAdjusted	Seasonally adjusted	Boolean	Boolean	BOOL	
Metadata.BaseYearPrice	Base year price	String	String	VARCHAR(16)	
Metadata.BaseYearIndex	Base year index	String	String	VARCHAR(16)	
Metadata.HistoricalEndYear	Historical end year	Int64	Year	YEAR	
Metadata.HistoricalEndQuarter	Historical end quarter	Int64	Int	INT(1)	
Metadata.LastUpdate	Date of last update	String	Date	DATE	Format: Day Month Year, e.g. 20 August 2019
Metadata.SourceDetails	Source details	String	String	VARCHAR(256)	
Metadata.AdditionalSourceDetails	Additional source details	String	String	VARCHAR(512)	
LocationCode	Location code	String	String	VARCHAR(16)	
VariableCode	Indicator code	String	String	VARCHAR(16)	
MeasureCode	+++NOT SUPPLIED+++	String	String	VARCHAR(16)	
Year (+++CALCULATED+++ from QuarterlyData.YYYYNN, see note)	Year	String   Int16	Year	YEAR	Using QuarterlyData.YYYYNN, for quarterly data this is a conversion of first four characters of YYYYNN key to string or whole number depending on your use case

API Jsn Response Field	Excel Add-in Column	Generic Data Type	Power Query/Pivot Type	SQL Field Type	Note
Year (+++CALCULATED+++ from AnnualData.YYYY, see note)	Year	String   Int16	Year	YEAR	Using AnnualData.YYYY, for annual data this is a conversion of YYYY key to string or whole number depending on your use case
Quarter (+++CALCULATED+++ from QuarterlyData.YYYYNN, see note)	Quarter	String   Int16	String	VARCHAR(16)	Using QuarterlyData.YYYYNN, for quarterly data this is conversion of last two characters of YYYYNN key to string or whole number depending on your use case
Period (+++CALCULATED+++ from QuarterlyData.YYYYNN, see note)	Period	String   Int16	String	VARCHAR(16)	Using QuarterlyData.YYYYNN, for quarterly data this is conversion of last two characters of YYYYNN key to string or whole number depending on your use case
Data (+++CALCULATED+++ from QuarterlyData.YYYYNN, see note)	Data	String   Double	String	VARCHAR(26)	Using QuarterlyData.YYYYNN as the key, Data is the value for this key. This field can contain a variety of types including integers, variable-precision floats, as well as the string “NA”, representing a missing value. We cast all of these to a string before writing to CSV. You must take care to handle "NA" if you wish to cast to decimal values.
Data (+++CALCULATED+++ from AnnualData.YYYY, see note)	Data	String   Double	String	VARCHAR(26)	using AnnualData.YYYY as the key, Data is the value for this key. This field can contain a variety of types including integers, variable-precision floats, as well as the



API Json Response Field	Excel Add-in Column	Generic Data Type	Power Query/Pivot Type	SQL Field Type	Note
					string "NA", representing a missing value. We cast all of these to a string before writing to CSV. You must take care to handle "NA" if you wish to cast to decimal values.
Unique id (+++CALCULATED+++ see note)	Unique id	String	String	VARCHAR(64)	Concatenation of [LocationCode]&[Variable Code]&[Metadata.MeasureName]&[Metadata.Units]&[Metadata.ScaleFactor]&[QuarterlyData.YYYYNN] OR [AnnualData.YYYY]
Series id (+++CALCULATED+++ see note)	Series id	String	String	VARCHAR(64)	Concatenation of [LocationCode]&[Variable Code]&[Metadata.MeasureName]&[Metadata.Units]&[Metadata.ScaleFactor]
Metadata.Description	Description	String	String	VARCHAR(128)	
Metadata.ScenarioName	Scenario	String	String	VARCHAR(64)	
Metadata.MarketSectorName	Market Sector	String	String	VARCHAR(64)	
Metadata.IncomeBandName	Income Band	String	String	VARCHAR(64)	
Metadata.HasQuarterly	+++NOT SUPPLIED+++	Boolean	Boolean	BOOL	
Metadata.CommodityName	+++NOT SUPPLIED+++	String	String	VARCHAR(64)	
Metadata.DatabankName	+++NOT SUPPLIED+++	String	String	VARCHAR(64)	
Metadata.AuthorEmail	+++NOT SUPPLIED+++	String	String	VARCHAR(64)	
Metadata.Author	+++NOT SUPPLIED+++	String	String	VARCHAR(64)	
Metadata.AuthorTelephon	+++NOT SUPPLIED+++	String	String	VARCHAR(64)	

API Jsn Response Field	Excel Add-in Column	Generic Data Type	Power Query/Pivot Type	SQL Field Type	Note
e					
Metadata.ImposedEndYear	+++NOT SUPPLIED+++	String	String	YEAR	
Metadata.ImposedEndQuarter	+++NOT SUPPLIED+++	String	String	INT(1)	
Metadata.SectorCoverage	+++NOT SUPPLIED+++	String	String	VARCHAR(64)	
Metadata.AnnualTypeCode	+++NOT SUPPLIED+++	String	String	VARCHAR(16)	
Metadata.PartnerName	+++NOT SUPPLIED+++	String	String	VARCHAR(64)	
Metadata.CategoryDescription	+++NOT SUPPLIED+++	String	String	VARCHAR(64)	
+++OPTIONALLY SUPPLIED DEPENDING ON DATABANK+++	Country	String	String	VARCHAR(64)	
+++OPTIONALLY SUPPLIED DEPENDING ON DATABANK+++	Product / Service	String	String	VARCHAR(256)	
+++OPTIONALLY SUPPLIED DEPENDING ON DATABANK+++	Origin	String	String	VARCHAR(128)	
+++OPTIONALLY SUPPLIED DEPENDING ON DATABANK+++	Country / Region	String	String	VARCHAR(64)	