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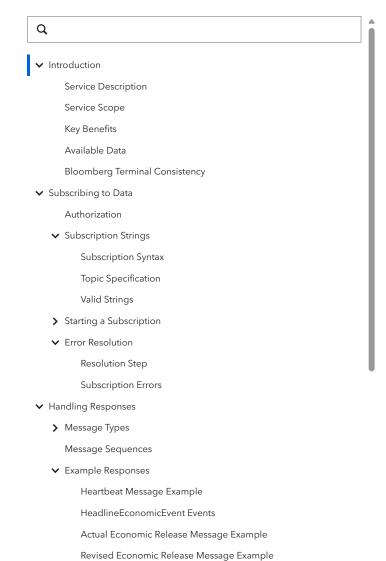
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Economic Data



Survey Consensus Message Example

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Macro Indicator Service data delivers real-time data streams in three flavors:

- Calendar: Forward looking calendar for upcoming economic release schedules.
- Surveys: Economist survey consensus.
- Actuals: Actual economic release.

NOTE

This service does not require EID enablement.

Service Scope

The Macro Indicator Service is available via the <u>Bloomberg API</u> (BLPAPI) over B-PIPE port 8194.

This API endpoint allows you to access macro economic data: //blp/economic-data

Key Benefits

Features	Benefits		
Global indicator coverage Provides a comprehensive view of macro indicators, allowing investors to track events on a global scale.			
Market-moving events	An actively curated set of key market-moving economic indicators, as reported by the source. Bloomberg News ensures availability of the most relevant real-time macro events at any given poir		
Real-time notifications via BLPAPI	Timely access to the latest economic release information facilitates time-sensitive investment and trading decisions via a standard Bloomberg API.		
Purpose-built schema	Strongly typed fields allow for robust, programmatic consumption of the latest macroeconomic information across regions in a manner agnostic to the source (e.g., web, press release, live even		

Available Data

Sources

Economic data sources include government agencies, central banks, statistical agencies, and third-party research institutions.

Coverage

≈3,000 global market moving economic indicators for 110+ countries.

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Subscribing to Data

HINT !

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For detailed guidance on subscribing to real-time data using the Bloomberg API (BLPAPI), see <u>Bloomberg API Guide > Subscriptions</u>.

Authorization

You must start the BLPAPI session in application-only mode and be authorized via the //blp/apiauth service.

Examples of creating a session, authorizing, and subscribing to real-time services appear in the BLPAPI SDK. You can download the SDK for your preferred programming language from the BDEV D

NOTE

The minimum recommended BLPAPI version required for Java and .NET applications to run correctly is 3.24.11.

Subscription Strings

Subscription Syntax

The subscription naming convention followed in the Macro Indicator Service is as follows:

//<service name>/<topic name>/<security identifier>

Where:

Convention	Description	Examples
<service name=""></service>	The name of the service to which you want to subscribe.	//blp/economic-data
<topic name=""></topic>	The name of the topic for which you want to receive notifications.	/headline-actuals/ticker/
		/headline-surveys/bbgid/
		/release-calendar/ticker/

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Topic Specification

The Macro Indicator Service provides a ticker-based subscription model. The service only supports topics that contain index securities with a valid ticker or Bloomberg ID (FIGI).

Valid Topics

To specify the topic, use one of these valid topic types:

Request normalized data using the ID_BB_GLOBAL (Bloomberg ID or FIGI).

Торіс Туре	Description			
/headline-actuals/ticker	Request actual release data using a parskeyable description.			
/headline-actuals/bbgid	quest actual release data using the ID_BB_GLOBAL (Bloomberg ID or FIGI).			
/headline-surveys/ticker	Request survey data using a parskeyable description.			
/headline-surveys/bbgid	Request survey data using the ID_BB_GLOBAL (Bloomberg ID or FIGI).			
/release-calendar/ticker	Request forward looking calendar data using a parskeyable description.			
/release-calendar/bbgid	Request forward looking calendar data using the ID_BB_GLOBAL (Bloomberg ID or FIGI).			

Valid Tickers

To specify the ticker, use one of these valid ticker types:

Ticker Type	Description
/ticker/	Request data using ticker. The Macro Indicator Service only accepts equity instruments in this format: /ticker/ <ticker> <exchange code=""> Index.</exchange></ticker>
/bbgid/	Request data using ID_BB_GLOBAL (Bloomberg ID or FIGI).

Bloomberg ID

ID_BB_GLOBAL is a twelve-character, alphanumeric identifier for an exchange-traded instrument. For example, the topic /bbgid/BBG002SBQKM3 represents a subscription to US Initial Jobless Claims,

Case Sensitivity

The topic prefixes are case-sensitive (all lower case):

/ticker/

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• /bbgid/bbg002sbqkm3 or /bbgid/BBG002SBQKM3



You will only receive data for the economic indicator associated with the instrument specified in the topic.

Valid Strings

Based on the above ticker and topic specifications, these are examples of valid strings for actual, survey and calendar data subscriptions:

Topic Name	Ticker	Fully Qualified Subscription String
/headline- actuals/ticker/	/INJCJC Index/	//blp/economic-data/headline-actuals/ticker/INJCJC Index
/headline- surveys/ticker/	/INJCJC Index/	//blp/economic-data/headline-surveys/ticker/INJCJC Index
/release- calendar/ticker/	/INJCJC Index/	//blp/economic-data/release-calendar/ticker/INJCJC Index
/headline-actuals/bbgid/	/BBG002SBQKM3/	//blp/economic-data/headline-actuals/bbgid/BBG002SBQKM3
/headline-surveys/bbgid/	/BBG002SBQKM3/	//blp/economic-data/headline-surveys/bbgid/BBG002SBQKM3
/release-calendar/bbgid/	/BBG002SBQKM3/	//blp/economic-data/release-calendar/bbgid/BBG002SBQKM3

Starting a Subscription

Example Subscription

To subscribe to the Macro Indicators Service,

- 1. Enter the service name //blp/economic-data.
- 2. Specify the content, either /headline-actuals/, /headline-surveys/ or /release-calendar/
- 3. Enter the topic containing an index ticker or bbgid identifier.

In this example, you are opening the service and subscribing to the Macro Indicators data feed via B-PIPE for the following indicators: US Initial Jobless Claims and US CPI Urban Consumers YoY

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```
3
    SubscriptionList subscriptions;
    // Actual release subscriptions
    subscriptions.add("/headline-actuals/ticker/INJCJC Index");
    subscriptions.add("/headline-actuals/ticker/CPI YOY Index");
    subscriptions.add("/headline-actuals/bbgid/BBG002SBQKM3"); // INJCJC Index
    subscriptions.add("/headline-actuals/bbgid/BBG002SBDLF3"); // CPI YOY Index
10
11
    // Survey consensus subscriptions
12
    subscriptions.add("/headline-surveys/ticker/INJCJC Index");
13
    subscriptions.add("/headline-surveys/ticker/CPI YOY Index");
    subscriptions.add("/headline-surveys/bbgid/BBG002SBQKM3"); // INJCJC Index
    subscriptions.add("/headline-surveys/bbgid/BBG002SBDLF3"); // CPI YOY Index
16
17
    // Calendar subscriptions
    subscriptions.add("/release-calendar/ticker/INJCJC Index");
    subscriptions.add("/release-calendar/ticker/CPI YOY Index");
19
    subscriptions.add("/release-calendar/bbgid/BBG002SBQKM3"); // INJCJC Index
20
21
    subscriptions.add("/release-calendar/bbgid/BBG002SBDLF3"); // CPI YOY Index
   session.subscribe(subscriptions);
```

Error Resolution

Resolution Step

Before starting a subscription, the BLPAPI validates the topic in a resolution step.

- If topic resolution was successful, a SubscriptionStarted message appears.
- If topic resolution was unsuccessful, a SubscriptionFailure message appears with information about the error.

Subscription Errors

Expected SubscriptionFailure errors include:

Code	Category	Description	Scenario
5	PERMISSION_ERROR	"Requester is not entitled to subscribe"	Requester is not entitled for Macro
5	INVALID_SUBSCRIBER_TOPIC	"Identifier provided is invalid or not recognized"	Identifier provided is not a valid/re
1	INVALID_SUBSCRIBER_TOPIC	"Malformed topic string"	Topic format is not supported

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	INVALID_SUBSCRIBER_TOFIC	Invallu lu_bb_GEODAE Specifieu, Shoulu consist of 12 aiphanumeric characters	me entity provided with topic typ			
1	INVALID_SUBSCRIBER_TOPIC	"Invalid ticker type. Supported ticker types are: Index"	The ticker is not an Index instrume			
1	INVALID_SUBSCRIBER_TOPIC	"Invalid subscription type."	Subscription type not supported.			
3	NO_DATA_AVAILABLE	"Instrument not in coverage"	There is no economic data availab			
2	INTERNAL_ERROR	"Internal error occurred, please retry request or contact Bloomberg Support."	Internal error occurred, please ret			

Handling Responses

HINT !

For detailed guidance on handling Events returned via the Bloomberg API, see Bloomberg API Guide > Event Handling.

Message Types

Message Specification

The Macro Indicators Service responds with these message types:

Message	Data Type	Description
Heartbeat	Heartbeat	Subscription is active
EconomicEvent	EconomicEvent	Macro/economic event information

Heartbeat Messages

Heartbeat messages provide a recurring message at regular five-minute intervals indicating that your connection is active. Because economic events are sporadic and there may be long periods of

Economic Messages

EconomicEvent messages contain the specified economic indicator information. They include:

• HeadlineEconomicEvent: Contains raw actuals, revisions as reported by the source as well as survey consensus from economists.

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You can identify the messages sequences associated with a specific HeadlineEconomicEvent or HeadlineCalendarEvent data point with field EVENT_IDthat is unique to ticker and observation per

NEW Message

Each series start with a NEW message containing newly announced actual release, revision data, survey consensus and forward looking event.

UPDATE Message

UPDATE messages come after the NEW message. They are sent when there are new estimates published, additional revisions are made to previously revised value or there has been a change to a sch

DELETE Message

If a release needs to be removed, a DELETE message will be sent over the feed. This indicates the invalidation of a data point that was sent over the feed.

Example Responses

Appearing below are example response messages. These messages represent typical messages, but they are not related to specific economic release events.

Heartbeat Message Example

```
JSON
```

HeadlineEconomicEvent Events

Below are example HeadlineEconomicEvent push events.

Actual Economic Release Message Example

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15 16 17 18 19 }	"SINGLE": "75.8" } }				



Sample message is for USB5IBA% Index US 5 year note bidder participation for observation period Mar 26, 2025 released at 13:00.

Revised Economic Release Message Example

```
EconomicEvent: {
2
3
             "HeadlineEconomicEvent": {
4
                 "ID_BB_GLOBAL": "BBG00563SQ16",
                 "PARSEKYABLE_DES": "ISSIMOM Index",
                 "DESCRIPTION": "Israel Industrial Production Manufacturing SA MoM",
6
                 "EVENT_TYPE": "REVISION",
8
                 "EVENT_SUBTYPE": "NEW",
9
                 "EVENT_ID": 2133945,
10
                 "OBSERVATION_PERIOD": "Jan",
11
                 "ECO_RELEASE_DT": {
                      "DATETIME": "2025-03-26T07:00:00.000-04:00"
12
13
                 "VALUE": {
14
15
                     "SINGLE": "3.1"
16
17
                 "PRIOR_VALUE": {
18
                     "SINGLE": "2.6"
19
20
                 "REVISION METADATA": {
```

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29 }		



Sample message is for ISSIMOM Index Israel Industrial Production Manufacturing indicator's revised value for Dec observation period released back in Feb 23, 2025. Revision value was announced or

Survey Consensus Message Example

```
EconomicEvent: {
2
3
             "HeadlineEconomicEvent": {
4
                 "ID_BB_GLOBAL": "BBG002SFX451",
5
                 "PARSEKYABLE_DES": "RSRSTMOM Index",
                 "DESCRIPTION": "Retail Inventories Seasonally Adjusted Month over Month change",
 7
                 "EVENT_TYPE": "ESTIMATE",
8
                 "EVENT_SUBTYPE": "UPDATE",
9
                 "EVENT_ID": 2159136,
10
                 "OBSERVATION_PERIOD": "Feb",
11
                 "ECO RELEASE DT": {
12
                     "DATETIME": "2025-03-27T08:30:00.000-04:00"
13
                 },
14
                 "VALUE": {
15
                     "DISTRIBUTION": {
16
                          "LOW": "0.0",
17
                          "HIGH": "1.0",
18
                          "MEDIAN": "0.6",
                          "AVERAGE": "0.5",
19
20
                          "STANDARD_DEVIATION": "0.3",
21
                          "NUMBER": "9"
22
23
```

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JSON

```
1
     EconomicEvent: {
2
3
             "HeadlineEconomicEvent": {
4
                 "ID_BB_GLOBAL": "BBG002SFGWS3",
 5
                 "PARSEKYABLE DES": "GKGNVQQ Index",
6
                 "DESCRIPTION": "Greece Real GDP SWDA QoQ",
7
                 "EVENT_TYPE": "ACTUAL",
8
                 "EVENT_SUBTYPE": "UPDATE",
9
                 "EVENT_ID": 2151105,
10
                 "OBSERVATION_PERIOD": "4Q",
11
                 "ECO_RELEASE_DT": {
12
                     "DATETIME": "2025-03-07T05:00:00.000-05:00"
13
14
                 "VALUE": {
15
                     "SINGLE": "0.9"
16
17
18
19
```

Forward Looking Calendar Event Message Example

```
1
    EconomicEvent: {
2
3
             "HeadlineCalendarEvent": {
4
                 "ID_BB_GLOBAL": "BBG002SRBT72",
5
                 "PARSEKYABLE_DES": "RBICRRP Index",
6
                 "DESCRIPTION": "Reserve Bank of India Cash Reserve Ratio Policy Announcement",
7
                 "EVENT_TYPE": "CALENDAR",
8
                 "EVENT_SUBTYPE": "NEW",
9
                 "EVENT ID": 2196759,
10
                 "OBSERVATION_PERIOD": "Jun 6",
11
                 "ECO_RELEASE_DT": {
12
                     "DATETIME": "2025-06-06T00:30:00.000-04:00"
13
14
                 "RELEASE_STATUS": "SCHEDULED"
15
16
17
```

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JSON

```
1
    EconomicEvent: {
2
3
             "HeadlineCalendarEvent": {
                 "ID_BB_GLOBAL": "BBGOOGFMLRL3",
4
5
                 "PARSEKYABLE_DES": "TNPOANRT Index",
6
                 "DESCRIPTION": "Tunisia Central Bank Rate Announcement Rate",
7
                 "EVENT_TYPE": "CALENDAR",
8
                 "EVENT_SUBTYPE": "UPDATE",
9
                 "EVENT_ID": 2051202,
10
                 "OBSERVATION_PERIOD": "Mar 26",
11
                 "ECO_RELEASE_DT": {
12
                     "DATETIME": "2025-03-26T11:03:00.000-04:00"
13
14
                 "RELEASE_STATUS": "RELEASED"
15
16
17
```

Removed Calendar Event Message Example

```
JSON
```

```
EconomicEvent: {
2
3
             "HeadlineCalendarEvent": {
4
                 "ID BB GLOBAL": "BBG00YFG1NL8",
                 "PARSEKYABLE_DES": "UKPPHIPY Index",
6
                 "DESCRIPTION": "UK PPI Inputs into Manufacturing YoY",
7
                 "EVENT_TYPE": "CALENDAR",
8
                 "EVENT_SUBTYPE": "DELETE",
9
                 "EVENT_ID": 2134219,
10
                 "OBSERVATION_PERIOD": "Feb",
11
                 "ECO_RELEASE_DT": {
12
                     "DATETIME": "2025-03-26T03:00:00.000-04:00"
13
14
                 "RELEASE_STATUS": "SCHEDULED"
15
16
17
```

Empty Message

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HeadlineEconomicEvent Actual Release Initial Paint Messages

```
JSON
1
2
         "EconomicEvent": {
3
             "HeadlineEconomicEvent": {
                 "ID_BB_GLOBAL": "BBG002SBQKM3",
4
5
                 "PARSEKYABLE_DES": "INJCJC Index",
6
                 "DESCRIPTION": "US Initial Jobless Claims SA",
7
                 "EVENT_TYPE": "ACTUAL",
                 "EVENT_SUBTYPE": "INITPAINT",
8
                 "EVENT_ID": 2076250,
9
10
                 "OBSERVATION PERIOD": "Mar 15",
11
                 "ECO_RELEASE_DT": {
12
                     "DATETIME": "2025-03-20T12:30:00+00:00"
13
14
                 "VALUE": {
15
                     "SINGLE": "223.0"
16
17
18
19
```

HeadlineEconomicEvent Survey Initial Paint Messages

```
JSON

1 {
2     "EconomicEvent": {
3         "HeadlineEconomicEvent": {
4                "ID_BB_GLOBAL": "BBG002SBQKM3",
5                "PARSEKYABLE_DES": "INJCJC Index",
6                 "DESCRIPTION": "US Initial Jobless Claims SA",
```

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```
16
                      "DISTRIBUTION": {
17
                          "LOW": "215.0",
18
                          "HIGH": "240.0",
19
                          "MEDIAN": "225.0",
20
                          "AVERAGE": "225.0",
21
                          "STANDARD_DEVIATION": "4.4",
22
                          "NUMBER": "42"
23
24
25
26
```

NOTE

Initial paint messages for forward looking calendar events will provide all known event dates up to 1 year at the time the subscription is made.

HeadlineCalendarEvent Initial Paint Messages

```
JSON
     "EconomicEvent": {
         "HeadlineCalendarEvent": {
             "ID_BB_GLOBAL": "BBG002SBQKM3",
             "PARSEKYABLE_DES": "INJCJC Index",
             "DESCRIPTION": "US Initial Jobless Claims SA",
             "EVENT_TYPE": "CALENDAR",
             "EVENT_SUBTYPE": "INITPAINT",
             "EVENT_ID": 2076251,
             "OBSERVATION_PERIOD": "Mar 22",
             "ECO RELEASE DT": {
                 "DATETIME": "2025-03-27T12:30:00+00:00"
             "RELEASE_STATUS": "SCHEDULED"
     "EconomicEvent": {
         "HeadlineCalendarEvent": {
             "ID_BB_GLOBAL": "BBG002SBQKM3",
             "PARSEKYABLE_DES": "INJCJC Index",
             "DESCRIPTION": "US Initial Jobless Claims SA",
```

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```
33 }
34 }
35 }
36 
37 {
38 "EconomicEvent": {
39 "HeadlineCalendarEvent": {
40 "ID_BB_GLOBAL": "BBG002SBQKM3",
41 "PARSEKYABLE_DES": "INJCJC Index",
42 "DESCRIPTION": "US Initial Jobless Claims SA",
43 "FVENT TYPE": "CALENDAR"
```

Data Specification

HeadlineEconomicEvent

The HeadlineEconomicEvent data type provides survey and release data for the most widely tracked market-moving economic indicators.

Field Name	Data Type	Minimum Occurrences	Maximum Occurrences	Description
ID_BB_GLOBAL	String	1	1	Immutable instrument-level identifier for the economic indicator.
PARSEKYABLE_DES	String	1	1	Specific identifier for a economic indicator (DS001).
EVENT_TYPE	EventType	1	1	Describes the nature of the economic release data point. More details in the <u>EventType</u> section b
EVENT_SUBTYPE	EventSubType	1	1	Nature of the event associated with a specific data point. Currently one of NEW, UPDATE, DELETE, a
DESCRIPTION	String	1	1	Description of the economic indicator.
EVENT_ID	String	1	1	Unique key for the specific economic event, defined by the release of actuals for a given observa
OBSERVATION_PERIOD	String	1	1	Specifies the observation period associated with release of actuals for a given economic indicate
ECO_RELEASE_DT	String	1	1	The expected (or completed) release time of actuals for a given economic indicator and observa
PRIOR_EVENT_ID	String	0	1	Unique key for the specific economic event, defined by the release of actuals for the revised obs
PRIOR_OBSERVATION_PERIOD	String	0	1	Specifies the observation period associated with the revision of actuals for a given economic ind
PRIOR_ECO_RELEASE_DT	String	0	1	The expected (or completed) release time of actuals for the revised economic indicator and obse

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Normalized

The HeadlineCalendarEvent data type provides all scheduled events for market-moving economic indicators.

Field Name	Data Type	Minimum Occurrences	Maximum Occurrences	Description
ID_BB_GLOBAL	String	1	1	Immutable instrument-level identifier for the economic indicator.
PARSEKYABLE_DES	String	1	1	Specific identifier for a economic indicator (DS001).
EVENT_TYPE	EventType	1	1	Describes the nature of the economic release data point. More details in the <u>EventType</u> section below.
EVENT_SUBTYPE	EventSubType	1	1	Nature of the event associated with a specific data point. Currently one of NEW, UPDATE, DELETE, and INI
DESCRIPTION	String	1	1	Description of the economic indicator.
EVENT_ID	String	1	1	Unique key for the specific economic event, defined by the release of actuals for a given observation p
OBSERVATION_PERIOD	String	1	1	Specifies the observation period associated with release of actuals for a given economic indicator (DZC
ECO_RELEASE_DT	String	1	1	The expected (or completed) release time of actuals for a given economic indicator and observation $p\varepsilon$
RELEASE_STATUS	String	1	1	Specifies the release status of the economic indicator - one of SCHEDULED or RELEASED.

EventType

EventType is an enumeration data type.

Enumeration Name	Enumeration Type	Enumeration Value	Description
EventType	String	ACTUAL	Actual value associated with the economic release, as announced by the source - applicable only to HeadlineEconomic
EventType	String	REVISION	Latest revised value for the economic release, as announced by the source - applicable only to HeadlineEconomicEven
EventType	String	ESTIMATE	Estimates associated with a given economic release, based on inputs from surveyed economists - applicable only to He
EventType	String	CALENDAR	A calendar event for the economic release schedule - applicable only to HeadlineCalendarEvent messages.

EventSubType

EventSubType is an enumeration data type.

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EventSubType		String	DELETE	Deletion of an existing data point.
EventSubType		String	INITPAINT	Initial state of an economic release. Recap a data point that was sent c

EcoReleaseDt

ECO_RELEASE_DT is the expected (or completed) release time in UTC of actuals for a given economic indicator and observation period, as currently known. There are three levels of granularity for when an indicator will be released, based on currently known information:

- 1. a specific time on a specific day (DATETIME).
- 2. a specific day with no certain time (DATE).
- 3. a range of days (DATERANGE).

Value

Value returns the value of the actual release or survey consensus distribution statistics.

Element	Name	Applicable EventType	Description
SINGLE	SINGLE	ACTUAL, REVISION	Value of the actual release.
DISTRIBUTION	HIGH	ESTIMATE	High of all survey estimates available for the current release of an economic index
DISTRIBUTION	LOW	ESTIMATE	Low of all survey estimates available for the current release of an economic index
DISTRIBUTION	MEDIAN	ESTIMATE	Median of all survey estimates available for the current release of an economic inc
DISTRIBUTION	AVERAGE	ESTIMATE	Average of all survey estimates available for the current release of an economic in
DISTRIBUTION	STANDARD_DEVIATION	ESTIMATE	Standard deviation of all survey estimates available for the current release of an e-
DISTRIBUTION	NUMBER	ESTIMATE	Survey number of observations.