

B-PIPE

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Introduction

Service Description

The Macro Indicator Service (`//blp/macro-indicators`) provides a ticker-based subscription model to access economic data for indicators of interest as real-time push messages. Streamed via the Bloomberg API (BLPAPI), the feed delivers survey consensus and actual value updates of economic data.

Macro Indicator Service data delivers real-time data streams for:

- **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 [Bloomberg API](#) (BLPAPI) over B-PIPE port **8194**. This API endpoint allows you to access macro economic data: `//blp/macro-indicators`

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 point of time.
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 events).

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.

Bloomberg Terminal Consistency

The underlying economic data is consistent with the Economic Calendar (ECO <GO>) function on the Bloomberg Terminal®.

Subscribing to Data

HINT

For detailed guidance on subscribing to real-time data using the Bloomberg API (BLPAPI), see [Bloomberg API Guide > Subscriptions](#).

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 [Downloads](#) page.

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>/<security identifier>`

Where:

<security identifier> is the security identifier for the security to which you want to subscribe, either a ticker or Bloomberg ID (also known as the Financial Information Global Identifier or FIGI).**INJCJC Index**

BBG002SBQKM3

Convention	Description	Examples
<service name>	The name of the service to which you want to subscribe.	<code>//blp/macro-indicators</code>

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 Tickers

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

Ticker Type	Description
<code>/ticker/</code>	Request data using ticker. The Macro Indicator Service only accepts index instruments in this format: <code>/ticker/<ticker> <exchange code> Index</code> .
<code>/bbgid/</code>	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, the indicator with the ticker **INJCJC Index**.

Case Sensitivity

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

- `/ticker/`
- `/bbgid/`

The instruments are case-insensitive:

- `/ticker/injcjc index` or `/ticker/INJCJC Index`
- `/bbgid/bbg002sbqkm3` or `/bbgid/BBG002SBQKM3`

NOTE

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 data subscriptions:

Identifier Type	Identifier	Fully Qualified Subscription String
<code>/ticker/</code>	<code>/INJCJC Index/</code>	<code>//blp/macro-indicators/ticker/INJCJC Index</code>
<code>/bbgid/</code>	<code>/BBG002SBQKM3/</code>	<code>//blp/macro-indicators/bbgid/BBG002SBQKM3</code>

Starting a Subscription

Example Subscription

To subscribe to the Macro Indicators Service,

1. Enter the service name `//blp/economic-data`.
2. 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

Subscription Start Code Example

C++

```
1 session.openService("//blp/macro-indicators");
2
3 SubscriptionList subscriptions;
4 subscriptions.add("/ticker/INJCJC Index");
5 subscriptions.add("/ticker/CPI YOY Index");
6 subscriptions.add("/bbgid/BBG002SBQKH3"); // INJCJC Index
7 subscriptions.add("/bbgid/BBG002SBDLF3"); // CPI YOY Index
```

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 Indicators service
5	INVALID_SUBSCRIBER_TOPIC	"Identifier provided is invalid or not recognized"	Identifier provided is not a valid/recognized instrument
1	INVALID_SUBSCRIBER_TOPIC	"Malformed topic string"	Topic format is not supported
1	INVALID_SUBSCRIBER_TOPIC	"Invalid security type. Supported security types are: bbgid, ticker"	The topic has an incorrect prefix before the identifier
1	INVALID_SUBSCRIBER_TOPIC	"Topic options are not supported"	The topic uses invalid optional parameters
1	INVALID_SUBSCRIBER_TOPIC	"Invalid ID_BB_GLOBAL specified, should consist of 12 alphanumeric characters"	The entity provided with topic type FIGI is not a 12-character alphanumeric string
1	INVALID_SUBSCRIBER_TOPIC	"Invalid ticker type. Supported ticker types are: Index"	The ticker is not an Index instrument
1	INVALID_SUBSCRIBER_TOPIC	"Invalid subscription type."	Subscription type not supported.
3	NO_DATA_AVAILABLE	"Instrument not in coverage"	There is no data available for this instrument over the Macro Indicators service.
2	INTERNAL_ERROR	"Internal error occurred, please retry request or contact Bloomberg Support."	Internal error occurred, please retry request or contact Bloomberg Support.

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
MacroEvent	MacroEvent	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 inactivity, heartbeat messages ensure that there are no connection interruptions or data prob

Economic Messages

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

- **MacroReferenceData**: Contains foundational reference information for macroeconomic indicators.
- **MacroHeadLineEvent**: Contains raw actuals, revisions as reported by the source as well as survey consensus from economists.
- **MacroCalendarEvent**: Contains announcement or modification of a forward looking calendar schedule.

Message Sequences

You can identify the messages sequences associated with a specific **MacroHeadLineEvent** data point with field **EVENT_ID** that is unique to ticker and observation period.

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 scheduled event.

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
1 {
2   Heartbeat = {
3 }
4 }
```

MacroHeadlineEvent Events

Below are example **MacroHeadLineEvent** push events.

Actual Economic Release Message Example

```
JSON
1 MacroEvent: {
2   {
3     "MacroHeadlineEvent": {
4       "EVENT_TYPE": "ACTUAL",
5       "EVENT_SUBTYPE": "NEW",
6       "EVENT_ID": 2152629,
7       "OBSERVATION_PERIOD": "Mar 26",
8       "ECO_RELEASE_DT": {
9         "DATETIME": "2025-03-26T13:00:00.000-04:00"
10      },
11      "VALUE": {
12        "SINGLE": "75.8"
13      }
14    }
15  }
16 }
```

Name	U.S. 5 Year Note Bidder Partic									
Ticker	USB5IBA% Index									
	Source US Treasury									
Calendar	2025									
Date	Time Period	Med	Avg	Survey High	Low	Num	Actual	Prior	Revised	
31 01/27	13:00 Jan 27	--	--	--	--	0	62.8%	67.3%	--	--
31 02/25	13:00 Feb 25	--	--	--	--	0	74.9%	62.8%	--	--
31 03/26	13:00 Mar 26	--	--	--	--	0	75.8%	74.9%	--	--
31 04/23	13:00 Apr 23	--	--	--	--	0	64.0%	75.8%	--	--
31 05/28	13:00 May 28	--	--	--	--	0	78.4%	64.0%	--	--
31 06/25	13:00 Jun 25	--	--	--	--	0	--	78.4%	--	--
31 07/28	13:00 Jul 28	--	--	--	--	0	--	--	--	--
31 08/27	13:00 Aug 27	--	--	--	--	0	--	--	--	--

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

```
JSON
1 MacroEvent: {
2   {
3     "MacroHeadlineEvent": {
4       "EVENT_TYPE": "REVISION",
5       "EVENT_SUBTYPE": "NEW",
6       "EVENT_ID": 2133945,
7       "RELEVANCE_VALUE": 21.4286,
8       "OBSERVATION_PERIOD": "Jan",
9       "ECO_RELEASE_DT": {
10      }
```

```
11      },
12      "VALUE": {
13        "SINGLE": "3.1"
14      },
15      "PRIOR_VALUE": {
16        "SINGLE": "2.6"
17      },
18      "REVISION_METADATA": {
19        "PRIOR_EVENT_ID": 2049611,
20        "PRIOR_OBSERVATION_PERIOD": "Dec",
21        "PRIOR_ECO_RELEASE_DT": {
22          "DATETIME": "2025-02-23T11:00:00.000+00:00"
23        }
24      }
25    }
26  }
27 }
```



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 on Mar 26, 2025 along with the Jan observation period values, restating the previously announced values.

Survey Consensus Message Example

```
JSON

1 | MacroEvent: {
2 |   {
3 |     "MacroHeadlineEvent": {
4 |       "EVENT_TYPE": "ESTIMATE",
5 |       "EVENT_SUBTYPE": "UPDATE",
6 |       "EVENT_ID": 2159136,
7 |       "OBSERVATION_PERIOD": "Feb",
8 |       "ECO_RELEASE_DT": {
9 |         "DATETIME": "2025-03-27T08:30:00.000+04:00"
10 |       },
11 |       "VALUE": {
12 |         "DISTRIBUTION": {
13 |           "LOW": "0.0",
14 |           "HIGH": "1.0",
15 |           "MEDIAN": "0.6",
16 |           "AVERAGE": "0.5",
17 |           "STANDARD_DEVIATION": "0.3",
18 |           "NUMBER": "9"
19 |         }
20 |       }
21 |     }
22 |   }
23 | }
```

Economic Release Update Message Example

```
JSON

1 | MacroEvent: {
2 |   {
3 |     "MacroHeadlineEvent": {
4 |       "EVENT_TYPE": "ACTUAL",
5 |       "EVENT_SUBTYPE": "UPDATE",
6 |       "EVENT_ID": 2151105,
7 |       "OBSERVATION_PERIOD": "4Q",
8 |       "ECO_RELEASE_DT": {
9 |         "DATETIME": "2025-03-07T05:00:00.000+05:00"
10 |       },
11 |       "VALUE": {
12 |         "SINGLE": "0.9"
13 |       }
14 |     }
15 |   }
16 | }
```

Forward Looking Calendar Event Message Example

```
JSON

1 | MacroEvent: {
2 |   {
3 |     "MacroHeadlineEvent": {
4 |       "EVENT_TYPE": "CALENDAR",
5 |       "EVENT_SUBTYPE": "NEW",
6 |       "EVENT_ID": 2196759,
7 |       "OBSERVATION_PERIOD": "Jun 6",
8 |       "ECO_RELEASE_DT": {
9 |         "DATETIME": "2025-06-06T00:30:00.000+04:00"
10 |       },
11 |       "RELEASE_STATUS": "SCHEDULED",
12 |       "RELEVANCE_VALUE": 68.4211
13 |     }
14 |   }
15 | }
```

Updated Calendar Event Message Example

```
JSON

1 | MacroEvent: {
2 |   {
3 |     "MacroHeadlineEvent": {
4 |       "EVENT_TYPE": "CALENDAR",
5 |       "EVENT_SUBTYPE": "UPDATE",
6 |       "EVENT_ID": 2051202,
7 |       "OBSERVATION_PERIOD": "Mar 26",
8 |       "ECO_RELEASE_DT": {
9 |         "DATETIME": "2025-03-26T11:03:00.000+04:00"
10 |       },
11 |       "RELEASE_STATUS": "RELEASED",
12 |       "RELEVANCE_VALUE": 50,
13 |     }
14 |   }
15 | }
```

Removed Calendar Event Message Example

```
JSON

1 | MacroEvent: {
2 |   {
3 |     "MacroHeadlineEvent": {
4 |       "EVENT_TYPE": "CALENDAR",
5 |       "EVENT_SUBTYPE": "DELETE",
6 |       "EVENT_ID": 2134219,
7 |       "OBSERVATION_PERIOD": "Feb",
8 |       "ECO_RELEASE_DT": {
9 |         "DATETIME": "2025-03-26T03:00:00.000+04:00"
10 |       },
11 |       "RELEASE_STATUS": "SCHEDULED",
12 |       "RELEVANCE_VALUE": 10.3448
13 |     }
14 |   }
15 | }
```

MacroHeadlineEvent Initial Paint Messages

```
JSON

1 | {
2 |   {
3 |     "MacroEvent": {
4 |       "MacroReferenceData": {
5 |         "ID_BB_GLOBAL": "BBG002SBQKM3",
6 |         "PARSEKEYABLE_DES": "INJCJC Index",
7 |         "DESCRIPTION": "US Initial Jobless Claims SA",
8 |         "INDX_FREQ": "Weekly on Friday",
9 |         "INDX_UNITS": "Volume",
10 |        "COUNTRY_ISO": "US",
11 |        "INDX_SOURCE": "Department of Labor",
12 |        "SEASONALITY_AND_TRANSFORMATION": "Units/Persons SA"
13 |      }
14 |    }
15 |  }
16 | }
17 |
18 | {
19 |   "MacroEvent": {
20 |     "MacroCalendarEvent": {
21 |       "EVENT_TYPE": "CALENDAR",
22 |       "EVENT_SUBTYPE": "INITPAINT",
23 |       "OBSERVATION_PERIOD": "Jun 14",
24 |       "ECO_RELEASE_DT": {
25 |         "DATETIME": "2025-06-18T12:30:00+00:00"
26 |       },
27 |       "EVENT_ID": 2151213,
28 |       "RELEASE_STATUS": "SCHEDULED",
29 |       "RELEVANCE_VALUE": 98.6111
30 |     }
31 |   }
32 | }
```



```
31 }
32 {
33     "MacroEvent": {
34         "MacroCalendarEvent": {
35             "EVENT_TYPE": "CALENDAR",
36             "EVENT_SUBTYPE": "INITPAINT",
37             "OBSERVATION_PERIOD": "Jun 21",
38             "ECO_RELEASE_DT": {
39                 "DATETIME": "2025-06-26T12:30:00+00:00"
40             },
41             "EVENT_ID": 2151214,
42             "RELEASE_STATUS": "SCHEDULED",
43             "RELEVANCE_VALUE": 98.5915
```

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.

Data Specification

MacroEvent

The **MacroHeadlineEvent** 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
EVENT_TYPE	String	1	1	Describes the nature of the economic release data point. More details in the EventType section below.
EVENT_SUBTYPE	String	1	1	Nature of the event associated with a specific data point. Currently one of NEW, UPDATE, DELETE, and INITPAINT. More details in the EventSubType section below.
EVENT_ID	Int32	1	1	Unique key for the specific economic event, defined by the release of actuals for a given observation period.
OBSERVATION_PERIOD	String	1	1	Specifies the observation period associated with release of actuals for a given economic indicator (DZ065).
ECO_RELEASE_DT	String	1	1	The expected (or completed) release time of actuals for a given economic indicator and observation period, as currently known. More details in the EcoReleaseDt section below.
PRIOR_EVENT_ID	String	0	1	Unique key for the specific economic event, defined by the release of actuals for the revised observation period.
PRIOR_OBSERVATION_PERIOD	String	0	1	Specifies the observation period associated with the revision of actuals for a given economic indicator (DZ065).
PRIOR_ECO_RELEASE_DT	String	0	1	The expected (or completed) release time of actuals for the revised economic indicator and observation period, as currently known.
VALUE	Float64	1	1	Values associated with the economic release event. More details in the Value section below.
RELEVANCE_VALUE	Float64	0	1	Measure of the popularity of the economic index, representative of the number of alerts set for an economic event relative to all alerts set for all events in that country.

The **MacroReferenceData** data type provides foundational reference details for the macro indicator.

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).
DESCRIPTION	String	1	1	Description of the economic indicator.
INDX_FREQ	String	0	1	Frequency of index update schedule
INDX_UNITS	String	0	1	Measurement type or format in which the economic indicator's value is expressed. Possible options are: Quantity, volume, percent, price, value, yield, units, discount, rate or null
COUNTRY_ISO	String	0	1	Returns the country or territory code in which the constituents within the index are domiciled. If there are varying countries or territories within the index, the ISO country or territory code will return MULT for multiple.
INDX_SOURCE	String	0	1	The supplier of the data for the index. For all other security types, use Pricing Source (PR092, PRICING_SOURCE).
SEASONALITY_AND_TRANSFORMATION	String	0	1	Indicates both the type of data (value, index, percent, etc.) as well as the seasonality (seasonally adjusted, not seasonally adjusted, etc.) within the time series.

MacroCalendarEvent

The **MacroCalendarEvent** 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 EventType section below.
EVENT_SUBTYPE	EventSubType	1	1	Nature of the event associated with a specific data point. Currently one of NEW , UPDATE , DELETE , and INITPAINT . More details in the EventSubType section below.
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 period.
OBSERVATION_PERIOD	String	1	1	Specifies the observation period associated with release of actuals for a given economic indicator (DZ065).
ECO_RELEASE_DT	String	1	1	The expected (or completed) release time of actuals for a given economic indicator and observation period, as currently known. More details in the EcoReleaseDt section below.
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 HeadlineEconomicEvent messages.
EventType	String	REVISION	Latest revised value for the economic release, as announced by the source - applicable only to HeadlineEconomicEvent messages.
EventType	String	ESTIMATE	Estimates associated with a given economic release, based on inputs from surveyed economists - applicable only to HeadlineEconomicEvent messages.
EventType	String	CALENDAR	A calendar event for the economic release schedule - applicable only to HeadlineCalendarEvent messages.

EventSubType

EventSubType is an enumeration data type.

Enumeration Name	Enumeration Type	Enumeration Value	Description
EventSubType	String	NEW	Initiation of a new data point
EventSubType	String	UPDATE	Update to an existing data point
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 over the feed.

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 index
DISTRIBUTION	AVERAGE	ESTIMATE	Average of all survey estimates available for the current release of an economic index
DISTRIBUTION	STANDARD_DEVIATION	ESTIMATE	Standard deviation of all survey estimates available for the current release of an economic index.
DISTRIBUTION	NUMBER	ESTIMATE	Survey number of observations.

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Swap Data Repository (SDR) Feeds

Historical Time Series