

# Package ‘rnbp’

March 23, 2025

**Title** Wrapper for the National Bank of Poland API

**Version** 0.2.2

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**Description** Use the <<https://api.nbp.pl/>> API through R. Retrieve currency exchange rates and gold prices data published by the National Bank of Poland in form of convenient R objects.

**License** GPL-3

**BugReports** <https://github.com/szymanskir/rnbp/issues>

**Encoding** UTF-8

**Imports** curl, httr, jsonlite, utils

**Suggests** covr, httpptest, testthat (>= 2.1.0), knitr, rmarkdown,  
ggplot2

**RoxygenNote** 7.3.2

**VignetteBuilder** knitr

**URL** <https://github.com/szymanskir/rnbp>

**NeedsCompilation** no

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**Repository** CRAN

**Date/Publication** 2025-03-23 20:40:02 UTC

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---

*.goldprice\_base\_url*      *Returns the base url for the gold price endpoint.*

---

**Description**

Returns the base url for the gold price endpoint.

**Usage**

*.goldprice\_base\_url()*

---

*.rates\_base\_url*      *Returns the base url for the rates endpoint.*

---

**Description**

Returns the base url for the rates endpoint.

**Usage**

*.rates\_base\_url()*

---

.send\_gold\_endpoint\_request

*Sends a request and parses the gold price endpoint response.*

---

**Description**

Sends a request and parses the gold price endpoint response.

**Usage**

.send\_gold\_endpoint\_request(request\_url)

**Arguments**

request\_url url to which the request should be sent.

**Value**

nbp\_api\_response object with the request content.

---

.send\_rates\_endpoint\_request

*Sends a request and parses the rates endpoint response.*

---

**Description**

Sends a request and parses the rates endpoint response.

**Usage**

.send\_rates\_endpoint\_request(request\_url)

**Arguments**

request\_url url to which the request should be sent.

**Value**

nbp\_api\_response object with the request content.

---

**.send\_tables\_endpoint\_request**

*Sends a request and parses the tables endpoint response.*

---

**Description**

Sends a request and parses the tables endpoint response.

**Usage**

```
.send_tables_endpoint_request(request_url)
```

**Arguments**

`request_url` url to which the request should be sent.

**Value**

`nbp_api_response` object with the request content.

---

**.tables\_base\_url**

*Returns the base url for the tables endpoint.*

---

**Description**

Returns the base url for the tables endpoint.

**Usage**

```
.tables_base_url()
```

---

**add\_json\_format**

*Adds the json formatting option to the passed url request.*

---

**Description**

Adds the json formatting option to the passed url request.

**Usage**

```
add_json_format(url)
```

**Arguments**

`url` request url to which the json format option should be added

**Value**

url with json format option added

---

add_path_part	<i>Adds a path part to the given url</i>
---------------	--

---

**Description**

Adds a path part to the given url

**Usage**

```
add_path_part(url, path_name)
```

**Arguments**

url	url to which a path part should be added
path_name	path part which should be added to the url

**Value**

url with the path part added

---

create_request	<i>Creates a request with the given path parts. The json format argument is included by default.</i>
----------------	--

---

**Description**

Creates a request with the given path parts. The json format argument is included by default.

**Usage**

```
create_request(base_url, path_parts = NULL)
```

**Arguments**

base_url	base url of the API for which a request should be created
path_parts	that should be added to the base url

**Value**

request url composed of the given base url and specified path parts

**get\_current\_exchangerate***Retrieves the current exchange rate for the given currency.*

---

**Description**

Retrieves the current exchange rate for the given currency.

**Usage**

```
get_current_exchangerate(table, currency_code)
```

**Arguments**

table	specifies which from which table the exchange rate should be fetched.
currency_code	code of the currency for which the exchange rate should be fetched.

**Value**

nbp\_api\_response object containing the current exchange rate.

**See Also**

<https://api.nbp.pl/#kursyWalut>

Other rates: [get\\_exchangerate\\_from\(\)](#), [get\\_exchangerate\\_from\\_interval\(\)](#), [get\\_last\\_n\\_exchangerates\(\)](#), [get\\_todays\\_exchangerate\(\)](#)

**Examples**

```
tryCatch(
  {
    ## Retrieve the current exchange rate for euros
    response <- get_current_exchangerate("A", "EUR")
    ## Retrieve the content
    response$content
  },
  error = function(e) message(e)
)
```

---

`get_current_exchangerate_table`  
*Retrieves the current exchange rate table.*

---

## Description

Retrieves the current exchange rate table.

## Usage

```
get_current_exchangerate_table(table)
```

## Arguments

`table` specifies which table should be fetched.

## Value

`nbp_api_response` object containing the current exchange rate table.

## See Also

<https://api.nbp.pl/#kursyWalut>

Other tables: `get_exchangerate_table_from()`, `get_exchangerate_tables_from_interval()`,  
`get_last_n_exchangerate_tables()`, `get_todays_exchangerate_table()`

## Examples

```
tryCatch(  
  {  
    ## Retrieve the current A exchange rate table  
    response <- get_current_exchangerate_table("A")  
    ## Retrieve the content  
    response$content  
  },  
  error = function(e) message(e)  
)
```

`get_current_goldprice` *Retrieves the current gold price.*

## Description

Retrieves the current gold price.

## Usage

```
get_current_goldprice()
```

## Value

`nbp_api_response` object containing the current gold price.

## See Also

<https://api.nbp.pl/#cenyZlota>

Other goldprice: `get_goldprice_from()`, `get_goldprice_from_interval()`, `get_last_n_goldprices()`, `get_todays_goldprice()`

## Examples

```
tryCatch(
  {
    ## Fetch the current gold price
    response <- get_current_goldprice()
    ## Retrieve the current gold price value
    response$content$cena
  },
  error = function(e) message(e)
)
```

`get_exchangerate_from` *Retrieves the exchange rate from a specific date.*

## Description

Retrieves the exchange rate from a specific date.

## Usage

```
get_exchangerate_from(table, currency_code, date)
```

## Arguments

table	specifies which from which table the exchange rate should be fetched.
currency_code	code of the currency for which the exchange rate should be fetched.
date	date from which the exchange rate should be fetched.

## Details

As exchange rates are not published on the weekends fetching values from a weekend date will result in a 404 error. In those cases the function returns an error with an appropriate message.

## Value

nbp\_api\_response object containing the exchange rate from the specified date.

## See Also

<https://api.nbp.pl/#kursyWalut>

Other rates: `get_current_exchangerate()`, `get_exchangerate_from_interval()`, `get_last_n_exchangerates()`, `get_todays_exchangerate()`

## Examples

```
tryCatch(
{
  ## Fetch the euro exchange rate from a week ago
  response <- get_exchangerate_from("A", "EUR", Sys.Date() - 7)
  ## Preview response content
  response$content
},
error = function(e) message(e)
)
```

---

### get\_exchangerate\_from\_interval

*Retrieves the exchange rates from a specific interval.*

---

## Description

Retrieves the exchange rates from a specific interval.

## Usage

```
get_exchangerate_from_interval(table, currency_code, from, to)
```

## Arguments

<code>table</code>	specifies which from which table the exchange rate should be fetched.
<code>currency_code</code>	code of the currency for which the exchange rate should be fetched.
<code>from</code>	start day of the interval.
<code>to</code>	end day of the interval.

## Details

As exchange rates are not published on the weekends fetching values from an interval containing a weekend will result in a response that omits those days.

## Value

`nbp_api_response` object containing the exchange rates from the specified interval.

## See Also

<https://api.nbp.pl/#kursyWalut>

Other rates: `get_current_exchangerate()`, `get_exchangerate_from()`, `get_last_n_exchangerates()`, `get_todays_exchangerate()`

## Examples

```
tryCatch(
{
  ## Fetch the exchange rate table from the past week
  response <- get_exchangerate_tables_from_interval("A", Sys.Date() - 7, Sys.Date())
  ## Preview response content
  response$content
},
error = function(e) message(e)
)
```

### `get_exchangerate_tables_from_interval`

*Retrieves the exchange rate tables from a specific interval.*

## Description

Retrieves the exchange rate tables from a specific interval.

## Usage

```
get_exchangerate_tables_from_interval(table, from, to)
```

## Arguments

table	specifies which table should be fetched.
from	start day of the interval.
to	end day of the interval.

## Details

As exchange rate tables are not published on the weekends fetching values from an interval containing a weekend will result in a response that omits those days.

## Value

nbp\_api\_response object containing the exchange rates tables from the specified interval.

## See Also

<https://api.nbp.pl/#kursyWalut>

Other tables: `get_current_exchangerate_table()`, `get_exchangerate_table_from()`, `get_last_n_exchangerate_table()`, `get_todays_exchangerate_table()`

## Examples

```
tryCatch(
{
  ## Fetch the exchange rate table from the past week
  response <- get_exchangerate_tables_from_interval("A", Sys.Date() - 7, Sys.Date())
  ## Preview response content
  response$content
},
error = function(e) message(e)
)
```

### get\_exchangerate\_table\_from

*Retrieves the exchange rate table from a specific date.*

## Description

Retrieves the exchange rate table from a specific date.

## Usage

`get_exchangerate_table_from(table, date)`

### Arguments

<code>table</code>	specifies which table should be fetched.
<code>date</code>	date from which the exchange rate table should be fetched.

### Details

As exchange rate tables are not published on the weekends fetching values from a weekend date will result in a 404 error. In those cases the function returns an error with an appropriate message.

### Value

`nbp_api_response` object containing the exchange rate table from the specified date.

### See Also

<https://api.nbp.pl/#kursyWalut>

Other tables: `get_current_exchangerate_table()`, `get_exchangerate_tables_from_interval()`, `get_last_n_exchangerate_tables()`, `get_todays_exchangerate_table()`

### Examples

```
tryCatch(
{
  ## Fetch the A exchange rate table from a week ago
  response <- get_exchangerate_table_from("A", Sys.Date() - 7)
  ## Preview response content
  response$content
},
error = function(e) message(e)
)
```

`get_goldprice_from`     *Retrieves the gold price from a specific date.*

### Description

Retrieves the gold price from a specific date.

### Usage

```
get_goldprice_from(date)
```

### Arguments

<code>date</code>	date from which the gold price should be fetched.
-------------------	---

## Details

As gold prices are not published on the weekends fetching values from a weekend date will result in a 404 error. In those cases the function returns an error with an appropriate message.

## Value

nbp\_api\_response object containing the gold price from the specified date.

## See Also

<https://api.nbp.pl/#cenyZlota>

Other goldprice: `get_current_goldprice()`, `get_goldprice_from_interval()`, `get_last_n_goldprices()`, `get_todays_goldprice()`

## Examples

```
tryCatch(
{
  ## Fetch the gold price from a week ago
  response <- get_goldprice_from(Sys.Date() - 7)
  ## Preview response content
  response$content
},
error = function(e) message(e)
)
```

## get\_goldprice\_from\_interval

*Retrieves the gold prices from a specific interval.*

## Description

Retrieves the gold prices from a specific interval.

## Usage

`get_goldprice_from_interval(from, to)`

## Arguments

from	start day of the interval.
to	end day of the interval.

## Details

As gold prices are not published on the weekends fetching values from an interval containing a weekend will result in a response that omits those days.

**Value**

`nbp_api_response` object containing the gold prices from the specified interval.

**See Also**

<https://api.nbp.pl/#cenyZlota>

Other goldprice: `get_current_goldprice()`, `get_goldprice_from()`, `get_last_n_goldprices()`, `get_todays_goldprice()`

**Examples**

```
tryCatch(
{
  ## Fetch the gold prices from the past week
  response <- get_goldprice_from_interval(Sys.Date() - 7, Sys.Date())
  ## Preview response content
  response$content
},
error = function(e) message(e)
)
```

**get\_last\_n\_exchangerates**

*Retrieves the last n exchange rates.*

**Description**

Retrieves the last n exchange rates.

**Usage**

```
get_last_n_exchangerates(table, currency_code, n)
```

**Arguments**

<code>table</code>	specifies which from which table the exchange rate should be fetched.
<code>currency_code</code>	code of the currency for which the exchange rate should be fetched.
<code>n</code>	number of exchange rates to retrieve.

**Value**

`nbp_api_response` object containing the last n exchange rates.

## See Also

<https://api.nbp.pl/#kursyWalut>

Other rates: `get_current_exchangerate()`, `get_exchangerate_from()`, `get_exchangerate_from_interval()`, `get_todays_exchangerate()`

## Examples

```
tryCatch(
{
  ## Fetch the last 3 exchange rates for euros
  response <- get_last_n_exchangerates("A", "EUR", 3)
  ## Preview response content
  response$content
},
error = function(e) message(e)
)
```

---

### get\_last\_n\_exchangerate\_tables

*Retrieves the last n exchange rate tables.*

---

## Description

Retrieves the last n exchange rate tables.

## Usage

```
get_last_n_exchangerate_tables(table, n)
```

## Arguments

table	specifies which table should be fetched.
n	number of exchange rate tables to retrieve.

## Value

`nbp_api_response` object containing the last n exchange rate tables.

## See Also

<https://api.nbp.pl/#kursyWalut>

Other tables: `get_current_exchangerate_table()`, `get_exchangerate_table_from()`, `get_exchangerate_tables_from()`, `get_todays_exchangerate_table()`

## Examples

```
tryCatch(
{
  ## Fetch the last 3 A exchange rate tables
  response <- get_last_n_exchangerate_tables("A", 3)
  ## Preview response content
  response$content
},
error = function(e) message(e)
)
```

`get_last_n_goldprices` *Retrieves the last n gold prices.*

## Description

Retrieves the last n gold prices.

## Usage

```
get_last_n_goldprices(n)
```

## Arguments

n	number of gold prices to retrieve.
---	------------------------------------

## Value

`nbp_api_response` object containing the last n gold prices.

## See Also

<https://api.nbp.pl/#cenyZlota>

Other goldprice: `get_current_goldprice()`, `get_goldprice_from()`, `get_goldprice_from_interval()`, `get_todays_goldprice()`

## Examples

```
tryCatch(
{
  ## Fetch the last 3 gold price values
  response <- get_last_n_goldprices(3)
  ## Preview response content
  response$content
},
error = function(e) message(e)
)
```

---

**get\_todays\_exchangerate**

*Retrieves the exchange rate that was published today.*

---

**Description**

Retrieves the exchange rate that was published today.

**Usage**

```
get_todays_exchangerate(table, currency_code)
```

**Arguments**

table	specifies which from which table the exchange rate should be fetched.
currency_code	code of the currency for which the exchange rate should be fetched.

**Details**

If today's data is not available the API will return a 404 Not found error. In that case the function will return an error with an appropriate message.

**Value**

nbp\_api\_response object containing today's exchange rate.

**See Also**

<https://api.nbp.pl/#kursyWalut>

Other rates: [get\\_current\\_exchangerate\(\)](#), [get\\_exchangerate\\_from\(\)](#), [get\\_exchangerate\\_from\\_interval\(\)](#), [get\\_last\\_n\\_exchangerates\(\)](#)

**Examples**

```
tryCatch(
{
  ## Fetch todays A exchange rate table
  response <- get_todays_exchangerate("A", "EUR")
  ## Preview response content
  response$content
},
error = function(e) message(e)
)
```

`get_todays_exchangerate_table`

*Retrieves the exchange rate table that was published today.*

**Description**

Retrieves the exchange rate table that was published today.

**Usage**

```
get_todays_exchangerate_table(table)
```

**Arguments**

`table` specifies which table should be fetched.

**Details**

If today's data is not available the API will return a 404 Not found error. In that case the function will return an error with an appropriate message.

**Value**

`nbp_api_response` object containing today's exchange rate table.

**See Also**

<https://api.nbp.pl/#kursyWalut>

Other tables: `get_current_exchangerate_table()`, `get_exchangerate_table_from()`, `get_exchangerate_tables_from()`, `get_last_n_exchangerate_tables()`

**Examples**

```
tryCatch(
{
  ## Fetch todays A exchange rate table
  response <- get_todays_exchangerate_table("A")
  ## Preview response content
  response$content
},
error = function(e) message(e)
)
```

---

get\_todays\_goldprice    *Retrieves the gold price that was published today.*

---

## Description

Retrieves the gold price that was published today.

## Usage

```
get_todays_goldprice()
```

## Details

If today's data is not available the API will return a 404 Not found error. In that case the function will return an error with an appropriate message.

## Value

nbp\_api\_response object containing today's gold price.

## See Also

<https://api.nbp.pl/#cenyZlota>

Other goldprice: [get\\_current\\_goldprice\(\)](#), [get\\_goldprice\\_from\(\)](#), [get\\_goldprice\\_from\\_interval\(\)](#), [get\\_last\\_n\\_goldprices\(\)](#)

## Examples

```
tryCatch(
  {
    ## Fetch todays gold price
    response <- get_todays_goldprice()
    ## Preview response content
    response$content
  },
  error = function(e) message(e)
)
```

---

<code>is_count</code>	<i>Checks if an object is a positive integer.</i>
-----------------------	---

---

**Description**

Checks if an object is a positive integer.

**Usage**

```
is_count(x)
```

**Arguments**

x                   object to be tested.

**Value**

TRUE or FALSE depending on whether its argument is a positive integer or not.

---

<code>is_date</code>	<i>Checks if an object is a date object.</i>
----------------------	--

---

**Description**

Checks if an object is a date object.

**Usage**

```
is_date(x)
```

**Arguments**

x                   object to be tested.

**Value**

TRUE or FALSE depending on whether its arguments is a date object or not.

---

is_integer	<i>Checks if an object is an integer.</i>
------------	---

---

**Description**

Checks if an object is an integer.

**Usage**

```
is_integer(x)
```

**Arguments**

x                   object to be tested.

**Value**

TRUE or FALSE depending on whether its argument is an integer or not.

---

is_nbp_api_response	<i>Checks whether the given object is of the class nbp_api_response.</i>
---------------------	--

---

**Description**

Checks whether the given object is of the class nbp\_api\_response.

**Usage**

```
is_nbp_api_response(x)
```

**Arguments**

x                   object to test if it is of the class nbp\_api\_response

**Value**

TRUE if the object is of the class nbp\_api\_response

---

nbp_api_base_url	<i>Returns the base url of the nbp api.</i>
------------------	---

---

**Description**

Returns the base url of the nbp api.

**Usage**

```
nbp_api_base_url()
```

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