Package: concordance (via r-universe)

October 18, 2024

Type Package

Title Product Concordance

Version 2.1.0

Date 2023-01-16

Description A set of utilities for matching products in different classification codes used in international trade research. It supports concordance between the Harmonized System (HS0, HS1, HS2, HS3, HS4, HS5, HS6, HS combined), the Standard International Trade Classification (SITC1, SITC2, SITC3, SITC4), the North American Industry Classification System (NAICS 2002, 2007, 2012, 2017, combined), as well as the Broad Economic Categories (BEC4), the International Standard of Industrial Classification (ISIC2, ISIC3, ISIC3.1, ISIC4), and the Standard Industrial Classification (SIC). It also provides code nomenclature/descriptions look-up, product code look-up based on user-specified keywords, Rauch classification look-up (via concordance to SITC2), trade elasticity look-up (via concordance to HS0 or SITC3 codes), upstreamness/downstreamness look-up (via concordance to ISIC3 and NAICS codes), and intermediateness look-up (via product descriptions).

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Depends R (>= 3.6.0)

Imports dplyr (>= 0.8.5), purrr (>= 0.3.3), rlang (>= 0.4.5), stringr (>= 1.4.0), tibble (>= 3.0.0), tidyr (>= 1.0.2)

LazyData true

LazyDataCompression xz

BugReports https://github.com/insongkim/concordance/issues

RoxygenNote 7.2.1

Encoding UTF-8

Repository https://insongkim.r-universe.dev

RemoteUrl https://github.com/insongkim/concordance

RemoteRef HEAD

RemoteSha de8517e0fa2b6cd0de8c02bcb7ba4583cde76aa7

Contents

`bea2002_desc` *BEA Description for year 2002*

Description

A dataset containing the description of products under the BEA industry classification in 2002

Usage

```
bea2002_desc
```

Format

A data frame with 430 rows and 2 variables:

code BEA Code

desc BEA Description

Source

https://www.bea.gov/industry/benchmark-input-output-data

`bea2002_naics2002` *BEA2002-NAICS2002 Concordance*

Description

A dataset containing concordances between BEA2002 and NAICS2002 classification.

Usage

```
bea2002_naics2002
```

Format

A data frame with 1,335 rows and 6 variables:

BEA2002 6-digit BEA2002 Code

NAICS2002_6d 6-digit NAICS2002 Code

NAICS2002_5d 5-digit NAICS2002 Code

NAICS2002_4d 4-digit NAICS2002 Code

NAICS2002_3d 3-digit NAICS2002 Code

NAICS2002_2d 2-digit NAICS2002 Code

Source

https://www.bea.gov/industry/benchmark-input-output-data

bea2007_naics2007 *BEA2007-NAICS2007 Concordance*

Description

A dataset containing concordances between BEA2007 and NAICS2007 classification.

Usage

```
bea2007_naics2007
```

Format

A data frame with 1,376 rows and 6 variables:

BEA2007 6-digit BEA2007 Code
NAICS2007_6d 6-digit NAICS2007 Code
NAICS2007_5d 5-digit NAICS2007 Code
NAICS2007_4d 4-digit NAICS2007 Code
NAICS2007_3d 3-digit NAICS2007 Code
NAICS2007_2d 2-digit NAICS2007 Code

Source

https://apps.bea.gov/iTable/index_industry_io.cfm

bea2012_desc *BEA Description for year 2012*

Description

A dataset containing the description of products under the BEA industry classification in 2007 and 2012

Usage

```
bea2012_desc
```

Format

A data frame with 409 rows and 2 variables:

code BEA Code
desc BEA Description

Source

https://apps.bea.gov/iTable/index_industry_io.cfm

bea2012_naics2012 *BEA2012-NAICS2012 Concordance*

Description

A dataset containing concordances between BEA2012 and NAICS2012 classification.

Usage

```
bea2012_naics2012
```

Format

A data frame with 1,376 rows and 6 variables:

BEA2012 6-digit BEA2012 Code
NAICS2012_6d 6-digit NAICS2012 Code
NAICS2012_5d 5-digit NAICS2012 Code
NAICS2012_4d 4-digit NAICS2012 Code
NAICS2012_3d 3-digit NAICS2012 Code
NAICS2012_2d 2-digit NAICS2012 Code

Source

https://apps.bea.gov/iTable/index_industry_io.cfm

bec4_desc *BEC4 Description*

Description

A dataset containing the description of products under the BEC4 classification.

Usage

```
bec4_desc
```

Format

A data frame with 50 rows and 2 variables:

code BEC4 Code
desc BEC4 Description

Source

https://comtrade.un.org/data/cache/classificationBEC.json

concord *Concording Different Classification Codes*

Description

Concords different classification codes used in international trade.

Usage

```
concord(sourcevar, origin, destination, dest.digit = 4, all = FALSE)
```

Arguments

sourcevar	An input character vector of industry/product codes to be converted.
origin	A string setting the input coding scheme. Currently supports: "HS0" (1988/92), "HS1" (1996), "HS2" (2002), "HS3" (2007), "HS4" (2012), "HS5" (2017), "HS" (combined), "SITC1" (1950), "SITC2" (1974), "SITC3" (1985), "SITC4" (2006), "NAICS2002", "NAICS2007", "NAICS2012", "NAICS2017", "NAICS" (combined), "ISIC2" (1968), "ISIC3" (1989), "ISIC3.1" (2002), "ISIC4" (2008), "BEC4" (2016).
destination	A string setting the output coding scheme. Currently supports: "HS0" (1988/92), "HS1" (1996), "HS2" (2002), "HS3" (2007), "HS4" (2012), "HS5" (2017), "HS" (combined), "SITC1" (1950), "SITC2" (1974), "SITC3" (1985), "SITC4" (2006), "NAICS2002", "NAICS2007", "NAICS2012", "NAICS2017", "NAICS" (combined), "ISIC2" (1968), "ISIC3" (1989), "ISIC3.1" (2002), "ISIC4" (2008), "BEC4" (2016).
dest.digit	An integer indicating the preferred number of digits for outputs. The default is 4 digits.
all	Either TRUE or FALSE. If TRUE, the function will return (1) all matched outputs for each input, and (2) the share of occurrences for each matched output among all matched outputs. Users can use the shares as weights for more precise concordances. If FALSE, the function will only return the matched output with the largest share of occurrences (the mode match). If the mode consists of multiple matches, the function will return the first matched output.

Value

The matched output(s) for each element of the input vector. Either a list object when all = TRUE or a character vector when all = FALSE.

Note

Please include leading zeros in codes (e.g., use HS code 010110 instead of 10110). For BEC4 only, use original codes or add trailing zeroes if necessary (e.g., 7 or 700 instead of 007). Results may be buggy otherwise.

Source

Data consolidated from

- Pierce and Schott (2009, 2018) <https://faculty.som.yale.edu/peterschott/international-trade-data/>
- World Integrated Trade Solution (WITS), World Bank <https://wits.worldbank.org/product_concordance.html>
- United Nations Trade Statistics <https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp>

Examples

```
# HS to NAICS
concord(sourcevar = c("120600", "854690"),
        origin = "HS", destination = "NAICS",
        dest.digit = 6, all = TRUE)
concord(sourcevar = c("120600", "854690"),
        origin = "HS", destination = "NAICS",
        dest.digit = 6, all = FALSE)

# NAICS to HS
concord(sourcevar = c("111120", "326199"),
        origin = "NAICS", destination = "HS",
        dest.digit = 6, all = TRUE)

# HS to SITC4
concord(sourcevar = c("120600", "854690"),
        origin = "HS", destination = "SITC4",
        dest.digit = 5, all = TRUE)

# SITC4 to HS
concord(sourcevar = c("22240", "77324"),
        origin = "SITC4", destination = "HS",
        dest.digit = 6, all = TRUE)

# HS to ISIC3
concord(sourcevar = c("120600", "854690"),
        origin = "HS", destination = "ISIC3",
        dest.digit = 4, all = TRUE)

# SITC4 to NAICS
concord(sourcevar = c("22240", "77324"),
        origin = "SITC4", destination = "NAICS",
        dest.digit = 6, all = TRUE)

# NAICS to SITC4
concord(sourcevar = c("111120", "326199"),
        origin = "NAICS", destination = "SITC4",
        dest.digit = 5, all = TRUE)

# BEC4 to NAICS2017
concord(sourcevar = c("11", "21"),
```

```
origin = "BEC4", destination = "NAICS2017",
dest.digit = 4, all = FALSE)
```

---

concord_hs *Concord Within HS Codes*

Description

Concords codes within the Harmonized System classification (HS0, HS1, HS2, HS3, HS4, HS5, HS6).

Usage

```
concord_hs(sourcevar, origin, destination, dest.digit = 4, all = FALSE)
```

Arguments

sourcevar	An input character vector of HS codes. The function accepts 2, 4, 6-digit HS codes.
origin	A string setting the input industry classification: "HS0" (1988/92), "HS1" (1996), "HS2" (2002), "HS3" (2007), "HS4" (2012), "HS5" (2017), and "HS6" (2022).
destination	A string setting the output industry classification: "HS0" (1988/92), "HS1" (1996), "HS2" (2002), "HS3" (2007), "HS4" (2012), "HS5" (2017), and "HS6" (2022).
dest.digit	An integer indicating the preferred number of digits for output codes. Allows 2, 4, or 6-digit HS codes. The default is 4 digits.
all	Either TRUE or FALSE. If TRUE, the function will return (1) all matched outputs for each input, and (2) the share of occurrences for each matched output among all matched outputs. Users can use the shares as weights for more precise concordances. If FALSE, the function will only return the matched output with the largest share of occurrences (the mode match). If the mode consists of multiple matches, the function will return the first matched output.

Value

The matched output(s) for each element of the input vector. Either a list object when all = TRUE or a character vector when all = FALSE.

Note

Always include leading zeros in codes (e.g., use HS code 010110 instead of 10110)—results may be buggy otherwise.

Source

Concordance tables provided by:

- United Nations Trade Statistics <https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp>

Examples

```
# HS5 to HS4
concord_hs(sourcevar = c("1206", "8546"),
           origin = "HS5", destination = "HS4",
           dest.digit = 4, all = TRUE)

# HS0 to HS5
concord_hs(sourcevar = c("010111", "382390"),
           origin = "HS0", destination = "HS5",
           dest.digit = 6, all = TRUE)
```

---

concord_hs_bec *Converting HS and BEC Codes*

Description

Concords Harmonized System codes (HS0, HS1, HS2, HS3, HS4, HS5, HS6, HS combined) to and from Broad Economic Classification codes (BEC Revision 4).

Usage

```
concord_hs_bec(sourcevar, origin, destination, dest.digit = 2, all = FALSE)
```

Arguments

`sourcevar`	An input character vector of HS or BEC codes. The function accepts 2, 4, 6-digit codes for HS and 1 to 3-digit codes for BEC.
`origin`	A string setting the input industry classification: "HS" (combined), "HS0" (1988/92), "HS1" (1996), "HS2" (2002), "HS3" (2007), "HS4" (2012), "HS5" (2017), "HS6" (2022), "BEC4" (2016).
`destination`	A string setting the output industry classification: "HS" (combined), "HS0" (1988/92), "HS1" (1996), "HS2" (2002), "HS3" (2007), "HS4" (2012), "HS5" (2017), "HS6" (2022), "BEC4" (2016).
`dest.digit`	An integer indicating the preferred number of digits for output codes. Allows 2, 4, or 6 digits for HS codes and 1 to 3 digits for BEC codes. The default is 2 digits.
`all`	Either TRUE or FALSE. If TRUE, the function will return (1) all matched outputs for each input, and (2) the share of occurrences for each matched output among all matched outputs. Users can use the shares as weights for more precise concordances. If FALSE, the function will only return the matched output with the largest share of occurrences (the mode match). If the mode consists of multiple matches, the function will return the first matched output.

Value

The matched output(s) for each element of the input vector. Either a list object when all = TRUE or a character vector when all = FALSE.

Note

Always include leading zeros in codes (e.g., use HS code 010110 instead of 10110)—results may be buggy otherwise.

Source

Concordance tables provided by:

- United Nations Trade Statistics <https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp>

Examples

```
# one input: one-to-one match
concord_hs_bec(sourcevar = "120600",
               origin = "HS", destination = "BEC4",
               dest.digit = 3, all = FALSE)

concord_hs_bec(sourcevar = "120600",
               origin = "HS", destination = "BEC4",
               dest.digit = 3, all = TRUE)

# two inputs: multiple-to-one match
concord_hs_bec(sourcevar = c("010110", "010210"),
               origin = "HS", destination = "BEC4",
               dest.digit = 3, all = FALSE)

concord_hs_bec(sourcevar = c("010110", "010210"),
               origin = "HS", destination = "BEC4",
               dest.digit = 3, all = TRUE)

# two inputs: repeated
concord_hs_bec(sourcevar = c("120600", "120600"),
               origin = "HS", destination = "BEC4",
               dest.digit = 3, all = FALSE)

# one to multiple matches
concord_hs_bec(sourcevar = c("010120", "030571"),
               origin = "HS", destination = "BEC4",
               dest.digit = 3, all = TRUE)

# if no match, will return NA and give warning message
concord_hs_bec(sourcevar = c("120600", "120610"),
               origin = "HS", destination = "BEC4",
               dest.digit = 3, all = FALSE)

# 4-digit inputs, 2-digit outputs
concord_hs_bec(sourcevar = c("1206", "8546"),
               origin = "HS", destination = "BEC4",
               dest.digit = 2, all = TRUE)

# 6-digit inputs, 1-digit outputs
```

```
concord_hs_bec(sourcevar = c("120600", "854610"),
               origin = "HS", destination = "BEC4",
               dest.digit = 1, all = TRUE)

## BEC4 to HS combined
concord_hs_bec(sourcevar = c("1", "7"),
               origin = "BEC4", destination = "HS",
               dest.digit = 6, all = FALSE)
```

`concord_hs_isic` *Converting HS and ISIC Codes*

Description

Concords Harmonized System codes (HS0, HS1, HS2, HS3, HS4, HS5, HS6, HS combined) to and from International Standard Industrial Classification codes (ISIC Revision 2, 3, 3.1, 4).

Usage

```
concord_hs_isic(sourcevar, origin, destination, dest.digit = 4, all = FALSE)
```

Arguments

`sourcevar`	An input character vector of HS or ISIC codes. The function accepts 2, 4, 6-digit codes for HS and 1 to 4-digit codes for ISIC.
`origin`	A string setting the input industry classification: "HS" (combined), "HS0" (1988/92), "HS1" (1996), "HS2" (2002), "HS3" (2007), "HS4" (2012), "HS5" (2017), "HS6" (2022), "ISIC2" (1968), "ISIC3" (1989), "ISIC3.1" (2002), "ISIC4" (2008).
`destination`	A string setting the output industry classification: "HS" (combined), "HS0" (1988/92), "HS1" (1996), "HS2" (2002), "HS3" (2007), "HS4" (2012), "HS5" (2017), "HS6" (2022), "ISIC2" (1968), "ISIC3" (1989), "ISIC3.1" (2002), "ISIC4" (2008).
`dest.digit`	An integer indicating the preferred number of digits for output codes. Allows 2, 4, or 6 digits for HS codes and 1 to 4 digits for ISIC codes. The default is 4 digits.
`all`	Either TRUE or FALSE. If TRUE, the function will return (1) all matched outputs for each input, and (2) the share of occurrences for each matched output among all matched outputs. Users can use the shares as weights for more precise concordances. If FALSE, the function will only return the matched output with the largest share of occurrences (the mode match). If the mode consists of multiple matches, the function will return the first matched output.

Value

The matched output(s) for each element of the input vector. Either a list object when all = TRUE or a character vector when all = FALSE.

Note

Always include leading zeros in codes (e.g., use HS code 010110 instead of 10110)—results may be buggy otherwise.

Source

Concordance tables provided by:

- World Integrated Trade Solution (WITS), World Bank <https://wits.worldbank.org/product_concordance.html>

Examples

```
## HS5 to ISIC4
concord_hs_isic(sourcevar = c("120600", "854690"),
                origin = "HS5", destination = "ISIC4",
                dest.digit = 4, all = TRUE)

## ISIC4 to HS5
concord_hs_isic(sourcevar = c("0111", "2599"),
                origin = "ISIC4", destination = "HS5",
                dest.digit = 4, all = TRUE)
```

---

concord_hs_naics *Converting HS and NAICS Codes*

Description

Concords Harmonized System codes (HS0, HS1, HS2, HS3, HS4, HS5, HS6, HS combined) to and from North American Industry Classification System codes (NAICS2002, NAICS2007, NAICS2012, NAICS2017, NAICS combined).

Usage

```
concord_hs_naics(sourcevar, origin, destination, dest.digit = 6, all = FALSE)
```

Arguments

sourcevar	An input character vector of HS or NAICS codes. The function accepts 2, 4, 6-digit codes for HS and 2 to 6-digit codes for NAICS.
origin	A string setting the input industry classification: "HS" (combined), "HS0" (1988/92), "HS1" (1996), "HS2" (2002), "HS3" (2007), "HS4" (2012), "HS5" (2017), "HS6" (2022), "NAICS2002", "NAICS2007", "NAICS2012", "NAICS2017", "NAICS" (combined).
destination	A string setting the output industry classification: "HS" (combined), "HS0" (1988/92), "HS1" (1996), "HS2" (2002), "HS3" (2007), "HS4" (2012), "HS5" (2017), "HS6" (2022), "NAICS2002", "NAICS2007", "NAICS2012", "NAICS2017", "NAICS" (combined).

`dest.digit` An integer indicating the preferred number of digits for output codes. Allows 2, 4, or 6 digits for HS and 2 to 6-digit codes for NAICS. The default is 6 digits.

`all` Either TRUE or FALSE. If TRUE, the function will return (1) all matched outputs for each input, and (2) the share of occurrences for each matched output among all matched outputs. Users can use the shares as weights for more precise concordances. If FALSE, the function will only return the matched output with the largest share of occurrences (the mode match). If the mode consists of multiple matches, the function will return the first matched output.

Value

The matched output(s) for each element of the input vector. Either a list object when all = TRUE or a character vector when all = FALSE.

Note

Always include leading zeros in codes (e.g., use HS code 010110 instead of 10110)—results may be buggy otherwise.

Source

HS-NAICS concordance tables between 1989 and 2017 from Pierce and Schott (2009, 2018) <https://faculty.som.yale.edu/pet
trade-data/>.

Examples

```
## HS combined to NAICS
# one input: one-to-one match
concord_hs_naics(sourcevar = "120600",
                 origin = "HS", destination = "NAICS",
                 all = FALSE)
concord_hs_naics(sourcevar = "120600",
                 origin = "HS", destination = "NAICS",
                 all = TRUE)

# two inputs: multiple-to-one match
concord_hs_naics(sourcevar = c("120600", "120400"),
                 origin = "HS", destination = "NAICS",
                 all = FALSE)
concord_hs_naics(sourcevar = c("120600", "120400"),
                 origin = "HS", destination = "NAICS",
                 all = TRUE)

# two inputs: repeated
concord_hs_naics(sourcevar = c("120600", "120600"),
                 origin = "HS", destination = "NAICS",
                 all = FALSE)

# one to multiple matches
concord_hs_naics(sourcevar = c("120600", "854690"),
                 origin = "HS", destination = "NAICS",
```

```
                all = TRUE)

# if no match, will return NA and give warning message
concord_hs_naics(sourcevar = c("120600", "120800"),
                origin = "HS", destination = "NAICS",
                all = FALSE)

# 4-digit inputs
concord_hs_naics(sourcevar = c("1206", "8546"),
                origin = "HS", destination = "NAICS",
                all = TRUE)

# 4-digit outputs
concord_hs_naics(sourcevar = c("120600", "854690"),
                origin = "HS", destination = "NAICS",
                dest.digit = 4, all = TRUE)

## HS5 to NAICS
concord_hs_naics(sourcevar = c("1206", "8546"),
                origin = "HS5", destination = "NAICS",
                all = TRUE)

concord_hs_naics(sourcevar = c("120600", "854690"),
                origin = "HS5", destination = "NAICS",
                dest.digit = 4, all = TRUE)

## NAICS to HS
concord_hs_naics(sourcevar = c("1111", "3271"),
                origin = "NAICS", destination = "HS",
                all = TRUE)

concord_hs_naics(sourcevar = c("111120", "326199"),
                origin = "NAICS", destination = "HS",
                dest.digit = 4, all = TRUE)
```

`concord_hs_sitc` *Converting HS and SITC Codes*

Description

Concords Harmonized System codes (HS0, HS1, HS2, HS3, HS4, HS5, HS6, HS combined) to and from Standard International Trade Classification codes (SITC Revision 1, 2, 3, 4).

Usage

```
concord_hs_sitc(sourcevar, origin, destination, dest.digit = 4, all = FALSE)
```

Arguments

sourcevar	An input character vector of HS or SITC codes. The function accepts 2, 4, 6-digit codes for HS and 1 to 5-digit codes for SITC.
origin	A string setting the input industry classification: "HS" (combined), "HS0" (1988/92), "HS1" (1996), "HS2" (2002), "HS3" (2007), "HS4" (2012), "HS5" (2017), "HS6" (2022), "SITC1" (1950), "SITC2" (1974), "SITC3" (1985), and "SITC4" (2006).
destination	A string setting the output industry classification: "HS" (combined), "HS0" (1988/92), "HS1" (1996), "HS2" (2002), "HS3" (2007), "HS4" (2012), "HS5" (2017), "HS6" (2022), "SITC1" (1950), "SITC2" (1974), "SITC3" (1985), "SITC4" (2006).
dest.digit	An integer indicating the preferred number of digits for output codes. Allows 2, 4, or 6 digits for HS codes and 1 to 5 digits for SITC codes. The default is 4 digits.
all	Either TRUE or FALSE. If TRUE, the function will return (1) all matched outputs for each input, and (2) the share of occurrences for each matched output among all matched outputs. Users can use the shares as weights for more precise concordances. If FALSE, the function will only return the matched output with the largest share of occurrences (the mode match). If the mode consists of multiple matches, the function will return the first matched output.

Value

The matched output(s) for each element of the input vector. Either a list object when all = TRUE or a character vector when all = FALSE.

Note

Always include leading zeros in codes (e.g., use HS code 010110 instead of 10110)—results may be buggy otherwise.

Source

Concordance tables provided by:

- World Integrated Trade Solution (WITS), World Bank <https://wits.worldbank.org/product_concordance.html>
- United Nations Trade Statistics <https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp>

Examples

```
## HS combined to SITC4
# one input: one-to-one match
concord_hs_sitc(sourcevar = "120600",
                origin = "HS", destination = "SITC4",
                dest.digit = 5, all = FALSE)

concord_hs_sitc(sourcevar = "120600",
                origin = "HS", destination = "SITC4",
```

```
                dest.digit = 5, all = TRUE)

# two inputs: multiple-to-one match
concord_hs_sitc(sourcevar = c("010110", "010119"),
                origin = "HS", destination = "SITC4",
                dest.digit = 5, all = FALSE)

concord_hs_sitc(sourcevar = c("010110", "010119"),
                origin = "HS", destination = "SITC4",
                dest.digit = 5, all = TRUE)

# two inputs: repeated
concord_hs_sitc(sourcevar = c("120600", "120600"),
                origin = "HS", destination = "SITC4",
                dest.digit = 5, all = FALSE)

# one to multiple matches
concord_hs_sitc(sourcevar = c("1206", "1001"),
                origin = "HS", destination = "SITC4",
                dest.digit = 5, all = TRUE)

# if no match, will return NA and give warning message
concord_hs_sitc(sourcevar = c("120600", "120610"),
                origin = "HS", destination = "SITC4",
                dest.digit = 5, all = FALSE)

# 4-digit inputs, 5-digit outputs
concord_hs_sitc(sourcevar = c("1206", "8546"),
                origin = "HS", destination = "SITC4",
                dest.digit = 5, all = TRUE)

# 6-digit inputs, 3-digit outputs
concord_hs_sitc(sourcevar = c("120600", "854610"),
                origin = "HS", destination = "SITC4",
                dest.digit = 3, all = TRUE)

## SITC4 to HS combined
concord_hs_sitc(sourcevar = c("22240", "77322"),
                origin = "SITC4", destination = "HS",
                dest.digit = 6, all = FALSE)
```

`concord_isic` *Concord Within ISIC Codes*

Description

Concords codes within the International Standard Industrial Classification codes (ISIC Revision 2, 3, 3.1, 4).

Usage

```
concord_isic(sourcevar, origin, destination, dest.digit = 4, all = FALSE)
```

Arguments

sourcevar	An input character vector of ISIC codes. The function accepts 1 to 4-digit ISIC codes.
origin	A string setting the input industry classification: "ISIC2" (1968), "ISIC3" (1989), "ISIC3.1" (2002), "ISIC4" (2008).
destination	A string setting the output industry classification: "ISIC2" (1968), "ISIC3" (1989), "ISIC3.1" (2002), "ISIC4" (2008).
dest.digit	An integer indicating the preferred number of digits for output codes. Allows 1 to 4-digit ISIC codes. The default is 4 digits.
all	Either TRUE or FALSE. If TRUE, the function will return (1) all matched outputs for each input, and (2) the share of occurrences for each matched output among all matched outputs. Users can use the shares as weights for more precise concordances. If FALSE, the function will only return the matched output with the largest share of occurrences (the mode match). If the mode consists of multiple matches, the function will return the first matched output.

Value

The matched output(s) for each element of the input vector. Either a list object when all = TRUE or a character vector when all = FALSE.

Note

Always include leading zeros in codes (e.g., use ISIC3 code 0111 instead of 111)—results may be buggy otherwise.

Source

Concordance tables provided by:

- United Nations Trade Statistics <https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp>

Examples

```
# ISIC3 to ISIC2
concord_isic(sourcevar = c("0111", "1721"),
             origin = "ISIC3", destination = "ISIC2",
             dest.digit = 4, all = TRUE)
```

concord_isic_bec *Converting ISIC and BEC Codes*

Description

Concords International Standard Industrial Classification codes (ISIC Revision 2, 3, 3.1, 4) to and from Broad Economic Classification codes (BEC Revision 4) via the bridge of Harmonized System codes.

Usage

```
concord_isic_bec(sourcevar, origin, destination, dest.digit = 2, all = FALSE)
```

Arguments

sourcevar	An input character vector of ISIC or BEC codes. The function accepts 1 to 4-digit codes for ISIC and 1 to 3-digit codes for BEC.
origin	A string setting the input industry classification: "ISIC2" (1968), "ISIC3" (1989), "ISIC3.1" (2002), "ISIC4" (2008), "BEC4" (2016).
destination	A string setting the output industry classification: "ISIC2" (1968), "ISIC3" (1989), "ISIC3.1" (2002), "ISIC4" (2008), "BEC4" (2016).
dest.digit	An integer indicating the preferred number of digits for output codes. Allows 1 to 4 digits for ISIC and 1 to 3 digits for BEC codes. The default is 2 digits.
all	Either TRUE or FALSE. If TRUE, the function will return (1) all matched outputs for each input, and (2) the share of occurrences for each matched output among all matched outputs. Users can use the shares as weights for more precise concordances. If FALSE, the function will only return the matched output with the largest share of occurrences (the mode match). If the mode consists of multiple matches, the function will return the first matched output.

Value

The matched output(s) for each element of the input vector. Either a list object when all = TRUE or a character vector when all = FALSE.

Source

Concordance tables provided by:

- United Nations Trade Statistics <https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp>

Examples

```
# one input: one-to-multiple match
concord_isic_bec(sourcevar = "1110",
                 origin = "ISIC2", destination = "BEC4",
                 dest.digit = 2, all = FALSE)

concord_isic_bec(sourcevar = "1110",
                 origin = "ISIC2", destination = "BEC4",
                 dest.digit = 2, all = TRUE)

# two inputs: multiple-to-multiple match
concord_isic_bec(sourcevar = c("3211", "2901"),
                 origin = "ISIC2", destination = "BEC4",
                 dest.digit = 2, all = FALSE)

concord_isic_bec(sourcevar = c("3211", "2901"),
                 origin = "ISIC2", destination = "BEC4",
                 dest.digit = 2, all = TRUE)

# repeated inputs
concord_isic_bec(sourcevar = c("3720", "3720"),
                 origin = "ISIC2", destination = "BEC4",
                 dest.digit = 2, all = FALSE)

# if no match, will return NA and give warning message
concord_isic_bec(sourcevar = c("3721", "2911"),
                  origin = "ISIC2", destination = "BEC4",
                  dest.digit = 2, all = FALSE)

# 3-digit inputs, 1-digit outputs
concord_isic_bec(sourcevar = c("372", "381"),
                 origin = "ISIC2", destination = "BEC4",
                 dest.digit = 1, all = TRUE)

# BEC4 to ISIC2
concord_isic_bec(sourcevar = c("1", "7"),
                origin = "BEC4", destination = "ISIC2",
                dest.digit = 4, all = FALSE)
```

`concord_naics` *Concord Within NAICS Codes*

Description

Concords codes within the North American Industry Classification System codes (NAICS2002, NAICS2007, NAICS2012, NAICS2017).

Usage

```
concord_naics(sourcevar, origin, destination, dest.digit = 4, all = FALSE)
```

Arguments

sourcevar	An input character vector of NAICS codes. The function accepts 2 to 6-digit NAICS codes.
origin	A string setting the input industry classification: "NAICS2002", "NAICS2007", "NAICS2012", and "NAICS2017".
destination	A string setting the output industry classification: "NAICS2002", "NAICS2007", "NAICS2012", and "NAICS2017".
dest.digit	An integer indicating the preferred number of digits for output codes. Allows 2 to 6-digit NAICS codes. The default is 4 digits.
all	Either TRUE or FALSE. If TRUE, the function will return (1) all matched outputs for each input, and (2) the share of occurrences for each matched output among all matched outputs. Users can use the shares as weights for more precise concordances. If FALSE, the function will only return the matched output with the largest share of occurrences (the mode match). If the mode consists of multiple matches, the function will return the first matched output.

Value

The matched output(s) for each element of the input vector. Either a list object when all = TRUE or a character vector when all = FALSE.

Source

Concordance tables provided by:

- United State Census Bureau <https://www.census.gov/eos/www/naics/concordances/concordances.html>

Examples

```
concord_naics(sourcevar = c("2111", "3352"),
              origin = "NAICS2017", destination = "NAICS2002",
              dest.digit = 6, all = TRUE)
concord_naics(sourcevar = c("2111", "3352"),
              origin = "NAICS2017", destination = "NAICS2007",
              dest.digit = 6, all = TRUE)
concord_naics(sourcevar = c("2111", "3352"),
              origin = "NAICS2017", destination = "NAICS2012",
              dest.digit = 6, all = TRUE)
```

---

concord_naics_bec *Converting NAICS and BEC Codes*

Description

Concords North American Industry Classification System codes (NAICS2002, NAICS2007, NAICS2012, NAICS2017, NAICS combined) to and from Broad Economic Classification codes (BEC Revision 4) via the bridge of Harmonized System codes.

Usage

```
concord_naics_bec(sourcevar, origin, destination, dest.digit = 2, all = FALSE)
```

Arguments

sourcevar	An input character vector of NAICS or BEC codes. The function accepts 2 to 6-digit codes for NAICS and 1 to 3-digit codes for BEC.
origin	A string setting the input industry classification: "NAICS2002", "NAICS2007", "NAICS2012", "NAICS2017", "NAICS" (combined), "BEC4" (2016).
destination	A string setting the output industry classification: "NAICS2002", "NAICS2007", "NAICS2012", "NAICS2017", "NAICS" (combined), "BEC4" (2016).
dest.digit	An integer indicating the preferred number of digits for output codes. Allows 2 to 6 digits for NAICS and 1 to 3 digits for BEC codes. The default is 2 digits.
all	Either TRUE or FALSE. If TRUE, the function will return (1) all matched outputs for each input, and (2) the share of occurrences for each matched output among all matched outputs. Users can use the shares as weights for more precise concordances. If FALSE, the function will only return the matched output with the largest share of occurrences (the mode match). If the mode consists of multiple matches, the function will return the first matched output.

Value

The matched output(s) for each element of the input vector. Either a list object when all = TRUE or a character vector when all = FALSE.

Source

Concordance tables provided by:

- United Nations Trade Statistics <https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp>

Examples

```
# one input: one-to-one match
concord_naics_bec(sourcevar = "11111",
                  origin = "NAICS2002", destination = "BEC4",
                  dest.digit = 2, all = FALSE)

concord_naics_bec(sourcevar = "212325",
                  origin = "NAICS2002", destination = "BEC4",
                  dest.digit = 2, all = TRUE)

# two inputs: multiple-to-multiple match
concord_naics_bec(sourcevar = c("11291", "31511"),
                  origin = "NAICS2002", destination = "BEC4",
                  dest.digit = 2, all = FALSE)

concord_naics_bec(sourcevar = c("11291", "31511"),
```

```
                  origin = "NAICS2002", destination = "BEC4",
                  dest.digit = 2, all = TRUE)

# repeated inputs
concord_naics_bec(sourcevar = c("11251", "11251"),
                  origin = "NAICS2002", destination = "BEC4",
                  dest.digit = 2, all = FALSE)

# if no match, will return NA and give warning message
concord_naics_bec(sourcevar = c("23721", "23721"),
                  origin = "NAICS2002", destination = "BEC4",
                  dest.digit = 2, all = FALSE)

# 4-digit inputs, 1-digit outputs
concord_naics_bec(sourcevar = c("1129", "3151"),
                  origin = "NAICS2002", destination = "BEC4",
                  dest.digit = 1, all = TRUE)

# BEC4 to NAICS2002
concord_naics_bec(sourcevar = c("1", "7"),
                 origin = "BEC4", destination = "NAICS2002",
                 dest.digit = 6, all = FALSE)
```

`concord_naics_isic` *Converting NAICS and ISIC Codes*

Description

Concords North American Industry Classification System codes (NAICS2002, NAICS2007, NAICS2012, NAICS2017) to and from International Standard Industrial Classification codes (ISIC Revision 2, 3, 3.1, 4).

Usage

```
concord_naics_isic(sourcevar, origin, destination, dest.digit = 4, all = FALSE)
```

Arguments

`sourcevar`	An input character vector of NAICS or ISIC codes. The function accepts 2 to 6-digit codes for NAICS and 1 to 4-digit codes for ISIC.
`origin`	A string setting the input industry classification: "NAICS2002", "NAICS2007", "NAICS2012", "NAICS2017", "ISIC2" (1968), "ISIC3" (1989), "ISIC3.1" (2002), "ISIC4" (2008).
`destination`	A string setting the output industry classification: "NAICS2002", "NAICS2007", "NAICS2012", "NAICS2017", "ISIC2" (1968), "ISIC3" (1989), "ISIC3.1" (2002), "ISIC4" (2008).
`dest.digit`	An integer indicating the preferred number of digits for output codes. Allows 2 to 6 digits for NAICS codes and 1 to 4 digits for ISIC codes. The default is 4 digits.

`all` Either TRUE or FALSE. If TRUE, the function will return (1) all matched outputs for each input, and (2) the share of occurrences for each matched output among all matched outputs. Users can use the shares as weights for more precise concordances. If FALSE, the function will only return the matched output with the largest share of occurrences (the mode match). If the mode consists of multiple matches, the function will return the first matched output.

Value

The matched output(s) for each element of the input vector. Either a list object when all = TRUE or a character vector when all = FALSE.

Note

Always include leading zeros in codes (e.g., use ISIC4 code 0111 instead of 111)—results may be buggy otherwise.

Source

Concordance tables provided by:

- The U.S. Census Bureau <https://www.census.gov/eos/www/naics/concordances/concordances.html>

Examples

```
## NAICS2017 to ISIC4
concord_naics_isic(sourcevar = c("111120", "326199"),
                origin = "NAICS2017", destination = "ISIC4",
                dest.digit = 4, all = TRUE)
```

---

concord_sitc *Concord Within SITC Codes*

Description

Concords codes within the Standard International Trade Classification classification (SITC Revision 1, 2, 3, 4).

Usage

```
concord_sitc(sourcevar, origin, destination, dest.digit = 4, all = FALSE)
```

Arguments

sourcevar	An input character vector of SITC codes. The function accepts 1 to 5-digit SITC codes.
origin	A string setting the input industry classification: "SITC1" (1950), "SITC2" (1974), "SITC3" (1985), "SITC4" (2006).
destination	A string setting the output industry classification: "SITC1" (1950), "SITC2" (1974), "SITC3" (1985), "SITC4" (2006).
dest.digit	An integer indicating the preferred number of digits for output codes. Allows 1 to 5-digit SITC codes. The default is 4 digits.
all	Either TRUE or FALSE. If TRUE, the function will return (1) all matched outputs for each input, and (2) the share of occurrences for each matched output among all matched outputs. Users can use the shares as weights for more precise concordances. If FALSE, the function will only return the matched output with the largest share of occurrences (the mode match). If the mode consists of multiple matches, the function will return the first matched output.

Value

The matched output(s) for each element of the input vector. Either a list object when all = TRUE or a character vector when all = FALSE.

Note

Always include leading zeros in codes (e.g., use SITC code 01211 instead of 1211)—results may be buggy otherwise.

Source

Concordance tables provided by:

- United Nations Trade Statistics <https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp>

Examples

```
# SITC4 to SITC3
concord_sitc(sourcevar = c("22240", "04110"), origin = "SITC4",
             destination = "SITC3", dest.digit = 5, all = TRUE)

# SITC1 to SITC4
concord_sitc(sourcevar = c("22180", "04100"), origin = "SITC1",
             destination = "SITC4", dest.digit = 5, all = TRUE)
```

concord_sitc_bec *Converting SITC and BEC Codes*

Description

Concords Standard International Trade Classification codes (SITC1, SITC2, SITC3, SITC4) to and from Broad Economic Classification codes (BEC Revision 4).

Usage

```
concord_sitc_bec(sourcevar, origin, destination, dest.digit = 2, all = FALSE)
```

Arguments

sourcevar	An input character vector of SITC or BEC codes. The function accepts 1 to 5-digit codes for SITC and 1 to 3-digit codes for BEC.
origin	A string setting the input industry classification: "SITC1" (1950), "SITC2" (1974), "SITC3" (1985), "SITC4" (2006), "BEC4" (2016).
destination	A string setting the output industry classification: "SITC1" (1950), "SITC2" (1974), "SITC3" (1985), "SITC4" (2006), "BEC4" (2016).
dest.digit	An integer indicating the preferred number of digits for output codes. Allows 1 to 5 digits for SITC and 1 to 3 digits for BEC codes. The default is 2 digits.
all	Either TRUE or FALSE. If TRUE, the function will return (1) all matched outputs for each input, and (2) the share of occurrences for each matched output among all matched outputs. Users can use the shares as weights for more precise concordances. If FALSE, the function will only return the matched output with the largest share of occurrences (the mode match). If the mode consists of multiple matches, the function will return the first matched output.

Value

The matched output(s) for each element of the input vector. Either a list object when all = TRUE or a character vector when all = FALSE.

Source

Concordance tables provided by:

- United Nations Trade Statistics <https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp>

Examples

```
# one input: one-to-one match
concord_sitc_bec(sourcevar = "73161",
                origin = "SITC1", destination = "BEC4",
                dest.digit = 3, all = FALSE)

concord_sitc_bec(sourcevar = "73161",
                origin = "SITC1", destination = "BEC4",
                dest.digit = 3, all = TRUE)

# two inputs: multiple-to-one match
concord_sitc_bec(sourcevar = c("04300", "05484"),
                origin = "SITC1", destination = "BEC4",
                dest.digit = 3, all = FALSE)

concord_sitc_bec(sourcevar = c("04300", "05484"),
                origin = "SITC1", destination = "BEC4",
                dest.digit = 3, all = TRUE)

# two inputs: repeated
concord_sitc_bec(sourcevar = c("04300", "04300"),
                origin = "SITC1", destination = "BEC4",
                dest.digit = 3, all = FALSE)

# if no match, will return NA and give warning message
concord_sitc_bec(sourcevar = c("04300", "04301"),
                origin = "SITC1", destination = "BEC4",
                dest.digit = 3, all = FALSE)

# 4-digit inputs, 2-digit outputs
concord_sitc_bec(sourcevar = c("0430", "5121"),
                origin = "SITC1", destination = "BEC4",
                dest.digit = 2, all = TRUE)

# 3-digit inputs, 1-digit outputs
concord_sitc_bec(sourcevar = c("043", "512"),
                origin = "SITC1", destination = "BEC4",
                dest.digit = 1, all = TRUE)

# BEC4 to SITC1
concord_sitc_bec(sourcevar = c("1", "7"),
                origin = "BEC4", destination = "SITC1",
                dest.digit = 5, all = FALSE)
```

---

concord_sitc_isic *Converting SITC and ISIC Codes*

Description

Concords Standard International Trade Classification codes (SITC Revision 1, 2, 3, 4) to and from International Standard Industrial Classification codes (ISIC Revision 2, 3, 3.1, 4).

Usage

```
concord_sitc_isic(sourcevar, origin, destination, dest.digit = 4, all = FALSE)
```

Arguments

sourcevar	An input character vector of SITC or ISIC codes. The function accepts 1 to 5-digit codes for SITC and 1 to 4-digit codes for ISIC.
origin	A string setting the input industry classification: "SITC1" (1950), "SITC2" (1974), "SITC3" (1985), "SITC4" (2006), "ISIC2" (1968), "ISIC3" (1989), "ISIC3.1" (2002), "ISIC4" (2008).
destination	A string setting the output industry classification: "SITC1" (1950), "SITC2" (1974), "SITC3" (1985), "SITC4" (2006), "ISIC2" (1968), "ISIC3" (1989), "ISIC3.1" (2002), "ISIC4" (2008).
dest.digit	An integer indicating the preferred number of digits for output codes. Allows 1 to 5 digits for SITC codes and 1 to 4 digits for ISIC codes. The default is 4 digits.
all	Either TRUE or FALSE. If TRUE, the function will return (1) all matched outputs for each input, and (2) the share of occurrences for each matched output among all matched outputs. Users can use the shares as weights for more precise concordances. If FALSE, the function will only return the matched output with the largest share of occurrences (the mode match). If the mode consists of multiple matches, the function will return the first matched output.

Value

The matched output(s) for each element of the input vector. Either a list object when all = TRUE or a character vector when all = FALSE.

Note

Always include leading zeros in codes (e.g., use HS code 010110 instead of 10110)—results may be buggy otherwise.

Source

Concordance tables provided by:

- World Integrated Trade Solution (WITS), World Bank <https://wits.worldbank.org/product_concordance.html>

Examples

```
## SITC3 to ISIC3
concord_sitc_isic(sourcevar = c("22240", "04110"),
                  origin = "SITC3", destination = "ISIC3",
                  dest.digit = 4, all = TRUE)
```

concord_sitc_naics *Converting SITC and NAICS Codes*

Description

Concords Standard International Trade Classification classification codes (SITC Revision 1, 2, 3, 4) to and from North American Industry Classification System codes (NAICS2002, NAICS2007, NAICS2012, NAICS2017, NAICS combined).

Usage

```
concord_sitc_naics(sourcevar, origin, destination, dest.digit = 4, all = FALSE)
```

Arguments

sourcevar	An input character vector of SITC or NAICS codes. The function accepts 1 to 5-digit codes for SITC and 2 to 6-digit codes for NAICS.
origin	A string setting the input industry classification: "SITC1" (1950), "SITC2" (1974), "SITC3" (1985), "SITC4" (2006), "NAICS2002", "NAICS2007", "NAICS2012", "NAICS2017", "NAICS" (combined).
destination	A string setting the output industry classification: "SITC1" (1950), "SITC2" (1974), "SITC3" (1985), "SITC4" (2006), "NAICS2002", "NAICS2007", "NAICS2012", "NAICS2017", "NAICS" (combined).
dest.digit	An integer indicating the preferred number of digits for output codes. Allows 1 to 5-digit codes for SITC and 2 to 6-digit codes for NAICS. The default is 4 digits.
all	Either TRUE or FALSE. If TRUE, the function will return (1) all matched outputs for each input, and (2) the share of occurrences for each matched output among all matched outputs. Users can use the shares as weights for more precise concordances. If FALSE, the function will only return the matched output with the largest share of occurrences (the mode match). If the mode consists of multiple matches, the function will return the first matched output.

Value

The matched output(s) for each element of the input vector. Either a list object when all = TRUE or a character vector when all = FALSE.

Note

Always include leading zeros in codes (e.g., use SITC code 01211 instead of 1211)—results may be buggy otherwise.

Source

SITC-NAICS concordances are mapped through HS (combined):

- SITC-HS concordance tables are from the World Integrated Trade Solution (WITS), World Bank <https://wits.worldbank.org/product_concordance.html> and United Nations Trade Statistics <https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp>.
- HS-NAICS concordance tables are from Pierce and Schott (2009, 2018) <https://faculty.som.yale.edu/peterschott/intern trade-data/>.

Examples

```
## SITC4 to NAICS
# one input: one-to-one match
concord_sitc_naics(sourcevar = "22240",
                   origin = "SITC4", destination = "NAICS",
                   dest.digit = 6, all = FALSE)
concord_sitc_naics(sourcevar = "22240",
                   origin = "SITC4", destination = "NAICS",
                   dest.digit = 6, all = TRUE)

# two inputs: multiple-to-one match
concord_sitc_naics(sourcevar = c("22240", "04110"),
                   origin = "SITC4", destination = "NAICS",
                   dest.digit = 6, all = FALSE)
concord_sitc_naics(sourcevar = c("22240", "04110"),
                   origin = "SITC4", destination = "NAICS",
                   dest.digit = 6, all = TRUE)

# two inputs: repeated
concord_sitc_naics(sourcevar = c("22240", "22240"),
                   origin = "SITC4", destination = "NAICS",
                   dest.digit = 6, all = FALSE)

# one to multiple matches
concord_sitc_naics(sourcevar = c("22240", "00190"),
                   origin = "SITC4", destination = "NAICS",
                   dest.digit = 6, all = TRUE)

# if no match, will return NA and give warning message
concord_sitc_naics(sourcevar = c("22240", "00160"),
                   origin = "SITC4", destination = "NAICS",
                   dest.digit = 6, all = FALSE)

# 4-digit inputs
concord_sitc_naics(sourcevar = c("2224", "0019"),
                   origin = "SITC4", destination = "NAICS",
                   dest.digit = 6, all = TRUE)

# 4-digit outputs
concord_sitc_naics(sourcevar = c("22240", "00190"),
                   origin = "SITC4", destination = "NAICS",
                   dest.digit = 6, all = TRUE)
```

```
## NAICS to SITC4
concord_sitc_naics(sourcevar = c("111120", "326199"),
                   origin = "NAICS", destination = "SITC4",
                   dest.digit = 4, all = TRUE)
```

`get_desc` *Looking Up Product Description*

Description

Returns the description of product codes.

Usage

```
get_desc(sourcevar, origin)
```

Arguments

`sourcevar`	A character vector of input codes.
`origin`	A string indicating one of the following industry/product classifications: "HS0" (1988/92), "HS1" (1996), "HS2" (2002), "HS3" (2007), "HS4" (2012), "HS5" (2017), "HS6" (2022), "HS" (combined), "SITC1" (1950), "SITC2" (1974), "SITC3" (1985), "SITC4" (2006), "NAICS2002", "NAICS2007", "NAICS2012", "NAICS2017", "ISIC2" (1968), "ISIC3" (1989), "ISIC3.1" (2002), "ISIC4" (2008), "BEC4" (2016).

Value

A character vector giving the title/description of each element of the input codes.

Note

Please include leading zeros in codes (e.g., use HS code 010110 instead of 10110). For BEC4 only, use original codes or add trailing zeroes if necessary (e.g., 7 or 700 instead of 007). Results may be buggy otherwise.

Source

Data consolidated from

- The U.S. Census Bureau <https://www.census.gov/>
- The U.S. Bureau of Labor Statistics <https://www.bls.gov/>
- UN Comtrade <https://comtrade.un.org/>
- UN Trade Statistics <https://unstats.un.org/unsd/trade/default.asp>

Examples

```
# HS
get_desc(sourcevar = c("120600", "854690"), origin = "HS")

# Returns NA when no concordances exist and gives warning message
get_desc(sourcevar = c("120600", "120601", "854690"), origin = "HS")

# HS0
get_desc(sourcevar = c("120600", "854690"), origin = "HS0")

# HS1
get_desc(sourcevar = c("120600", "854690"), origin = "HS1")

# HS2
get_desc(sourcevar = c("120600", "854690"), origin = "HS2")

# HS3
get_desc(sourcevar = c("120600", "854690"), origin = "HS3")

# HS4
get_desc(sourcevar = c("120600", "854690"), origin = "HS4")

# HS5
get_desc(sourcevar = c("120600", "854690"), origin = "HS5")

# HS6
get_desc(sourcevar = c("120600", "854690"), origin = "HS6")

# NAICS 2002
get_desc(sourcevar = c("111120", "326199"), origin = "NAICS2002")

# NAICS 2007
get_desc(sourcevar = c("111120", "326199"), origin = "NAICS2007")

# NAICS 2012
get_desc(sourcevar = c("111120", "326199"), origin = "NAICS2012")

# NAICS 2017
get_desc(sourcevar = c("111120", "326199"), origin = "NAICS2017")

# ISIC2
get_desc(sourcevar = c("3114", "3831"), origin = "ISIC2")

# ISIC3
get_desc(sourcevar = c("1512", "3110"), origin = "ISIC3")

# ISIC4
get_desc(sourcevar = c("1512", "3110"), origin = "ISIC4")

# SITC1
get_desc(sourcevar = c("4216", "7232"), origin = "SITC1")
```

```
# SITC2
get_desc(sourcevar = c("4236", "7732"), origin = "SITC2")

# SITC3
get_desc(sourcevar = c("4221", "7732"), origin = "SITC3")

# SITC4
get_desc(sourcevar = c("4221", "7732"), origin = "SITC4")

# BEC4
get_desc(sourcevar = c("111", "112"), origin = "BEC4")
```

`get_intermediate` *Looking Up the Level of Intermediate Goods Production*

Description

Calculates and returns the level (proportion) of intermediate goods production in an industry based on product descriptions.

Usage

```
get_intermediate(sourcevar, origin)
```

Arguments

`sourcevar`	An input character vector of industry codes to look up.
`origin`	A string indicating one of the following industry/product classifications: "HS0" (1988/92), "HS1" (1996), "HS2" (2002), "HS3" (2007), "HS4" (2012), "HS5" (2017), "HS6" (2022), "HS" (combined), "SITC1" (1950), "SITC2" (1974), "SITC3" (1985), "SITC4" (2006), "NAICS2002", "NAICS2007", "NAICS2012", "NAICS2017", "ISIC2" (1968), "ISIC3" (1989), "ISIC4" (2008), "BEC4" (2016).

Value

Uses keywords ("part(s)", "intermediate", and "component") to identify intermediate-goods producing industries (at the most disaggregated level in the description data), and then calculates and returns the proportion these industries occupy among each input code.

Note

Please include leading zeros in codes (e.g., use HS code 010110 instead of 10110). For BEC4 only, use original codes or add trailing zeroes if necessary (e.g., 7 or 700 instead of 007). Also note that the results may not be informative for broad categories like BEC4.

Source

Product descriptions consolidated from

- The U.S. Census Bureau <https://www.census.gov/>
- The U.S. Bureau of Labor Statistics <https://www.bls.gov/>
- UN Comtrade <https://comtrade.un.org/>
- UN Trade Statistics <https://unstats.un.org/unsd/trade/default.asp>

Examples

```
# NAICS
get_intermediate(sourcevar = c("11", "31-33", "42"), origin = "NAICS2017")
get_intermediate(sourcevar = c("3131", "3363"), origin = "NAICS2017")

# HS
get_intermediate(sourcevar = c("03", "84"), origin = "HS5")

# SITC
get_intermediate(sourcevar = c("05", "75"), origin = "SITC4")
```

---

get_proddiff *Looking Up Product Differentiation*

Description

Returns Rauch's classification of product differentiation. Rauch classifies 4-digit SITC2 codes according to three possible types: differentiated products ("n"), reference priced ("r"), and homogeneous goods traded on an organized exchange ("w").

Usage

```
get_proddiff(sourcevar, origin, setting = "CON", prop = "")
```

Arguments

sourcevar	An input character vector of industry/product codes.
origin	A string setting the input coding scheme. Supports the following classifications: "HS0" (1988/92), "HS1" (1996), "HS2" (2002), "HS3" (2007), "HS4" (2012), "HS5" (2017), "HS6" (2022), "HS" (combined), "SITC1" (1950), "SITC2" (1974), "SITC3" (1985), "SITC4" (2006), "NAICS2002", "NAICS2007", "NAICS2012", "NAICS2017", "ISIC2" (1968), "ISIC3" (1989), "ISIC4" (2008), "BEC4" (2016).
setting	Choose "CON" (conservative, default) or "LIB" (liberal) classification.
prop	Can be set to "n", "r", or "w", in which case the function will return, respectively, the proportion of type "n", "r", or "w" in the resulting vector of Rauch indices. If prop is not set to any of these, then the function returns, for each input code, a dataframe that summarizes all the frequencies and proportions of type "w", "r", and "n".

Value

Concords each element of the input vector to 4-digit SITC2 codes, then uses the corresponding codes as input to extract Rauch product differentiation indices.

Note

Please include leading zeros in codes (e.g., use HS code 010110 instead of 10110). For BEC4 only, use original codes or add trailing zeroes if necessary (e.g., 7 or 700 instead of 007). Results may be buggy otherwise.

Source

Data from Jon Haveman's International Trade Data page <http://www.macalester.edu/research/economics/PAGE/HAVEMAN

References

Rauch, James E. 1999. "Networks Versus Markets in International Trade," Journal of International Economics 48(1): 7–35.

Examples

```
# SITC2 input
get_proddiff(sourcevar = c("22240", "04110"), origin = "SITC2", setting = "CON", prop = "")

get_proddiff(sourcevar = c("22240", "04110"), origin = "SITC2", setting = "CON", prop = "r")

get_proddiff(sourcevar = c("22240", "04110"), origin = "SITC2", setting = "CON", prop = "w")

get_proddiff(sourcevar = c("22240", "04110"), origin = "SITC2", setting = "CON", prop = "n")

get_proddiff(sourcevar = c("22240", "04110"), origin = "SITC2", setting = "LIB", prop = "")

# SITC3 input
get_proddiff(sourcevar = c("22240", "04110"), origin = "SITC3", setting = "CON", prop = "")

# SITC4 input
get_proddiff(sourcevar = c("22240", "04110"), origin = "SITC4", setting = "CON", prop = "")

# HS input
get_proddiff(sourcevar = c("1206", "1001", "8546"), origin = "HS", setting = "CON", prop = "")

# NAICS input
get_proddiff(sourcevar = c("111120", "326199"), origin = "NAICS", setting = "CON", prop = "")

# BEC4 input
get_proddiff(sourcevar = c("11", "21"), origin = "BEC4", setting = "CON", prop = "")
```

`get_product` *Looking Up Product Codes By Keywords*

Description

Returns product codes for which descriptions match user-specified keywords.

Usage

```
get_product(pattern, origin, digits = 4, type = "regex", ignore.case = TRUE)
```

Arguments

`pattern`	String pattern to look for. The function utilizes the function `stringr::str_detect` for pattern detection.
`origin`	A string indicating one of the following industry/product classifications: "HS0" (1988/92), "HS1" (1996), "HS2" (2002), "HS3" (2007), "HS4" (2012), "HS5" (2017), "HS6" (2022), "HS" (combined), "SITC1" (1950), "SITC2" (1974), "SITC3" (1985), "SITC4" (2006), "NAICS2002", "NAICS2007", "NAICS2012", "NAICS2017", "ISIC2" (1968), "ISIC3" (1989), "ISIC4" (2008), "BEC4" (2016).
`digits`	An integer indicating the preferred number of digits for output codes. The default is 4 digits. Allows 1 to 5-digit codes for the SITC classification; 2, 4, 6-digit codes for NAICS and HS classifications; 1 to 4-digit codes for the ISIC classification; 1 to 3-digit codes for the BEC classification.
`type`	A string indicating the type of pattern interpretation. Three options are available: `regex`, `fixed`, and `coll`. The default interpretation is a regular expression. See ?str_detect for further details.
`ignore.case`	If TRUE (by default), pattern dection will ignore case differences.

Value

A character vector of product codes that match user specified description patterns.

Source

Product descriptions consolidated from

- The U.S. Census Bureau <https://www.census.gov/>
- The U.S. Bureau of Labor Statistics <https://www.bls.gov/>
- UN Comtrade <https://comtrade.un.org/>
- UN Trade Statistics <https://unstats.un.org/unsd/trade/default.asp>

Examples

```
# find manufacture-related NAICS codes
manu.vec <- get_product(pattern = "manu", origin = "NAICS2017", digits = 4,
                        type = "regex", ignore.case = TRUE)
manu.vec

# check product description
get_desc(manu.vec, origin = "NAICS2017")

# 6-digit outputs
get_product(pattern = "manu", origin = "NAICS2017", digits = 6,
            type = "regex", ignore.case = TRUE)

# choose different interpretation types
get_product(pattern = "manu", origin = "NAICS2017", digits = 4,
            type = "fixed", ignore.case = TRUE)
get_product(pattern = "manu", origin = "NAICS2017", digits = 4,
            type = "coll", ignore.case = TRUE)
```

---

get_sigma *Looking Up Product Elasticity*

Description

Returns product-level import demand price elasticities based on 3-digit HS0 estimates from Broda and Weinstein (QJE, 2006) for 73 countries.

Usage

```
get_sigma(
  sourcevar,
  origin,
  country = "USA",
  use_SITC = FALSE,
  give_avg = TRUE
)
```

Arguments

sourcevar	An input character vector of industry/product codes.
origin	A string setting the input coding scheme. Supports the following classifications: "HS0" (1988/92), "HS1" (1996), "HS2" (2002), "HS3" (2007), "HS4" (2012), "HS5" (2017), "HS6" (2022), "HS" (combined), "SITC1" (1950), "SITC2" (1974), "SITC3" (1985), "SITC4" (2006), "NAICS2002", "NAICS2007", "NAICS2012", "NAICS2017", "ISIC2" (1968), "ISIC3" (1989), "ISIC3.1" (2002), "ISIC4" (2008), "BEC4" (2016).

country	A string setting the ISO 3-letter country code for which to return import demand elasticities (default = "USA"). For a list of available countries, load the package and type "unique(sigma_hs0_3d$iso3c)".
use_SITC	Set to FALSE by default. Set to TRUE if you wish to look up elasticities via 5-digit SITC3 codes instead. Only available for the United States.
give_avg	Set to FALSE if you wish to obtain the full vector of elasticities for all matching codes of each element in the input vector. When set to TRUE (as by default) each output element will be a simple average of all elasticities (of matched codes) in the corresponding vector.

Value

Concords vector of input codes to 3-digit HS0 codes and then extracts the corresponding product-level import demand elasticities in the country selected by the user. For the United States (only), Broda and Weinstein (2006) have also estimated elasticities based on more fine-grained 5-digit SITC3 codes. Set use_SITC to TRUE to obtain elasticities in the United States via this method.

Note

Always include leading zeros in codes (e.g., use HS code 010110 instead of 10110)—results may be buggy otherwise.

Source

Data from David E. Weinstein's webpage <http://www.columbia.edu/~dew35/TradeElasticities/TradeElasticities.html>.

References

Broda, Christian, and David E. Weinstein. 2006. "Globalization and the Gains from Variety," Quarterly Journal of Economics, 121(2): 541–585.

Examples

```
# South Korea, SITC4 input
get_sigma(sourcevar = c("21170", "69978", "21170"), origin = "SITC4",
          country = "KOR", use_SITC = FALSE, give_avg = TRUE)

get_sigma(sourcevar = c("21170", "69978", "21170"), origin = "SITC4",
          country = "KOR", use_SITC = FALSE, give_avg = FALSE)

# United States, HS5 input, SITC3 estimates
get_sigma(sourcevar = c("0101", "0207", "0101"), origin = "HS5",
          country = "USA", use_SITC = TRUE, give_avg = FALSE)

get_sigma(sourcevar = c("0101", "0207", "0101"), origin = "HS5",
          country = "USA", use_SITC = TRUE, give_avg = TRUE)
```

get_upstream *Looking Up the Upstreamness and Downstreamness of Industries*

Description

Returns measures of industry upstreamness and downstreamness based on Antras and Chor (2018) and Antras, Chor, Fally and Hillberry (2012).

Usage

```
get_upstream(
  sourcevar,
  origin,
  country,
  year,
  setting = "GVC_Ui",
  detailed = FALSE
)
```

Arguments

sourcevar	An input character vector of industry codes to look up.
origin	A string indicating one of the following industry/product classifications: "HS0" (1988/92), "HS1" (1996), "HS2" (2002), "HS3" (2007), "HS4" (2012), "HS5" (2017), "HS6" (2022), "HS" (combined), "SITC1" (1950), "SITC2" (1974), "SITC3" (1985), "SITC4" (2006), "NAICS2002", "NAICS2007", "NAICS2012", "NAICS2017", "ISIC2" (1968), "ISIC3" (1989), "ISIC3.1" (2002), "ISIC4" (2008), "BEC4" (2016).
country	A string setting the ISO 3-letter country code for which to return values (default = "USA"). Antras and Chor (2018) provide estimates for 40 countries and the Rest of the World (RoW). For a list of available countries, load the package and type "unique(upstream$ISO3C)".
year	An integer setting the year for which to return values. Antras and Chor (2018) provide estimates for 1995-2011. The default returns estimates for 2011.
setting	Choose one of the four available measures from Antras and Chor (2018). • "GVC_Ui": Upstreamness (net inventories correction). This is the defult measure. Larger values are associated with higher levels of upstreamness. • "GVC_FUGOi": Final-use to gross-output (net inventories correction). Lower values are associated with higher levels of upstreamness. • "GVC_Di": Downstreamness (net inventories correction). Larger values are associated with higher levels of downstreamness. • "GVC_VAGOi": Value-added to gross-output (net inventories correction). Lower values are associated with higher levels of downstreamness

`detailed` Choose whether to return more detailed industry-level GVC_Ui estimates following Antras, Chor, Fally, and Hillberry (2012). Note that these estimates only exist for USA in 2002, 2007, and 2012.

- "FALSE": Do not report detailed measures. This is the default.
- "TRUE": Report the detailed measures.

Value

Concords each element of the input vector to 2-digit ISIC3 codes, then uses the corresponding codes as input to calculate weighted estimates of upstreamness or downstreamness. For detailed estimates, the function concords each element of the input vector to 6-digit BEA codes, and then calculates weighted average estimates of upstreamness (GVC_Ui).

Source

Data from Pol Antras' webpage:

- <https://scholar.harvard.edu/antras/publications/measurement-upstreamness-and-downstreamness-global-valuechains>
- <https://scholar.harvard.edu/antras/publications/measuring-upstreamness-production-and-trade-flows>

References

- Antras, Pol, and Davin Chor. 2018. "On the Measurement of Upstreamness and Downstreamness in Global Value Chains." World Trade Evolution: Growth, Productivity and Employment, 126-194. Taylor & Francis Group.
- Antras, Pol, Davin Chor, Thibault Fally, and Russell Hillberry. 2012. "Measuring the Upstreamness of Production and Trade Flows." American Economic Review Papers and Proceedings 102(3), 412-416.

Examples

```
# ISIC3
get_upstream(sourcevar = c("01", "29", "29", "80"), origin = "ISIC3",
             country = "USA", year = "2011",
             setting = "GVC_Ui", detailed = FALSE)

# HS5
get_upstream(sourcevar = c("0101", "0301", "7014", "8420"), origin = "HS5",
             country = "USA", year = "2012",
             setting = "GVC_Ui", detailed = TRUE)
```

hs0_bec4 *HS0-BEC4 Concordance*

Description

A dataset containing concordances between HS1 and BEC4 classifications.

Usage

```
hs0_bec4
```

Format

A data frame with 5,156 rows and 6 variables:

HS0_6d 6-digit HS0 Code
HS0_4d 4-digit HS0 Code
HS0_2d 2-digit HS0 Code
BEC4_3d 3-digit BEC4 Code
BEC4_2d 2-digit BEC4 Code
BEC4_1d 1-digit BEC4 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs0_desc *HS0 Description*

Description

A dataset containing the description of products under the HS0 classification.

Usage

```
hs0_desc
```

Format

A data frame with 6380 rows and 2 variables:

code HS0 Code
desc HS0 Description

Source

https://comtrade.un.org/data/cache/classificationH0.json

hs0_isic2 *HS0-ISIC2 Concordance*

Description

A dataset containing concordances between HS0 and ISIC2 classifications.

Usage

```
hs0_isic2
```

Format

A data frame with 5018 rows and 7 variables:

HS0_6d 6-digit HS0 Code

HS0_4d 4-digit HS0 Code

HS0_2d 2-digit HS0 Code

ISIC2_4d 4-digit ISIC2 Code

ISIC2_3d 3-digit ISIC2 Code

ISIC2_2d 2-digit ISIC2 Code

ISIC2_1d 1-digit ISIC2 Code

Source

https://wits.worldbank.org/product_concordance.html

hs0_isic3 *HS0-ISIC3 Concordance*

Description

A dataset containing concordances between HS0 and ISIC3 classifications.

Usage

```
hs0_isic3
```

Format

A data frame with 5018 rows and 7 variables:

HS0_6d 6-digit HS0 Code

HS0_4d 4-digit HS0 Code

HS0_2d 2-digit HS0 Code

ISIC3_4d 4-digit ISIC3 Code

ISIC3_3d 3-digit ISIC3 Code

ISIC3_2d 2-digit ISIC3 Code

ISIC3_1d 1-digit ISIC3 Code

Source

https://wits.worldbank.org/product_concordance.html

---

hs0_naics *HS0-NAICS Concordance*

Description

A dataset containing concordances between HS0 and NAICS (combined) classifications.

Usage

```
hs0_naics
```

Format

A data frame with 8058 rows and 8 variables:

HS0_6d 6-digit HS0 Code

HS0_4d 4-digit HS0 Code

HS0_2d 2-digit HS0 Code

NAICS_6d 6-digit NAICS Code

NAICS_5d 5-digit NAICS Code

NAICS_4d 4-digit NAICS Code

NAICS_3d 3-digit NAICS Code

NAICS_2d 2-digit NAICS Code

Source

Pierce and Schott (2009, 2018), https://spinup-000d1a-wp-offload-media.s3.amazonaws.com/faculty/wp-content/uploads/sites/47/2019/06/hssicnaics_20181015.zip

hs0_sitc1 *HS0-SITC1 Concordance*

Description

A dataset containing concordances between HS0 and SITC1 classification.

Usage

```
hs0_sitc1
```

Format

A data frame with 5012 rows and 8 variables:

HS0_6d 6-digit HS0 Code

HS0_4d 4-digit HS0 Code

HS0_2d 2-digit HS0 Code

SITC1_5d 5-digit SITC1 Code

SITC1_4d 4-digit SITC1 Code

SITC1_3d 3-digit SITC1 Code

SITC1_2d 2-digit SITC1 Code

SITC1_1d 1-digit SITC1 Code

Source

https://wits.worldbank.org/product_concordance.html

hs0_sitc2 *HS0-SITC2 Concordance*

Description

A dataset containing concordances between HS0 and SITC2 classifications.

Usage

```
hs0_sitc2
```

Format

A data frame with 5017 rows and 8 variables:

HS0_6d 6-digit HS0 Code

HS0_4d 4-digit HS0 Code

HS0_2d 2-digit HS0 Code

SITC2_5d 5-digit SITC2 Code

SITC2_4d 4-digit SITC2 Code

SITC2_3d 3-digit SITC2 Code

SITC2_2d 2-digit SITC2 Code

SITC2_1d 1-digit SITC2 Code

Source

https://wits.worldbank.org/product_concordance.html

---

hs0_sitc3 *HS0-SITC3 Concordance*

Description

A dataset containing concordances between HS0 and SITC3 classifications.

Usage

```
hs0_sitc3
```

Format

A data frame with 5017 rows and 8 variables:

HS0_6d 6-digit HS0 Code

HS0_4d 4-digit HS0 Code

HS0_2d 2-digit HS0 Code

SITC3_5d 5-digit SITC3 Code

SITC3_4d 4-digit SITC3 Code

SITC3_3d 3-digit SITC3 Code

SITC3_2d 2-digit SITC3 Code

SITC3_1d 1-digit SITC3 Code

Source

https://wits.worldbank.org/product_concordance.html

hs0_sitc4 *HS0-SITC4 Concordance*

Description

A dataset containing concordances between HS0 and SITC4 classifications.

Usage

```
hs0_sitc4
```

Format

A data frame with 5018 rows and 8 variables:

HS0_6d 6-digit HS0 Code

HS0_4d 4-digit HS0 Code

HS0_2d 2-digit HS0 Code

SITC4_5d 5-digit SITC4 Code

SITC4_4d 4-digit SITC4 Code

SITC4_3d 3-digit SITC4 Code

SITC4_2d 2-digit SITC4 Code

SITC4_1d 1-digit SITC4 Code

Source

https://wits.worldbank.org/product_concordance.html

hs1_bec4 *HS1-BEC4 Concordance*

Description

A dataset containing concordances between HS1 and BEC4 classifications.

Usage

```
hs1_bec4
```

Format

A data frame with 5,334 rows and 6 variables:

HS1_6d 6-digit HS1 Code

HS1_4d 4-digit HS1 Code

HS1_2d 2-digit HS1 Code

BEC4_3d 3-digit BEC4 Code

BEC4_2d 2-digit BEC4 Code

BEC4_1d 1-digit BEC4 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

---

hs1_desc *HS1 Description*

Description

A dataset containing the description of products under the HS1 classification.

Usage

```
hs1_desc
```

Format

A data frame with 6473 rows and 2 variables:

code HS1 Code

desc HS1 Description

Source

https://comtrade.un.org/data/cache/classificationH1.json

hs1_hs0 *HS1-HS0 Concordance*

Description

A dataset containing concordances between HS1 and HS0 classification.

Usage

```
hs1_hs0
```

Format

A data frame with 5130 rows and 6 variables:

HS1_6d 6-digit HS1 Code

HS1_4d 4-digit HS1 Code

HS1_2d 2-digit HS1 Code

HS0_6d 6-digit HS0 Code

HS0_4d 4-digit HS0 Code

HS0_2d 2-digit HS0 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs1_isic2 *HS1-ISIC2 Concordance*

Description

A dataset containing concordances between HS1 and ISIC2 classifications.

Usage

```
hs1_isic2
```

Format

A data frame with 5113 rows and 7 variables:

HS1_6d 6-digit HS1 Code

HS1_4d 4-digit HS1 Code

HS1_2d 2-digit HS1 Code

ISIC2_4d 4-digit ISIC2 Code

ISIC2_3d 3-digit ISIC2 Code

ISIC2_2d 2-digit ISIC2 Code

ISIC2_1d 1-digit ISIC2 Code

Source

https://wits.worldbank.org/product_concordance.html

---

hs1_isic3 *HS1-ISIC3 Concordance*

Description

A dataset containing concordances between HS1 and ISIC3 classifications.

Usage

```
hs1_isic3
```

Format

A data frame with 5113 rows and 7 variables:

HS1_6d 6-digit HS1 Code

HS1_4d 4-digit HS1 Code

HS1_2d 2-digit HS1 Code

ISIC3_4d 4-digit ISIC3 Code

ISIC3_3d 3-digit ISIC3 Code

ISIC3_2d 2-digit ISIC3 Code

ISIC3_1d 1-digit ISIC3 Code

Source

https://wits.worldbank.org/product_concordance.html

hs1_naics *HS1-NAICS Concordance*

Description

A dataset containing concordances between HS1 and NAICS (combined) classifications.

Usage

```
hs1_naics
```

Format

A data frame with 8297 rows and 8 variables:

HS1_6d 6-digit HS1 Code

HS1_4d 4-digit HS1 Code

HS1_2d 2-digit HS1 Code

NAICS_6d 6-digit NAICS Code

NAICS_5d 5-digit NAICS Code

NAICS_4d 4-digit NAICS Code

NAICS_3d 3-digit NAICS Code

NAICS_2d 2-digit NAICS Code

Source

Pierce and Schott (2009, 2018), https://spinup-000d1a-wp-offload-media.s3.amazonaws.com/faculty/wp-content/uploads/sites/47/2019/06/hssicnaics_20181015.zip

hs1_sitc1 *HS1-SITC1 Concordance*

Description

A dataset containing concordances between HS1 and SITC1 classifications.

Usage

```
hs1_sitc1
```

Format

A data frame with 5106 rows and 8 variables:

HS1_6d 6-digit HS1 Code

HS1_4d 4-digit HS1 Code

HS1_2d 2-digit HS1 Code

SITC1_5d 5-digit SITC1 Code

SITC1_4d 4-digit SITC1 Code

SITC1_3d 3-digit SITC1 Code

SITC1_2d 2-digit SITC1 Code

SITC1_1d 1-digit SITC1 Code

Source

https://wits.worldbank.org/product_concordance.html

---

hs1_sitc2 *HS1-SITC2 Concordance*

Description

A dataset containing concordances between HS1 and SITC2 classifications.

Usage

```
hs1_sitc2
```

Format

A data frame with 5111 rows and 8 variables:

HS1_6d 6-digit HS1 Code

HS1_4d 4-digit HS1 Code

HS1_2d 2-digit HS1 Code

SITC2_5d 5-digit SITC2 Code

SITC2_4d 4-digit SITC2 Code

SITC2_3d 3-digit SITC2 Code

SITC2_2d 2-digit SITC2 Code

SITC2_1d 1-digit SITC2 Code

Source

https://wits.worldbank.org/product_concordance.html

hs1_sitc3 *HS1-SITC3 Concordance*

Description

A dataset containing concordances between HS1 and SITC3 classifications.

Usage

```
hs1_sitc3
```

Format

A data frame with 5111 rows and 8 variables:

HS1_6d 6-digit HS1 Code

HS1_4d 4-digit HS1 Code

HS1_2d 2-digit HS1 Code

SITC3_5d 5-digit SITC3 Code

SITC3_4d 4-digit SITC3 Code

SITC3_3d 3-digit SITC3 Code

SITC3_2d 2-digit SITC3 Code

SITC3_1d 1-digit SITC3 Code

Source

https://wits.worldbank.org/product_concordance.html

hs1_sitc4 *HS1-SITC4 Concordance*

Description

A dataset containing concordances between HS1 and SITC4 classifications.

Usage

```
hs1_sitc4
```

Format

A data frame with 5111 rows and 8 variables:

HS1_6d 6-digit HS1 Code

HS1_4d 4-digit HS1 Code

HS1_2d 2-digit HS1 Code

SITC4_5d 5-digit SITC4 Code

SITC4_4d 4-digit SITC4 Code

SITC4_3d 3-digit SITC4 Code

SITC4_2d 2-digit SITC4 Code

SITC4_1d 1-digit SITC4 Code

Source

https://wits.worldbank.org/product_concordance.html

---

hs2_bec4 *HS2-BEC4 Concordance*

Description

A dataset containing concordances between HS2 and BEC4 classifications.

Usage

```
hs2_bec4
```

Format

A data frame with 5,351 rows and 6 variables:

HS2_6d 6-digit HS2 Code

HS2_4d 4-digit HS2 Code

HS2_2d 2-digit HS2 Code

BEC4_3d 3-digit BEC4 Code

BEC4_2d 2-digit BEC4 Code

BEC4_1d 1-digit BEC4 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs2_desc *HS2 Description*

Description

A dataset containing the description of products under the HS2 classification.

Usage

```
hs2_desc
```

Format

A data frame with 6568 rows and 2 variables:

code HS2 Code
desc HS2 Description

Source

https://comtrade.un.org/data/cache/classificationH2.json

hs2_hs0 *HS2-HS0 Concordance*

Description

A dataset containing concordances between HS2 and HS0 classification.

Usage

```
hs2_hs0
```

Format

A data frame with 5223 rows and 6 variables:

HS2_6d 6-digit HS2 Code
HS2_4d 4-digit HS2 Code
HS2_2d 2-digit HS2 Code
HS0_6d 6-digit HS0 Code
HS0_4d 4-digit HS0 Code
HS0_2d 2-digit HS0 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs2_hs1 *HS2-HS1 Concordance*

Description

A dataset containing concordances between HS2 and HS1 classification.

Usage

```
hs2_hs1
```

Format

A data frame with 5223 rows and 6 variables:

HS2_6d 6-digit HS2 Code

HS2_4d 4-digit HS2 Code

HS2_2d 2-digit HS2 Code

HS1_6d 6-digit HS1 Code

HS1_4d 4-digit HS1 Code

HS1_2d 2-digit HS1 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs2_isic2 *HS2-ISIC2 Concordance*

Description

A dataset containing concordances between HS2 and ISIC2 classifications.

Usage

```
hs2_isic2
```

Format

A data frame with 5224 rows and 7 variables:

HS2_6d 6-digit HS2 Code

HS2_4d 4-digit HS2 Code

HS2_2d 2-digit HS2 Code

ISIC2_4d 4-digit ISIC2 Code

ISIC2_3d 3-digit ISIC2 Code

ISIC2_2d 2-digit ISIC2 Code

ISIC2_1d 1-digit ISIC2 Code

Source

https://wits.worldbank.org/product_concordance.html

`hs2_isic3` *HS2-ISIC3 Concordance*

Description

A dataset containing concordances between HS2 and ISIC3 classifications.

Usage

```
hs2_isic3
```

Format

A data frame with 5224 rows and 7 variables:

HS2_6d 6-digit HS2 Code

HS2_4d 4-digit HS2 Code

HS2_2d 2-digit HS2 Code

ISIC3_4d 4-digit ISIC3 Code

ISIC3_3d 3-digit ISIC3 Code

ISIC3_2d 2-digit ISIC3 Code

ISIC3_1d 1-digit ISIC3 Code

Source

https://wits.worldbank.org/product_concordance.html

hs2_naics *HS2-NAICS Concordance*

Description

A dataset containing concordances between HS2 and NAICS (combined) classifications.

Usage

```
hs2_naics
```

Format

A data frame with 8609 rows and 8 variables:

HS2_6d 6-digit HS2 Code

HS2_4d 4-digit HS2 Code

HS2_2d 2-digit HS2 Code

NAICS_6d 6-digit NAICS Code

NAICS_5d 5-digit NAICS Code

NAICS_4d 4-digit NAICS Code

NAICS_3d 3-digit NAICS Code

NAICS_2d 2-digit NAICS Code

Source

Pierce and Schott (2009, 2018), https://spinup-000d1a-wp-offload-media.s3.amazonaws.com/faculty/wp-content/uploads/sites/47/2019/06/hssicnaics_20181015.zip

hs2_sitc1 *HS2-SITC1 Concordance*

Description

A dataset containing concordances between HS2 and SITC1 classifications.

Usage

```
hs2_sitc1
```

Format

A data frame with 5217 rows and 8 variables:

HS2_6d 6-digit HS2 Code

HS2_4d 4-digit HS2 Code

HS2_2d 2-digit HS2 Code

SITC1_5d 5-digit SITC1 Code

SITC1_4d 4-digit SITC1 Code

SITC1_3d 3-digit SITC1 Code

SITC1_2d 2-digit SITC1 Code

SITC1_1d 1-digit SITC1 Code

Source

https://wits.worldbank.org/product_concordance.html

---

hs2_sitc2 *HS2-SITC2 Concordance*

Description

A dataset containing concordances between HS2 and SITC2 classifications.

Usage

```
hs2_sitc2
```

Format

A data frame with 5222 rows and 8 variables:

HS2_6d 6-digit HS2 Code

HS2_4d 4-digit HS2 Code

HS2_2d 2-digit HS2 Code

SITC2_5d 5-digit SITC2 Code

SITC2_4d 4-digit SITC2 Code

SITC2_3d 3-digit SITC2 Code

SITC2_2d 2-digit SITC2 Code

SITC2_1d 1-digit SITC2 Code

Source

https://wits.worldbank.org/product_concordance.html

hs2_sitc3 *HS2-SITC3 Concordance*

Description

A dataset containing concordances between HS2 and SITC3 classifications.

Usage

```
hs2_sitc3
```

Format

A data frame with 5222 rows and 8 variables:

HS2_6d 6-digit HS2 Code

HS2_4d 4-digit HS2 Code

HS2_2d 2-digit HS2 Code

SITC3_5d 5-digit SITC3 Code

SITC3_4d 4-digit SITC3 Code

SITC3_3d 3-digit SITC3 Code

SITC3_2d 2-digit SITC3 Code

SITC3_1d 1-digit SITC3 Code

Source

https://wits.worldbank.org/product_concordance.html

hs2_sitc4 *HS2-SITC4 Concordance*

Description

A dataset containing concordances between HS2 and SITC4 classifications.

Usage

```
hs2_sitc4
```

Format

A data frame with 5220 rows and 8 variables:

HS2_6d 6-digit HS2 Code

HS2_4d 4-digit HS2 Code

HS2_2d 2-digit HS2 Code

SITC4_5d 5-digit SITC4 Code

SITC4_4d 4-digit SITC4 Code

SITC4_3d 3-digit SITC4 Code

SITC4_2d 2-digit SITC4 Code

SITC4_1d 1-digit SITC4 Code

Source

https://wits.worldbank.org/product_concordance.html

---

hs3_bec4 *HS3-BEC4 Concordance*

Description

A dataset containing concordances between HS3 and BEC4 classifications.

Usage

```
hs3_bec4
```

Format

A data frame with 5,050 rows and 6 variables:

HS3_6d 6-digit HS3 Code

HS3_4d 4-digit HS3 Code

HS3_2d 2-digit HS3 Code

BEC4_3d 3-digit BEC4 Code

BEC4_2d 2-digit BEC4 Code

BEC4_1d 1-digit BEC4 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs3_desc *HS3 Description*

Description

A dataset containing the description of products under the HS3 classification.

Usage

```
hs3_desc
```

Format

A data frame with 6372 rows and 2 variables:

code HS3 Code

desc HS3 Description

Source

https://comtrade.un.org/data/cache/classificationH3.json

hs3_hs0 *HS3-HS0 Concordance*

Description

A dataset containing concordances between HS3 and HS0 classification.

Usage

```
hs3_hs0
```

Format

A data frame with 5053 rows and 6 variables:

HS3_6d 6-digit HS3 Code

HS3_4d 4-digit HS3 Code

HS3_2d 2-digit HS3 Code

HS0_6d 6-digit HS0 Code

HS0_4d 4-digit HS0 Code

HS0_2d 2-digit HS0 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs3_hs1 *HS3-HS1 Concordance*

Description

A dataset containing concordances between HS3 and HS1 classification.

Usage

```
hs3_hs1
```

Format

A data frame with 5052 rows and 6 variables:

HS3_6d 6-digit HS3 Code
HS3_4d 4-digit HS3 Code
HS3_2d 2-digit HS3 Code
HS1_6d 6-digit HS1 Code
HS1_4d 4-digit HS1 Code
HS1_2d 2-digit HS1 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs3_hs2 *HS3-HS2 Concordance*

Description

A dataset containing concordances between HS3 and HS2 classification.

Usage

```
hs3_hs2
```

Format

A data frame with 5052 rows and 6 variables:

HS3_6d 6-digit HS3 Code
HS3_4d 4-digit HS3 Code
HS3_2d 2-digit HS3 Code
HS2_6d 6-digit HS2 Code
HS2_4d 4-digit HS2 Code
HS2_2d 2-digit HS2 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

---

hs3_isic2 *HS3-ISIC2 Concordance*

Description

A dataset containing concordances between HS3 and ISIC2 classifications.

Usage

```
hs3_isic2
```

Format

A data frame with 5052 rows and 7 variables:

HS3_6d 6-digit HS3 Code

HS3_4d 4-digit HS3 Code

HS3_2d 2-digit HS3 Code

ISIC2_4d 4-digit ISIC2 Code

ISIC2_3d 3-digit ISIC2 Code

ISIC2_2d 2-digit ISIC2 Code

ISIC2_1d 1-digit ISIC2 Code

Source

https://wits.worldbank.org/product_concordance.html

---

hs3_isic3 *HS3-ISIC3 Concordance*

Description

A dataset containing concordances between HS3 and ISIC3 classifications.

Usage

```
hs3_isic3
```

Format

A data frame with 5052 rows and 7 variables:

HS3_6d 6-digit HS3 Code

HS3_4d 4-digit HS3 Code

HS3_2d 2-digit HS3 Code

ISIC3_4d 4-digit ISIC3 Code

ISIC3_3d 3-digit ISIC3 Code

ISIC3_2d 2-digit ISIC3 Code

ISIC3_1d 1-digit ISIC3 Code

Source

https://wits.worldbank.org/product_concordance.html

`hs3_naics` *HS3-NAICS Concordance*

Description

A dataset containing concordances between HS3 and NAICS (combined) classifications.

Usage

```
hs3_naics
```

Format

A data frame with 8545 rows and 8 variables:

HS3_6d 6-digit HS3 Code

HS3_4d 4-digit HS3 Code

HS3_2d 2-digit HS3 Code

NAICS_6d 6-digit NAICS Code

NAICS_5d 5-digit NAICS Code

NAICS_4d 4-digit NAICS Code

NAICS_3d 3-digit NAICS Code

NAICS_2d 2-digit NAICS Code

Source

Pierce and Schott (2009, 2018), https://spinup-000d1a-wp-offload-media.s3.amazonaws.com/faculty/wp-content/uploads/sites/47/2019/06/hssicnaics_20181015.zip

hs3_sitc1 *HS3-SITC1 Concordance*

Description

A dataset containing concordances between HS3 and SITC1 classifications.

Usage

```
hs3_sitc1
```

Format

A data frame with 5045 rows and 8 variables:

HS3_6d 6-digit HS3 Code

HS3_4d 4-digit HS3 Code

HS3_2d 2-digit HS3 Code

SITC1_5d 5-digit SITC1 Code

SITC1_4d 4-digit SITC1 Code

SITC1_3d 3-digit SITC1 Code

SITC1_2d 2-digit SITC1 Code

SITC1_1d 1-digit SITC1 Code

Source

https://wits.worldbank.org/product_concordance.html

hs3_sitc2 *HS3-SITC2 Concordance*

Description

A dataset containing concordances between HS3 and SITC2 classifications.

Usage

```
hs3_sitc2
```

Format

A data frame with 5050 rows and 8 variables:

HS3_6d 6-digit HS3 Code

HS3_4d 4-digit HS3 Code

HS3_2d 2-digit HS3 Code

SITC2_5d 5-digit SITC2 Code

SITC2_4d 4-digit SITC2 Code

SITC2_3d 3-digit SITC2 Code

SITC2_2d 2-digit SITC2 Code

SITC2_1d 1-digit SITC2 Code

Source

https://wits.worldbank.org/product_concordance.html

`hs3_sitc3` *HS3-SITC3 Concordance*

Description

A dataset containing concordances between HS3 and SITC3 classifications.

Usage

```
hs3_sitc3
```

Format

A data frame with 5050 rows and 8 variables:

HS3_6d 6-digit HS3 Code

HS3_4d 4-digit HS3 Code

HS3_2d 2-digit HS3 Code

SITC3_5d 5-digit SITC3 Code

SITC3_4d 4-digit SITC3 Code

SITC3_3d 3-digit SITC3 Code

SITC3_2d 2-digit SITC3 Code

SITC3_1d 1-digit SITC3 Code

Source

https://wits.worldbank.org/product_concordance.html

hs3_sitc4 *HS3-SITC4 Concordance*

Description

A dataset containing concordances between HS3 and SITC4 classifications.

Usage

```
hs3_sitc4
```

Format

A data frame with 5050 rows and 8 variables:

HS3_6d 6-digit HS3 Code

HS3_4d 4-digit HS3 Code

HS3_2d 2-digit HS3 Code

SITC4_5d 5-digit SITC4 Code

SITC4_4d 4-digit SITC4 Code

SITC4_3d 3-digit SITC4 Code

SITC4_2d 2-digit SITC4 Code

SITC4_1d 1-digit SITC4 Code

Source

https://wits.worldbank.org/product_concordance.html

hs4_bec4 *HS4-BEC4 Concordance*

Description

A dataset containing concordances between HS4 and BEC4 classifications.

Usage

```
hs4_bec4
```

Format

A data frame with 5,283 rows and 6 variables:

HS4_6d 6-digit HS4 Code

HS4_4d 4-digit HS4 Code

HS4_2d 2-digit HS4 Code

BEC4_3d 3-digit BEC4 Code

BEC4_2d 2-digit BEC4 Code

BEC4_1d 1-digit BEC4 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

---

`hs4_desc` *HS4 Description*

Description

A dataset containing the description of products under the HS4 classification.

Usage

```
hs4_desc
```

Format

A data frame with 6528 rows and 2 variables:

code HS4 Code

desc HS4 Description

Source

https://comtrade.un.org/data/cache/classificationH4.json

hs4_hs0 *HS4-HS0 Concordance*

Description

A dataset containing concordances between HS4 and HS0 classification.

Usage

```
hs4_hs0
```

Format

A data frame with 5206 rows and 6 variables:

HS4_6d 6-digit HS4 Code
HS4_4d 4-digit HS4 Code
HS4_2d 2-digit HS4 Code
HS0_6d 6-digit HS0 Code
HS0_4d 4-digit HS0 Code
HS0_2d 2-digit HS0 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs4_hs1 *HS4-HS1 Concordance*

Description

A dataset containing concordances between HS4 and HS1 classification.

Usage

```
hs4_hs1
```

Format

A data frame with 5206 rows and 6 variables:

HS4_6d 6-digit HS4 Code
HS4_4d 4-digit HS4 Code
HS4_2d 2-digit HS4 Code
HS1_6d 6-digit HS1 Code
HS1_4d 4-digit HS1 Code
HS1_2d 2-digit HS1 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

---

`hs4_hs2` *HS4-HS2 Concordance*

Description

A dataset containing concordances between HS4 and HS2 classification.

Usage

```
hs4_hs2
```

Format

A data frame with 5206 rows and 6 variables:

HS4_6d 6-digit HS4 Code

HS4_4d 4-digit HS4 Code

HS4_2d 2-digit HS4 Code

HS2_6d 6-digit HS2 Code

HS2_4d 4-digit HS2 Code

HS2_2d 2-digit HS2 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

---

`hs4_hs3` *HS4-HS3 Concordance*

Description

A dataset containing concordances between HS4 and HS3 classification.

Usage

```
hs4_hs3
```

Format

A data frame with 5205 rows and 6 variables:

HS4_6d 6-digit HS4 Code

HS4_4d 4-digit HS4 Code

HS4_2d 2-digit HS4 Code

HS3_6d 6-digit HS3 Code

HS3_4d 4-digit HS3 Code

HS3_2d 2-digit HS3 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

---

hs4_isic2 *HS4-ISIC2 Concordance*

Description

A dataset containing concordances between HS4 and ISIC2 classifications.

Usage

```
hs4_isic2
```

Format

A data frame with 5205 rows and 7 variables:

HS4_6d 6-digit HS4 Code

HS4_4d 4-digit HS4 Code

HS4_2d 2-digit HS4 Code

ISIC2_4d 4-digit ISIC2 Code

ISIC2_3d 3-digit ISIC2 Code

ISIC2_2d 2-digit ISIC2 Code

ISIC2_1d 1-digit ISIC2 Code

Source

https://wits.worldbank.org/product_concordance.html

hs4_isic3 *HS4-ISIC3 Concordance*

Description

A dataset containing concordances between HS4 and ISIC3 classifications.

Usage

```
hs4_isic3
```

Format

A data frame with 5205 rows and 7 variables:

HS4_6d 6-digit HS4 Code

HS4_4d 4-digit HS4 Code

HS4_2d 2-digit HS4 Code

ISIC3_4d 4-digit ISIC3 Code

ISIC3_3d 3-digit ISIC3 Code

ISIC3_2d 2-digit ISIC3 Code

ISIC3_1d 1-digit ISIC3 Code

Source

https://wits.worldbank.org/product_concordance.html

hs4_naics *HS4-NAICS Concordance*

Description

A dataset containing concordances between HS4 and NAICS (combined) classifications.

Usage

```
hs4_naics
```

Format

A data frame with 8790 rows and 8 variables:

HS4_6d 6-digit HS4 Code

HS4_4d 4-digit HS4 Code

HS4_2d 2-digit HS4 Code

NAICS_6d 6-digit NAICS Code

NAICS_5d 5-digit NAICS Code

NAICS_4d 4-digit NAICS Code

NAICS_3d 3-digit NAICS Code

NAICS_2d 2-digit NAICS Code

Source

Pierce and Schott (2009, 2018), https://spinup-000d1a-wp-offload-media.s3.amazonaws.com/faculty/wp-content/uploads/sites/47/2019/06/hssicnaics_20181015.zip

---

hs4_sitc1 *HS4-SITC1 Concordance*

Description

A dataset containing concordances between HS4 and SITC1 classifications.

Usage

```
hs4_sitc1
```

Format

A data frame with 5199 rows and 8 variables:

HS4_6d 6-digit HS4 Code

HS4_4d 4-digit HS4 Code

HS4_2d 2-digit HS4 Code

SITC1_5d 5-digit SITC1 Code

SITC1_4d 4-digit SITC1 Code

SITC1_3d 3-digit SITC1 Code

SITC1_2d 2-digit SITC1 Code

SITC1_1d 1-digit SITC1 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs4_sitc2 *HS4-SITC2 Concordance*

Description

A dataset containing concordances between HS4 and SITC2 classifications.

Usage

```
hs4_sitc2
```

Format

A data frame with 5205 rows and 8 variables:

HS4_6d 6-digit HS4 Code

HS4_4d 4-digit HS4 Code

HS4_2d 2-digit HS4 Code

SITC2_5d 5-digit SITC2 Code

SITC2_4d 4-digit SITC2 Code

SITC2_3d 3-digit SITC2 Code

SITC2_2d 2-digit SITC2 Code

SITC2_1d 1-digit SITC2 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs4_sitc3 *HS4-SITC3 Concordance*

Description

A dataset containing concordances between HS4 and SITC3 classifications.

Usage

```
hs4_sitc3
```

Format

A data frame with 5206 rows and 8 variables:

HS4_6d 6-digit HS4 Code

HS4_4d 4-digit HS4 Code

HS4_2d 2-digit HS4 Code

SITC3_5d 5-digit SITC3 Code

SITC3_4d 4-digit SITC3 Code

SITC3_3d 3-digit SITC3 Code

SITC3_2d 2-digit SITC3 Code

SITC3_1d 1-digit SITC3 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

---

hs4_sitc4 *HS4-SITC4 Concordance*

Description

A dataset containing concordances between HS4 and SITC4 classifications.

Usage

```
hs4_sitc4
```

Format

A data frame with 5205 rows and 8 variables:

HS4_6d 6-digit HS4 Code

HS4_4d 4-digit HS4 Code

HS4_2d 2-digit HS4 Code

SITC4_5d 5-digit SITC4 Code

SITC4_4d 4-digit SITC4 Code

SITC4_3d 3-digit SITC4 Code

SITC4_2d 2-digit SITC4 Code

SITC4_1d 1-digit SITC4 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs5_bec4 *HS5-BEC4 Concordance*

Description

A dataset containing concordances between HS5 and BEC4 classifications.

Usage

```
hs5_bec4
```

Format

A data frame with 5,511 rows and 6 variables:

HS5_6d 6-digit HS5 Code
HS5_4d 4-digit HS5 Code
HS5_2d 2-digit HS5 Code
BEC4_3d 3-digit BEC4 Code
BEC4_2d 2-digit BEC4 Code
BEC4_1d 1-digit BEC4 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs5_desc *HS5 Description*

Description

A dataset containing the description of products under the HS5 classification.

Usage

```
hs5_desc
```

Format

A data frame with 6708 rows and 2 variables:

code HS5 Code
desc HS5 Description

Source

https://comtrade.un.org/data/cache/classificationH5.json

hs5_hs0 *HS5-HS0 Concordance*

Description

A dataset containing concordances between HS5 and HS0 classification.

Usage

```
hs5_hs0
```

Format

A data frame with 5388 rows and 6 variables:

HS5_6d 6-digit HS5 Code
HS5_4d 4-digit HS5 Code
HS5_2d 2-digit HS5 Code
HS0_6d 6-digit HS0 Code
HS0_4d 4-digit HS0 Code
HS0_2d 2-digit HS0 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs5_hs1 *HS5-HS1 Concordance*

Description

A dataset containing concordances between HS5 and HS1 classification.

Usage

```
hs5_hs1
```

Format

A data frame with 5388 rows and 6 variables:

HS5_6d 6-digit HS5 Code
HS5_4d 4-digit HS5 Code
HS5_2d 2-digit HS5 Code
HS1_6d 6-digit HS1 Code
HS1_4d 4-digit HS1 Code
HS1_2d 2-digit HS1 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

---

hs5_hs2 *HS5-HS2 Concordance*

Description

A dataset containing concordances between HS5 and HS2 classification.

Usage

```
hs5_hs2
```

Format

A data frame with 5388 rows and 6 variables:

HS5_6d 6-digit HS5 Code

HS5_4d 4-digit HS5 Code

HS5_2d 2-digit HS5 Code

HS2_6d 6-digit HS2 Code

HS2_4d 4-digit HS2 Code

HS2_2d 2-digit HS2 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

---

hs5_hs3 *HS5-HS3 Concordance*

Description

A dataset containing concordances between HS5 and HS3 classification.

Usage

```
hs5_hs3
```

Format

A data frame with 5388 rows and 6 variables:

HS5_6d 6-digit HS5 Code

HS5_4d 4-digit HS5 Code

HS5_2d 2-digit HS5 Code

HS3_6d 6-digit HS3 Code

HS3_4d 4-digit HS3 Code

HS3_2d 2-digit HS3 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

---

hs5_hs4 *HS5-HS4 Concordance*

Description

A dataset containing concordances between HS5 and HS4 classification.

Usage

```
hs5_hs4
```

Format

A data frame with 5388 rows and 6 variables:

HS5_6d 6-digit HS5 Code

HS5_4d 4-digit HS5 Code

HS5_2d 2-digit HS5 Code

HS4_6d 6-digit HS4 Code

HS4_4d 4-digit HS4 Code

HS4_2d 2-digit HS4 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs5_isic2 *HS5-ISIC2 Concordance*

Description

A dataset containing concordances between HS5 and ISIC2 classifications.

Usage

```
hs5_isic2
```

Format

A data frame with 5338 rows and 7 variables:

HS5_6d 6-digit HS5 Code

HS5_4d 4-digit HS5 Code

HS5_2d 2-digit HS5 Code

ISIC2_4d 4-digit ISIC2 Code

ISIC2_3d 3-digit ISIC2 Code

ISIC2_2d 2-digit ISIC2 Code

ISIC2_1d 1-digit ISIC2 Code

Source

https://wits.worldbank.org/product_concordance.html

hs5_isic3 *HS5-ISIC3 Concordance*

Description

A dataset containing concordances between HS5 and ISIC3 classifications.

Usage

```
hs5_isic3
```

Format

A data frame with 5338 rows and 7 variables:

HS5_6d 6-digit HS5 Code

HS5_4d 4-digit HS5 Code

HS5_2d 2-digit HS5 Code

ISIC3_4d 4-digit ISIC3 Code

ISIC3_3d 3-digit ISIC3 Code

ISIC3_2d 2-digit ISIC3 Code

ISIC3_1d 1-digit ISIC3 Code

Source

https://wits.worldbank.org/product_concordance.html

---

hs5_naics *HS5-NAICS Concordance*

Description

A dataset containing concordances between HS5 and NAICS (combined) classifications.

Usage

```
hs5_naics
```

Format

A data frame with 8973 rows and 8 variables:

HS5_6d 6-digit HS5 Code

HS5_4d 4-digit HS5 Code

HS5_2d 2-digit HS5 Code

NAICS_6d 6-digit NAICS Code

NAICS_5d 5-digit NAICS Code

NAICS_4d 4-digit NAICS Code

NAICS_3d 3-digit NAICS Code

NAICS_2d 2-digit NAICS Code

Source

Pierce and Schott (2009, 2018), https://spinup-000d1a-wp-offload-media.s3.amazonaws.com/faculty/wp-content/uploads/sites/47/2019/06/hssicnaics_20181015.zip

hs5_sitc1 *HS5-SITC1 Concordance*

Description

A dataset containing concordances between HS5 and SITC1 classifications.

Usage

```
hs5_sitc1
```

Format

A data frame with 5381 rows and 8 variables:

HS5_6d 6-digit HS5 Code

HS5_4d 4-digit HS5 Code

HS5_2d 2-digit HS5 Code

SITC1_5d 5-digit SITC1 Code

SITC1_4d 4-digit SITC1 Code

SITC1_3d 3-digit SITC1 Code

SITC1_2d 2-digit SITC1 Code

SITC1_1d 1-digit SITC1 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs5_sitc2 *HS5-SITC2 Concordance*

Description

A dataset containing concordances between HS5 and SITC2 classifications.

Usage

```
hs5_sitc2
```

Format

A data frame with 5387 rows and 8 variables:

HS5_6d 6-digit HS5 Code

HS5_4d 4-digit HS5 Code

HS5_2d 2-digit HS5 Code

SITC2_5d 5-digit SITC2 Code

SITC2_4d 4-digit SITC2 Code

SITC2_3d 3-digit SITC2 Code

SITC2_2d 2-digit SITC2 Code

SITC2_1d 1-digit SITC2 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

---

hs5_sitc3 *HS5-SITC3 Concordance*

Description

A dataset containing concordances between HS5 and SITC3 classifications.

Usage

```
hs5_sitc3
```

Format

A data frame with 5387 rows and 8 variables:

HS5_6d 6-digit HS5 Code

HS5_4d 4-digit HS5 Code

HS5_2d 2-digit HS5 Code

SITC3_5d 5-digit SITC3 Code

SITC3_4d 4-digit SITC3 Code

SITC3_3d 3-digit SITC3 Code

SITC3_2d 2-digit SITC3 Code

SITC3_1d 1-digit SITC3 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs5_sitc4 *HS5-SITC4 Concordance*

Description

A dataset containing concordances between HS5 and SITC4 classifications.

Usage

```
hs5_sitc4
```

Format

A data frame with 5387 rows and 8 variables:

HS5_6d 6-digit HS5 Code

HS5_4d 4-digit HS5 Code

HS5_2d 2-digit HS5 Code

SITC4_5d 5-digit SITC4 Code

SITC4_4d 4-digit SITC4 Code

SITC4_3d 3-digit SITC4 Code

SITC4_2d 2-digit SITC4 Code

SITC4_1d 1-digit SITC4 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs6_bec4 *HS6-BEC4 Concordance*

Description

A dataset containing concordances between HS6 and BEC4 classifications.

Usage

```
hs6_bec4
```

Format

A data frame with 5927 rows and 6 variables:

HS6_6d 6-digit HS6 Code

HS6_4d 4-digit HS6 Code

HS6_2d 2-digit HS6 Code

BEC4_3d 3-digit BEC4 Code

BEC4_2d 2-digit BEC4 Code

BEC4_1d 1-digit BEC4 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

---

hs6_desc *HS6 Description*

Description

A dataset containing the description of products under the HS6 classification.

Usage

```
hs6_desc
```

Format

A data frame with 6939 rows and 2 variables:

code HS6 Code

desc HS6 Description

Source

https://comtrade.un.org/data/cache/classificationH6.json

hs6_hs0 *HS6-HS0 Concordance*

Description

A dataset containing concordances between HS6 and HS0 classification.

Usage

```
hs6_hs0
```

Format

A data frame with 5613 rows and 6 variables:

HS6_6d 6-digit HS6 Code
HS6_4d 4-digit HS6 Code
HS6_2d 2-digit HS6 Code
HS0_6d 6-digit HS0 Code
HS0_4d 4-digit HS0 Code
HS0_2d 2-digit HS0 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs6_hs1 *HS6-HS1 Concordance*

Description

A dataset containing concordances between HS6 and HS1 classification.

Usage

```
hs6_hs1
```

Format

A data frame with 5613 rows and 6 variables:

HS6_6d 6-digit HS6 Code
HS6_4d 4-digit HS6 Code
HS6_2d 2-digit HS6 Code
HS1_6d 6-digit HS1 Code
HS1_4d 4-digit HS1 Code
HS1_2d 2-digit HS1 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

---

hs6_hs2 *HS6-HS2 Concordance*

Description

A dataset containing concordances between HS6 and HS2 classification.

Usage

```
hs6_hs2
```

Format

A data frame with 5613 rows and 6 variables:

HS6_6d 6-digit HS6 Code

HS6_4d 4-digit HS6 Code

HS6_2d 2-digit HS6 Code

HS2_6d 6-digit HS2 Code

HS2_4d 4-digit HS2 Code

HS2_2d 2-digit HS2 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

---

hs6_hs3 *HS6-HS3 Concordance*

Description

A dataset containing concordances between HS6 and HS3 classification.

Usage

```
hs6_hs3
```

Format

A data frame with 5613 rows and 6 variables:

HS6_6d 6-digit HS6 Code

HS6_4d 4-digit HS6 Code

HS6_2d 2-digit HS6 Code

HS3_6d 6-digit HS3 Code

HS3_4d 4-digit HS3 Code

HS3_2d 2-digit HS3 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

---

hs6_hs4 *HS6-HS4 Concordance*

Description

A dataset containing concordances between HS6 and HS4 classification.

Usage

```
hs6_hs4
```

Format

A data frame with 5613 rows and 6 variables:

HS6_6d 6-digit HS6 Code

HS6_4d 4-digit HS6 Code

HS6_2d 2-digit HS6 Code

HS4_6d 6-digit HS4 Code

HS4_4d 4-digit HS4 Code

HS4_2d 2-digit HS4 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs6_hs5 *HS6-HS5 Concordance*

Description

A dataset containing concordances between HS6 and HS5 classification.

Usage

```
hs6_hs5
```

Format

A data frame with 5613 rows and 6 variables:

HS6_6d 6-digit HS6 Code

HS6_4d 4-digit HS6 Code

HS6_2d 2-digit HS6 Code

HS5_6d 6-digit HS5 Code

HS5_4d 4-digit HS5 Code

HS5_2d 2-digit HS5 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs6_isic2 *HS6-ISIC2 Concordance*

Description

A dataset containing concordances between HS6 and ISIC2 classifications.

Usage

```
hs6_isic2
```

Format

A data frame with 5613 rows and 7 variables:

HS6_6d 6-digit HS6 Code

HS6_4d 4-digit HS6 Code

HS6_2d 2-digit HS6 Code

ISIC2_4d 4-digit ISIC2 Code

ISIC2_3d 3-digit ISIC2 Code

ISIC2_2d 2-digit ISIC2 Code

ISIC2_1d 1-digit ISIC2 Code

Source

https://wits.worldbank.org/product_concordance.html

---

hs6_isic3 *HS6-ISIC3 Concordance*

Description

A dataset containing concordances between HS6 and ISIC3 classifications.

Usage

```
hs6_isic3
```

Format

A data frame with 5613 rows and 7 variables:

HS6_6d 6-digit HS6 Code

HS6_4d 4-digit HS6 Code

HS6_2d 2-digit HS6 Code

ISIC3_4d 4-digit ISIC3 Code

ISIC3_3d 3-digit ISIC3 Code

ISIC3_2d 2-digit ISIC3 Code

ISIC3_1d 1-digit ISIC3 Code

Source

https://wits.worldbank.org/product_concordance.html

hs6_naics *HS6-NAICS Concordance*

Description

A dataset containing concordances between HS6 and NAICS (combined) classifications.

Usage

```
hs6_naics
```

Format

A data frame with 9451 rows and 8 variables:

HS6_6d 6-digit HS6 Code

HS6_4d 4-digit HS6 Code

HS6_2d 2-digit HS6 Code

NAICS_6d 6-digit NAICS Code

NAICS_5d 5-digit NAICS Code

NAICS_4d 4-digit NAICS Code

NAICS_3d 3-digit NAICS Code

NAICS_2d 2-digit NAICS Code

Source

Pierce and Schott (2009, 2018), https://spinup-000d1a-wp-offload-media.s3.amazonaws.com/faculty/wp-content/uploads/sites/47/2019/06/hssicnaics_20181015.zip

hs6_sitc1 *HS6-SITC1 Concordance*

Description

A dataset containing concordances between HS6 and SITC1 classifications.

Usage

```
hs6_sitc1
```

Format

A data frame with 5605 rows and 8 variables:

HS6_6d 6-digit HS6 Code

HS6_4d 4-digit HS6 Code

HS6_2d 2-digit HS6 Code

SITC1_5d 5-digit SITC1 Code

SITC1_4d 4-digit SITC1 Code

SITC1_3d 3-digit SITC1 Code

SITC1_2d 2-digit SITC1 Code

SITC1_1d 1-digit SITC1 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

---

hs6_sitc2 *HS6-SITC2 Concordance*

Description

A dataset containing concordances between HS6 and SITC2 classifications.

Usage

```
hs6_sitc2
```

Format

A data frame with 5611 rows and 8 variables:

HS6_6d 6-digit HS6 Code

HS6_4d 4-digit HS6 Code

HS6_2d 2-digit HS6 Code

SITC2_5d 5-digit SITC2 Code

SITC2_4d 4-digit SITC2 Code

SITC2_3d 3-digit SITC2 Code

SITC2_2d 2-digit SITC2 Code

SITC2_1d 1-digit SITC2 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs6_sitc3 *HS6-SITC3 Concordance*

Description

A dataset containing concordances between HS6 and SITC3 classifications.

Usage

```
hs6_sitc3
```

Format

A data frame with 5611 rows and 8 variables:

HS6_6d 6-digit HS6 Code

HS6_4d 4-digit HS6 Code

HS6_2d 2-digit HS6 Code

SITC3_5d 5-digit SITC3 Code

SITC3_4d 4-digit SITC3 Code

SITC3_3d 3-digit SITC3 Code

SITC3_2d 2-digit SITC3 Code

SITC3_1d 1-digit SITC3 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs6_sitc4 *HS6-SITC4 Concordance*

Description

A dataset containing concordances between HS6 and SITC4 classifications.

Usage

```
hs6_sitc4
```

Format

A data frame with 5611 rows and 8 variables:

HS6_6d 6-digit HS6 Code

HS6_4d 4-digit HS6 Code

HS6_2d 2-digit HS6 Code

SITC4_5d 5-digit SITC4 Code

SITC4_4d 4-digit SITC4 Code

SITC4_3d 3-digit SITC4 Code

SITC4_2d 2-digit SITC4 Code

SITC4_1d 1-digit SITC4 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

---

hs_bec4 *HS-BEC4 Concordance*

Description

A dataset containing concordances between HS and BEC4 classifications.

Usage

```
hs_bec4
```

Format

A data frame with 6,830 rows and 6 variables:

HS_6d 6-digit HS Code

HS_4d 4-digit HS Code

HS_2d 2-digit HS Code

BEC4_3d 3-digit BEC4 Code

BEC4_2d 2-digit BEC4 Code

BEC4_1d 1-digit BEC4 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs_desc *HS (Combined) Description*

Description

A dataset containing the description of products under the HS (Combined) classification (H0 to H6).

Usage

```
hs_desc
```

Format

A data frame with 8261 rows and 2 variables:

code HS Code

desc HS Description

hs_isic2 *HS-ISIC2 Concordance*

Description

A dataset containing concordances between HS (combined) and ISIC2 classifications.

Usage

```
hs_isic2
```

Format

A data frame with 6542 rows and 7 variables:

HS_6d 6-digit HS Code

HS_4d 4-digit HS Code

HS_2d 2-digit HS Code

ISIC2_4d 4-digit ISIC2 Code

ISIC2_3d 3-digit ISIC2 Code

ISIC2_2d 2-digit ISIC2 Code

ISIC2_1d 1-digit ISIC2 Code

Source

https://wits.worldbank.org/product_concordance.html

hs_isic3 *HS-ISIC3 Concordance*

Description

A dataset containing concordances between HS (combined) and ISIC3 classifications.

Usage

```
hs_isic3
```

Format

A data frame with 6539 rows and 7 variables:

HS_6d 6-digit HS Code

HS_4d 4-digit HS Code

HS_2d 2-digit HS Code

ISIC3_4d 4-digit ISIC3 Code

ISIC3_3d 3-digit ISIC3 Code

ISIC3_2d 2-digit ISIC3 Code

ISIC3_1d 1-digit ISIC3 Code

Source

https://wits.worldbank.org/product_concordance.html

hs_isic31 *HS-ISIC3.1 Concordance*

Description

A dataset containing concordances between HS (combined) and ISIC3.1 classifications.

Usage

```
hs_isic31
```

Format

A data frame with 6,873 rows and 7 variables:

HS_6d 6-digit HS Code

HS_4d 4-digit HS Code

HS_2d 2-digit HS Code

ISIC3.1_4d 4-digit ISIC3.1 Code

ISIC3.1_3d 3-digit ISIC3.1 Code

ISIC3.1_2d 2-digit ISIC3.1 Code

ISIC3.1_1d 1-digit ISIC3.1 Code

Source

https://wits.worldbank.org/product_concordance.html

---

hs_isic4 *HS-ISIC4 Concordance*

Description

A dataset containing concordances between HS (combined) and ISIC4 classifications.

Usage

```
hs_isic4
```

Format

A data frame with 22,885 rows and 7 variables:

HS_6d 6-digit HS Code

HS_4d 4-digit HS Code

HS_2d 2-digit HS Code

ISIC4_4d 4-digit ISIC4 Code

ISIC4_3d 3-digit ISIC4 Code

ISIC4_2d 2-digit ISIC4 Code

ISIC4_1d 1-digit ISIC4 Code

Source

https://wits.worldbank.org/product_concordance.html

hs_naics *HS-NAICS Concordance*

Description

A dataset containing concordances between HS (combined) and NAICS (combined) classifications.

Usage

```
hs_naics
```

Format

A data frame with 10399 rows and 8 variables:

HS_6d 6-digit HS Code

HS_4d 4-digit HS Code

HS_2d 2-digit HS Code

NAICS_6d 6-digit NAICS Code

NAICS_5d 5-digit NAICS Code

NAICS_4d 4-digit NAICS Code

NAICS_3d 3-digit NAICS Code

NAICS_2d 2-digit NAICS Code

Source

Pierce and Schott (2009, 2018), https://spinup-000d1a-wp-offload-media.s3.amazonaws.com/faculty/wp-content/uploads/sites/47/2019/06/hssicnaics_20181015.zip

hs_sitc1 *HS-SITC1 Concordance*

Description

A dataset containing concordances between HS (combined) and SITC1 classifications.

Usage

```
hs_sitc1
```

Format

A data frame with 7683 rows and 8 variables:

HS_6d 6-digit HS Code
HS_4d 4-digit HS Code
HS_2d 2-digit HS Code
SITC1_5d 5-digit SITC1 Code
SITC1_4d 4-digit SITC1 Code
SITC1_3d 3-digit SITC1 Code
SITC1_2d 2-digit SITC1 Code
SITC1_1d 1-digit SITC1 Code

Source

https://wits.worldbank.org/product_concordance.html; https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

---

hs_sitc2 *HS-SITC2 Concordance*

Description

A dataset containing concordances between HS (combined) and SITC2 classifications.

Usage

```
hs_sitc2
```

Format

A data frame with 8346 rows and 8 variables:

HS_6d 6-digit HS Code
HS_4d 4-digit HS Code
HS_2d 2-digit HS Code
SITC2_5d 5-digit SITC2 Code
SITC2_4d 4-digit SITC2 Code
SITC2_3d 3-digit SITC2 Code
SITC2_2d 2-digit SITC2 Code
SITC2_1d 1-digit SITC2 Code

Source

https://wits.worldbank.org/product_concordance.html; https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs_sitc3 *HS-SITC3 Concordance*

Description

A dataset containing concordances between HS (combined) and SITC3 classifications.

Usage

```
hs_sitc3
```

Format

A data frame with 6826 rows and 8 variables:

HS_6d 6-digit HS Code

HS_4d 4-digit HS Code

HS_2d 2-digit HS Code

SITC3_5d 5-digit SITC3 Code

SITC3_4d 4-digit SITC3 Code

SITC3_3d 3-digit SITC3 Code

SITC3_2d 2-digit SITC3 Code

SITC3_1d 1-digit SITC3 Code

Source

https://wits.worldbank.org/product_concordance.html; https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

hs_sitc4 *HS-SITC4 Concordance*

Description

A dataset containing concordances between HS (combined) and SITC4 classifications.

Usage

```
hs_sitc4
```

Format

A data frame with 6582 rows and 8 variables:

HS_6d 6-digit HS Code

HS_4d 4-digit HS Code

HS_2d 2-digit HS Code

SITC4_5d 5-digit SITC4 Code

SITC4_4d 4-digit SITC4 Code

SITC4_3d 3-digit SITC4 Code

SITC4_2d 2-digit SITC4 Code

SITC4_1d 1-digit SITC4 Code

Source

https://wits.worldbank.org/product_concordance.html; https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

---

isic2_desc *ISIC2 Description*

Description

A dataset containing the description of products under the ISIC2 classification.

Usage

```
isic2_desc
```

Format

A data frame with 276 rows and 2 variables:

code ISIC2 Code

desc ISIC2 Description

Source

https://unstats.un.org/unsd/classifications/Econ/ISIC

isic3.1_desc *ISIC3.1 Description*

Description

A dataset containing the description of products under the ISIC3.1 classification.

Usage

```
isic3.1_desc
```

Format

A data frame with 540 rows and 2 variables:

code ISIC3.1 Code

desc ISIC3.1 Description

Source

https://unstats.un.org/unsd/classifications/Econ/ISIC

isic31_isic2 *ISIC3.1-ISIC2 Concordance*

Description

A dataset containing concordances between ISIC3.1 and ISIC2 classifications.

Usage

```
isic31_isic2
```

Format

A data frame with 636 rows and 8 variables:

ISIC3.1_4d 4-digit ISIC3.1 Code

ISIC3.1_3d 3-digit ISIC3.1 Code

ISIC3.1_2d 2-digit ISIC3.1 Code

ISIC3.1_1d 1-digit ISIC3.1 Code

ISIC2_4d 4-digit ISIC2 Code

ISIC2_3d 3-digit ISIC2 Code

ISIC2_2d 2-digit ISIC2 Code

ISIC2_1d 1-digit ISIC2 Code

Source

https://unstats.un.org/unsd/classifications/Econ/ISIC

`isic31_isic3` *ISIC3.1-ISIC3 Concordance*

Description

A dataset containing concordances between ISIC3.1 and ISIC3 classifications.

Usage

```
isic31_isic3
```

Format

A data frame with 316 rows and 8 variables:

ISIC3.1_4d 4-digit ISIC3.1 Code

ISIC3.1_3d 3-digit ISIC3.1 Code

ISIC3.1_2d 2-digit ISIC3.1 Code

ISIC3.1_1d 1-digit ISIC3.1 Code

ISIC3_4d 4-digit ISIC3 Code

ISIC3_3d 3-digit ISIC3 Code

ISIC3_2d 2-digit ISIC3 Code

ISIC3_1d 1-digit ISIC3 Code

Source

https://unstats.un.org/unsd/classifications/Econ/ISIC

`isic3_desc` *ISIC3 Description*

Description

A dataset containing the description of products under the ISIC3 classification.

Usage

```
isic3_desc
```

Format

A data frame with 528 rows and 2 variables:

code ISIC3 Code

desc ISIC3 Description

Source

https://unstats.un.org/unsd/classifications/Econ/ISIC

---

isic3_isic2 *ISIC3-ISIC2 Concordance*

Description

A dataset containing concordances between ISIC3 and ISIC2 classifications.

Usage

```
isic3_isic2
```

Format

A data frame with 585 rows and 8 variables:

ISIC3_4d 4-digit ISIC3 Code

ISIC3_3d 3-digit ISIC3 Code

ISIC3_2d 2-digit ISIC3 Code

ISIC3_1d 1-digit ISIC3 Code

ISIC2_4d 4-digit ISIC2 Code

ISIC2_3d 3-digit ISIC2 Code

ISIC2_2d 2-digit ISIC2 Code

ISIC2_1d 1-digit ISIC2 Code

Source

https://unstats.un.org/unsd/classifications/Econ/ISIC

isic4_desc *ISIC4 Description*

Description

A dataset containing the description of products under the ISIC4 classification.

Usage

```
isic4_desc
```

Format

A data frame with 766 rows and 2 variables:

code ISIC4 Code

desc ISIC4 Description

Source

https://unstats.un.org/unsd/classifications/Econ/ISIC

isic4_isic2 *ISIC4-ISIC2 Concordance*

Description

A dataset containing concordances between ISIC4 and ISIC2 classifications.

Usage

```
isic4_isic2
```

Format

A data frame with 1706 rows and 8 variables:

ISIC4_4d 4-digit ISIC4 Code

ISIC4_3d 3-digit ISIC4 Code

ISIC4_2d 2-digit ISIC4 Code

ISIC4_1d 1-digit ISIC4 Code

ISIC2_4d 4-digit ISIC2 Code

ISIC2_3d 3-digit ISIC2 Code

ISIC2_2d 2-digit ISIC2 Code

ISIC2_1d 1-digit ISIC2 Code

Source

https://unstats.un.org/unsd/classifications/Econ/ISIC

`isic4_isic3` *ISIC4-ISIC3 Concordance*

Description

A dataset containing concordances between ISIC4 and ISIC3 classifications.

Usage

```
isic4_isic3
```

Format

A data frame with 798 rows and 8 variables:

ISIC4_4d 4-digit ISIC4 Code

ISIC4_3d 3-digit ISIC4 Code

ISIC4_2d 2-digit ISIC4 Code

ISIC4_1d 1-digit ISIC4 Code

ISIC3_4d 4-digit ISIC3 Code

ISIC3_3d 3-digit ISIC3 Code

ISIC3_2d 2-digit ISIC3 Code

ISIC3_1d 1-digit ISIC3 Code

Source

https://unstats.un.org/unsd/classifications/Econ/ISIC

`isic4_isic31` *ISIC4-ISIC3.1 Concordance*

Description

A dataset containing concordances between ISIC4 and ISIC3.1 classifications.

Usage

```
isic4_isic31
```

Format

A data frame with 737 rows and 8 variables:

ISIC4_4d 4-digit ISIC4 Code

ISIC4_3d 3-digit ISIC4 Code

ISIC4_2d 2-digit ISIC4 Code

ISIC4_1d 1-digit ISIC4 Code

ISIC3.1_4d 4-digit ISIC3.1 Code

ISIC3.1_3d 3-digit ISIC3.1 Code

ISIC3.1_2d 2-digit ISIC3.1 Code

ISIC3.1_1d 1-digit ISIC3.1 Code

Source

https://unstats.un.org/unsd/classifications/Econ/ISIC

---

naics2002_desc *NAICS 2002 Description*

Description

A dataset containing the description of products under the NAICS 2002 classification.

Usage

```
naics2002_desc
```

Format

A data frame with 2341 rows and 2 variables:

code NAICS 2002 Code

desc NAICS 2002 Description

Source

https://www.census.gov/eos/www/naics/

naics2002_isic31 *NAICS2002-ISIC3.1 Concordance*

Description

A dataset containing concordances between NAICS2002 and ISIC3.1 classifications.

Usage

```
naics2002_isic31
```

Format

A data frame with 1960 rows and 9 variables:

NAICS2002_6d 6-digit NAICS2002 Code
NAICS2002_5d 5-digit NAICS2002 Code
NAICS2002_4d 4-digit NAICS2002 Code
NAICS2002_3d 3-digit NAICS2002 Code
NAICS2002_2d 2-digit NAICS2002 Code
ISIC3.1_4d 4-digit ISIC3.1 Code
ISIC3.1_3d 3-digit ISIC3.1 Code
ISIC3.1_2d 2-digit ISIC3.1 Code
ISIC3.1_1d 1-digit ISIC3.1 Code

Source

https://www.census.gov/eos/www/naics/concordances/concordances.html

naics2007_desc *NAICS 2007 Description*

Description

A dataset containing the description of products under the NAICS 2007 classification.

Usage

```
naics2007_desc
```

Format

A data frame with 2328 rows and 2 variables:

code NAICS 2007 Code
desc NAICS 2007 Description

Source

https://www.census.gov/eos/www/naics/

---

naics2007_isic4 *NAICS2007-ISIC4 Concordance*

Description

A dataset containing concordances between NAICS2007 and ISIC4 classifications.

Usage

```
naics2007_isic4
```

Format

A data frame with 1765 rows and 9 variables:

NAICS2007_6d 6-digit NAICS2007 Code

NAICS2007_5d 5-digit NAICS2007 Code

NAICS2007_4d 4-digit NAICS2007 Code

NAICS2007_3d 3-digit NAICS2007 Code

NAICS2007_2d 2-digit NAICS2007 Code

ISIC4_4d 4-digit ISIC4 Code

ISIC4_3d 3-digit ISIC4 Code

ISIC4_2d 2-digit ISIC4 Code

ISIC4_1d 1-digit ISIC4 Code

Source

https://www.census.gov/eos/www/naics/concordances/concordances.html

naics2007_naics2002 *NAICS2007-NAICS2002 Concordance*

Description

A dataset containing concordances between NAICS2007 and NAICS2002 classification.

Usage

```
naics2007_naics2002
```

Format

A data frame with 1200 rows and 10 variables:

NAICS2007_6d 6-digit NAICS2007 Code

NAICS2007_5d 5-digit NAICS2007 Code

NAICS2007_4d 4-digit NAICS2007 Code

NAICS2007_3d 3-digit NAICS2007 Code

NAICS2007_2d 2-digit NAICS2007 Code

NAICS2002_6d 6-digit NAICS2002 Code

NAICS2002_5d 5-digit NAICS2002 Code

NAICS2002_4d 4-digit NAICS2002 Code

NAICS2002_3d 3-digit NAICS2002 Code

NAICS2002_2d 2-digit NAICS2002 Code

Source

https://www.census.gov/eos/www/naics/concordances/concordances.html

naics2012_desc *NAICS 2012 Description*

Description

A dataset containing the description of products under the NAICS 2012 classification.

Usage

```
naics2012_desc
```

Format

A data frame with 2229 rows and 2 variables:

code NAICS 2012 Code

desc NAICS 2012 Description

Source

https://data.bls.gov/cew/apps/bls_naics/v2/bls_naics_app.htm#tab=download&naics=2012

---

naics2012_isic4 *NAICS2012-ISIC4 Concordance*

Description

A dataset containing concordances between NAICS2012 and ISIC4 classifications.

Usage

```
naics2012_isic4
```

Format

A data frame with 1663 rows and 9 variables:

NAICS2012_6d 6-digit NAICS2012 Code

NAICS2012_5d 5-digit NAICS2012 Code

NAICS2012_4d 4-digit NAICS2012 Code

NAICS2012_3d 3-digit NAICS2012 Code

NAICS2012_2d 2-digit NAICS2012 Code

ISIC4_4d 4-digit ISIC4 Code

ISIC4_3d 3-digit ISIC4 Code

ISIC4_2d 2-digit ISIC4 Code

ISIC4_1d 1-digit ISIC4 Code

Source

https://www.census.gov/eos/www/naics/concordances/concordances.html

naics2012_naics2002 *NAICS2012-NAICS2002 Concordance*

Description

A dataset containing concordances between NAICS2012 and NAICS2002 classification.

Usage

```
naics2012_naics2002
```

Format

A data frame with 1184 rows and 6 variables:

NAICS2012_6d 6-digit NAICS2012 Code

NAICS2012_5d 5-digit NAICS2012 Code

NAICS2012_4d 4-digit NAICS2012 Code

NAICS2012_3d 3-digit NAICS2012 Code

NAICS2012_2d 2-digit NAICS2012 Code

NAICS2002_6d 6-digit NAICS2002 Code

NAICS2002_5d 5-digit NAICS2002 Code

NAICS2002_4d 4-digit NAICS2002 Code

NAICS2002_3d 3-digit NAICS2002 Code

NAICS2002_2d 2-digit NAICS2002 Code

Source

https://www.census.gov/eos/www/naics/concordances/concordances.html

naics2012_naics2007 *NAICS2012-NAICS2007 Concordance*

Description

A dataset containing concordances between NAICS2012 and NAICS2007 classification.

Usage

```
naics2012_naics2007
```

Format

A data frame with 1184 rows and 10 variables:

NAICS2012_6d 6-digit NAICS2012 Code

NAICS2012_5d 5-digit NAICS2012 Code

NAICS2012_4d 4-digit NAICS2012 Code

NAICS2012_3d 3-digit NAICS2012 Code

NAICS2012_2d 2-digit NAICS2012 Code

NAICS2007_6d 6-digit NAICS2007 Code

NAICS2007_5d 5-digit NAICS2007 Code

NAICS2007_4d 4-digit NAICS2007 Code

NAICS2007_3d 3-digit NAICS2007 Code

NAICS2007_2d 2-digit NAICS2007 Code

Source

https://www.census.gov/eos/www/naics/concordances/concordances.html

---

naics2017_desc *NAICS 2017 Description*

Description

A dataset containing the description of products under the NAICS 2017 classification.

Usage

```
naics2017_desc
```

Format

A data frame with 2217 rows and 2 variables:

code NAICS 2017 Code

desc NAICS 2017 Description

Source

https://data.bls.gov/cew/apps/bls_naics/v2/bls_naics_app.htm#tab=download&naics=2017

naics2017_isic4 *NAICS2017-ISIC4 Concordance*

Description

A dataset containing concordances between NAICS2017 and ISIC4 classifications.

Usage

```
naics2017_isic4
```

Format

A data frame with 1653 rows and 9 variables:

NAICS2017_6d 6-digit NAICS2017 Code

NAICS2017_5d 5-digit NAICS2017 Code

NAICS2017_4d 4-digit NAICS2017 Code

NAICS2017_3d 3-digit NAICS2017 Code

NAICS2017_2d 2-digit NAICS2017 Code

ISIC4_4d 4-digit ISIC4 Code

ISIC4_3d 3-digit ISIC4 Code

ISIC4_2d 2-digit ISIC4 Code

ISIC4_1d 1-digit ISIC4 Code

Source

https://www.census.gov/eos/www/naics/concordances/concordances.html

naics2017_naics2002 *NAICS2017-NAICS2002 Concordance*

Description

A dataset containing concordances between NAICS2017 and NAICS2002 classification.

Usage

```
naics2017_naics2002
```

Format

A data frame with 1212 rows and 10 variables:

NAICS2017_6d 6-digit NAICS2017 Code

NAICS2017_5d 5-digit NAICS2017 Code

NAICS2017_4d 4-digit NAICS2017 Code

NAICS2017_3d 3-digit NAICS2017 Code

NAICS2017_2d 2-digit NAICS2017 Code

NAICS2002_6d 6-digit NAICS2002 Code

NAICS2002_5d 5-digit NAICS2002 Code

NAICS2002_4d 4-digit NAICS2002 Code

NAICS2002_3d 3-digit NAICS2002 Code

NAICS2002_2d 2-digit NAICS2002 Code

Source

https://www.census.gov/eos/www/naics/concordances/concordances.html

---

naics2017_naics2007 *NAICS2017-NAICS2007 Concordance*

Description

A dataset containing concordances between NAICS2017 and NAICS2007 classification.

Usage

```
naics2017_naics2007
```

Format

A data frame with 1188 rows and 10 variables:

NAICS2017_6d 6-digit NAICS2017 Code

NAICS2017_5d 5-digit NAICS2017 Code

NAICS2017_4d 4-digit NAICS2017 Code

NAICS2017_3d 3-digit NAICS2017 Code

NAICS2017_2d 2-digit NAICS2017 Code

NAICS2007_6d 6-digit NAICS2007 Code

NAICS2007_5d 5-digit NAICS2007 Code

NAICS2007_4d 4-digit NAICS2007 Code

NAICS2007_3d 3-digit NAICS2007 Code

NAICS2007_2d 2-digit NAICS2007 Code

Source

https://www.census.gov/eos/www/naics/concordances/concordances.html

---

`naics2017_naics2012` *NAICS2017-NAICS2012 Concordance*

Description

A dataset containing concordances between NAICS2017 and NAICS2012 classification.

Usage

```
naics2017_naics2012
```

Format

A data frame with 1069 rows and 10 variables:

NAICS2017_6d 6-digit NAICS2017 Code

NAICS2017_5d 5-digit NAICS2017 Code

NAICS2017_4d 4-digit NAICS2017 Code

NAICS2017_3d 3-digit NAICS2017 Code

NAICS2017_2d 2-digit NAICS2017 Code

NAICS2012_6d 6-digit NAICS2012 Code

NAICS2012_5d 5-digit NAICS2012 Code

NAICS2012_4d 4-digit NAICS2012 Code

NAICS2012_3d 3-digit NAICS2012 Code

NAICS2012_2d 2-digit NAICS2012 Code

Source

https://www.census.gov/eos/www/naics/concordances/concordances.html

sigma_hs0 *Sigma Table (3-Digit HS0)*

Description

A dataset containing import demand elasticities by HS0 3-digit codes from Broda and Weinstein (QJE, 2006) for 73 countries.

Usage

```
sigma_hs0
```

Format

A data frame with 11293 rows and 4 variables:

iso3c ISO 3-letter Country Code

HS0_3d 3-digit HS0 Code

HS0_2d 2-digit HS0 Code

sigma Import Demand Elasticity

Source

http://www.columbia.edu/~dew35/TradeElasticities/TradeElasticities.html

References

C. Broda and D. Weinstein, "Globalization and the Gains from Variety," Quarterly Journal of Economics, Volume 121, Issue 2 - May 2006.

sigma_sitc3 *Sigma Table (5-Digit SITC3)*

Description

A dataset containing import demand elasticities for the United States by 5-digit SITC3 codes from Broda and Weinstein (QJE, 2006).

Usage

```
sigma_sitc3
```

Format

A data frame with 2716 rows and 7 variables:

iso3c ISO 3-letter Country Code
SITC3_5d 5-digit SITC3 Code
SITC3_4d 4-digit SITC3 Code
SITC3_3d 3-digit SITC3 Code
SITC3_2d 2-digit SITC3 Code
SITC3_1d 1-digit SITC3 Code
sigma Import Demand Elasticity

Source

http://www.columbia.edu/~dew35/TradeElasticities/TradeElasticities.html

References

C. Broda and D. Weinstein, "Globalization and the Gains from Variety," Quarterly Journal of Economics, Volume 121, Issue 2 - May 2006.

---

sitc1_bec4 *SITC1-BEC4 Concordance*

Description

A dataset containing concordances between SITC1 and BEC4 classifications.

Usage

```
sitc1_bec4
```

Format

A data frame with 1,787 rows and 8 variables:

SITC1_5d 5-digit SITC1 Code
SITC1_4d 4-digit SITC1 Code
SITC1_3d 3-digit SITC1 Code
SITC1_2d 2-digit SITC1 Code
SITC1_1d 1-digit SITC1 Code
BEC4_3d 3-digit BEC4 Code
BEC4_2d 2-digit BEC4 Code
BEC4_1d 1-digit BEC4 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

sitc1_desc *SITC1 Description*

Description

A dataset containing the description of products under the SITC1 classification.

Usage

```
sitc1_desc
```

Format

A data frame with 3024 rows and 2 variables:

code SITC1 Code

desc SITC1 Description

Source

https://comtrade.un.org/data/cache/classificationS1.json

sitc1_naics *SITC1-NAICS Concordance*

Description

A dataset containing concordances between SITC1 and NAICS (combined) classification via HS (combined).

Usage

```
sitc1_naics
```

Format

A data frame with 3797 rows and 10 variables:

SITC1_5d 5-digit SITC1 Code

SITC1_4d 4-digit SITC1 Code

SITC1_3d 3-digit SITC1 Code

SITC1_2d 2-digit SITC1 Code

SITC1_1d 1-digit SITC1 Code

NAICS_6d 6-digit NAICS Code

NAICS_5d 5-digit NAICS Code

NAICS_4d 4-digit NAICS Code

NAICS_3d 3-digit NAICS Code

NAICS_2d 2-digit NAICS Code

Source

https://wits.worldbank.org/product_concordance.html; https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp; Pierce and Schott (2009, 2018), https://spinup-000d1a-wp-offload-media.s3.amazonaws.com/faculty/wp-content/uploads/sites/47/2019/06/hssicnaics_20181015.zip

---

`sitc2_bec4` *SITC2-BEC4 Concordance*

Description

A dataset containing concordances between SITC2 and BEC4 classifications.

Usage

```
sitc2_bec4
```

Format

A data frame with 2,597 rows and 8 variables:

SITC2_5d 5-digit SITC2 Code

SITC2_4d 4-digit SITC2 Code

SITC2_3d 3-digit SITC2 Code

SITC2_2d 2-digit SITC2 Code

SITC2_1d 1-digit SITC2 Code

BEC4_3d 3-digit BEC4 Code

BEC4_2d 2-digit BEC4 Code

BEC4_1d 1-digit BEC4 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

sitc2_desc *SITC2 Description*

Description

A dataset containing the description of products under the SITC2 classification.

Usage

```
sitc2_desc
```

Format

A data frame with 3988 rows and 2 variables:

code SITC2 Code

desc SITC2 Description

Source

https://comtrade.un.org/data/cache/classificationS2.json

sitc2_isic2 *SITC2-ISIC2 Concordance*

Description

A dataset containing concordances between SITC2 and ISIC2 classifications.

Usage

```
sitc2_isic2
```

Format

A data frame with 1687 rows and 9 variables:

SITC2_5d 5-digit SITC2 Code

SITC2_4d 4-digit SITC2 Code

SITC2_3d 3-digit SITC2 Code

SITC2_2d 2-digit SITC2 Code

SITC2_1d 1-digit SITC2 Code

ISIC2_4d 4-digit ISIC2 Code

ISIC2_3d 3-digit ISIC2 Code

ISIC2_2d 2-digit ISIC2 Code

ISIC2_1d 1-digit ISIC2 Code

Source

https://wits.worldbank.org/product_concordance.html

`sitc2_naics` *SITC2-NAICS Concordance*

Description

A dataset containing concordances between SITC2 and NAICS (combined) classification via HS (combined).

Usage

```
sitc2_naics
```

Format

A data frame with 5065 rows and 10 variables:

SITC2_5d 5-digit SITC2 Code

SITC2_4d 4-digit SITC2 Code

SITC2_3d 3-digit SITC2 Code

SITC2_2d 2-digit SITC2 Code

SITC2_1d 1-digit SITC2 Code

NAICS_6d 6-digit NAICS Code

NAICS_5d 5-digit NAICS Code

NAICS_4d 4-digit NAICS Code

NAICS_3d 3-digit NAICS Code

NAICS_2d 2-digit NAICS Code

Source

https://wits.worldbank.org/product_concordance.html; https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp; Pierce and Schott (2009, 2018), https://spinup-000d1a-wp-offload-media.s3.amazonaws.com/faculty/wp-content/uploads/sites/47/2019/06/hssicnaics_20181015.zip

sitc2_rauch *SITC2-Rauch Concordance*

Description

A dataset containing concordances between SITC2 and Rauch's classification.

Usage

```
sitc2_rauch
```

Format

A data frame with 1189 rows and 3 variables:

SITC2 SITC2 Code

CON Conservative classification

LIB Liberal classification

Source

Data from Jon Haveman's International Trade Data page: http://www.macalester.edu/research/economics/PAGE/HAVEMAN/Trade.Resources/TradeData.html#Rauch

sitc2_sitc1 *SITC2-SITC1 Concordance*

Description

A dataset containing concordances between SITC2 and SITC1 classification.

Usage

```
sitc2_sitc1
```

Format

A data frame with 1833 rows and 10 variables:

SITC2_5d 5-digit SITC2 Code

SITC2_4d 4-digit SITC2 Code

SITC2_3d 3-digit SITC2 Code

SITC2_2d 2-digit SITC2 Code

SITC2_1d 1-digit SITC2 Code

SITC1_5d 5-digit SITC1 Code

SITC1_4d 4-digit SITC1 Code

SITC1_3d 3-digit SITC1 Code

SITC1_2d 2-digit SITC1 Code

SITC1_1d 1-digit SITC1 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

---

`sitc3_bec4` *SITC3-BEC4 Concordance*

Description

A dataset containing concordances between SITC3 and BEC4 classifications.

Usage

```
sitc3_bec4
```

Format

A data frame with 3,404 rows and 8 variables:

SITC3_5d 5-digit SITC3 Code

SITC3_4d 4-digit SITC3 Code

SITC3_3d 3-digit SITC3 Code

SITC3_2d 2-digit SITC3 Code

SITC3_1d 1-digit SITC3 Code

BEC4_3d 3-digit BEC4 Code

BEC4_2d 2-digit BEC4 Code

BEC4_1d 1-digit BEC4 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

sitc3_desc *SITC3 Description*

Description

A dataset containing the description of products under the SITC3 classification.

Usage

```
sitc3_desc
```

Format

A data frame with 5951 rows and 2 variables:

code SITC3 Code

desc SITC3 Description

Source

https://comtrade.un.org/data/cache/classificationS3.json

sitc3_isic3 *SITC3-ISIC3 Concordance*

Description

A dataset containing concordances between SITC3 and ISIC3 classifications.

Usage

```
sitc3_isic3
```

Format

A data frame with 3069 rows and 9 variables:

SITC3_5d 5-digit SITC3 Code

SITC3_4d 4-digit SITC3 Code

SITC3_3d 3-digit SITC3 Code

SITC3_2d 2-digit SITC3 Code

SITC3_1d 1-digit SITC3 Code

ISIC3_4d 4-digit ISIC3 Code

ISIC3_3d 3-digit ISIC3 Code

ISIC3_2d 2-digit ISIC3 Code

ISIC3_1d 1-digit ISIC3 Code

Source

https://ec.europa.eu/eurostat

`sitc3_naics` *SITC3-NAICS Concordance*

Description

A dataset containing concordances between SITC3 and NAICS (combined) classification via HS (combined).

Usage

```
sitc3_naics
```

Format

A data frame with 6024 rows and 10 variables:

SITC3_5d 5-digit SITC3 Code

SITC3_4d 4-digit SITC3 Code

SITC3_3d 3-digit SITC3 Code

SITC3_2d 2-digit SITC3 Code

SITC3_1d 1-digit SITC3 Code

NAICS_6d 6-digit NAICS Code

NAICS_5d 5-digit NAICS Code

NAICS_4d 4-digit NAICS Code

NAICS_3d 3-digit NAICS Code

NAICS_2d 2-digit NAICS Code

Source

https://wits.worldbank.org/product_concordance.html; https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp; Pierce and Schott (2009, 2018), https://spinup-000d1a-wp-offload-media.s3.amazonaws.com/faculty/wp-content/uploads/sites/47/2019/06/hssicnaics_20181015.zip

sitc3_sitc1 *SITC3-SITC1 Concordance*

Description

A dataset containing concordances between SITC3 and SITC1 classification.

Usage

```
sitc3_sitc1
```

Format

A data frame with 3118 rows and 10 variables:

SITC3_5d 5-digit SITC3 Code

SITC3_4d 4-digit SITC3 Code

SITC3_3d 3-digit SITC3 Code

SITC3_2d 2-digit SITC3 Code

SITC3_1d 1-digit SITC3 Code

SITC1_5d 5-digit SITC1 Code

SITC1_4d 4-digit SITC1 Code

SITC1_3d 3-digit SITC1 Code

SITC1_2d 2-digit SITC1 Code

SITC1_1d 1-digit SITC1 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

sitc3_sitc2 *SITC3-SITC2 Concordance*

Description

A dataset containing concordances between SITC3 and SITC2 classification.

Usage

```
sitc3_sitc2
```

Format

A data frame with 3121 rows and 10 variables:

SITC3_5d 5-digit SITC3 Code
SITC3_4d 4-digit SITC3 Code
SITC3_3d 3-digit SITC3 Code
SITC3_2d 2-digit SITC3 Code
SITC3_1d 1-digit SITC3 Code
SITC2_5d 5-digit SITC2 Code
SITC2_4d 4-digit SITC2 Code
SITC2_3d 3-digit SITC2 Code
SITC2_2d 2-digit SITC2 Code
SITC2_1d 1-digit SITC2 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

---

sitc4_bec4 *SITC4-BEC4 Concordance*

Description

A dataset containing concordances between SITC4 and BEC4 classifications.

Usage

```
sitc4_bec4
```

Format

A data frame with 2,972 rows and 8 variables:

SITC4_5d 5-digit SITC4 Code
SITC4_4d 4-digit SITC4 Code
SITC4_3d 3-digit SITC4 Code
SITC4_2d 2-digit SITC4 Code
SITC4_1d 1-digit SITC4 Code
BEC4_3d 3-digit BEC4 Code
BEC4_2d 2-digit BEC4 Code
BEC4_1d 1-digit BEC4 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

sitc4_desc *SITC4 Description*

Description

A dataset containing the description of products under the SITC4 classification.

Usage

```
sitc4_desc
```

Format

A data frame with 7239 rows and 2 variables:

code SITC4 Code

desc SITC4 Description

Source

https://comtrade.un.org/data/cache/classificationS4.json

sitc4_naics *SITC4-NAICS Concordance*

Description

A dataset containing concordances between SITC4 and NAICS (combined) classification via HS (combined).

Usage

```
sitc4_naics
```

Format

A data frame with 5714 rows and 10 variables:

SITC4_5d 5-digit SITC4 Code

SITC4_4d 4-digit SITC4 Code

SITC4_3d 3-digit SITC4 Code

SITC4_2d 2-digit SITC4 Code

SITC4_1d 1-digit SITC4 Code

NAICS_6d 6-digit NAICS Code

NAICS_5d 5-digit NAICS Code

NAICS_4d 4-digit NAICS Code

NAICS_3d 3-digit NAICS Code

NAICS_2d 2-digit NAICS Code

Source

https://wits.worldbank.org/product_concordance.html; https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp; Pierce and Schott (2009, 2018), https://spinup-000d1a-wp-offload-media.s3.amazonaws.com/faculty/wp-content/uploads/sites/47/2019/06/hssicnaics_20181015.zip

---

sitc4_sitc1 *SITC4-SITC1 Concordance*

Description

A dataset containing concordances between SITC4 and SITC1 classification.

Usage

```
sitc4_sitc1
```

Format

A data frame with 3199 rows and 10 variables:

SITC4_5d 5-digit SITC4 Code

SITC4_4d 4-digit SITC4 Code

SITC4_3d 3-digit SITC4 Code

SITC4_2d 2-digit SITC4 Code

SITC4_1d 1-digit SITC4 Code

SITC1_5d 5-digit SITC1 Code

SITC1_4d 4-digit SITC1 Code

SITC1_3d 3-digit SITC1 Code

SITC1_2d 2-digit SITC1 Code

SITC1_1d 1-digit SITC1 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

sitc4_sitc2 *SITC4-SITC2 Concordance*

Description

A dataset containing concordances between SITC4 and SITC2 classification.

Usage

```
sitc4_sitc2
```

Format

A data frame with 3271 rows and 10 variables:

SITC4_5d 5-digit SITC4 Code

SITC4_4d 4-digit SITC4 Code

SITC4_3d 3-digit SITC4 Code

SITC4_2d 2-digit SITC4 Code

SITC4_1d 1-digit SITC4 Code

SITC2_5d 5-digit SITC2 Code

SITC2_4d 4-digit SITC2 Code

SITC2_3d 3-digit SITC2 Code

SITC2_2d 2-digit SITC2 Code

SITC2_1d 1-digit SITC2 Code

Source

https://unstats.un.org/unsd/trade/classifications/correspondence-tables.asp

sitc4_sitc3 *A dataset containing concordances between SITC4 and SITC3 classification.*

Description

A dataset containing concordances between SITC4 and SITC3 classification.

Usage

```
sitc4_sitc3
```

Format

A data frame with 3488 rows and 10 variables:

SITC4_5d 5-digit SITC4 Code

SITC4_4d 4-digit SITC4 Code

SITC4_3d 3-digit SITC4 Code

SITC4_2d 2-digit SITC4 Code

SITC4_1d 1-digit SITC4 Code

SITC3_5d 5-digit SITC3 Code

SITC3_4d 4-digit SITC3 Code

SITC3_3d 3-digit SITC3 Code

SITC3_2d 2-digit SITC3 Code

SITC3_1d 1-digit SITC3 Code

Source

https://unstats.un.org/unsd/trade/sitcrev4.htm

---

upstream *Upstreamness and Downstreamness Table*

Description

A dataset containing upstreamness and downstreamness estimates for 41 countries, 35 industries, and 17 years from Antras and Chor (2018).

Usage

```
upstream
```

Format

A data frame with 24,395 rows and 7 variables:

YEAR Year

ISO3C ISO 3-letter Country Code

WIOT2013_n WIOT 2013 Industry Code

GVC_Ui Upstreamness (net inventories correction)

GVC_FUGOi Final-use to gross-output (net inventories correction)

GVC_Di Downstreamness (net inventories correction)

GVC_VAGOi Value-added to gross-output (net inventories correction)

Source

https://scholar.harvard.edu/antras/publications/measurement-upstreamness-and-downstreamness-global-

References

Antras, Pol, and Davin Chor. 2018. "On the Measurement of Upstreamness and Downstreamness in Global Value Chains." World Trade Evolution: Growth, Productivity and Employment, 126-194. Taylor & Francis Group.

---

upstream_us_detailed *US Detailed Upstreamness Table*

Description

A dataset containing upstreamness estimates for 426 industries in 2002 and 405 industries in 2007 and 2012 based on Antras and Chor (2012).

Usage

```
upstream_us_detailed
```

Format

A data frame with 1,236 rows and 4 variables:

YEAR Year

CODE BEA Industry Code

GVC_Ui Upstreamness (net inventories correction)

BEA_CLASS Year of BEA Industry Code

Source

https://scholar.harvard.edu/antras/publications/measuring-upstreamness-production-and-trade-flows

References

Antras, Pol, and Davin Chor. 2012. "Measuring the Upstreamness of Production and Trade Flows." American Economic Review: Papers and Proceedings, Volume 102, Issue 3: 412-416.

`wiod_2013` *ISIC3-WIOT2013 Concordance*

Description

A dataset containing concordances between ISIC3 and WIOT2013 industry codes.

Usage

```
wiod_2013
```

Format

A data frame with 585 rows and 6 variables:

ISIC3_4d 4-digit ISIC3 Code

ISIC3_3d 3-digit ISIC3 Code

ISIC3_2d 2-digit ISIC3 Code

ISIC3_1d 1-digit ISIC3 Code

WIOT2013_c WIOT 2013 Character Code

WIOT2013_n WIOT 2013 Numeric Code

Source

http://www.wiod.org/release13

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