

econ.bst:  
BIB<sub>T</sub>E<sub>X</sub> style for economics  
(for ver. 2.1)

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## Contents

<b>1</b>	<b>Main features</b>	<b>2</b>
<b>2</b>	<b>How to use “econ.bst”</b>	<b>2</b>
<b>3</b>	<b>Customization</b>	<b>2</b>
3.1	Notes on customization . . . . .	2
3.2	Examples of customization . . . . .	2
3.2.1	Change delimiter used to separate multiple author names from “and” to “&”. . . . .	2
3.2.2	Make author to small caps style . . . . .	3
3.2.3	Change the style of volume and number . . . . .	4
3.2.4	Abbreviation of author name . . . . .	4
3.2.5	Order of first and last name in author field . . . . .	5
3.2.6	First name in initial . . . . .	6
3.2.7	Decapitalize letters in title field . . . . .	6
3.2.8	Number index before documents in reference . . . . .	6
3.2.9	List old references first . . . . .	7
3.2.10	Change the position of year . . . . .	7
3.2.11	Order of editors and book title in incollection and inproceedings entry . . . . .	7
3.2.12	Order of address and publisher . . . . .	8
<b>4</b>	<b>Sorting rule</b>	<b>8</b>
4.1	Basic sorting rule . . . . .	8
4.2	No sorting . . . . .	9
4.3	Sort references by type . . . . .	9
4.4	Use “year” as the primary sorting key . . . . .	9
4.5	Sorting by “absorder” field . . . . .	10
4.5.1	Ignore “absorder” field . . . . .	10
<b>5</b>	<b>Misc.</b>	<b>10</b>

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## 1 Main features

“econ.bst” provides the following features:

- The author-year type citation combined with “natbib.sty”.
- Reference style used in economics papers.
- Highly customizable. You can easily customize reference style as you wish.

The third feature is the key characteristic of “econ.bst”.

## 2 How to use “econ.bst”

- “econ.bst” requires “natbib.sty”. If “natbib.sty” is not installed in your TeX system, you must install it first.
- Put “econ.bst” file somewhere under the directory “/texmf/bibtex/bst”.
- You may need to change the character code of “econ.bst” according to your TeXsystem.
- See “econ-sample.tex” for an example tex file.

## 3 Customization

“econ.bst” defines many functions which have names like “bst.xxx.yyy”. You can easily customize the reference style by changing the contents of these functions.

### 3.1 Notes on customization

- Customization here is customization of the reference part. Style in the citation part mainly depends on a style file for citation (“natbib.sty” or “harvard.sty”).
- Except for some cases, customization here cannot change order of fields (order of author, year, title etc.)
- Functions with “.pre” define strings attached to the start of the field and functions with “.post” define strings attached to the end of field. For example, “bst.author.pre” defines strings attached before author.
- You can change order of entries (references). It will be explained in Section 4.

### 3.2 Examples of customization

#### 3.2.1 Change delimiter used to separate multiple author names from “and” to “&”.

For this, change the contents of “bst.and” and “bst.ands”.

**Default definition:**

```
FUNCTION {bst.and}
{ " and " }
FUNCTION {bst.ands}
{ ", and " }
```

**New definition:**

```
FUNCTION {bst.and}
{ " \& " }
FUNCTION {bst.ands}
{ " \& " }
```

Then, author names in reference part are displayed as follows:

Fujita, Masahisa, Paul R. Krugman, and Anthony J. Venables  
↓  
Fujita, Masahisa, Paul R. Krugman & Anthony J. Venables

See "econ\_b.bst".

### 3.2.2 Make author to small caps style

For this, change the contents of "bst.author.pre" and "bst.author.post".

**Default definition:**

```
FUNCTION {bst.author.pre}
{ "" }
FUNCTION {bst.author.post}
{ "" }
```

**New definition:**

```
FUNCTION {bst.author.pre}
{ "\textsc{" }
FUNCTION {bst.author.post}
{ "}" }
```

Then, author names in reference part are changed as follows:

Fujita, Masahisa, Paul R. Krugman, and Anthony J. Venables  
↓  
FUJITA, MASAHISA, PAUL R. KRUGMAN, AND ANTHONY J. VENABLES

See "econ\_b.bst".

### 3.2.3 Change the style of volume and number

For this, change the contents of “bst.volume.pre”, “bst.volume.post”, “bst.number.pre” and “bst.number.post”.

#### Default definition:

```
FUNCTION {bst.volume.pre}
{ ", Vol. " }
FUNCTION {bst.volume.post}
{ "" }
FUNCTION {bst.number.pre}
{ ", No. " }
FUNCTION {bst.number.post}
{ "" }
```

#### New definition:

```
FUNCTION {bst.volume.pre}
{ ", \textbf{" }
FUNCTION {bst.volume.post}
{ "}" }
FUNCTION {bst.number.pre}
{ " (" }
FUNCTION {bst.number.post}
{ ")" }
```

By this, the style of volume and number change from “Vol. 5, No. 10” to “5 (10)”. See econ\_b.bst.

### 3.2.4 Abbreviation of author name

By default, when there are multiple documents of the same author, author name except for the first document is abbreviated by \bysame command (i.e. ——— ).

If you want to always show author name for all documents, change the content of “bst.use.bysame” as follows:

```
FUNCTION {bst.use.bysame}
{ #0 }
```

In the default setting (‘bst.use.bysame’ is set to #1), author names are abbreviated when they are exactly the same. For example, suppose that there are the following entries

- Mazda, A., Subaru, B., and Honda, C., (2011) “ABC”
- Mazda, A., Subaru, B., and Honda, C., (2011) “DEF”
- Mazda, A., Subaru, B., and Toyota, D., (2011) “GHI”

In the default setting, these entries are listed like

- Mazda, A., Subaru, B., and Honda, C., (2011) "ABC"
- ——— , (2011) "DEF"
- Mazda, A., Subaru, B., and Toyota, D., (2011) "GHI"

That is, the abbreviation of authors by 'bysame' is only applied to entries with exactly the same authors.

If you set #2 to 'bst.use.bysame' like

```
FUNCTION {bst.use.bysame}
{ #2 }
```

you can choose alternative abbreviation style like

- Mazda, A., Subaru, B., Honda, C., (2011) "ABC"
- ——— , ——— , and ——— , (2011) "DEF"
- ——— , ——— , and Toyota, D., (2011) "GHI"

See "econ\_a.bst" and "econ\_b.bst" for examples.

### 3.2.5 Order of first and last name in author field

"bst.author.name" defines order of first and last name in author field.

**Default definition:**

```
FUNCTION {bst.author.name}
{ #0 }
```

If you change #0 to #1 or #2, you can customize order of first and family name. For example, suppose author field is defined as follows:

```
author = {Masahisa Fujita and Paul R. Krugman and Anthony J. Venables}
```

According to the content of “bst . author . name”, expression of author changes as follows:

1. #0: First author → last-first, other authors → first-last.  
→ Fujita, Masahisa, Paul R. Krugman, and Anthony J. Venables
2. #1: All authors → last-first  
→ Fujita, Masahisa, Krugman, Paul R., and Venables, Anthony J.
3. #2: All authors → first-last  
→ Masahisa Fujita, Paul R. Krugman, and Anthony J. Venables

### 3.2.6 First name in initial

By default, first name is displayed in full. If you change the content of “bst . first . name . initial” to non-zero, first name is displayed in initial. For example,

Fujita, Masahisa, Paul R. Krugman, and Anthony J. Venables  
↓  
Fujita, M., P. R. Krugman, and A. J. Venables

See “econ\_a . bst” for an example.

### 3.2.7 Decapitalize letters in title field

Suppose that the title field is defined as follows

```
title = {Econometric Policy Evaluation: A Critique}
```

Then, title is displayed in reference as follows:

Econometric Policy Evaluation: A Critique

If you change the content of “bst . title . lower . case” to non-zero, letters except the first letter are decapitalized. That is, you get the following expression in reference:

Econometric policy evaluation: A critique

See “econ\_a . bst” for an example.

### 3.2.8 Number index before documents in reference

You can put the number index to each documents as in “plain . bst”. For this, change the content of “bst . use . number . index” to non-zero.

```
FUNCTION {bst . use . number . index}  
{ #1 }
```

If you use fonts other than computer modern fonts, you had better adjust the contents of functions “bst . number . index . xxx . yyy”.

See “econ\_b . bst” for an example.

### 3.2.9 List old references first

By default, references written by the same author are listed in chronological order (old documents are listed first). If you change the contents of “`bst.reverse.year`” to non-zero, the order is reversed.

```
FUNCTION {bst.reverse.year}
{ #1 }
```

### 3.2.10 Change the position of year

By default, year is always displayed right after author name. You can change the place of year by setting other values to “`bst.year.position`”.

If non-zero set to “`bst.year.position`”, year is placed

- at the end of line if there is no “note” field,
- and before “note” field if there is.

for non-article type entry.

With respect to article type entry, the following rule is applied:

1. #1: → year is placed at the end (before note field).
2. #2: → year is placed after journal name.
3. #3: → year is placed after volume.

For example, reference style changes as follows:

**#0:** Mazda, A. and B. Subaru, 2007, “ABC,” *Journal of Automobiles*, Vol. 1, pp. 1-10.

**#1:** Mazda, A. and B. Subaru, “ABC,” *Journal of Automobiles*, Vol. 1, pp. 1-10, 2007.

**#2:** Mazda, A. and B. Subaru, “ABC,” *Journal of Automobiles*, 2007, Vol. 1, pp. 1-10.

**#3:** Mazda, A. and B. Subaru, “ABC,” *Journal of Automobiles*, Vol. 1, 2007, pp. 1-10.

See “`econ_a.bst`” and “`econ_b.bst`” for examples.

### 3.2.11 Order of editors and book title in incollection and inproceedings entry

By default, editor name comes before book title in incollection and inproceedings entry. You can reverse this order by setting non-zero to ‘`bst.editor.btitle.order`’ like

```
FUNCTION {bst.editor.btitle.order}
{ #1 }
```

Krugman, Paul R. (1991) "Is Bilateralism Bad?" in Elhanan Helpman and Assaf Razin eds. *International Trade and Trade Policy*, Cambridge, MA: MIT Press, pp. 9–23.



Krugman, Paul R. (1991) "Is Bilateralism Bad?" in *International Trade and Trade Policy* eds. by Elhanan Helpman and Assaf Razin, Cambridge, MA: MIT Press, pp. 9–23.

### 3.2.12 Order of address and publisher

By default, publisher address is placed before publisher name. You can reverse this order by setting non-zero to 'bst.address.position'.

Krugman, Paul R. (1991) "Is Bilateralism Bad?" in Elhanan Helpman and Assaf Razin eds. *International Trade and Trade Policy*, Cambridge, MA, MIT Press, pp. 9–23.



Krugman, Paul R. (1991) "Is Bilateralism Bad?" in Elhanan Helpman and Assaf Razin eds. *International Trade and Trade Policy*, MIT Press, Cambridge, MA, pp. 9–23.

## 4 Sorting rule

[Note] If you want to create an ordinary list of references, you need not to read this part. The explanation below is for sorting references in a special way.

### 4.1 Basic sorting rule

The sorting of references is done according to values of fields defined in bib files. Basically, sorting is done according to the following order of priority:

1. Type of entry (if "bst.sort.entry.type" has non-zero value)
2. Value of "year" field (if "bst.sort.year" has non-zero value)
3. Value of "absorder" field.
4. Value of "author" (or "editor") field.
5. Value of "year" field.
6. Value of "order" field.
7. Value of "month" field.
8. Value of "title" field.

By default,



- “`bst.sort.entry.type`” and “`bst.sort.year`” have zero,
- “`absorder`” and “`order`” fields are not assigned values because they are fields specific to “`econ.bst`”.

Thus, references are sorted according to

```
“author” → “year” → “month” → “title”
```

That is, “`author`” is used as the primary key, “`year`” as the secondary key, “`month`” as the third key and “`title`” as the fourth key.

## 4.2 No sorting

If you want to list references in citation order, set non-zero value to “`bst.no.sort`”.

```
FUNCTION {bst.no.sort}
{ #1 }
```

Note that when you set non-zero value to “`bst.no.sort`”, you had better not use `\bysame`.

## 4.3 Sort references by type

If you want to gather references according to their types (article, book, incollection, unpublished etc.), set non-zero value to “`bst.sort.entry.type`”.

```
FUNCTION {bst.sort.entry.type}
{ #1 }
```

Order of listing by entry type is determined by function “`bst.sort.entry.type.order`” (by default, listed in alphabetical order, that is, `article` → `book` → `booklet` → `comment` → `inbook` → `incollection` → ... → `unpublished`). See “`bst.sort.entry.type.order`” in “`econ.bst`”.

## 4.4 Use “`year`” as the primary sorting key

When you create CV or a list of your papers, you may want to sort references in chronological order. If all papers are written solely by yourself, references are sorted in chronological order by default. However, there are co-writers and if you are not the first author, references are not sorted in chronological order because the author name is used as the primary sorting key by default. If you want to sort references in chronological order even when there are co-writers, set non-zero to “`bst.sort.year`”.

```
FUNCTION {bst.sort.year}
{ #1 }
```

By default, old references are listed first. But if you set non-zero to “`bst.reverse.year`”, new references are listed first.

## 4.5 Sorting by “absorder” field

If “absorder” is defined in bib file, “econ.bst” uses its content as the primary sorting key. You can set number 0–999 to “absorder” field.

```
no absorder or absorder = 0 → absorder = 1 → absorder = 2 → ... → absorder = 999
```

That is, reference with a small value of “absorder” is listed first. In this document (“econ-sample.bib”), the reference with the key [Takeda \(2010\)](#) has 999 for “absorder” field and thus listed in the last.

### 4.5.1 Ignore “absorder” field

If you set some values for “absorder” fields in bib file, but if you want to ignore them, set non-zero to “bst.notuse.absorder.field”.

```
FUNCTION {bst.notuse.absorder.field}
{ #1 }
```

## 5 Misc.

- Email: <[shiro.takeda@gmail.com](mailto:shiro.takeda@gmail.com)>.
- econ.bst is available at <http://shiro.takeda.org/en/tex/econ-bst.html>.

[Borgers \(1995\)](#), [Bergemann et al. \(2011\)](#), [Takeda et al. \(2011a\)](#), [Takeda et al. \(2011b\)](#), [?](#), [Babiker and Eckaus \(2007\)](#), [Babiker et al. \(1999a\)](#), [Babiker et al. \(1999b\)](#), [Babiker et al. \(2000\)](#), [Babiker and Rutherford \(2005\)](#), [Goldin and Katz \(2011\)](#), [Goldin and Katz \(2008\)](#), [Goldin and Katz \(2000\)](#). [Takeda \(2013\)](#)

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