

# EViews: Introductory User Guide

## EViews Workfiles

Creating Workfiles | Working with Workfiles and Pages

Learning support material for the courses:

- ✓ NMST537 Time Series Analysis
- ✓ NEKN432 Econometrics

Based on official [EViews Tutorials](#) & [EViews Illustrated](#).

EViews: Introductory User Guide

# **EIEWS WORKFILES**

# EViews Workfiles

## EViews key principles:

- Any work in EViews is organized in **workfiles** (using **objects**).
- An EViews *workfile* must be created every time.
- Every EViews *workfile* contains one or more *workfile pages*.
- To set-up a workfile, you can either:
  - ✓ Create a “blank” workfile (this requires defining a structure).
  - ✓ Create a workfile by reading from a foreign source (e.g. database, \*.csv file, etc.).

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# **CREATING A WORKFILE BY DESCRIBING ITS STRUCTURE**

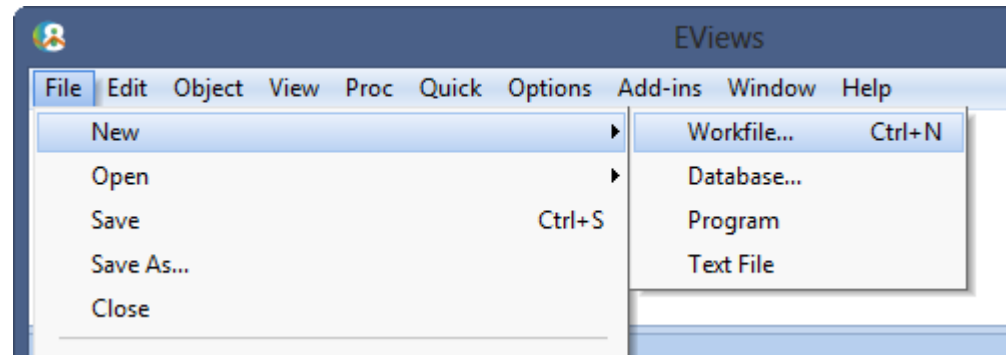
# Describing the Structure of a Workfile

- To create a workfile requires describing the structure of your data.
- The structure determines how many observations (i.e. rows) every series (or object) in the workfile page contains.
- There are three general types of workfile structure:
  - ✓ **Dated** – regular frequency (time series data)
  - ✓ **Unstructured/undated** (cross-sectional data)
  - ✓ **Balanced Panel** (panel data)
- A simple workfile with one page has one structure type.
- Multiple page workfiles with different pages may have different structures.

# Creating a Workfile

## To create a new workfile:

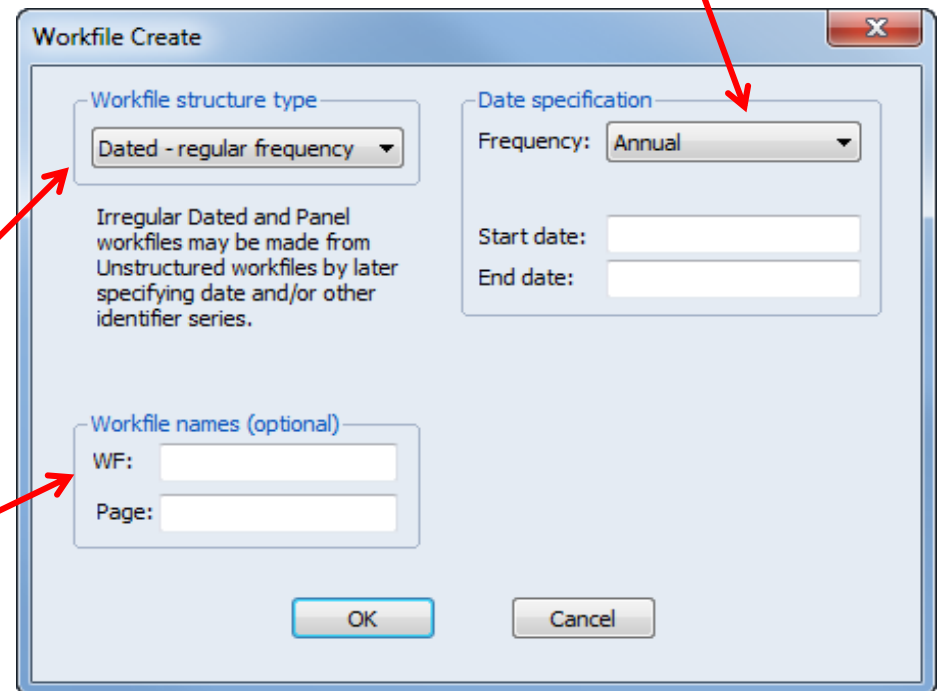
1. Click **File > New > Workfile...**
2. The **Workfile Create** dialog box opens up on the Main Menu screen. There are three dialog boxes we will use to structure a workfile.
3. EViews creates a workfile.



Use the “**Date/Structure/Panel structure specification**” area to specify the frequency and the start date/time and end date/time, etc.

Use the “**Workfile structure type**” pull down menu to specify the general structure type.  
[i.e. Dated, Unstructured/undated, Balanced Panel]

Enter a specific workfile name and first page for the workfile.  
[Optional: You do not need to name the workfile until it is saved.]



# Creating a Workfile Using Commands

- Workfiles can also be created using the command window.

[instead of menus/dialogs]

## To create a Dated Workfile:

- ✓ Enter into the command window, and press the **Enter** key to create the new workfile:

```
wfcreate(wf=monthly, page=dated) m 1950 2012
```

*[The new workfile is named MONTHLY containing a single page named DATED, structured as a monthly workfile 1950-2012.]*

## To create a Unstructured/Undated Workfile:

- ✓ Enter into the command window, and press the **Enter** key to create the new workfile:

```
wfcreate(wf=undated, page=state) u 50
```

*[The new workfile is named UNDATED containing a single page named STATE, structured as undated workfile with 50 obs.]*

## To create a Balance Panel Workfile:

- ✓ Enter into the command window, and press the **Enter** key to create the new workfile:

```
wfcreate(wf=panel, page=country) q 1950 2010 100
```

*[The new workfile is named PANEL containing a single page named COUNTRY structured as a panel workfile with 100 cross-sections of quarterly data 1950 - 2010.]*

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# **CREATING A WORKFILE FROM A FOREIGN DATA SOURCE**



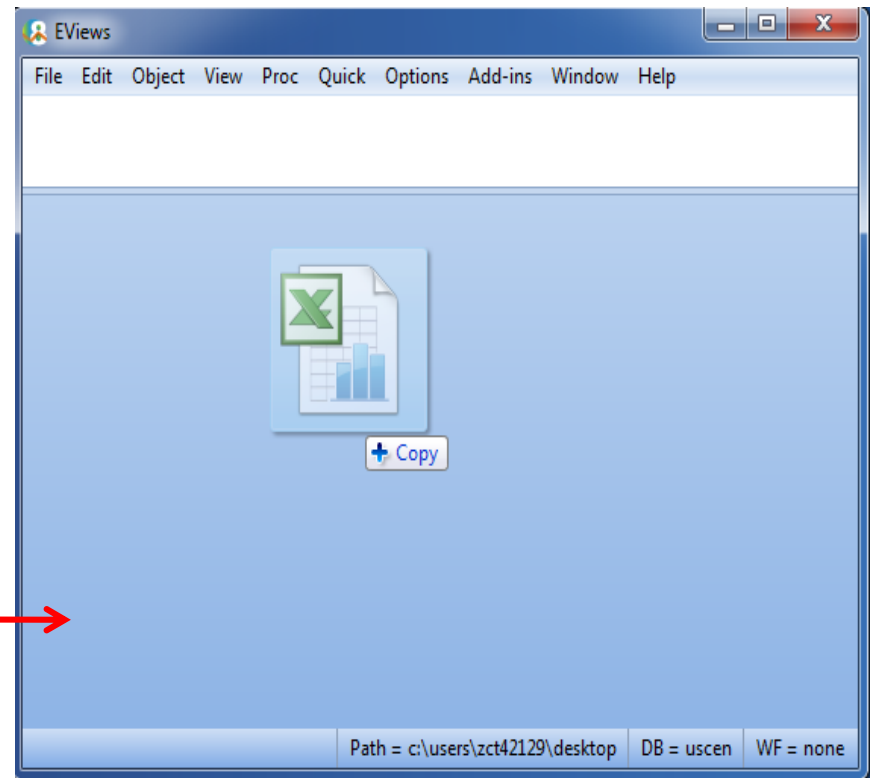
# EViews Workfiles

- EViews can create a new workfile by opening data from a variety of formats (e.g. MS Excel, HTML, CSV, ASCII, RATS, Stata, SPSS, SAS, etc.).
- EViews automatically recognizes the format and structure of files.
- Simply open the file in EViews and let the application do the rest.
- There are a number of ways to open a file in EViews:
  - ✓ Drag/drop a file in the main EViews window (this is the easiest method).
  - ✓ Click **File** → **Open** → **Foreign Data as Workfile**.
  - ✓ **Copy/Paste as New Workfile** in EViews desktop.

# Creating a Workfile by Dragging/Dropping Data

## To use drag and drop:

1. The easiest way to create a workfile is to select a file and drag/drop it onto the EViews desktop.
2. A “+” (plus) “Copy” sign appears when the file is in the appropriate area.
3. The **Excel Read** dialog appears.
4. In most cases, clicking **Finish** on this dialog will load the data.
5. EViews scans the Excel file to determine the structure and successfully open the file.

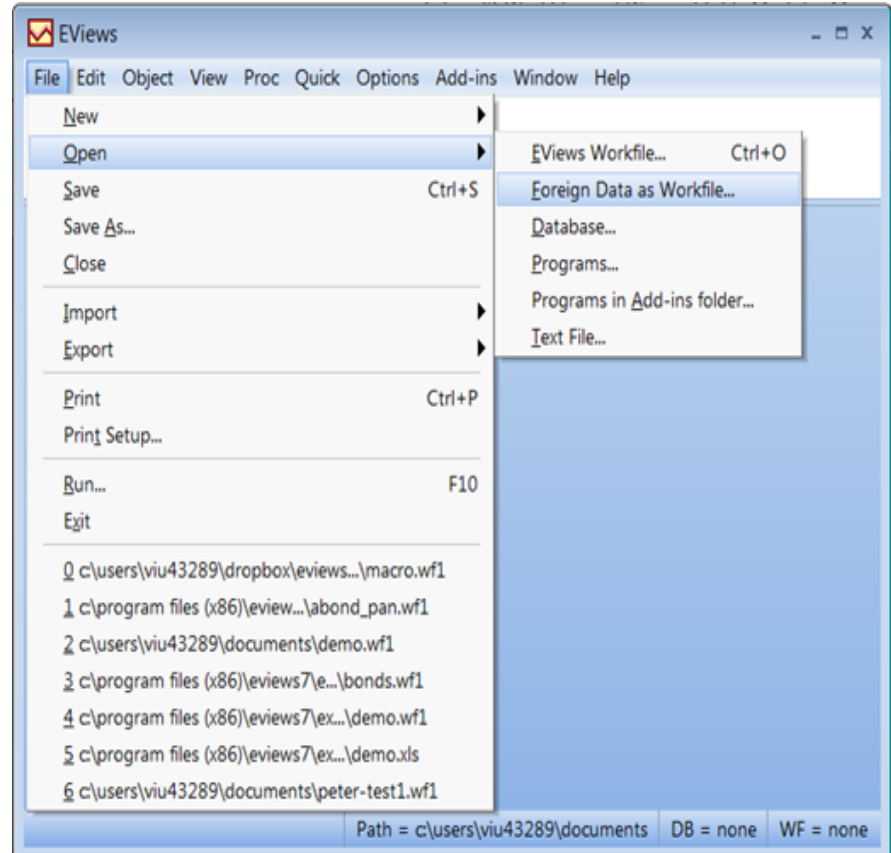


**Note:** If your data has lines of text before the column of data (showing data sources, and other info), you can tell EViews to skip these lines in the **Column headers** section which appears if you hit **Next** instead of **Finish**.

# Creating a Workfile by Importing Data

## To use an import feature:

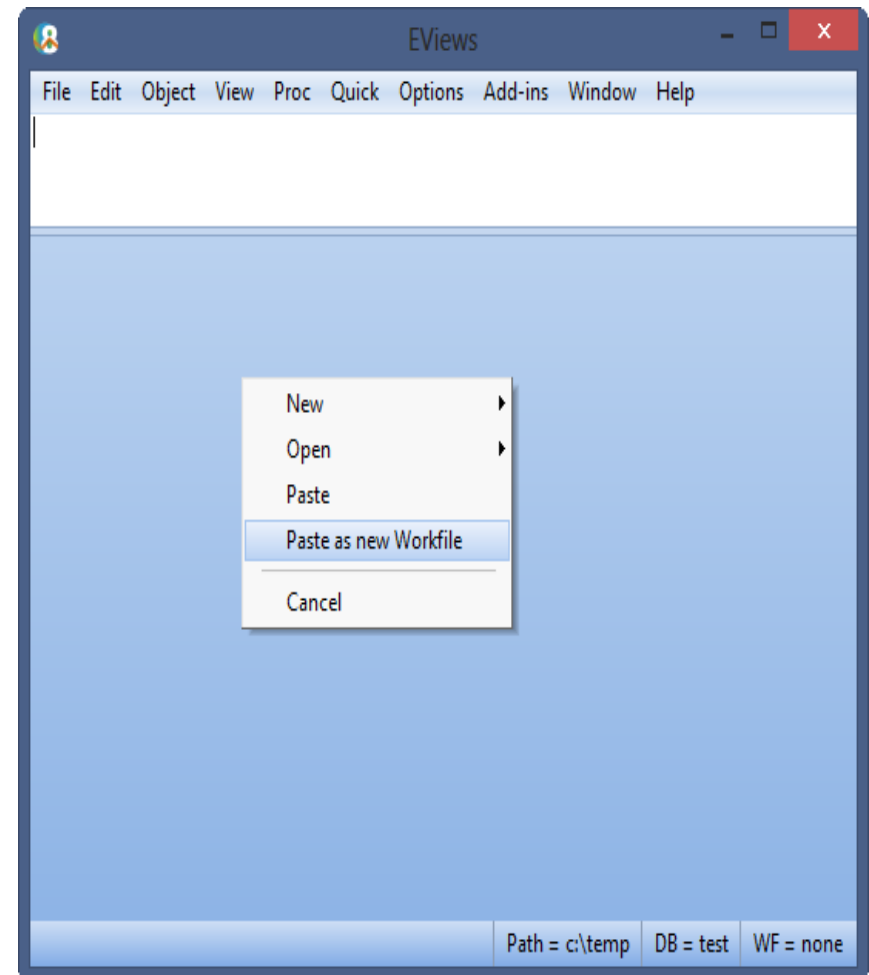
1. Click **File** → **Open** → **Foreign Data as Workfile**.
2. Select the directory where data is stored and open file.
3. The **Excel Read** dialog appears again.
4. As in the previous case, click **Finish** to load the data.



# Creating a Workfile by Copy/Paste

## To use a copy/paste feature:

1. Copy the source file (e.g. the range of Excel rows).
2. Right-click anywhere on the EViews desktop.
3. Select **Paste as New Workfile**.
4. As in the previous examples, the ***Excel Read*** dialog appears.
5. Click **Finish** to load the data.



# Creating a Workfile by Command

- You can just as easily open a foreign source file in EViews by typing in the command toolbar.

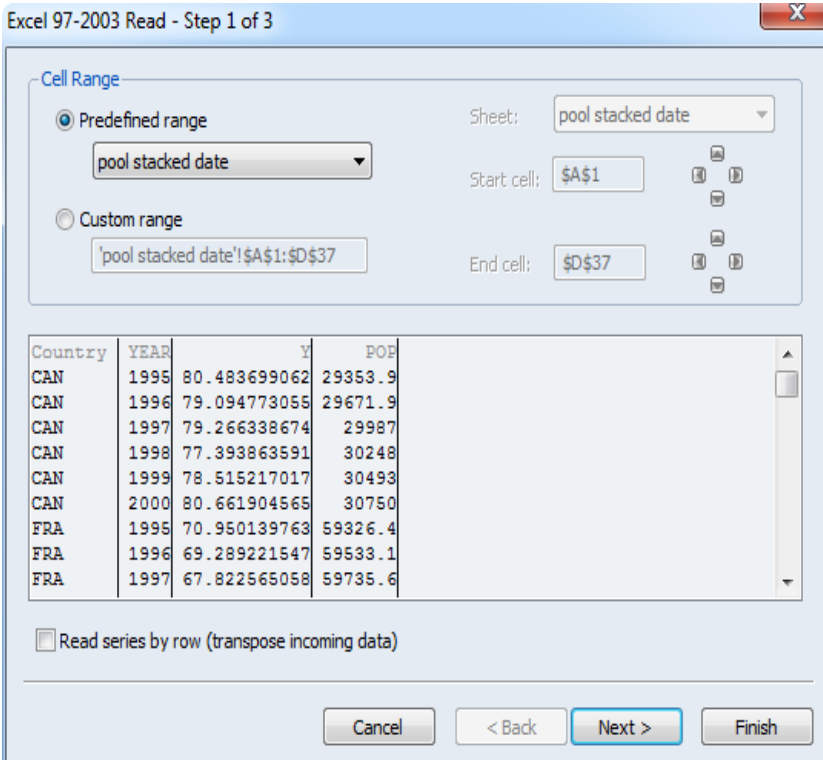
## To create a workfile by Command:

1. Type in the command window, e.g.:

```
wfopen(page=panel) "c:\panel.xls"
```

*[This creates a new workfile page named PANEL. The second part of the command instructs EViews, where the file is located.]*

2. The **Excel Read** dialog appears again.
3. Click **Finish** to load the data.



The dialog box is titled "Excel 97-2003 Read - Step 1 of 3". It contains a "Cell Range" section with two radio buttons: "Predefined range" (selected) and "Custom range". The "Predefined range" section has a dropdown menu showing "pool stacked date". The "Custom range" section has a text box containing "pool stacked date!\$A\$1:\$D\$37". To the right of these options are fields for "Sheet:" (dropdown showing "pool stacked date"), "Start cell:" (text box showing "\$A\$1"), and "End cell:" (text box showing "\$D\$37"). Below these fields is a preview table with the following data:

Country	YEAR	Y	POP
CAN	1995	80.483699062	29353.9
CAN	1996	79.094773055	29671.9
CAN	1997	79.266338674	29987
CAN	1998	77.393863591	30248
CAN	1999	78.515217017	30493
CAN	2000	80.661904565	30750
FRA	1995	70.950139763	59326.4
FRA	1996	69.289221547	59533.1
FRA	1997	67.822565058	59735.6

At the bottom of the dialog, there is a checkbox labeled "Read series by row (transpose incoming data)" which is currently unchecked. At the very bottom are four buttons: "Cancel", "< Back", "Next >", and "Finish".

# Transposing Data from Foreign Files

- Suppose you would like to bring the data in EViews, but so that dates appear in rows and the variables in columns.

## To transpose Data from Foreign Files:

1. Click **File** → **Open** → **Foreign Data as Workfile**.
2. Select the directory where data is stored and open the file.
3. The **Excel Read** dialog appears again. Check the box **Read series by row (transpose incoming data)**.
4. Click **Finish**.

**Alternatively, one can use Command, e.g.:**

```
wfopen (page=transpose)  
"c:\transpose.xls" byrow
```

*[This creates a new workfile page named TRANSPOSE; "c:\transpose.xls" instructs EViews where the data is located. The command byrow tells EViews to transpose the data.]*

Excel 97-2003 Read - Step 1 of 3

Cell Range

☒ Predefined range

Sheet: Sheet0

Start cell: \$A\$6

End cell: \$AK\$33

☐ Custom range

Sheet0!\$A\$6:\$AK\$33

	Gross domestic product	Personal consumption expenditures
2004-01-01	2.7	3.6
2004-04-01	2.6	1.8
2004-07-01	3	3.5
2004-10-01	3.3	4.4
2005-01-01	4.2	3.2
2005-04-01	1.8	4
2005-07-01	3.2	3.1
2005-10-01	2.1	1

☒ Read series by row (transpose incoming data)

Cancel < Back Next > Finish

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# **WORKFILE PAGES**

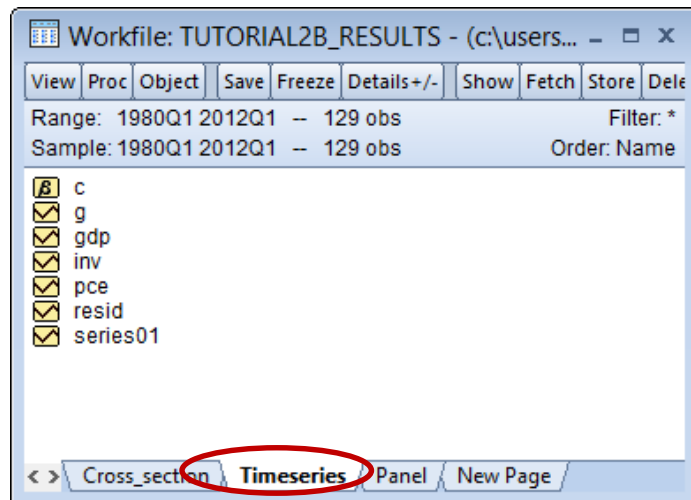
# EViews Pages (Part I)

- An EViews **workfile** is a collection of pages.
- Every EViews workfile has at least one page.
- All data in an EViews page share a common identifier.
- EViews allows you to create many pages of data with different identifiers within the same workfile.
- Multiple-page workfiles are useful because they allow you to;
  - ✓ Pull together unrelated data for easy accessibility.
  - ✓ Hold multiple frequency data (e.g. both quarterly and annual in same workfile).
  - ✓ Link data with different identifiers.
- The Page names appear as a series of tabs at the bottom of the workfile window. If you create a new workfile (by describing its structure), it contains a single page with the name “**Untitled**”.
- A page is active when the tab is displayed with a white background and slightly in front of the other tabs.

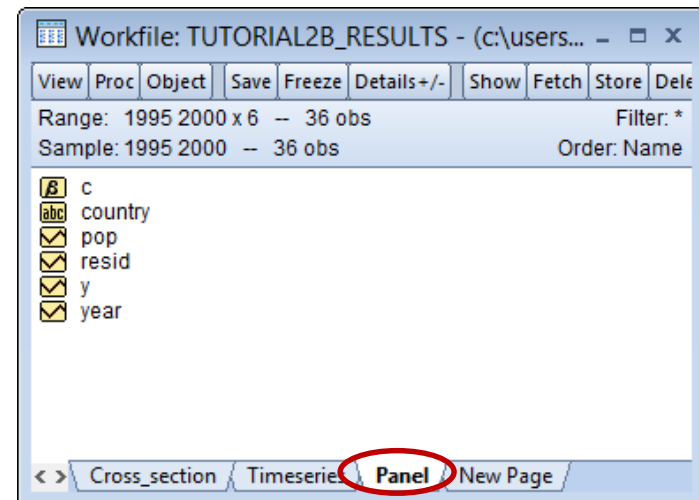


# EViews Pages (Part II)

- Clicking on a page tab makes that page active.
- The information you see on the workfile window are the contents (objects) of the active page.
- Any changes that you make (transforming data, changing the sample, etc.) whether via the command window or via menu/dialogs, will affect only the active page.



*Activating the TimeSeries page*



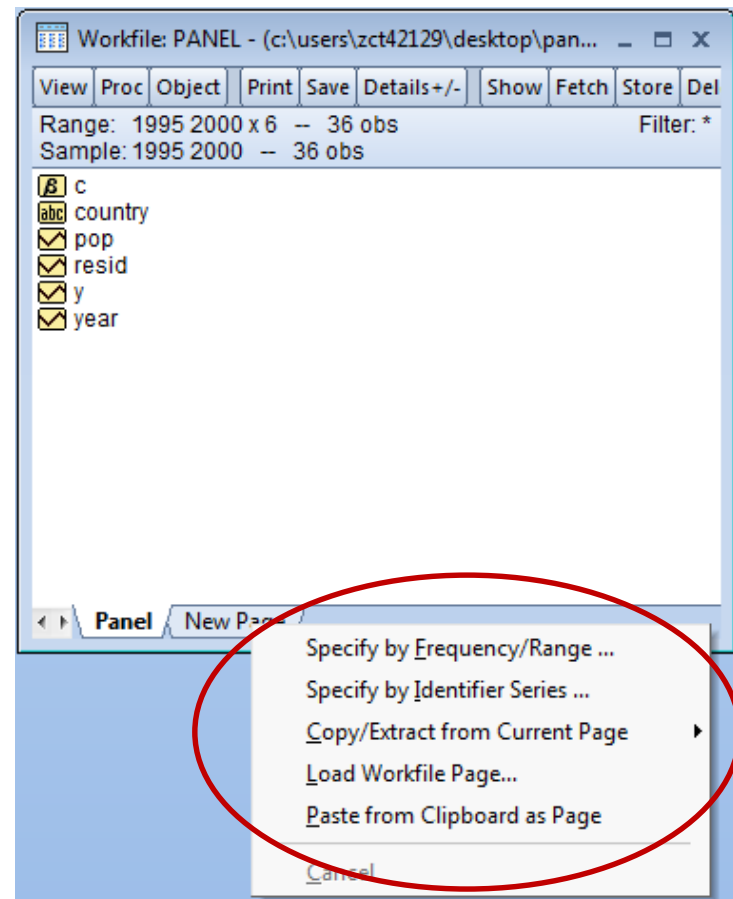
*Activating the Panel page*

# Creating a New Workfile Page

- There are a number of ways to create new pages.

## To add a page:

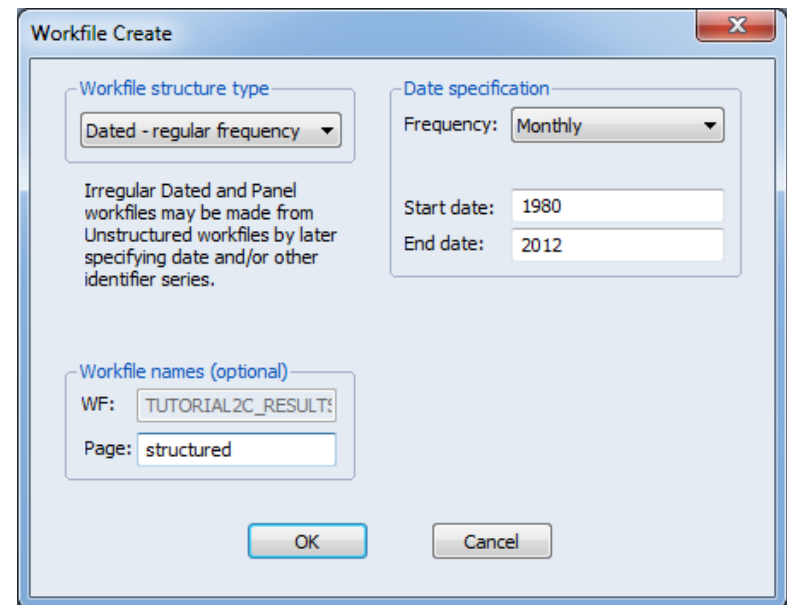
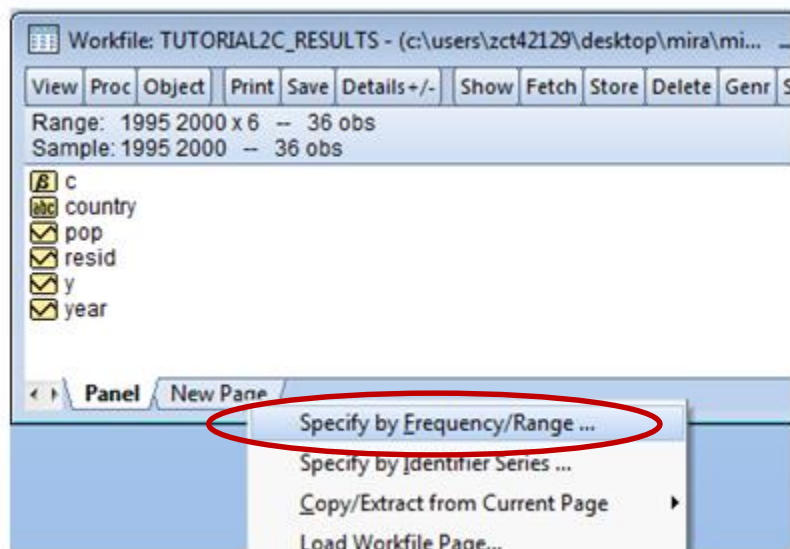
- ✓ Click the **New Page** tab at the bottom. A drop-down menu appears, which indicates a variety of ways to create a new page.



# Creating a New Page by Describing its Structure

To create a new page by describing its structure:

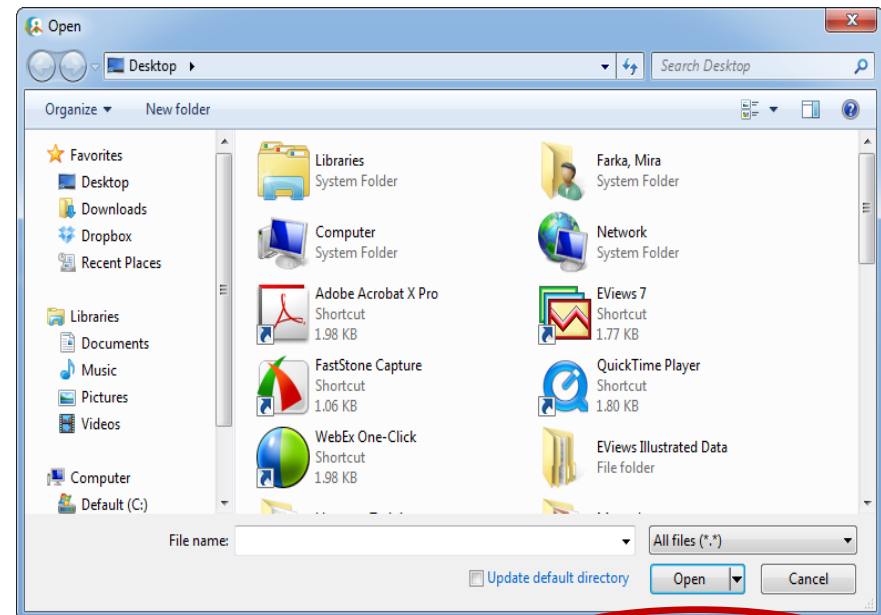
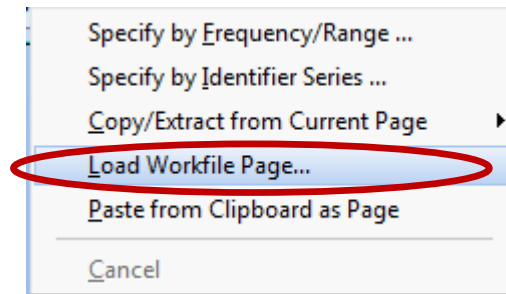
1. On the **New Page** tab click on **Specify by Frequency/Range**.
2. The **Workfile Create** dialog box opens up.
3. Use the dialog box to specify the type of workfile you would like to create.



# Creating a New Page by Loading Data

## To create a page by loading data:

1. On the **New Page** tab click **Load Workfile Page**.
2. The **Open** dialog box opens up which allows you to browse and locate the data file. Even though the name indicates that you are loading a workfile page, this command can just as easily load data from Excel, text files or any other format.
3. To load any other format, you need to change the file extension from **EViews workfile** to **All Files** (as shown here).
4. After you have located your file, click on it to open file.
5. The **Excel Read** box opens up.
6. Click **Finish** to load the data.

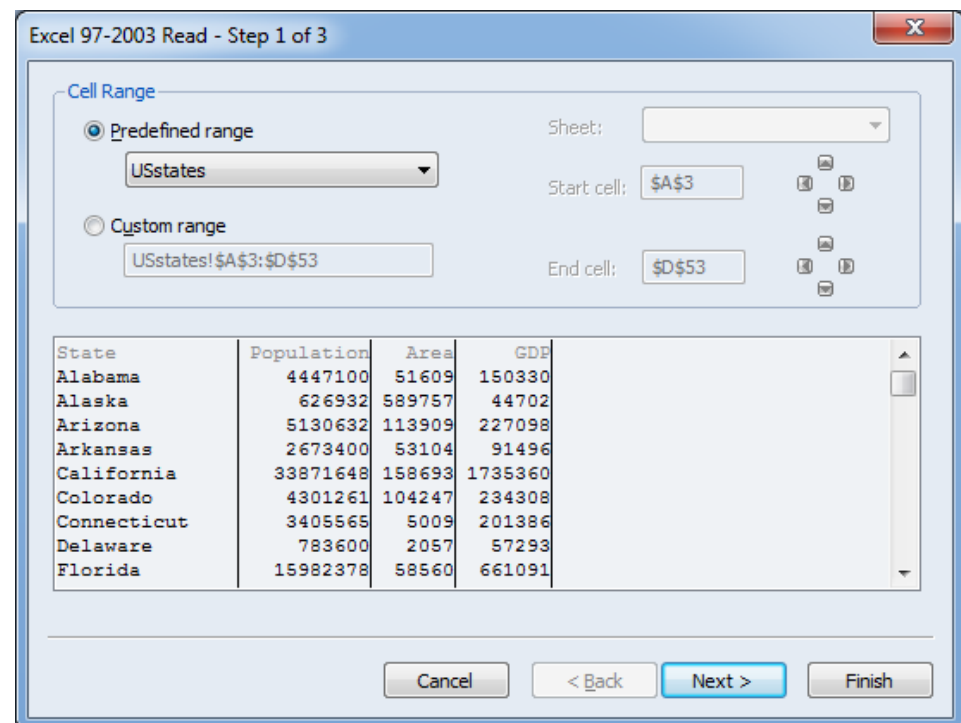
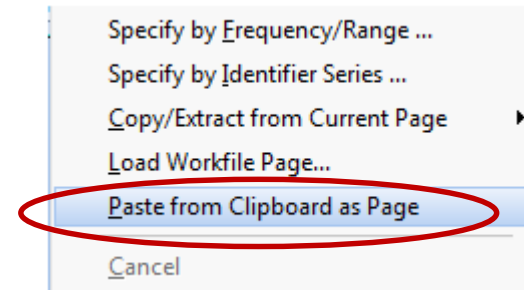


# Creating a New Page by Copy/Paste

## To create a page by Copy/Paste:

1. Locate your file on the disk and **Copy** it.
2. On the **New Page** tab click **Paste from Clipboard as Page**.
3. The **Excel Read** dialog opens up.
4. As usual, click **Finish** to load the data.

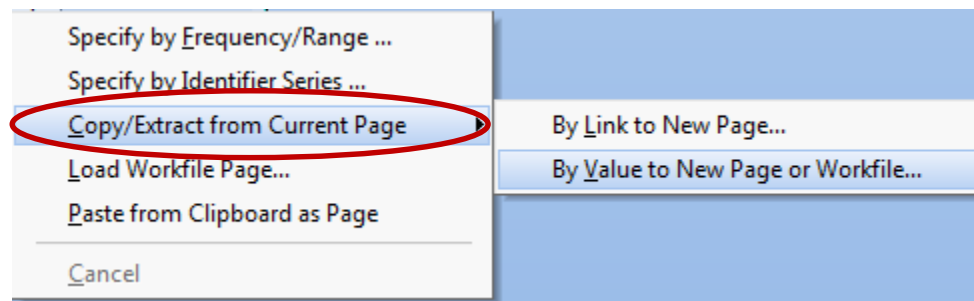
[You can also load data by dragging a source file and dropping it into the **New Page** tab. A plus (“+”) sign will appear when the cursor is over the **New Page** tab.]



# Creating a New Page Using an Existing Page (Part I)

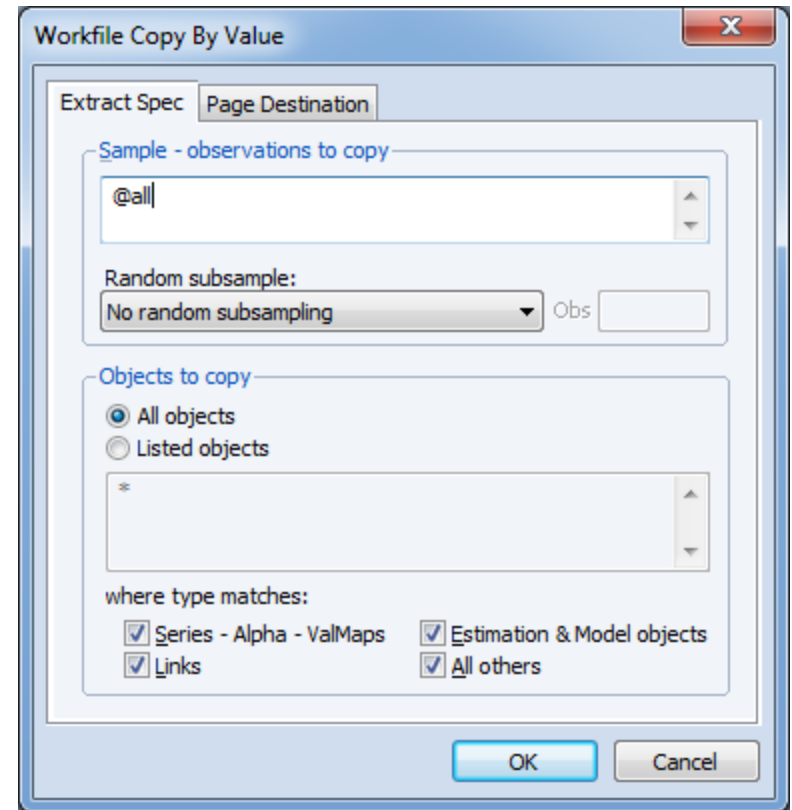
## To create a new page based on an existing page:

1. Click on the page from which you will extract data in order to activate it.
2. On the **New Page** tab click **Copy Extract from Current Page** (the current page is the active page).
3. Select:
  - ✓ **By Link to New Page** - if you want the data in the new page to be linked to the source page.
  - ✓ **By Value to New Page or Workfile** - if you want to make a copy of the data.



# Creating a New Page Using an Existing Page (Part II)

4. The **Workfile Copy by Value** dialog box opens.
5. Under **Extract Spec**, specify the data series you wish to extract.
  - a. If you wish to extract all the series, type **@all**.
  - b. If you wish to extract only a subset of the series, click **Listed objects** and type the name of the series.



# Creating a New Page Using an Existing Page (Part III)

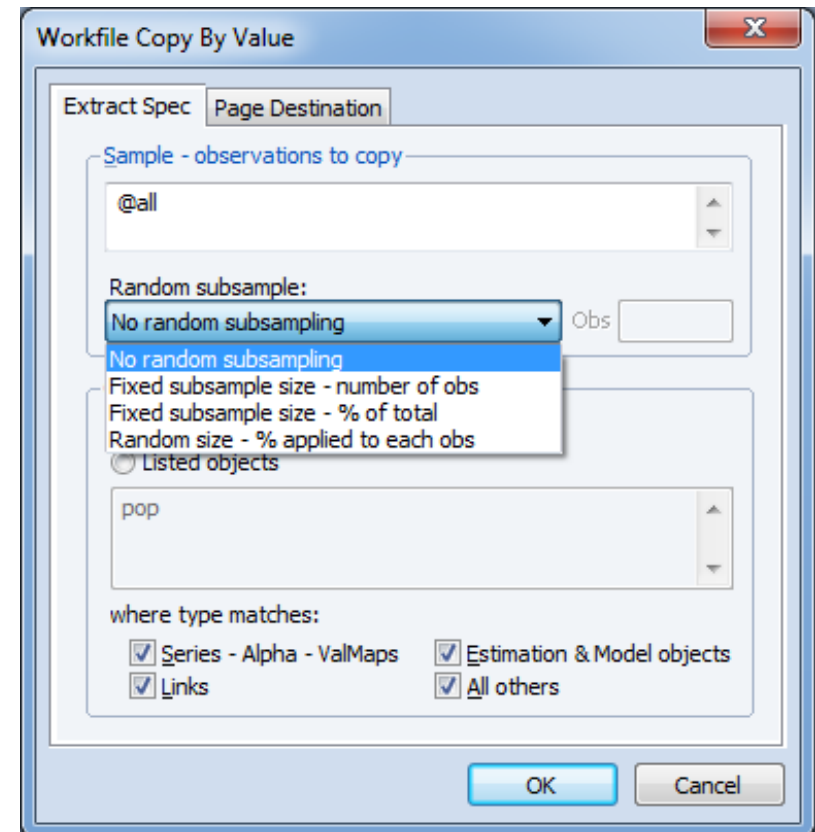
- In this case, EViews allows you to randomize extracted data.
- To select a **Random Subsample** of the active page data choose:
  - a. Fixed Subsample size - number of obs**

If you wish to extract a random subset of observations.
  - b. Fixed subsample size - % of total**

If you wish to extract a random subset of observations as a specified percentage of the total sample.
  - c. Random size - % applied to each obs**

If you do not wish to specify a fixed sample. EViews goes through each observation and randomly decides whether that observation will be included in the extraction. Note that if you choose this option, the size of the sample varies each time you perform extraction.
  - d. No Random Subsampling**

If you do not wish to extract a random subsample of the original data.



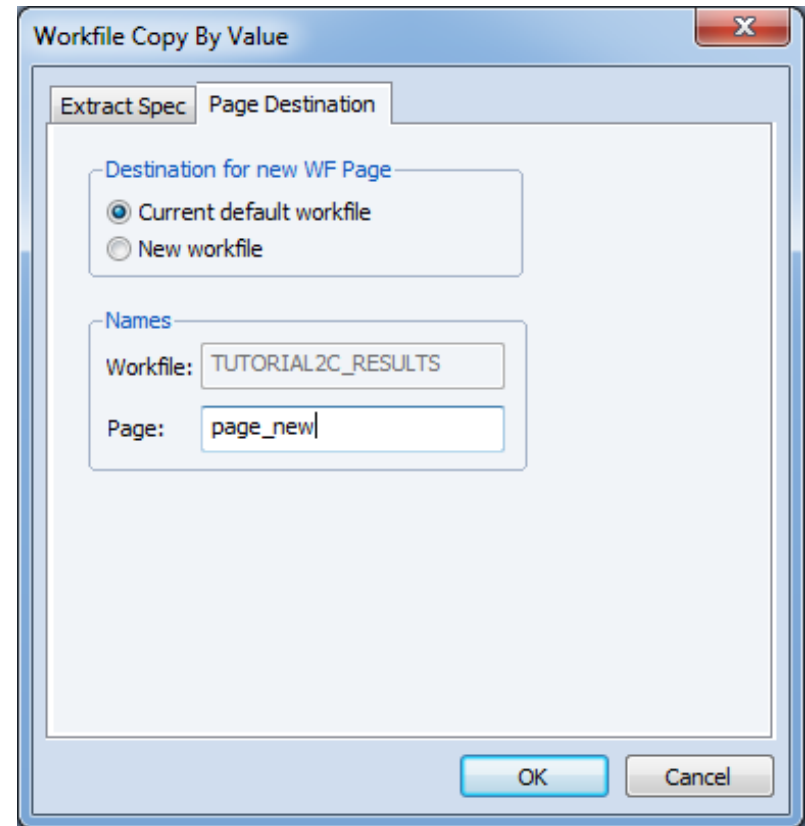


# Creating a New Page Using an Existing Page (Part IV)

- You can also control whether you want the extracted data to be saved in a new page, or new workfile.

## To create a new workfile page:

- Click the **Page Destination** tab on the **Workfile Copy by Value** dialog box.
- From **Destination for new WF Page** choose:
  - Current default workfile** (if you wish to save the page in the same workfile) or **New Workfile** (if you wish to create a new workfile).
  - Under **Names**, type the workfile name or the page name.

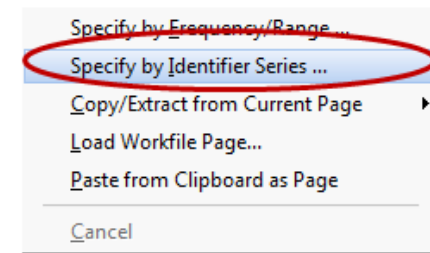


# Creating a New Page Using Identifier Series (Part I)

- This option allows you to structure a new page based on the original structure of the existing page. For example, one can structure one new page from an existing panel data page, which is based on the time series.

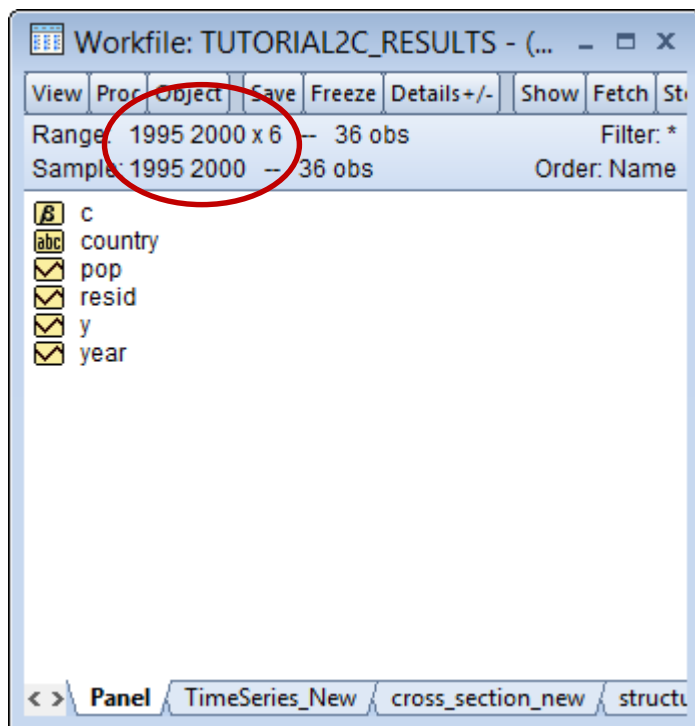
## To create a new page based on the time series structure of the existing panel data page:

- On the **New Page** tab click **Specify by Identifier Series**.
- The **Workfile Page Create by ID** box opens up. Leave blank the **Cross ID series** (since the new page will be structured solely by date).
- In **Date ID series**, specify the date identifier from the source file (in this case, year).
- Specify **ID page** (in this case panel).
- Name the page (in this case, TimeSeries\_New).

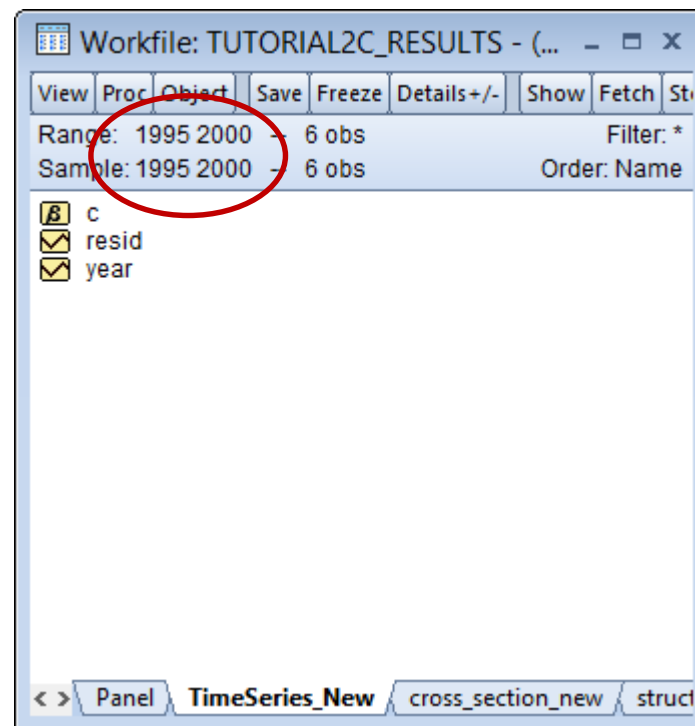
A screenshot of the 'Workfile Page Create by ID' dialog box. It has a title bar with a close button. The dialog is divided into several sections. The 'Identifier series' section contains a 'Method' dropdown menu set to 'Unique values of ID series from one page'. Below this are three text input fields: 'Cross ID series' (empty), 'Date ID series' (containing 'year'), and 'ID page' (containing 'panel'). The 'Sample' section has a text input field containing '@all'. The 'Names (optional)' section has two text input fields: 'WF:' containing 'TUTORIAL2C\_RESULT' and 'Page:' containing 'TimeSeries\_New'. At the bottom are 'OK' and 'Cancel' buttons.

# Creating a New Page Using Identifier Series (Part II)

- EViews has created a new page (TimeSeries\_New) structured by date following the date structure of the panel page (annual from 1995 to 2000).



*Panel Page*



*Time Series Page*

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