putdocx paragraph — Add text or images to an Office Open XML (.docx) file

DescriptionQuick startSyntaxOptionsRemarks and examplesAlso see

## Description

Title

putdocx paragraph adds a new paragraph to the document. The newly created paragraph becomes the active paragraph. All subsequent text or images will be appended to the active paragraph.

putdocx text adds text to the paragraph created by putdocx paragraph. The text may be a plain text string or any valid Stata expression (see [U] 13 Functions and expressions).

putdocx textblock begin adds a new paragraph to which a block of text can be added.

putdocx textblock append appends a block of text to the active paragraph.

putdocx textblock end ends a block of text initiated by putdocx textblock begin or putdocx textblock append.

putdocx textfile adds a block of preformatted text to a new paragraph with a predefined style.

putdocx pagenumber adds page numbers to a paragraph that is to be added to the header or footer.

putdocx image embeds a Portable Network Graphics (.png), Joint Photographic Experts Group (.jpg), Device-Independent Bitmap (.dib), Enhanced Metafile (.emf), Bitmap (.bmp), Tagged Image File Format (.tif), or Scalable Vector Graphics (.svg) file in the active paragraph.

# Quick start

Add a paragraph to the document with centered horizontal alignment putdocx paragraph, halign(center)

Append the text "This is paragraph text." to the active paragraph and format the text as bold putdocx text ("This is paragraph text."), bold

Add a PNG image saved as myimg to the active paragraph putdocx image myimg.png

Add content to the header myheading with the text "My Header" followed by the page number putdocx paragraph, toheader(myheading) putdocx text ("My Header ") putdocx pagenumber

Add a new paragraph containing the text between the two putdocx textblock commands putdocx textblock begin This paragraph is written as a block of text. putdocx textblock end

- Add file intro.txt to the document as a new paragraph putdocx textfile intro.txt
- Same as above, but append intro.txt to the active paragraph putdocx textfile intro.txt, append

# Syntax

Add paragraph to document
 putdocx paragraph [, paragraph\_options]
Add text to paragraph
 putdocx text (exp) [, text\_options]
Add a paragraph with a block of text
 putdocx textblock begin [, textblock\_options paragraph\_options]

Append a block of text to the active paragraph

putdocx textblock append [, textblock\_options]

End the block of text initiated with putdocx textblock begin or putdocx textblock append putdocx textblock end

Add page number to paragraph (to be added to header or footer) putdocx pagenumber [, *text\_options* totalpages]

Add a textfile as a block of preformatted text

putdocx textfile textfile [, append stopat(string[, stopatopt])]

Add image to paragraph

putdocx image filename [, image\_options]

*filename* is the full path to the image file or the relative path from the current working directory. If *filename* contains spaces, it must be enclosed in double quotes.

paragraph_options	Description
<pre>style(pstyle)</pre>	set paragraph text with specific style
<pre>font(fspec)</pre>	set font, font size, and font color
halign( <i>hvalue</i> )	set paragraph alignment
valign( <i>vvalue</i> )	set vertical alignment of characters on each line
<pre>indent(indenttype, #[unit])</pre>	set paragraph indentation
<pre>spacing(position, #[unit])</pre>	set spacing between lines of text
<pre>shading(sspec)</pre>	set background color, foreground color, and
	fill pattern
toheader( <i>hname</i> )	add paragraph content to the header hname
tofooter( <i>fname</i> )	add paragraph content to the footer fname

text_options	Description
* <u>nfor</u> mat(% <i>fmt</i> )	specify numeric format for text
<pre>font(fspec)</pre>	set font, font size, and font color
bold	format text as bold
italic	format text as italic
script(sub   super)	set subscript or superscript formatting of text
<u>strike</u> out	strike out text
<u>underl</u> ine[( <i>upattern</i> )]	underline text using specified pattern
<pre>shading(sspec)</pre>	set background color, foreground color, and fill
	pattern
linebreak[(#)]	add line breaks after text
<u>allc</u> aps	format text as all caps
* <u>smallc</u> aps	format text as small caps
*hyperlink( <i>link</i> )	add the text as a hyperlink
*bookmark( <i>bmname</i> )	add the text as a bookmark named bmname
*bookmarklink( <i>bmname</i> )	link the text to bookmark bmname
*trim	remove the leading and trailing spaces in the text

\*Cannot be specified with putdocx pagenumber.

textblock_options	Description			
[ <u>no]</u> paramode	specify whether blank lines signal new paragraphs;			
	default is noparamode			
[ <u>no]hard</u> break	specify whether spaces are added after hard line breaks;			
	default is nohardbreak			
image_options	Description			
<pre>image_options width(#[unit])</pre>	Description set image width			
0	<b>x</b>			
width(#[unit])	set image width			
width(#[unit])       height(#[unit])	set image width set image height			

fspec is

fontname [, size [, color]]

*fontname* may be any valid font installed on the user's computer. If *fontname* includes spaces, then it must be enclosed in double quotes.

size is a numeric value that represents font size measured in points. The default is 11.

color sets the text color.

sspec is

bgcolor [, fgcolor [, fpattern]]

bgcolor specifies the background color.

fgcolor specifies the foreground color. The default foreground color is black.

*fpattern* specifies the fill pattern. The most common fill patterns are solid for a solid color (determined by *fgcolor*), pct25 for 25% gray scale, pct50 for 50% gray scale, and pct75 for 75% gray scale. A complete list of fill patterns is shown in *Shading patterns* of [RPT] Appendix for putdocx.

- *color*, *bgcolor*, and *fgcolor* may be one of the colors listed in *Colors* of [RPT] **Appendix for putdocx**; a valid RGB value in the form ### ###, for example, 171 248 103; or a valid RRGGBB hex value in the form #######, for example, ABF867.
- *upattern* may be any of the patterns listed in *Underline patterns* of [RPT] **Appendix for putdocx**. The most common underline patterns are double, dash, and none.
- unit may be in (inch), pt (point), cm (centimeter), or twip (twentieth of a point). An inch is equivalent to 72 points, 2.54 centimeters, or 1440 twips. The default is in.

# Options

Options are presented under the following headings:

Options for putdocx paragraph Options for putdocx text Options for putdocx textblock begin Options for putdocx textblock append Options for putdocx pagenumber Options for putdocx textfile Options for putdocx image

### Options for putdocx paragraph

- style(pstyle) specifies that the text in the paragraph be formatted with style pstyle. Common values for pstyle are Title, Subtitle, and Heading1. See the complete list of paragraph styles in Paragraph styles of [RPT] Appendix for putdocx.
- font(fontname [, size [, color]]) sets the font, font size, and font color for the text within the
  paragraph. The font size and font color may be specified individually without specifying fontname.
  Use font("", size) to specify font size only. Use font("", "", color) to specify font color
  only. For both cases, the default font will be used.

Specifying font() with putdocx paragraph overrides font properties specified with putdocx begin.

- halign(*hvalue*) sets the horizontal alignment of the text within the paragraph. *hvalue* may be left, right, center, both, or distribute. distribute and both justify text between the left and right margins equally, but distribute also changes the spacing between words and characters. The default is halign(left).
- valign(vvalue) sets the vertical alignment of the characters on each line when the paragraph contains characters of varying size. vvalue may be auto, baseline, bottom, center, or top. The default is valign(baseline).

- indent(indenttype, #[unit]) specifies that the paragraph be indented by # units. indenttype may be left, right, hanging, or para. left and right indent # units from the left or the right, respectively. hanging uses hanging indentation and indents lines after the first line by # inches unless another unit is specified. para uses standard paragraph indentation and indents the first line by # inches unless another unit is specified. This option may be specified multiple times in a single command to accommodate different indentation settings. If both indent(hanging) and indent(para) are specified, only indent(hanging) is used.
- spacing(position, #[unit]) sets the spacing between lines of text. position may be before, after, or line. before specifies the space before the first line of the current paragraph, after specifies the space after the last line of the current paragraph, and line specifies the space between lines within the current paragraph. This option may be specified multiple times in a single command to accommodate different spacing settings.
- shading(*bgcolor* [, *fgcolor* [, *fpattern*]]) sets the background color, foreground color, and fill pattern for the paragraph.
- toheader(*hname*) specifies that the paragraph be added to the header *hname*. The paragraph will not be added to the body of the document.
- tofooter (*fname*) specifies that the paragraph be added to the footer *fname*. The paragraph will not be added to the body of the document.

### **Options for putdocx text**

- nformat (% fmt) specifies the numeric format of the text when the content of the new text appended to the paragraph is a numeric value. This setting has no effect when the content is a string.
- font(fontname [, size [, color]]) sets the font, font size, and font color for the new text within
  the active paragraph. The font size and font color may be specified individually without specifying
  fontname. Use font("", size) to specify the font size only. Use font("", "", color) to specify
  the font color only. For both cases, the default font will be used.

Specifying font() with putdocx text overrides all other font settings, including those specified with putdocx begin and putdocx paragraph.

- bold specifies that the new text in the active paragraph be formatted as bold.
- italic specifies that the new text in the active paragraph be formatted as italic.
- script(sub|super) changes the script style of the new text.script(sub) makes the text a subscript.script(super) makes the text a superscript.
- strikeout specifies that the new text in the active paragraph have a strikeout mark.
- underline (*upattern*) specifies that the new text in the active paragraph be underlined and optionally specifies the format of the line. By default, a single underline is used.
- shading(bgcolor [, fgcolor [, fpattern]]) sets the background color, foreground color, and fill
  pattern for the active paragraph. Specifying shading() with putdocx text overrides shading
  specifications from putdocx paragraph.
- linebreak (#) specifies that one or # line breaks be added after the new text.
- allcaps specifies that all letters of the new text in the active paragraph be capitalized.
- smallcaps specifies that all letters of the new text in the active paragraph be capitalized, with larger capitals for uppercase letters and smaller capitals for lowercase letters.

hyperlink(link) adds the text as a hyperlink to the webpage address specified in link.

- bookmark(*bmname*) adds the text as a bookmark named *bmname*. You can link to this bookmark from other text within a paragraph or from an expression in a table cell by using the bookmarklink(*bmname*) option.
- bookmarklink(*bmname*) adds the text as a link to the bookmark named *bmname*. Note that bookmark links can point only to bookmarks in the current document. Additionally, these links cannot point to bookmarks in documents to which you will be appending.

trim removes the leading and trailing spaces in the text.

### Options for putdocx textblock begin

- style(pstyle) specifies that the text in the paragraphs be formatted with style pstyle. Common values
  for pstyle are Title, Subtitle, and Heading1. See the complete list of paragraph styles in
  Paragraph styles of [RPT] Appendix for putdocx.
- font(fontname [, size [, color]]) sets the font, font size, and font color for the text within the
  paragraphs. The font size and font color may be specified individually without specifying fontname.
  Use font("", size) to specify font size only. Use font("", "", color) to specify font color
  only. For both cases, the default font will be used.

Specifying font() with putdocx textblock begin overrides font properties specified with putdocx begin.

- halign(hvalue) sets the horizontal alignment of the text within the paragraphs. hvalue may be left, right, center, both, or distribute. distribute and both justify text between the left and right margins equally, but distribute also changes the spacing between words and characters. The default is halign(left).
- valign(vvalue) sets the vertical alignment of the characters on each line when the paragraphs contain characters of varying size. vvalue may be auto, baseline, bottom, center, or top. The default is valign(baseline).
- indent(indenttype, #[unit]) specifies that the paragraphs be indented by # units. indenttype may be left, right, hanging, or para. left and right indent # units from the left or the right, respectively. hanging uses hanging indentation and indents lines after the first line by # inches unless another unit is specified. para uses standard paragraph indentation and indents the first line by # inches unless another unit is specified. This option may be specified multiple times in a single command to accommodate different indentation settings. If both indent(hanging) and indent(para) are specified, only indent(hanging) is used.
- spacing(position, #[unit]) sets the spacing between lines of text. position may be before, after, or line. before specifies the space before the first line of each paragraph in the text block, after specifies the space after the last line of each paragraph, and line specifies the space between lines within each paragraph. This option may be specified multiple times in a single command to accommodate different spacing settings.
- shading(bgcolor [, fgcolor [, fpattern]]) sets the background color, foreground color, and fill
  pattern for the paragraphs.
- toheader(*hname*) specifies that the first paragraph in a text block be added to the header *hname*. The first paragraph will not be added to the body of the document.

When you specify the paramode option with toheader(), all paragraphs after the first will be added to the body of the document, not the header.

tofooter (*fname*) specifies that the first paragraph in a text block be added to the footer *fname*. The first paragraph will not be added to the body of the document.

When you specify the paramode option with tofooter(), all paragraphs after the first will be added to the body of the document, not the footer.

- noparamode and paramode specify whether blank lines within a block of text signal the beginning of a new paragraph in the document. noparamode, the default, exports the block of text as a single paragraph, removing any empty lines. paramode treats blank lines as an indication of a new paragraph. When paramode is specified, the text following each blank line will begin a new paragraph. The treatment of paragraphs within text blocks can also be specified by using set docx\_paramode; see [RPT] set docx.
- nohardbreak and hardbreak specify whether putdocx textblock inserts a space at the beginning of lines or respects spaces exactly as they are typed. nohardbreak, the default, respects spaces at the beginning and end of lines exactly as they are typed in the text block. The hardbreak option inserts a space at the beginning of all nonempty lines, excluding the first line in the block of text and the first line of each paragraph. Thus, hardbreak adds a space after the hard line breaks in the text block. The treatment of spaces at line breaks can also be specified by using set docx\_hardbreak; see [RPT] set docx.

#### Options for putdocx textblock append

- noparamode and paramode specify whether blank lines within a block of text signal the beginning of a new paragraph in the document. noparamode, the default, exports the block of text as a single paragraph, removing any empty lines. paramode treats blank lines as an indication of a new paragraph. When paramode is specified, the text following each blank line will begin a new paragraph. The treatment of paragraphs within text blocks can also be specified by using set docx\_paramode; see [RPT] set docx.
- nohardbreak and hardbreak specify whether putdocx textblock inserts a space at the beginning of lines or respects spaces exactly as they are typed. nohardbreak, the default, respects spaces at the beginning and end of lines exactly as they are typed in the text block. The hardbreak option inserts a space at the beginning of all nonempty lines, excluding the first line in the block of text and the first line of each paragraph. Thus, hardbreak adds a space after the hard line breaks in the text block. The treatment of spaces at line breaks can also be specified by using set docx\_hardbreak; see [RPT] set docx.

#### Options for putdocx pagenumber

font(fontname [, size [, color]]) sets the font, font size, and font color for the page numbers. The
font size and font color may be specified individually without specifying fontname. Use font("",
size) to specify the font size only. Use font("", "", color) to specify the font color only. For
both cases, the default font will be used.

Specifying font() with putdocx pagenumber overrides all other font settings, including those specified with putdocx begin and putdocx paragraph.

- bold specifies that the page numbers be formatted as bold.
- italic specifies that the page numbers be formatted as italic.
- script(sub|super) changes the script style of the page numbers. script(sub) makes the page
  numbers subscripts. script(super) makes the page numbers superscripts.

strikeout specifies that the page numbers have a strikeout mark.

- underline (*upattern*) specifies that the page numbers be underlined and optionally specifies the format of the line. By default, a single underline is used.
- shading(bgcolor [, fgcolor [, fpattern]]) sets the background color, foreground color, and fill
  pattern for the page numbers. Specifying shading() with putdocx pagenumber overrides shading
  specifications from putdocx paragraph.
- linebreak (#) specifies that one or # line breaks be added after the page numbers.
- allcaps specifies that the page numbers be capitalized; this only applies with the page number formats lower\_letter, lower\_roman, cardinal\_text, and ordinal\_text.
- totalpages specifies that the total number of pages be displayed, instead of the current number of the page.

#### Options for putdocx textfile

- append specifies that the text file be appended to the current paragraph, rather than being added as a new paragraph.
- stopat(string  $\lfloor$ , stopatopt $\rfloor$ ) specifies that only a portion of the text file be included, using the specified string as the end point.

stopatopt must be one of contain, begin, or end. The default is contain, which matches the string inside the line. begin matches the string at the beginning of the line. end matches the string at the end of the line. If the line matches the string, the rest of the text file, including the line, will not be included in the document.

#### Options for putdocx image

- width(#[unit]) sets the width of the image. If the width is larger than the body width of the document, then the body width is used. If width() is not specified, then the default size is used; the default is determined by the image information and the body width of the document.
- height (# unit ) sets the height of the image. If height() is not specified, then the height of the image is determined by the width and the aspect ratio of the image.
- linebreak (#) specifies that one or # line breaks be added after the new image.
- link specifies that a link to the image *filename* be inserted into the document. If the image is linked, then the referenced file must be present so that the document can display the image.
- alt(*text*) specifies alternative text for the image to be read by voice software.

## **Remarks and examples**

# stata.com

Text, headers, footers, page numbers, and images are added to a .docx file via paragraphs. You first create a paragraph and then append text and other content to it. A paragraph can be formatted as a whole, and portions of the text within a paragraph can also be formatted individually.

To a paragraph, you can add valid Stata expressions, including strings, algebraic expressions, and direct references to stored results using putdocx text. For lengthier additions, you can add blocks of text using putdocx textblock. You can also insert preformatted text files in your .docx file with putdocx textfile. With putdocx image, you can add images such as Stata graphs to a paragraph.

With putdocx paragraph, you not only can add standard paragraphs to a document but also can create, with the variety of formatting options available to customize paragraphs, a document complete with a title, subtitle, headings, and headers and footers.

Remarks are presented under the following headings:

Adding a paragraph Formatting text Working with blocks of text Adding an image to the document Adding a bookmark to the document Inserting text files in the document

#### Adding a paragraph

With each putdocx paragraph command we execute, we have the opportunity to format all the text within the paragraph. For instance, we can specify font properties such as size and color along with alignment, indentation, and line spacing.

Specifying putdocx paragraph without any options will create an active paragraph in the body of the document. To instead add the paragraph content to a header or footer, use the toheader() or tofooter() option.

#### Example 1: Add a title to the document

Suppose we want to create a report on some of the contributing factors to low birthweight and save it in a file called bweight.docx. We use the Hosmer and Lemeshow dataset.

```
. use https://www.stata-press.com/data/r18/lbw
(Hosmer & Lemeshow data)
```

We must first create our document as described in [RPT] **putdocx begin**. Because we want to add a header to our document, we specify the header() option, and we specify the font size for the whole document.

. putdocx begin, header(bwtreport) font(, 14)

Now we create a paragraph to which we can append text or an image. Here we indicate that we are adding a title, and then we use putdocx text to add the title itself.

- . putdocx paragraph, style(Title)
- . putdocx text ("Factors of low birthweight")

The paragraph will remain active until we add a new paragraph, a table, a section break, or a page break (see [RPT] **putdocx table** and [RPT] **putdocx pagebreak**).

4

#### Example 2: Define the header content

Next we define the content of our header. To do so, we use the toheader() option, which places the contents of the paragraph in the header rather than in the body of our document. We also include page numbers in the header:

- . putdocx paragraph, toheader(bwtreport)
- . putdocx text ("Analysis of birthweight: ")
- . putdocx pagenumber

Now that our file is set up with a title and header, we add some text to the body of our document. In the next example, we will add a description of our dataset. Because the active paragraph is the one with the header content, we need to start a new paragraph that does not use the toheader() option.

. putdocx paragraph

putdocx paragraph with no options will use your computer's default font and the 14-point size that we requested with our previous putdocx begin command. See *Options for putdocx paragraph* for paragraph formatting options that can be specified to override defaults and settings specified in putdocx begin.

4

#### Formatting text

In each putdocx text command, we can specify any valid Stata expression (see [U] 13 Functions and expressions) including, but not limited to, a string of plain text. The expression can be formatted using the *Options for putdocx text*, which would override the settings specified in putdocx paragraph and putdocx begin.

#### Example 3: Format text individually

Suppose we want to write a description of lbw.dta to bweight.docx, including the number of women in the dataset and the average birthweight in grams (bwt) for their infants. We use the summarize command to get these descriptive statistics for the bwt variable.

. summarize bu	vt				
Variable	Obs	Mean	Std. dev.	Min	Max
bwt	189	2944.286	729.016	709	4990

We can use the results from summarize in the text we write. To see the available returned results, we type return list. (See [P] return for more about stored results from Stata commands.)

```
. return list
scalars:
    r(sum) = 556470
    r(max) = 4990
    r(min) = 709
    r(sd) = 729.0160177275554
    r(Var) = 531464.3541033434
    r(mean) = 2944.285714285714
    r(sum_w) = 189
    r(N) = 189
```

We see that r(N) stores the number of observations and r(mean) stores the average birthweight. Below, we create a paragraph containing this information and save the changes to our document.

```
. putdocx text (" We analyze a dataset with 'r(N)' women,")
. putdocx text (" and find an average birthweight of ")
. putdocx text ( r(mean)), nformat(%5.2f)
. putdocx text (" grams.")
. putdocx save bweight
successfully created "C:/mypath/bweight.docx"
```

Above, we formatted the mean birthweight to report only two digits after the decimal. The bweight.docx file now looks like this:



#### Working with blocks of text

While putdocx text is great for customizing small bits of text, it is more efficient to use the putdocx textblock commands when adding big blocks of text to your document. (Note that the commands putdocx textblock begin and putdocx textblock append cannot be used interactively.) To add a paragraph with a block of text to your document, simply enclose your text between the putdocx textblock commands as follows:

```
putdocx textblock begin
... block of text to add
putdocx textblock end
```

To instead append a block of text to the active paragraph, use putdocx textblock append.

For example, continuing with the Hosmer and Lemeshow dataset, suppose we wanted to add more details about the data. We might include a text block by typing the following:

```
putdocx textblock begin
We use data presented in Hosmer, Lemeshow, and Sturdivant (2013, 24).
These data record women's demographics, such as age and race, and their medical
history, including whether they have a history of hypertension.
putdocx textblock end
```

Inserting a block of text does not limit us to using the same format throughout the block. Before we include this text block in our document, we want to add a bit of text that is formatted differently from the rest of the text block.

We can use the <<dd\_docx\_display>> dynamic tag within our text block to include Stata results and modify the text style. This dynamic tag will execute Stata's display command and then replace the tag with its output. We can format the output by specifying any of the text options that are also available with putdocx text. The entire <<dd\_docx\_display text\_option : display\_directive>> tag must be contained on one line—there cannot be a line break within the tag. See [RPT] Dynamic tags for more information on the <<dd\_docx\_display>> dynamic tag.

4

#### Example 4: Formatting text within a block

Let's modify the code above to include the name of the book that presented the dataset. Because we saved our document to view it, we must first create a new active document. Then we add the underlined book title within our text block as follows:

putdocx begin, font(, 14)
putdocx textblock begin
We use data presented in the book
<<dd\_docx\_display underline: "Applied Logistic Regression, 3rd Edition">>
by Hosmer, Lemeshow, and Sturdivant. These data record women's demographics, such
as age and race, and their medical history, including whether they have
a history of hypertension.
putdocx textblock end

In addition to formatting text, we can use the <<dd\_docx\_display>> dynamic tag to include Stata results. For example, we briefly mention how many women in this dataset smoked while pregnant and how many of them gave birth to an infant that weighed less than 2,500 grams. To add this content, we first store some results in local macros and then summarize the data.

- . count if smoke==1 74
- . local smoke = 'r(N)'
- . count if low==1

```
. local lbw = r(N),
```

. summarize

Variable	Obs	Mean	Std. dev.	Min	Max
id	189	121.0794	63.30363	4	226
low	189	.3121693	.4646093	0	1
age	189	23.2381	5.298678	14	45
lwt	189	129.8201	30.57515	80	250
race	189	1.846561	.9183422	1	3
smoke	189	.3915344	.4893898	0	1
ptl	189	.1957672	.4933419	0	3
- ht	189	.0634921	.2444936	0	1
ui	189	.1481481	.3561903	0	1
ftv	189	.7936508	1.059286	0	6
bwt	189	2944.286	729.016	709	4990

We can now reference these macros and any stored results in our block of text, as follows:

putdocx textblock begin Out of the <<dd\_docx\_display: 'r(N)'>> women in this dataset, <<dd\_docx\_display shading(yellow): 'smoke'>> smoked during their pregnancy, and <<dd\_docx\_display : %4.1f 100\*'lbw'/'r(N)'>> % gave birth to an infant that weighed less than 2,500 grams. putdocx textblock end

#### Adding an image to the document

We can add any existing .png, .jpg, .dib, .emf, .bmp, .tif, and .svg image files to a .docx file with putdocx image. For example, you could include a company logo. We can also add graphs from Stata output. Because Stata graphs use the .gph extension, we must first use graph export to convert the Stata graph to one of the supported image formats; see [G-2] graph export.

#### Technical note

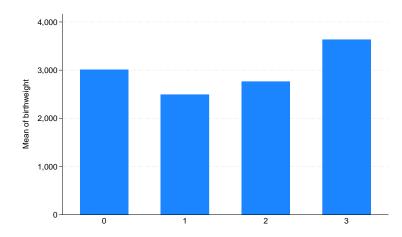
When you add a .svg file to a .docx file using putdocx, an extra .png file is generated using the original .svg file and embedded in the .docx file. This .png file is used to render the original .svg file in viewers that do not support rendering .svg files.

By default, images are embedded in the file. If the image is embedded, it becomes a part of the document and has no further relationship with the original image on the disk. We can instead link the image by specifying the link option. Using linked images means that if the saved image file is updated, then the linked image in the document will reflect the change.

If we add an image after text and want the paragraph that contains the image to have the same format as the active paragraph, we insert the image with no additional step. However, when we want to change the formatting or if there is no active paragraph, we must create one using putdocx paragraph. Note that we do not need to declare a new paragraph to insert an image into the cell of a table; see example 7 in [RPT] putdocx table.

#### Example 5: Export a Stata graph

Another probable factor of low birthweight is the mother's history of premature labor. We have a variable (ptl) that records the number of times a mother prematurely went into labor. Let's add a graph showing the mean birthweight separately for mothers who never went into premature labor and those who went into premature labor once, twice, and three times. We use the graph bar command followed by graph export to create a .png file.



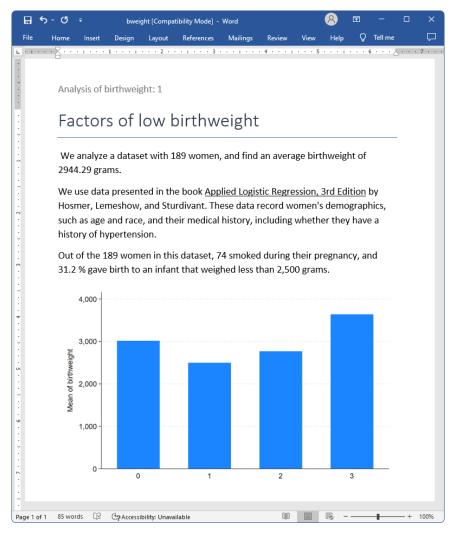
. graph bar bwt, over(ptl) ytitle(Mean of birthweight)

<sup>.</sup> graph export ptl.png file **ptl.png** saved as PNG format

Now we use putdocx image to add the .png file to a document. There is currently no active paragraph, so we declare a new paragraph and specify the halign() option to center our image; by default, paragraphs are left-aligned.

- . putdocx paragraph, halign(center)
- . putdocx image ptl.png
- . putdocx save bweight, append
- successfully appended to "C:/mypath/bweight.docx"

We append our active document, which includes the two text blocks along with this graph, to the existing content of bweight.docx. Here is what the file contains:



#### Adding a bookmark to the document

When creating a large document, it can be helpful to add bookmarks to sections that you will refer to throughout the document. You can add a bookmark with putdocx text or with the <<dd\_docx\_display>> dynamic tag. Then, to link to the bookmark from other text, specify the bookmarklink(*bmname*) option.

#### Example 6: Export a Stata graph with a bookmark

For example, suppose we plan to refer to the bar graph we created above in a later section of the document. Let's revise our code from the previous example as follows:

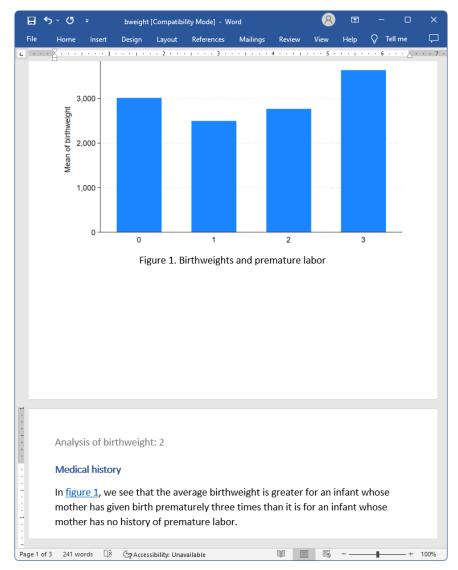
```
putdocx paragraph, halign(center)
putdocx image ptl.png, linebreak
putdocx text ("Figure 1. Birthweights and premature labor"), bookmark("bmark1")
```

We have now added a line break after the image and labeled it as "Figure 1". We included the bookmark("bmark1") option to add this text as a bookmark named bmark1. Below, we add a heading for a section on medical history.

```
putdocx paragraph, style(Heading1)
putdocx text ("Medical history")
```

We can point to the bookmark with the following block of text. The <<dd\_docx\_display>> dynamic tag allows us to specify text options such as bookmarklink() that apply to a portion of the text within the textblock. Here we link the text "figure 1" to our bmark1 bookmark, and we save our work.

```
putdocx textblock begin
In <<dd_docx_display bookmarklink("bmark1"): "figure 1">>, we see that the
average birthweight is greater for an infant whose mother has given birth
prematurely three times than it is for an infant whose mother has no history
of premature labor.
putdocx textblock end
putdocx save bweight, append
```



Our updated document appears as follows:

We can see that "figure 1" serves as a link to the graph.

#### Inserting text files in the document

There may be instances where you are building a document in pieces or where you are collaborating with others to complete a project. For these situations, it may be useful to include previously created text files in your .docx file with putdocx textfile. You can even specify the portion of the text file that you want to include in your .docx file.

For example, let's say our classmate wrote a section about the discovery of the effects of smoking during pregnancy. We want to incorporate this in a birthweight report we have saved as bweight2.docx. However, the text file he sent also includes a section on hypertension, which we do not want to include. To add his text file to our document, excluding the section on hypertension, we type the following in Stata:

```
putdocx begin
putdocx textfile smoke.txt, stopat(hypertension)
putdocx save bweight2, append
```

This tells Stata that whenever it comes across a line in the text file that contains the word "hypertension", it should exclude that line and anything that follows.

### Also see

[RPT] putdocx intro — Introduction to generating Office Open XML (.docx) files

[RPT] putdocx begin — Create an Office Open XML (.docx) file

[RPT] putdocx collect — Add a table from a collection to an Office Open XML (.docx) file

[RPT] putdocx pagebreak — Add breaks to an Office Open XML (.docx) file

[RPT] putdocx table — Add tables to an Office Open XML (.docx) file

[RPT] Appendix for putdocx — Appendix for putdocx entries

[RPT] set docx — Format settings for blocks of text

Stata, Stata Press, and Mata are registered trademarks of StataCorp LLC. Stata and Stata Press are registered trademarks with the World Intellectual Property Organization of the United Nations. StataNow and NetCourseNow are trademarks of StataCorp LLC. Other brand and product names are registered trademarks or trademarks of their respective companies. Copyright © 1985–2023 StataCorp LLC, College Station, TX, USA. All rights reserved.



For suggested citations, see the FAQ on citing Stata documentation.