

# PxEdit 4.0

## Charts

# Rain graphics




- PxEdit charts are made with Adrian *Smith's* ([www.sharpplot.com](http://www.sharpplot.com)) graphics engine called *Rain*
  - all the *Rain* graphics is handled internally as **PostScript**
- PxEdit supports five different chart types:
  - **line chart** (at most 200 observations at time as default)
  - bar chart (at most 50 observations)
  - horizontal bar chart (at most 50 observations)
  - pie chart (when just one row or column is selected)
  - pyramid chart (when two rows or columns are selected)

# Chart creation

# Step one: the table

- If the table is already in px format, just open it in PxEdit
- The table (which often comes from Excel) needs to be formatted as a **structural** table before importing to PxEdit
  - the table **title** must be in the first cell
  - the **variable** names and their value texts are given in corresponding rows and columns
    - column variables: the names are in the leftmost column
    - row variables: the names are in the same row beneath the column variables
  - **two** empty lines (e.g. before the footers) stop the table reading

# Example of a structural table (note the empty cells)

A27		:	  					
	A	B	C	D	E	F	G	H
1	Table title							
2	3rd variable (column variable)		value text 3/1		value text 3/2		value text 3/3	
3	4th variable (column variable)		value text 4/1	value text 4/2	value text 4/1	value text 4/2	value text 4/1	value text 4/2
4	1st variable (row variable)	2nd variable (row variable)						
5	value text 1/1	value text 2/1	1111	1112	1121	1122	1131	1132
6		value text 2/2	1211	1212	1221	1222	1231	1232
7		value text 2/3	1311	1312	1321	1322	1331	1332
8	value text 1/2	value text 2/1	2111	2112	2121	2122	2131	2132
9		value text 2/2	2211	2212	2221	2222	2231	2232
10		value text 2/3	2311	2312	2321	2322	2331	2332
11								
12								
13	table footer							
14								

# Step two: arrange the variables

- The chart will be created from **consecutive** rows and columns
  - one row or column: pie chart
  - two rows or columns: pyramid
- Data range arranging
  - variables may be **rearranged** (*Metadata/View*)
  - variable values may be **sorted** (*Metadata/Sort*)
  - needed variable values may be **selected** (*Metadata/Select*)
  - the data range for the chart starts from the **current** data cell (*anchor cell*)

# Step three: selections

- The selection window opens with *Edit/Graph..* or using **Ctrl+g** shortcut or right-clicking the anchor cell and selecting *Graph..* in the popup menu
- The data range is selected from the **anchor cell**
  - NB: too much data will make the chart unusable
- There are other selections, too
  - the chart height (cm)
  - the chart type (depends on the selected area)
  - chart orientation
- Pressing **Chart** will create the chart in a **new** window

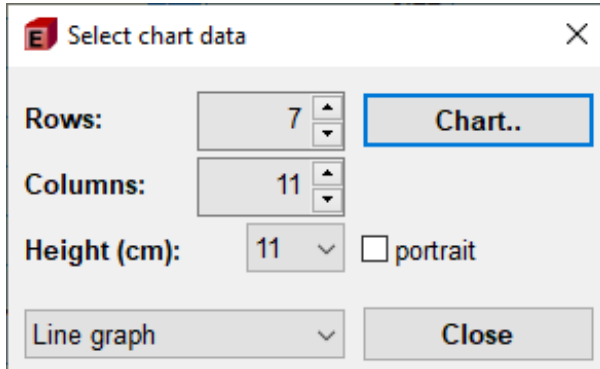
# Step four: fine-tuning and saving

- Double-clicking the window pane opens the *Settings* window
  - four tabs: *Headers*, *Chart*, *Axes* and *Legend*
  - basic settings follow Statistics Finland's standards
  - the **legend positioning** usually needs to be set
  - getting the desired result may take time because there are so many settings
- Right-clicking the window opens the *Chart* menu, which allows:
  - saving to different **file types** (png, eps, pdf, svg and vml)
  - copying to clipboard and printing
  - saving and loading the chart **setting files** (pxg)



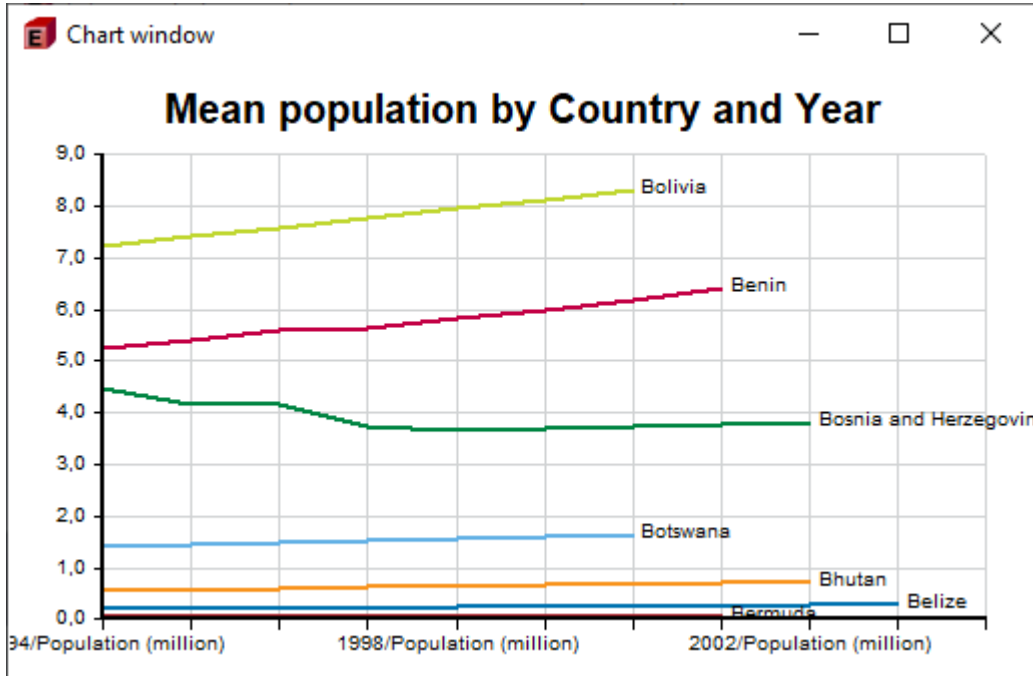
# User interface

# Data selection



- Double-clicking the *Rows* or *Columns* field will set **default** values
- Pressing **Ctrl** key and double-clicking the *Rows* or *Columns* field will set the **maximum** table value (use with care)
- The chart may have either landscape (default) or portrait orientation
- Used settings are **remembered** throughout the session

# Chart window



- The chart will be drawn according to the chart type settings
- PxEdit will save the settings for each chart type
  - chart **templates** (settings files) might make standard chart creation easier
- Open the *Chart settings* window by double-clicking the chart (or using the *Chart* menu)

# Chart settings

Chart settings

Headers Chart Axes Legend

☒ **Chart headings**

Mean population by Country and Year

-- enter subheading --

adjust centre ☐ bottom ☐ separator line

☐ opaque newline ; soft hyphen

**Labels**

1994/Population (million)

1995/Population (million)

1996/Population (million)

1997/Population (million)

1998/Population (million)

1999/Population (million)

2000/Population (million)

☐ opaque Remove first values Remove last values

☐ **Value tags**

adjust centre placement on top style normal

☐ opaque ☐ cumulative values decimals 1

☐ **Data range**

minimum 0 maximum 6,42

Reset OK Close

- Chart **elements** can be adjusted
  - probably only a few adjustments are necessary for everyday chart production
- Only the settings that apply to the **current** chart type are active
- **Reset**: return to the defaults
- **OK**: create a new chart
- **Close**: discard changes

# Headers Tab

The 'Chart settings' dialog box, Headers tab, is shown. It contains the following sections:

- Chart headings:** A checked checkbox. Below it are two text input fields. The first contains 'Mean population by Country and Year' and the second contains '-- enter subheading --'. To the right of each field is a font button labeled 'Aa'. Below these fields are options for 'adjust' (a dropdown menu set to 'centre'), a checkbox for 'bottom', a checkbox for 'separator line', a checkbox for 'opaque', a 'newline' dropdown menu set to ';', and a 'soft hyphen' dropdown menu set to '~'.
- Labels:** A list box containing the following items: '1994/Population (million)', '1995/Population (million)', '1996/Population (million)', '1997/Population (million)', '1998/Population (million)', '1999/Population (million)', and '2000/Population (million)'. To the right of the list is a font button labeled 'Aa'. Below the list are a checkbox for 'opaque', two buttons labeled 'Remove first values' and 'Remove last values', and another font button labeled 'Aa'.
- Value tags:** A checked checkbox. Below it are options for 'adjust' (a dropdown menu set to 'centre'), a 'placement' dropdown menu set to 'on top', a 'style' dropdown menu set to 'normal', a checkbox for 'opaque', a checkbox for 'cumulative values', and a 'decimals' dropdown menu set to '1'.
- Data range:** A checked checkbox. Below it are input fields for 'minimum' (set to '0') and 'maximum' (set to '6,42').

At the bottom of the dialog are three buttons: 'Reset', 'OK', and 'Close'.

- *Chart headings* switch controls whether the heading (and sub-heading) is drawn along the chart
- The default chart heading is the **table heading** (usually the *TITLE* keyword)
- Double-clicking the *Font* button [Aa] opens the corresponding font selection window

The 'Heading font' dialog box is shown. It contains the following elements:

- A font family dropdown menu set to 'Arial'.
- A font size dropdown menu set to '20'.
- A checked checkbox for 'bold'.
- A checked checkbox for 'italic'.
- A color selection button (a black square).

At the bottom are two buttons: 'OK' and 'Close'.

# Headings

Chart settings

Headers Chart Axes Legend

☒ Chart headings

Mean population by Country and Year

-- enter subheading --

adjust centre ☐ bottom ☐ separator line

☐ opaque newline soft hyphen

Labels

1994/Population (million)

1995/Population (million)

1996/Population (million)

1997/Population (million)

1998/Population (million)

1999/Population (million)

2000/Population (million)

☐ opaque Remove first values Remove last values

☐ Value tags

adjust centre placement on top style normal

☐ opaque ☐ cumulative values decimals 1

☐ Data range

minimum 0 maximum 6.42

Reset OK Close

- The chart heading may be **aligned** left, right or centred; and it may be drawn on top (default) or at the bottom
  - these selections also affect the possible **subheading**
  - the **opaque** switch draws the heading on top of the chart
  - the **separator line** switch creates a separating line between the heading and the chart
  - the **newline** and **soft hyphen** characters can be set (they affect the way all text lines are being split)

# Labels

Chart settings

Headers Chart Axes Legend

☒ Chart headings

Mean population by Country and Year

-- enter subheading --

adjust centre ☐ bottom ☐ separator line

☐ opaque newline ; soft hyphen ~

Labels

1994/Population (million)

1995/Population (million)

1996/Population (million)

1997/Population (million)

1998/Population (million)

1999/Population (million)

2000/Population (million)

☐ opaque Remove first values Remove last values

☐ Value tags

adjust centre placement on top style normal

☐ opaque ☐ cumulative values decimals 1

☐ Data range

minimum 0 maximum 6,42

Reset OK Close

- The editable list shows chart labels using the chart font
- Labels are made by joining the selected value texts of the row or column variables with a slash (/)
  - if all the labels have the same prefix, it will be discarded
- **Remove values** buttons make it possible to drop either the first or last variable value texts
- The *opaque* switch draws the labels on top of the chart

# Value tags

Chart settings

Headers Chart Axes Legend

☒ Chart headings

Mean population by Country and Year

-- enter subheading --

adjust centre ☐ bottom ☐ separator line

☐ opaque newline ; ☐ soft hyphen ~

Labels

1994/Population (million)

1995/Population (million)

1996/Population (million)

1997/Population (million)

1998/Population (million)

1999/Population (million)

2000/Population (million)

☐ opaque Remove first values Remove last values

☐ Value tags

adjust centre placement on top style normal

☐ opaque ☐ cumulative values decimals 1

☐ Data range

minimum 0 maximum 6.42

Reset OK Close

- Value tags may be **adjusted** and **positioned** according to the picture element, and the **shown decimals** may be set, too
- The ***cumulative values*** switch calculates cumulated values (for bar charts)
- The tags may be ***opaque***, and they may have different styles



# Data range

Chart settings

Headers | Chart | Axes | Legend

☒ Chart headings

Mean population by Country and Year

-- enter subheading --

adjust: centre | ☐ bottom | ☐ separator line

☐ opaque | newline: ; | soft hyphen: ~

Labels

1994/Population (million)

1995/Population (million)

1996/Population (million)

1997/Population (million)

1998/Population (million)

1999/Population (million)

2000/Population (million)

☐ opaque | Remove first values | Remove last values

☐ Value tags

adjust: centre | placement: on top | style: normal

☐ opaque | ☐ cumulative values | decimals: 1

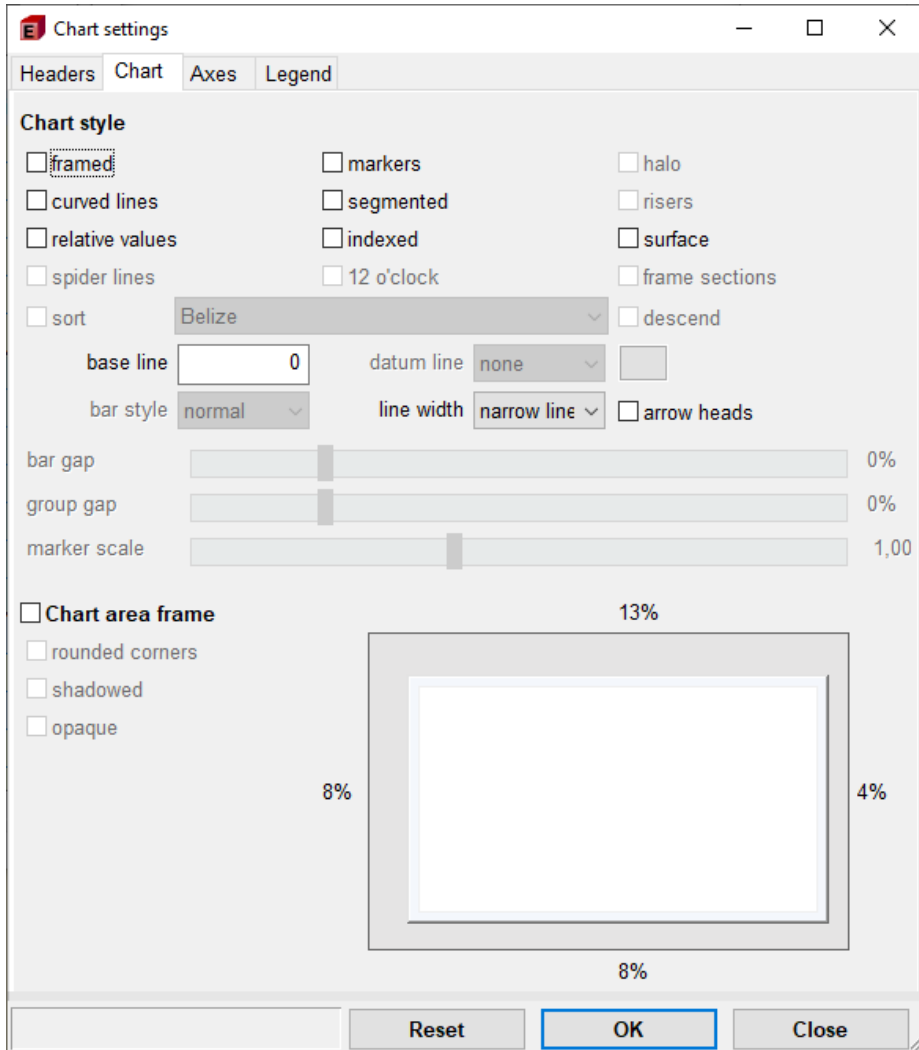
☐ Data range

minimum: 0 | maximum: 6.42

Reset | OK | Close

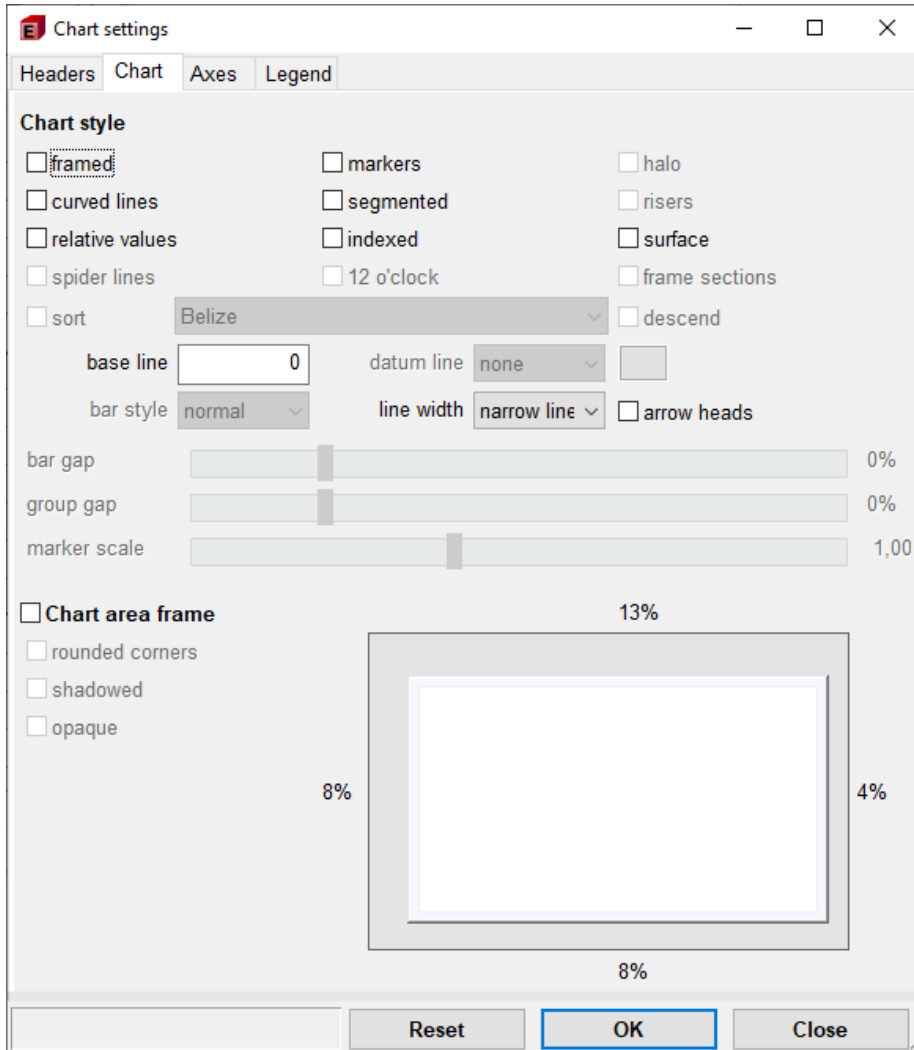
- The data range defaults the range **between** the minimum and maximum data values
  - may be set separately

# Chart style /1



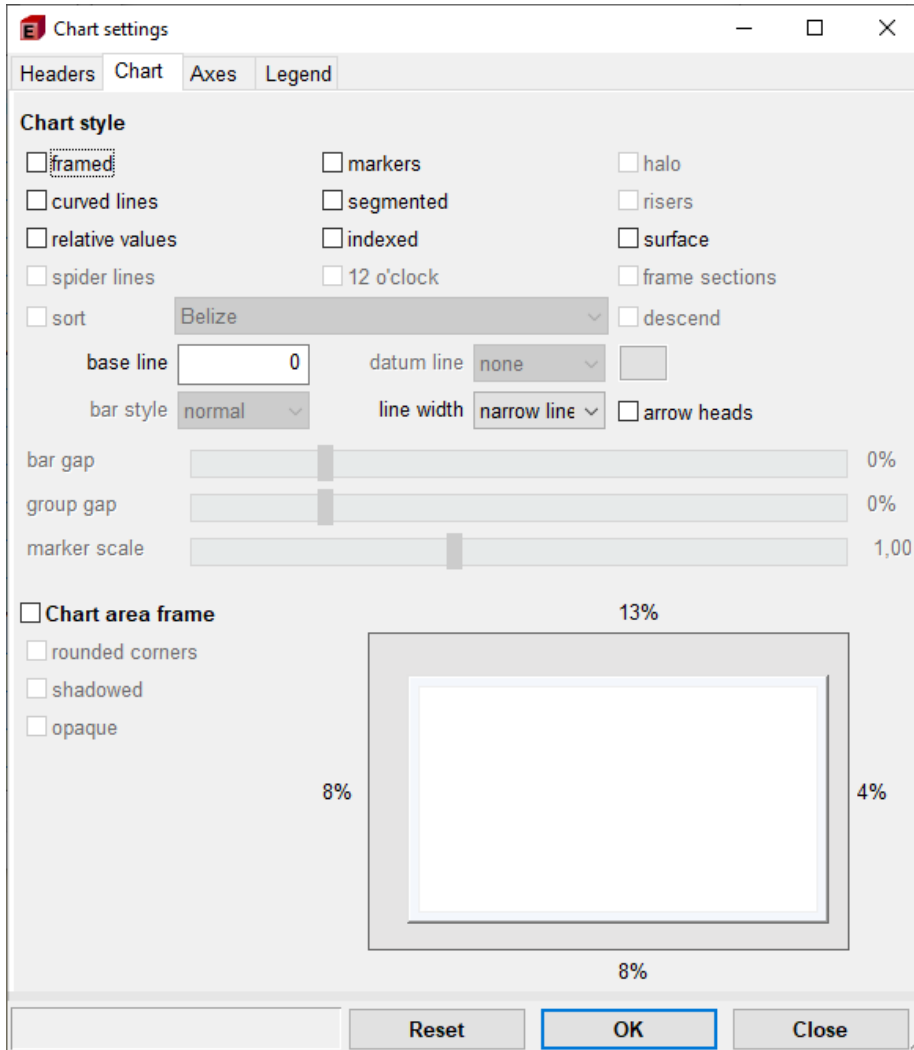
- *Framed* switch draws the frame around the chart area only
- Line graphs may be drawn with *markers* or *risers*
- The *halo* switch separates markers from the chart
- The *curved lines* switch draws lines using the Bézier smoothing method
- The *segmented* switch leaves the missing data (i.e. dot codes) undrawn in the line graph

# Chart style /2



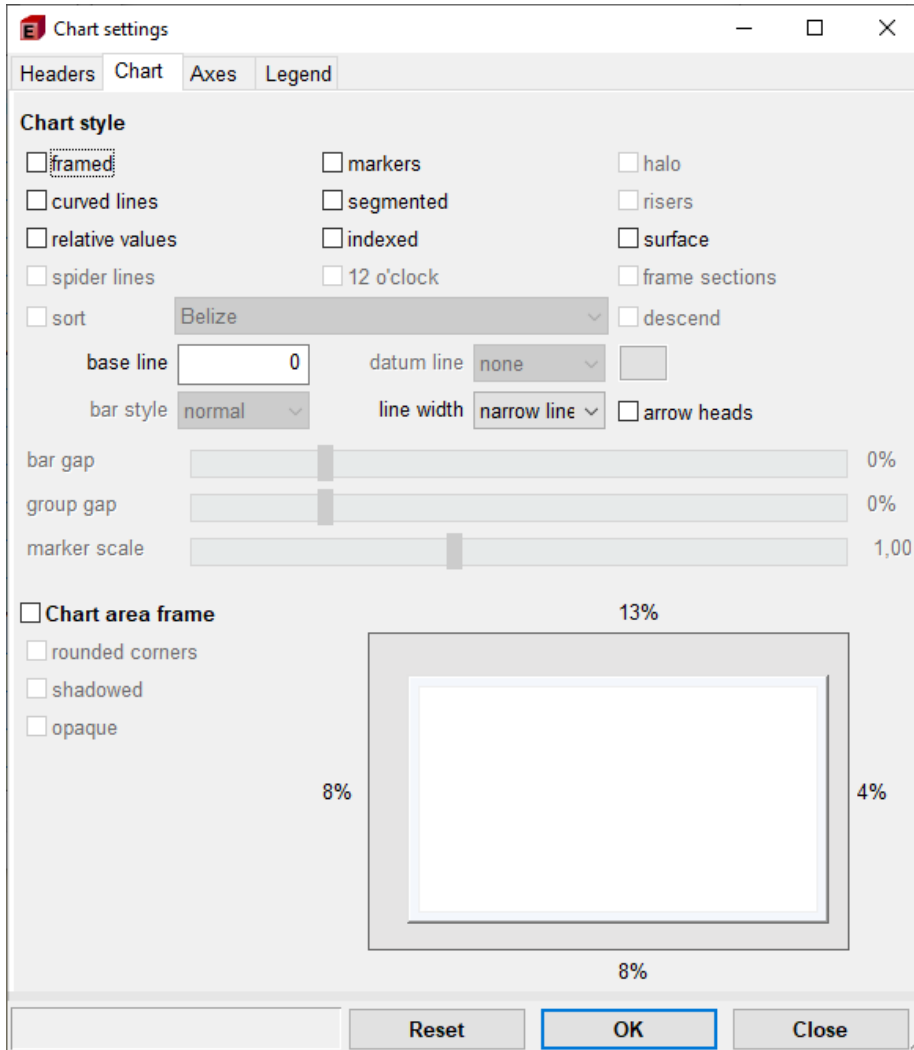
- The data values may be set *relative* and they may be *indexed* (starting from 100)
- The *surface* switch changes line graphs to surface charts
- Pie segments may be connected to their label texts with *spider lines*
- Pie segments may be drawn from 3 (the default) or *12 o'clock*
  - affects the drawing direction, too
- Bar and pie chart sections may be *framed*

# Chart style /3



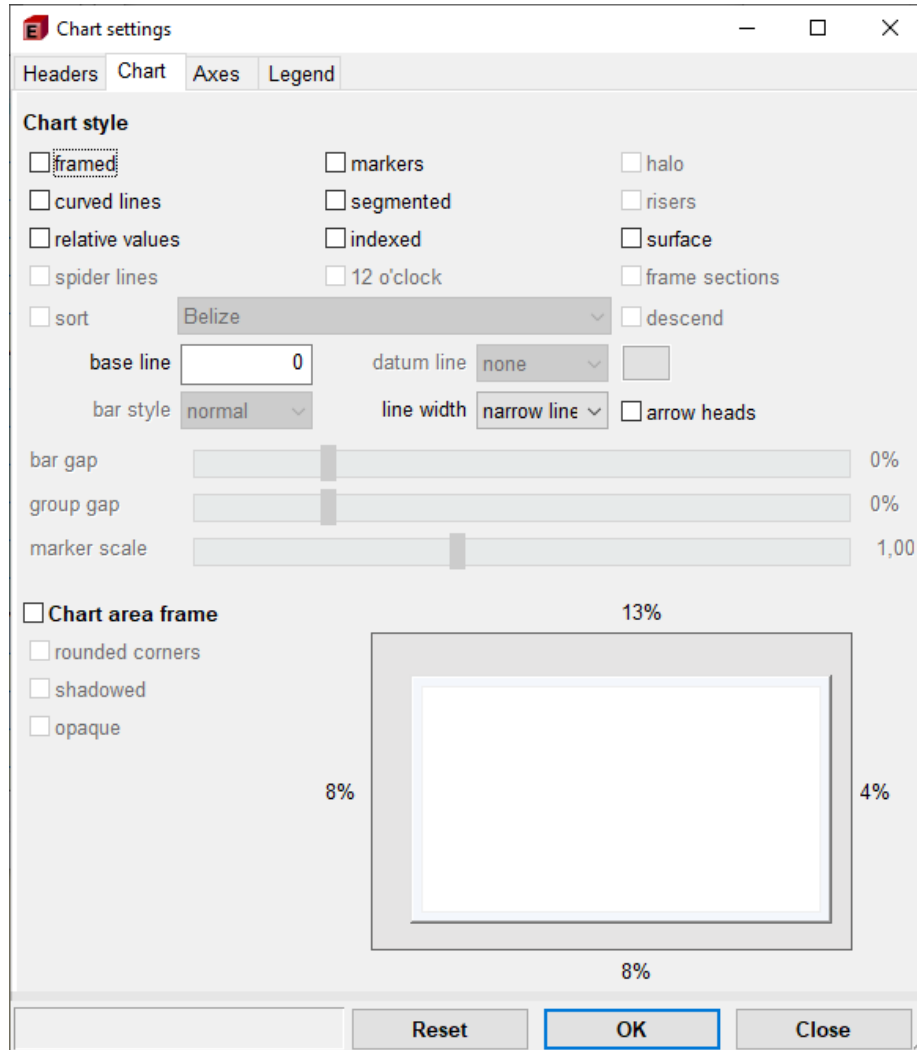
- Pie segments or horizontal bars may be *sorted* before drawing
  - the *ordering value* can be selected for a grouped horizontal bar chart
  - the sorting direction may be set *descending*
- The chart may have a *base line* (other than zero)
- Single line graphs may have a *datum line* (trend line, growth line or average line, also available for the bar charts)
  - the *datum line colour* may be changed with the attached colour button

# Chart style /4



- Bar chart styles can be chosen between normal, floating or stacked
- Line graphs may be decorated with *arrow heads* and the *line width* may be changed
- The *bar gap* and *bar group gap* may be set for bar charts
  - widths are given as a percentage of the bar width
  - negative values will define *overlapped* bars
- The *marker scaling* may be adjusted

# Margins



- Margins are given as a percentage of the chart size, they may be changed sliding the given picture frame edges
- The whole chart area can be *framed*
  - the frame may have *rounded* corners, may be *shadowed* and *opaque* (drawn on top of the chart)

# Axes Tab

Chart settings

Headers Chart **Axes** Legend

☒ **Axes**

axis width narrow line ☐ explode axes ☐ overlay grid

decimals 1 ☐ decimal point label factor 1

grid width fine line grid style

**Horizontal axis**

-- enter horizontal axis caption --

adjust at side placement bottom style normal

☐ start from zero ☒ clip ☒ extend

☐ logarithmic ☒ labels label style normal

☐ reverse ☒ horizontal grid ☐ arrow head

☒ tick marks ☐ minor ticks ☐ ticks between bars

major ticks 0 minor ticks 0 adjust outside

**Vertical axis**

-- enter vertical axis caption --

adjust at side placement bottom style normal

☒ start from zero ☒ clip ☒ extend

☐ logarithmic ☒ labels ☐ over axis

☐ reverse ☒ vertical grid ☐ arrow head

☒ tick marks ☐ minor ticks ☐ ticks between bars

major ticks 0 minor ticks 0 adjust outside

Reset OK Close

- Axis and grid line widths may be changed, and the axes may be *exploded* (moved slightly from the basic position)
- The grid style and colour may be set, and the grid may be drawn over the bar chart
- The default decimal setting for the chart values and axis labels may be changed with the drop-down menu
- The decimal separator and the label factor can be changed

# Axis settings /1

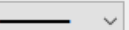
Chart settings

Headers Chart Axes Legend

☒ Axes

axis width narrow line ☐ explode axes ☐ overlay grid

decimals 1 ☐ decimal point label factor 1

grid width fine line grid style 

**Horizontal axis**

-- enter horizontal axis caption --

adjust at side placement bottom style normal

☐ start from zero ☒ clip ☒ extend

☐ logarithmic ☒ labels label style normal

☐ reverse ☒ horizontal grid ☐ arrow head

☒ tick marks ☐ minor ticks ☐ ticks between bars

major ticks 0 minor ticks 0 adjust outside

**Vertical axis**

-- enter vertical axis caption --

adjust at side placement bottom style normal

☒ start from zero ☒ clip ☒ extend

☐ logarithmic ☒ labels ☐ over axis

☐ reverse ☒ vertical grid ☐ arrow head

☒ tick marks ☐ minor ticks ☐ ticks between bars

major ticks 0 minor ticks 0 adjust outside

Reset OK Close

- The **axis captions** are drawn in relation to the corresponding axis
- The caption **adjustment**, **placement**, and **style** may be set
- The **force zero** switch starts the axis always at least from zero
- The **clip** switch trims the drawn chart at the axis (e.g. when the data range is too small)
- The **extend** switch draws the axis to the next tick mark



# Axis settings /2

Chart settings

Headers Chart Axes Legend

☒ Axes

axis width narrow line ☐ explode axes ☐ overlay grid

decimals 1 ☐ decimal point label factor 1

grid width fine line grid style

**Horizontal axis**

-- enter horizontal axis caption --

adjust at side placement bottom style normal

☐ start from zero ☒ clip ☒ extend

☐ logarithmic ☒ labels label style normal

☐ reverse ☒ horizontal grid ☐ arrow head

☒ tick marks ☐ minor ticks ☐ ticks between bars

major ticks 0 minor ticks 0 adjust outside

**Vertical axis**

-- enter vertical axis caption --

adjust at side placement bottom style normal

☒ start from zero ☒ clip ☒ extend

☐ logarithmic ☒ labels ☐ over axis

☐ reverse ☒ vertical grid ☐ arrow head

☒ tick marks ☐ minor ticks ☐ ticks between bars

major ticks 0 minor ticks 0 adjust outside

Reset OK Close

- The axes may be *logarithmic*, they may contain *labels* and the *label styles* may be set
- The axis direction may be *reversed*, there can be *parallel* grid lines, and the axis may end with *arrow heads*
- The axis *tick marks* and *minor ticks* may be set and adjusted as well

# Legend Tab

Chart settings

Headers Chart Axes Legend

☒ Legend

Belize Benin Bermuda Bhutan Bolivia Bosnia and Herzegovina Botswana

☒ end of line vertical centre horizontal top

☐ adjust manually vertical 0 horizontal 0

☐ boxed ☐ rounded corners ☐ shadowed

☐ reverse ☐ vertical ☐ autofit

Notes

-- enter note text --

adjust note centre vertical 0 horizontal 0

☐ boxed ☐ rounded corners ☐ shadowed

☐ opaque ☐ upright

-- enter footnote text --

adjust footnote centre ☐ separator line

Reset OK Close

- The Legend **texts** may be edited
- Chart colours may be changed with the **colour** buttons
  - all the colours may be set with the separate colour button
- The **adjust manually** switch enables absolute positioning of the legend inside the chart area
  - position is given as **pixel coordinates**
  - the lower left corner equals 0, 0
  - the chart area is based on the used chart size and margins

# Legend

Chart settings

Headers Chart Axes Legend

☒ Legend

Belize Benin Bermuda Bhutan Bolivia Bosnia and Herzegovina Botswana

☒ end of line vertical centre horizontal top

☐ adjust manually vertical 0 horizontal 0

☐ boxed ☐ rounded corners ☐ shadowed

☐ reverse ☐ vertical ☐ autofit

Notes

-- enter note text --

adjust note centre vertical 0 horizontal 0

☐ boxed ☐ rounded corners ☐ shadowed

☐ opaque ☐ upright

-- enter footnote text --

adjust footnote centre ☐ separator line

Reset OK Close

- Legend may be aligned to the area
  - horizontally: left, centre or right
  - vertically: top, middle or bottom
- Texts may be arranged vertically and the text order can be reversed
- The legend may be boxed with optional rounded corners and shadowed
- Texts may be written at the end of the line graphs
- The autofit switch tries to fit the text inside the legend box (the font size may be adjusted)

# Notes

Chart settings

Headers Chart Axes Legend

☒ Legend

Belize Benin Bermuda Bhutan Bolivia Bosnia and Herzegovina Botswana

☒ end of line vertical centre horizontal top

☐ adjust manually vertical 0 horizontal 0

☐ boxed ☐ rounded corners ☐ shadowed

☐ reverse ☐ vertical ☐ autofit

Notes

-- enter note text --

adjust note centre vertical 0 horizontal 0

☐ boxed ☐ rounded corners ☐ shadowed

☐ opaque ☐ upright

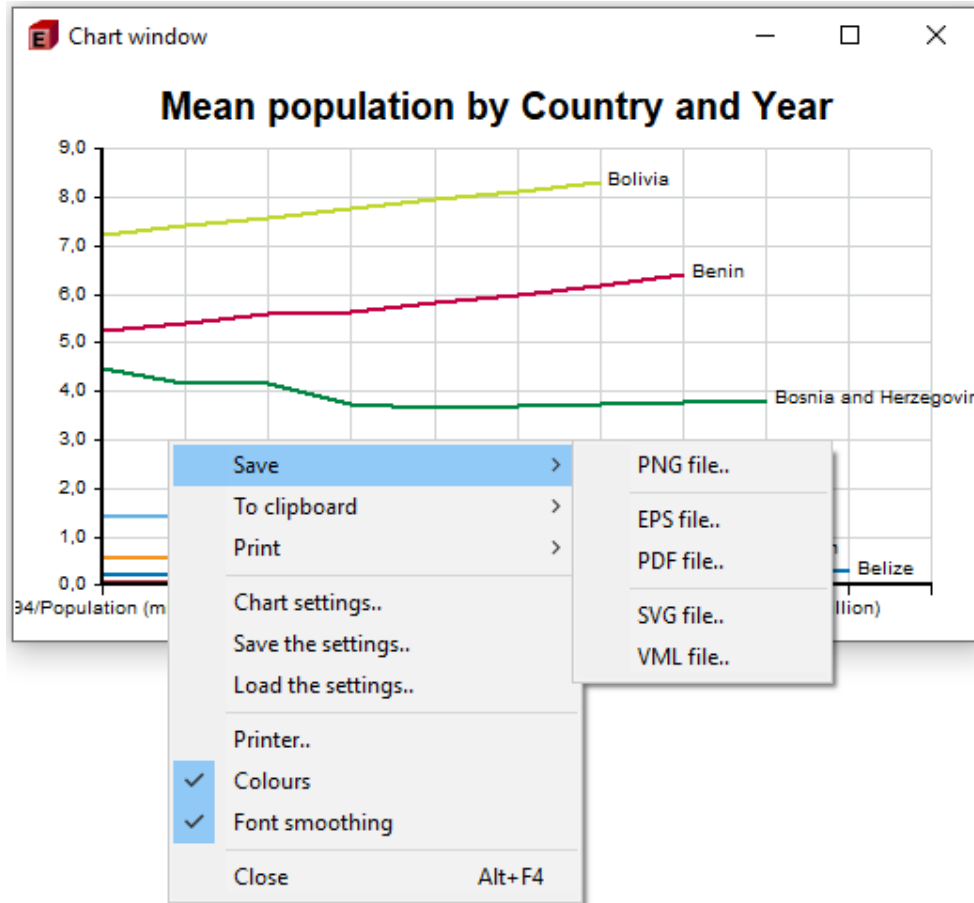
-- enter footnote text --

adjust footnote centre ☐ separator line

Reset OK Close

- **One note text** can be written in the chart area
  - can be aligned *horizontally*
  - can be *boxed* (with optional *rounded* corners and *shadowed*)
  - the note may be drawn *vertically*
  - the note may reside *over* the chart
  - the top left *position* of the note area is given in pixel coordinates (like the adjusted legend)
- The footnote can also be adjusted
  - there may be a *separating line* between the footnote and chart

# Chart menu



- Right-clicking the chart window opens the Chart menu
- The chart may be saved in different picture formats, copied to the clipboard or printed
- Chart settings can be saved in a separate text file (pxg) for later use

# Font smoothing

- If the font smoothing effect is in use (typically *ClearType*), it affects the output of the **chart texts**, especially small ones
  - this happens with **all** the graphics packages
- Font smoothing can be toggled off (and on) with the *Font smoothing* selection of the Chart menu
  - usually there is a short delay with Windows

# Tips

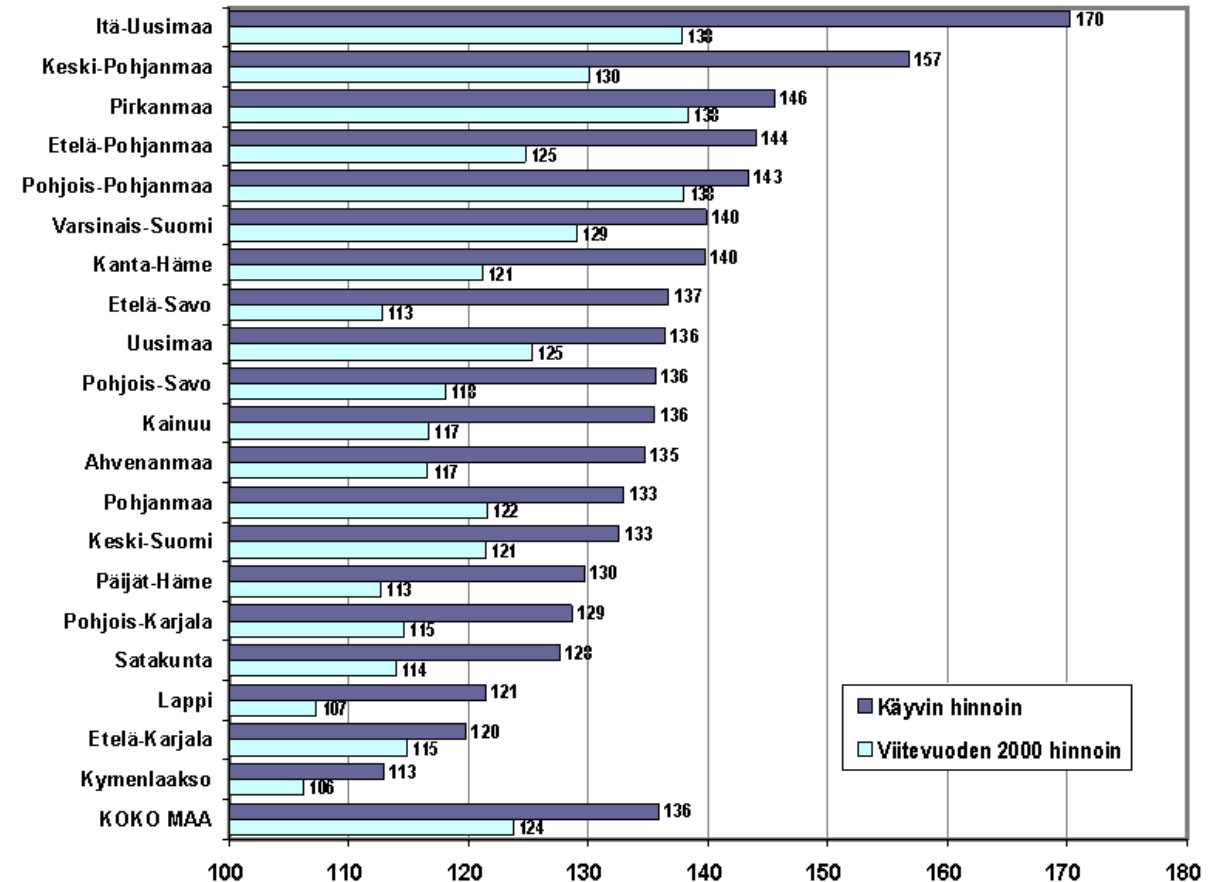
- Table values may be scrolled within the chart either with a scroll mouse or by pressing **Alt**+arrow keys
  - the default moving range is the selection area
  - to move one line or row, use the **Shift** key
- The colours for a one row chart (e.g. in the horizontal bar chart) may be changed with the colour buttons
- **Tick settings** are handy for tuning the horizontal axis

# Example



# Produce a horizontal bar chart from an Excel table

	A	B	C	D
1	Bruttokansantuotteen muutos 2000 - 2007 käyvin ja viitevuoden 2000 hinnoin			
2				
3	<b>Alueet - NUTS Regions (2007)</b>	<b>Viitevuoden 2000 hinnoin</b>	<b>Käyvin hinnoin</b>	
4	KOKO MAA	123,7	135,9	
5	Kymenlaakso	106,2	112,9	
6	Etelä-Karjala	114,9	119,8	
7	Lappi	107,3	121,5	
8	Satakunta	114	127,6	
9	Pohjois-Karjala	114,7	128,7	
10	Päijät-Häme	112,7	129,7	
11	Keski-Suomi	121,5	132,6	
12	Pohjanmaa	121,6	133	
13	Ahvenanmaa	116,6	134,8	
14	Kainuu	116,7	135,6	
15	Pohjois-Savo	118,1	135,6	
16	Uusimaa	125,4	136,4	
17	Etelä-Savo	112,8	136,7	
18	Kanta-Häme	121,2	139,7	
19	Varsinais-Suomi	129,1	139,8	
20	Pohjois-Pohjanmaa	138	143,4	
21	Etelä-Pohjanmaa	124,8	144	
22	Pirkanmaa	138,4	145,6	
23	Keski-Pohjanmaa	130,1	156,8	
24	Itä-Uusimaa	137,8	170,3	
25				
26				

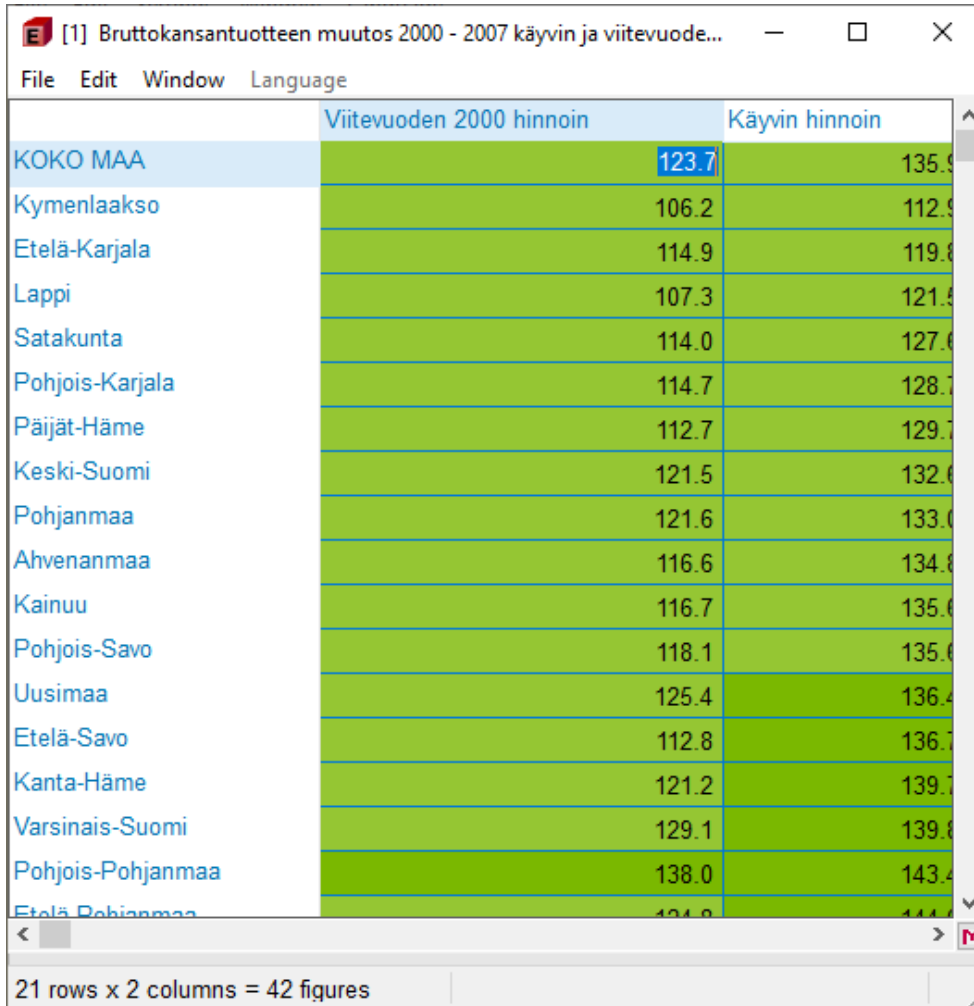


# Make the Excel table structural

	A	B	C	D
1	Bruttokansantuotteen muutos 2000 - 2007 käyvin ja viitevuoden 2000 hinnoin			
2				
3	<i>Hinnat</i>	<i>Viitevuoden 2000 hinnoin</i>	<i>Käyvin hinnoin</i>	
4	<i>Alueet - NUTS Regions (2007)</i>			
5	KOKO MAA	123,7	135,9	
6	Kymenlaakso	106,2	112,9	
7	Etelä-Karjala	114,9	119,8	
8	Lappi	107,3	121,5	
9	Satakunta	114	127,6	
10	Pohjois-Karjala	114,7	128,7	
11	Päijät-Häme	112,7	129,7	
12	Keski-Suomi	121,5	132,6	
13	Pohjanmaa	121,6	133	
14	Ahvenanmaa	116,6	134,8	
15	Kainuu	116,7	135,6	
16	Pohjois-Savo	118,1	135,6	
17	Uusimaa	125,4	136,4	
18	Etelä-Savo	112,8	136,7	
19	Kanta-Häme	121,2	139,7	
20	Varsinais-Suomi	129,1	139,8	
21	Pohjois-Pohjanmaa	138	143,4	
22	Etelä-Pohjanmaa	124,8	144	
23	Pirkanmaa	138,4	145,6	
24	Keski-Pohjanmaa	130,1	156,8	
25	Itä-Uusimaa	137,8	170,3	
26				
27				

- The title is already there
- Variable **names** need to be tuned
  - the column variable name is missing, let's use a suitable one, e.g. *Hinnat* (Prices)
  - add a new line for the row variable *Alueet* (Areas)
  - variable names will not be shown in the chart
- The table is ready for importing after these changes

# Import the table to PxEdit

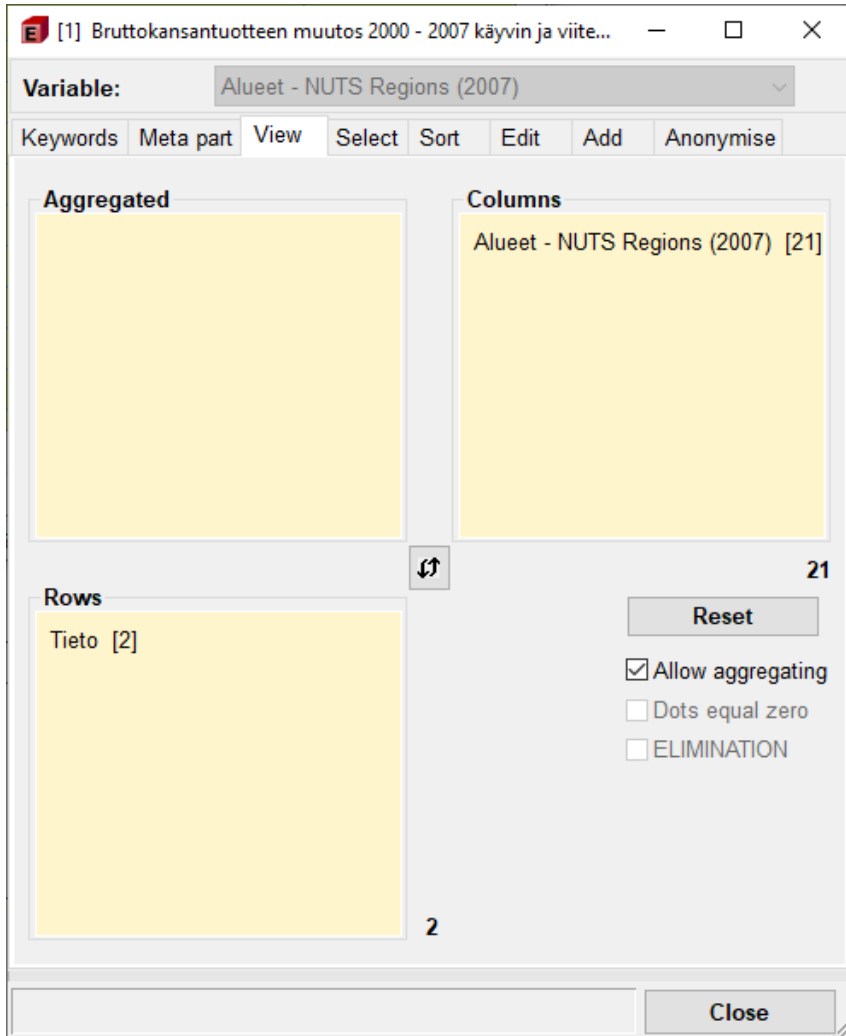


The screenshot shows the PxEdit application window with the title "[1] Bruttokansantuotteen muutos 2000 - 2007 käyvin ja viitevuode...". The menu bar includes File, Edit, Window, and Language. The spreadsheet has two columns: "Viitevuoden 2000 hinnoin" and "Käyvin hinnoin". The first row is "KOKO MAA" with values 123.7 and 135.9. The status bar at the bottom indicates "21 rows x 2 columns = 42 figures".

	Viitevuoden 2000 hinnoin	Käyvin hinnoin
KOKO MAA	123.7	135.9
Kymenlaakso	106.2	112.9
Etelä-Karjala	114.9	119.8
Lappi	107.3	121.5
Satakunta	114.0	127.0
Pohjois-Karjala	114.7	128.7
Päijät-Häme	112.7	129.7
Keski-Suomi	121.5	132.0
Pohjanmaa	121.6	133.0
Ahvenanmaa	116.6	134.8
Kainuu	116.7	135.0
Pohjois-Savo	118.1	135.0
Uusimaa	125.4	136.4
Etelä-Savo	112.8	136.7
Kanta-Häme	121.2	139.7
Varsinais-Suomi	129.1	139.8
Pohjois-Pohjanmaa	138.0	143.4
Etelä-Pohjanmaa	124.0	144.4

- After opening PxEdit the table can be **imported** from Excel
  - either *File/Read/Excel Worksheet* or **Ctrl+e** shortcut
- Excel may now be closed without saving the changed table

# Import the table to PxEdit



- The variables should be **rearranged** before making the chart
  - the Metadata editor may be opened either with *Edit/Metadata* or **Ctrl+m** shortcut or pressing the **m** button in the table window corner
- The *View* Tab is meant for changing the order of table **variables**
- The variable names can be dragged and dropped, but in this case, clicking the transpose button is even simpler

# Reorder the variable

Variable: Tieto

Keywords Meta part View Select Sort Edit Add Anonymise

Source

New order

OK

Select..

Reset

☐ Codes

☒ Allow sorting

☐ Numeric sort

☐ Data sort

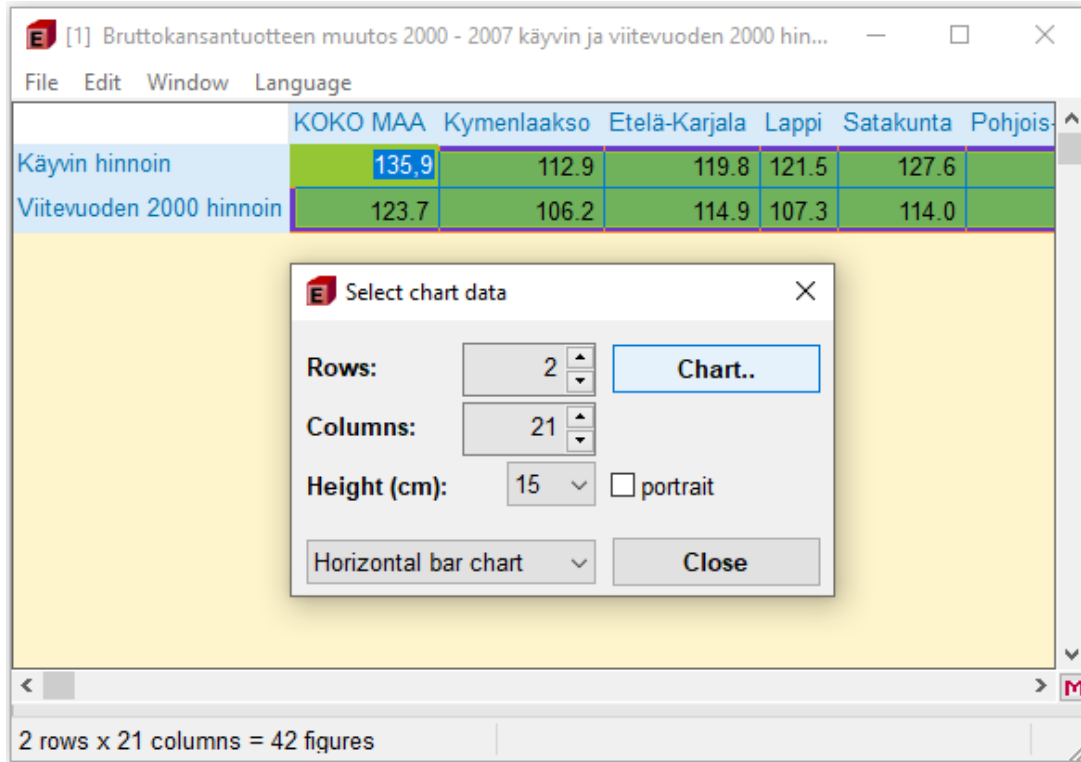
0 / 0 / 2 1 / 2 / 2

variable	value
Tieto	
Alueet - NUTS Regions (2007)	KOKO MAA

Close

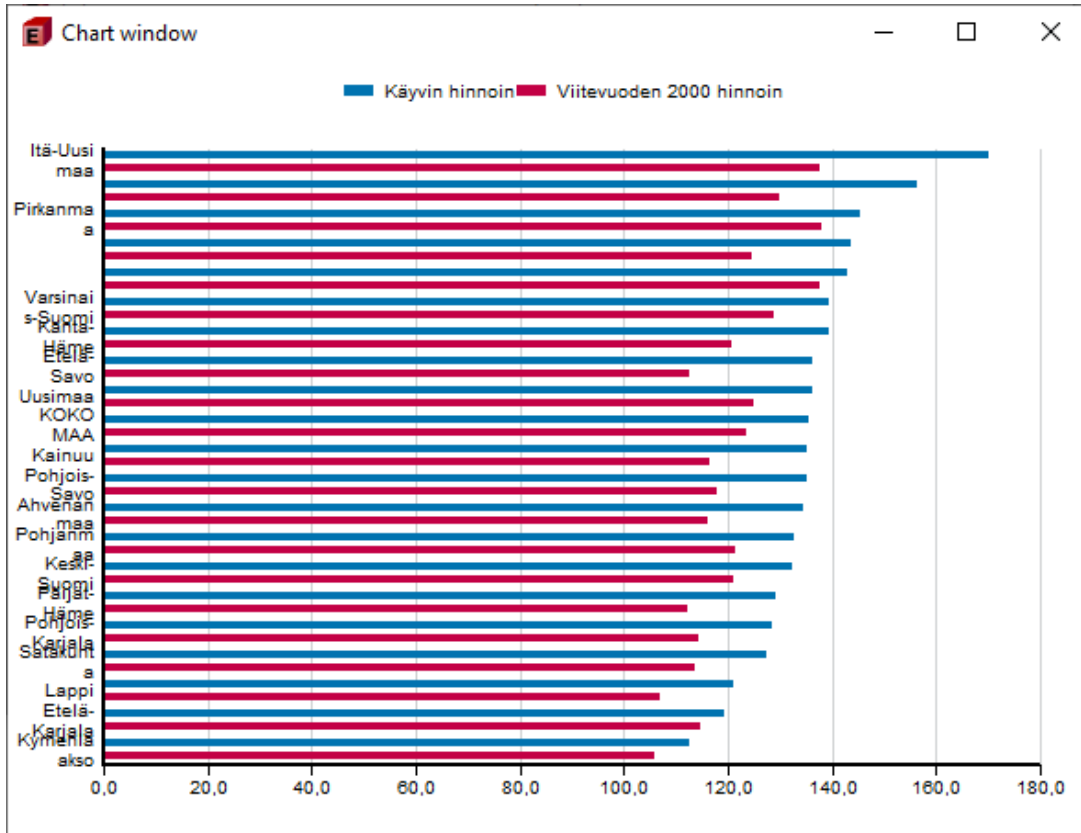
- The *Sort* Tab is meant for changing the order of variable **values**
- The value names are selected and moved from *Source* box to the *New order* box
- When the new order is ready, press the **OK** button
- Close the Metadata editor

# Select data for the chart



- Select the **first** table cell and either press the **Ctrl+g** shortcut or select *Edit/Graph..* from the menu bar or press the right mouse button and select *Graph..* from the popup menu
  - NB: use the **Expert** user level
- The data selection window opens
  - since the table is small, all the data may be selected
- Practise some settings
  - height to 15 cm
  - chart type to *Horizontal bar chart*
- Press the **Chart** button

# First version



- There's a lot to be changed:
  - margins
  - bar colours and widths
  - the order of the bars
  - legend
  - data range
  - the decimal setting of the horizontal axis labels
- Double-clicking the chart will open the Settings window

# Data range

Chart settings

Headers Chart Axes Legend

☐ Chart headings

Bruttokansantuotteen muutos 2000 - 2007 käyvin ja viitevuoden 2000 hinnoin by Tieto and

adjust centre ☐ bottom ☐ separator line

☐ opaque newline ; soft hyphen ~

Labels

KOKO MAA

Kymenlaakso

Etelä-Karjala

Lappi

Satakunta

Pohjois-Karjala

Päijät-Häme

☐ opaque Remove first values Remove last values

☐ Value tags

adjust centre placement on top style normal

☐ opaque ☐ cumulative values decimals 1

☒ Data range

minimum 100 maximum 180

Reset OK Close

- Data range is adjusted as in the original example (100 .. 180)
  - although this is **against** the standard principle of always starting a bar graph from zero!



# Chart settings

Chart settings

Headers Chart Axes Legend

**Chart style**

☐ framed ☐ markers ☐ halo

☐ curved lines ☐ segmented ☐ risers

☐ relative values ☐ indexed ☐ surface

☐ spider lines ☐ 12 o'clock ☐ frame sections

☒ sort Käyvin hinnoin ☒ descend

base line 0 datum line none

bar style normal line width fine line ☐ arrow heads

bar gap 10%

group gap 30%

marker scale 1,00

☐ Chart area frame

☐ rounded corners

☐ shadowed

☐ opaque

16% 4% 4% 8%

Reset OK Close

- Sort descending
- The bar gap is set as 10% and the group gap as 30%
- Margins are set with the sliding rectangle
  - make room to the left for the labels
  - adjust the top (there is no heading) and bottom margins, too
  - marginal settings sometimes need plenty of iterations

# Axes

Chart settings

Headers Chart Axes Legend

☒ Axes

axis width narrow line ☐ explode axes ☐ overlay grid

decimals 0 ☐ decimal point label factor 1

grid width fine line grid style

**Horizontal axis**

-- enter horizontal axis caption --

adjust at side placement bottom style normal

☒ start from zero ☒ clip ☒ extend

☐ logarithmic ☒ labels label style normal

☐ reverse ☒ horizontal grid ☐ arrow head

☒ tick marks ☐ minor ticks ☐ ticks between bars

major ticks 10 minor ticks 0 adjust outside

**Vertical axis**

-- enter vertical axis caption --

adjust at side placement bottom style normal

☒ start from zero ☒ clip ☒ extend

☐ logarithmic ☒ labels ☐ over axis

☒ reverse ☐ vertical grid ☐ arrow head

☒ tick marks ☐ minor ticks ☐ ticks between bars

major ticks 0 minor ticks 0 adjust outside

Reset OK Close

- Decimals to zero
- The horizontal major tick interval is set as 10
- The vertical axes are to be reversed
  - the same effect could have been achieved in PxEdit (*Metadata/Sort*)

# Legend

Chart settings

Headers Chart Axes Legend

☒ Legend

Käyvin hinnoin

Viitevuoden 2000 hinnoin

☐ end of line

☒ adjust manually

☐ boxed

☐ reverse

vertical: centre

horizontal: top

vertical: 50

horizontal: 250

☐ rounded corners

☐ shadowed

☒ vertical

☐ autofit

Notes

-- enter note text --

adjust note: centre

vertical: 0

horizontal: 0

☐ boxed

☐ opaque

☐ rounded corners

☐ upright

☐ shadowed

-- enter footnote text --

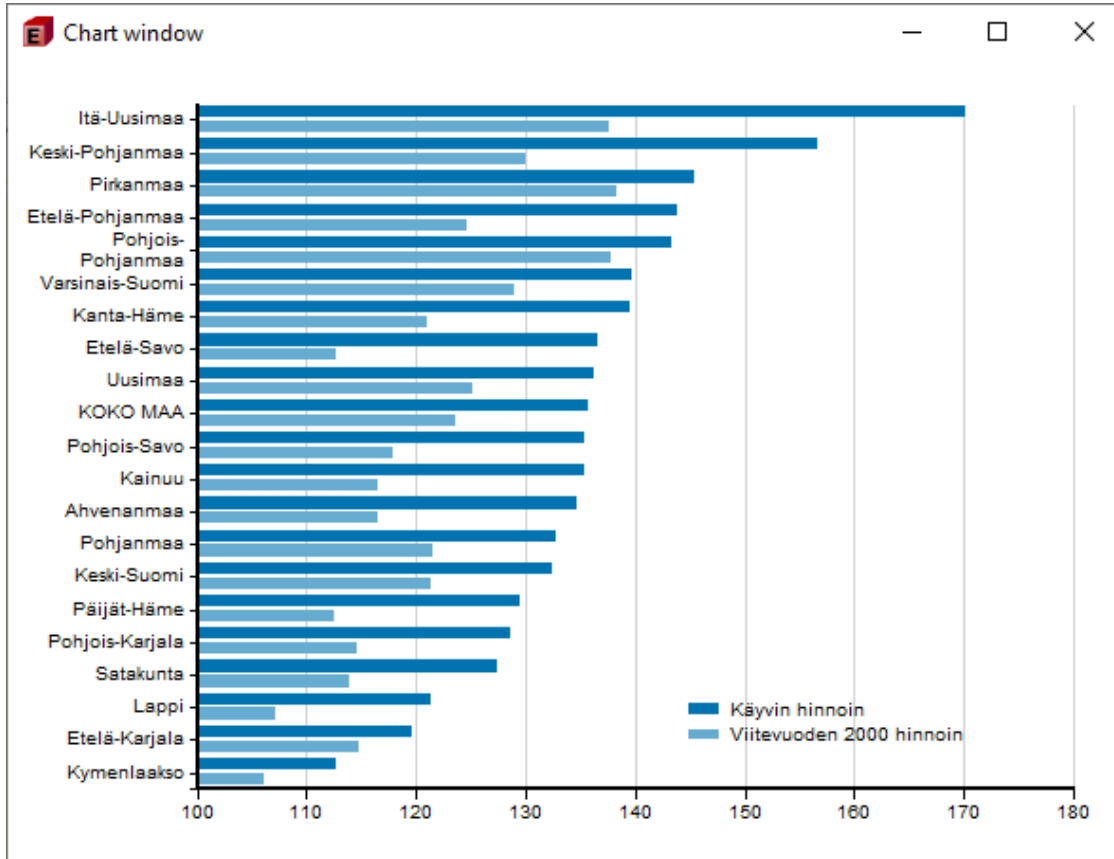
adjust footnote: centre

☐ separator line

Reset OK Close

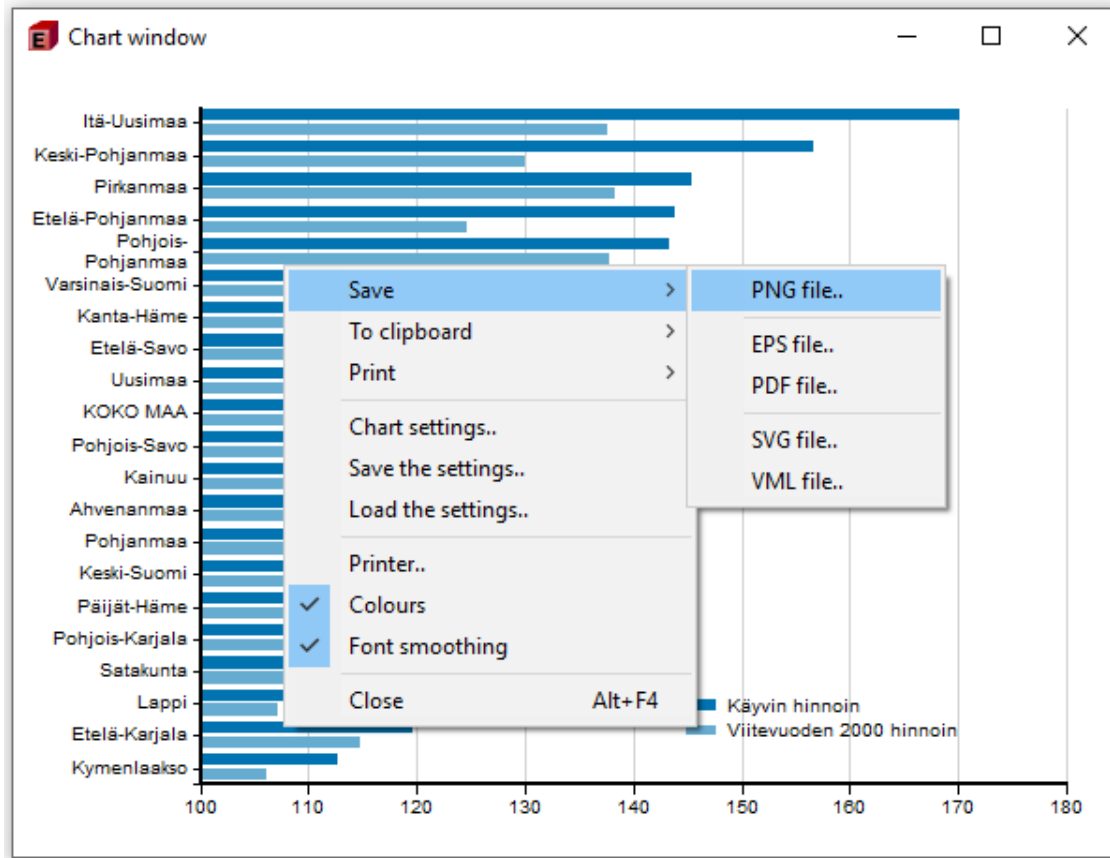
- Bar colours can be changed via the legend list colour buttons
- Adjust the absolute **positioning** of the legend to 50, 250
  - finding the proper setting usually needs some fine-tuning
- Set the legend to **vertical**
  - the legend will not be framed (as in the original example)
- Press **OK**

# Preview the fine-tuned chart



- Looks appropriate 😊
- The chart is internally handled in PostScript, so the saved picture file may look slightly different to the Chart window

# Save the chart



- Press the **right** mouse button on the Chart window
- Select *Save/PNG file..* and save with an appropriate name
- Open the saved file in an image viewer application to check it
- You may also save the chart **settings** in a separate file selecting *Save the settings..*
- You can now close PxEdit

# Final chart (as a png file)

