
PX-Web Training Manual

Economic, Social and Population

Databases

Version 1.0









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Statistics South Africa
170 Andries Street
Private Bag x44
Pretoria 0001

PX-Web Training Manual Economic, Social and Population Databases

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1. Introduction

This document outlines the basic functionality of PX-web as a dissemination tool for economic, social and population databases.

General information is covered in the first part of the document and in the second part a description is given on how to use PX-Web in order to get you to the information that you require.

Why use PX-Web

Px-Web and its software counterpart Pc-Axis are currently in use in 23 different statistical offices across the globe. Although initially designed for dissemination of census data it has also proved equally valuable in the dissemination of economic and social statistics.

Stats SA has been using this technology since October 2000 and it has proven its reliability, speed and overall cost effectiveness through the dissemination of time series data on the Stats SA website.

The PX-web system is a zero footprint client. This essentially means that you can use this software directly on our website without having to do any client installation.

The PC-Axis software suit if required will be available for download from the Stats SA website from the start of July 2003. This software will allow the user to locally build reports and to do cross-tabulations of data with information downloaded via the PX-Web system on the Stats SA website.

2. Tip on how to mark in a list box

At least one indication in every list box has to be made to show a result for each variable.

When you wish to see one or a few variables, mark these only. N.B. To undo a mark, press the button CTRL and click the mouse button on the text.

year Total: 5. Selected: <input type="text" value="5"/>	quarter Total: 4. Selected: <input type="text" value="2"/>	Number of employees and gross salaries and wages Total: 2. Selected: <input type="text" value="1"/>
1998 1999 2000 2001 2002	March June September December	Number of employees Gross salaries and wages (R'000)

To select all lines in a list box

- Mark the first line in the list box. Then press the buttons SHIFT and END simultaneously.

To select/undo a marked line in a list box

- Press the button CTRL and click the left mouse button on the selected line simultaneously.

To select more than one line in a list box

- Mark lines in a row by pressing the left mouse button and slip it over the requested lines. Or, mark the first line on your list and then press the button SHIFT at the same time as you press the up or down arrows on the keyboard.
- Mark lines, not in a row, by pressing the button CTRL at the same time as you click the left mouse button on the requested lines.

To search for a specific value in the list box

Mark the first line in the list box. Then type the first letter in the line requested. If you fail in getting the right line, try the typing again until you find the right value. Or use the up or down arrows or the mouse button to look further.

3. Explanation of the buttons used



Display the table in new layout



Save as PC-Axis file



Save as Excel file



Save as text file. You get to select text attributes.



Save as delimited file. You get to select the delimiter.



Save in any of the file formats, Html, dBase, Lotus



Change order for the variables, clockwise



Change order for the variables, counter clockwise



Change order for the variables, in any order you select



Remove lines with only zeros in the table cells



Sum a variable



Detailed information for tables. The button is only visible when such information is available.



Save information about the selected table in a cookie for later use



A page explaining the buttons used.

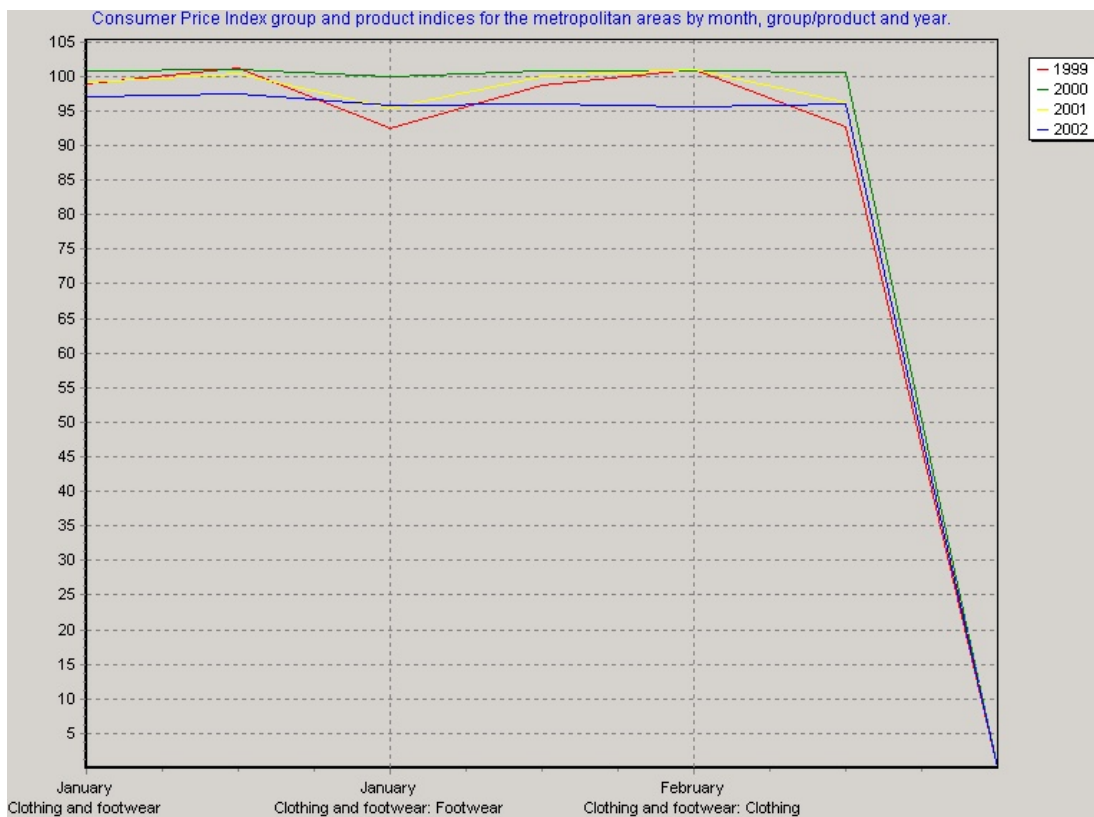
4. Formatting a graph

When a table is displayed on screen, you can generate a bitmap format graph from the information.

Clicking the graph button above the table does this. The button looks like this:



A graph will be generated and displayed on screen. The default type of graph is a Line graph as below.









By using the Graph, toolbar different types of graphs can be generated. This toolbar is displayed above the graph generated and looks like this:





It is important to note that although all options work, care should be taken when generating the “Population pyramid” as this graph only works with very specific population variables.


5. Help functions for presentation formats and other functions

Presentation formats accessible from the selection page and the table page:

Presentation form	File type	Icon on table page	Software
Show table on screen	-	-	Presents selected material in a table on screen
Save PC-Axis file	.px		PC-Axis
Save Excel file	.xls		Excel
Save text file	.txt		Notepad, MS Word or any other compliant word processing software
Save delimited file	.prn		Spreadsheet software, see description below
Save relational table as text file	.scb		Relational table that can be used in a local database system. See description below
Show map	.px		The map software in SSD. Map can only be made if the geographic variable is the first variable in the table

Additional presentation formats accessible from the table page:

Internet, html	.htm		File format for web browsers can be produced using the Print option and saving the table that is shown using the Save as... option or View source
Save dBase file	.dbf		dBase and other systems using dBase files

Show table with alternative layout	-		Toggle between alternative table layouts. If the option to remove zero lines is used the result will be shown in table layout 1
------------------------------------	---	---	---



Text files:

Save file. Select line length, page length och margin. Press the button

Line length:	<input type="text" value="80"/> (One line on an A4 page contains approximately 80 characters)
Page length:	<input type="text" value="70"/> (One A4 page contains approximately 70 lines)
Margin:	<input type="text" value="4"/>

If the indicated line length is too small to contain the stub and one column, the file will be created without page break. The table is limited to max 30 columns and 500 rows.



Delimited files:

Save file. Select file type and delimiter. Press the button

Delimited file with heading	Tabulator
Delimited file without heading	Comma
	Space
	Semi colon

If you select the file format option PRN with heading or without heading, the table will be converted with and without table heading accordingly. All textual fields are quoted and delimited from next field using optional delimiters as tabulation sign, comma, blank or a semicolon. The table cells are not quoted, but are delimited using the selected delimiter option.



Relational table as text file:

The file with the relational table contains column headings but not a table title. It is tabulator delimited.








 **dBase files:**

Save file. Select file format and press the button

dBase(as relational table)
dBase(w ith layout as table on screen)

If the file is to be used in a map program it is best to select table layout and place the geographic variable first in the table

Other functions:

Pivot clockwise		Option to turn the table around clockwise
Pivot anti-clockwise		Option to turn the table around anti-clockwise
Pivot manually		Manual pivot option
Remove zero rows		Suppress lines containing only zeros. This is possible for tables that contain maximum 3 variables in the stub. The result is shown in table layout 1.
Sum variable		Summing all values for a selected variable
Print		Print the table.
Help		Help information on this page

 **Manual pivot options:**

Change layout:

Select row or column for each variable and order number within row/column.

OK

Then press the button

region	Row	▼	1
marital status	Row	▼	2

age	Row	▼	3
sex	Row	▼	4
period	Column	▼	1

The user must enter a consecutive numbering for row and column starting from 1



Summing variables:

Sum variable. Select one variable and press the button		OK
<input checked="" type="checkbox"/>	region	
<input type="checkbox"/>	marital status	
<input type="checkbox"/>	age	
<input type="checkbox"/>	sex	
<input type="checkbox"/>	period	
New Value Name:	<input type="text" value="Total"/>	

Notice that it is not suitable to make aggregations of indices and averages

6. Exercises.

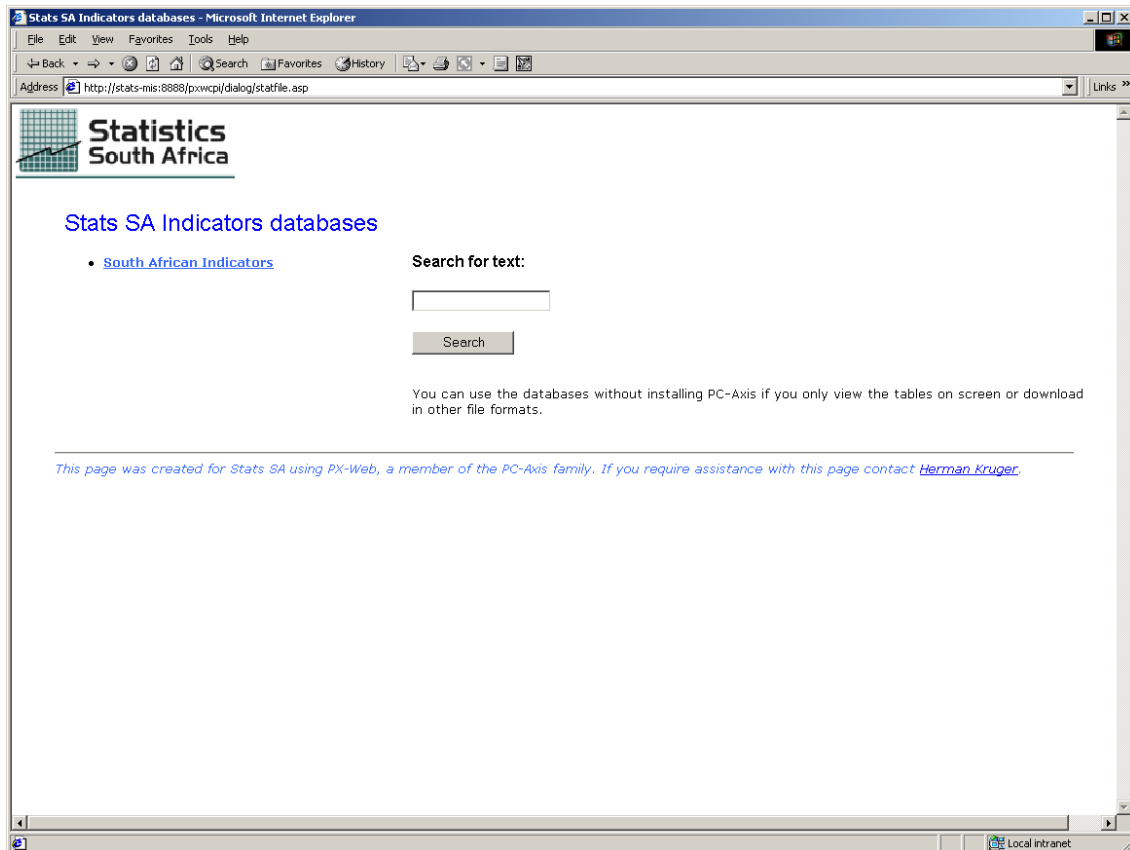
* Please note that this exercise will be on the Stats SA time series database. Census data will be made available through the Census 2001 part of the website on the release date of Census 2001.

Exercise 1

Step 1 Accessing the system

For training purposes, we will access the Stats SA Management Information system.

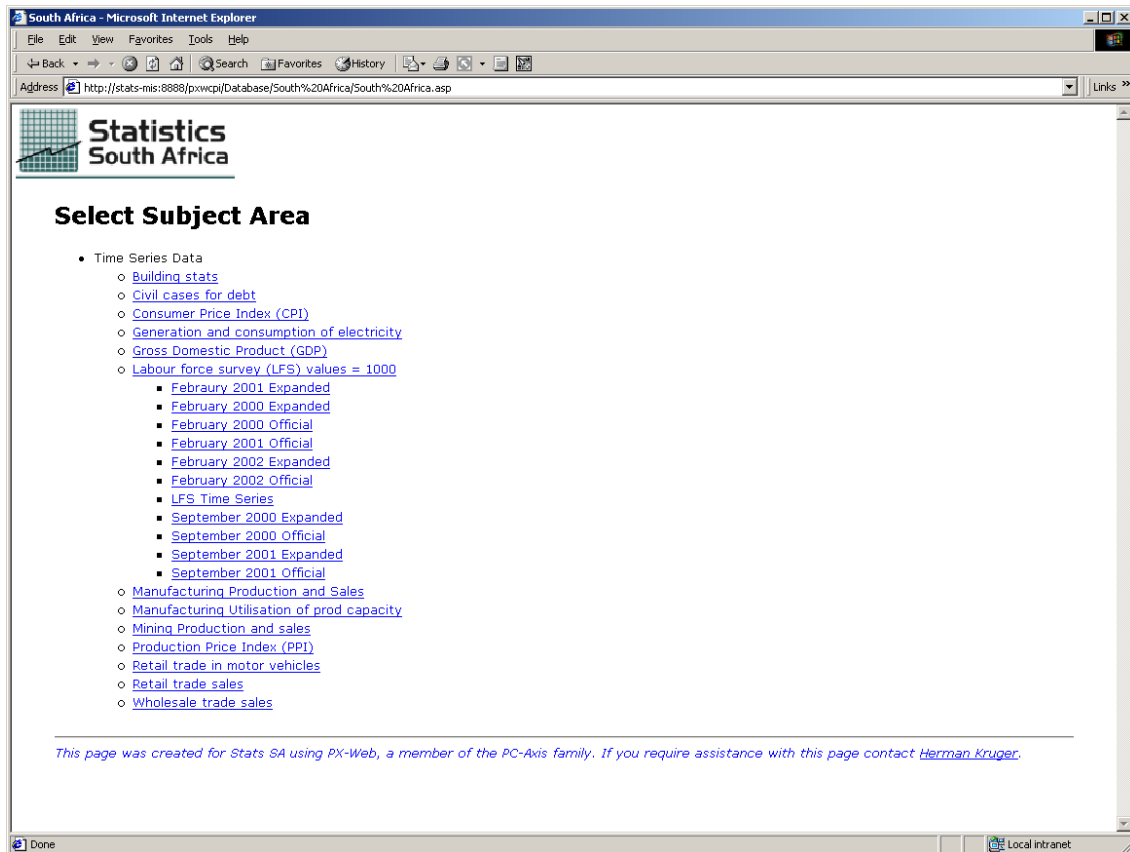
* All economic databases are available from the Stats SA web site (www.statssa.gov.za). Registration, although compulsory is free. Census 2001 data will be available from the Census links on the Stats SA web site.



This homepage will be displayed for training purposes. The only database listed for this exercise is the *South African Indicators*. Select this link to progress to the next screen.

Step 2 Choosing your database to query

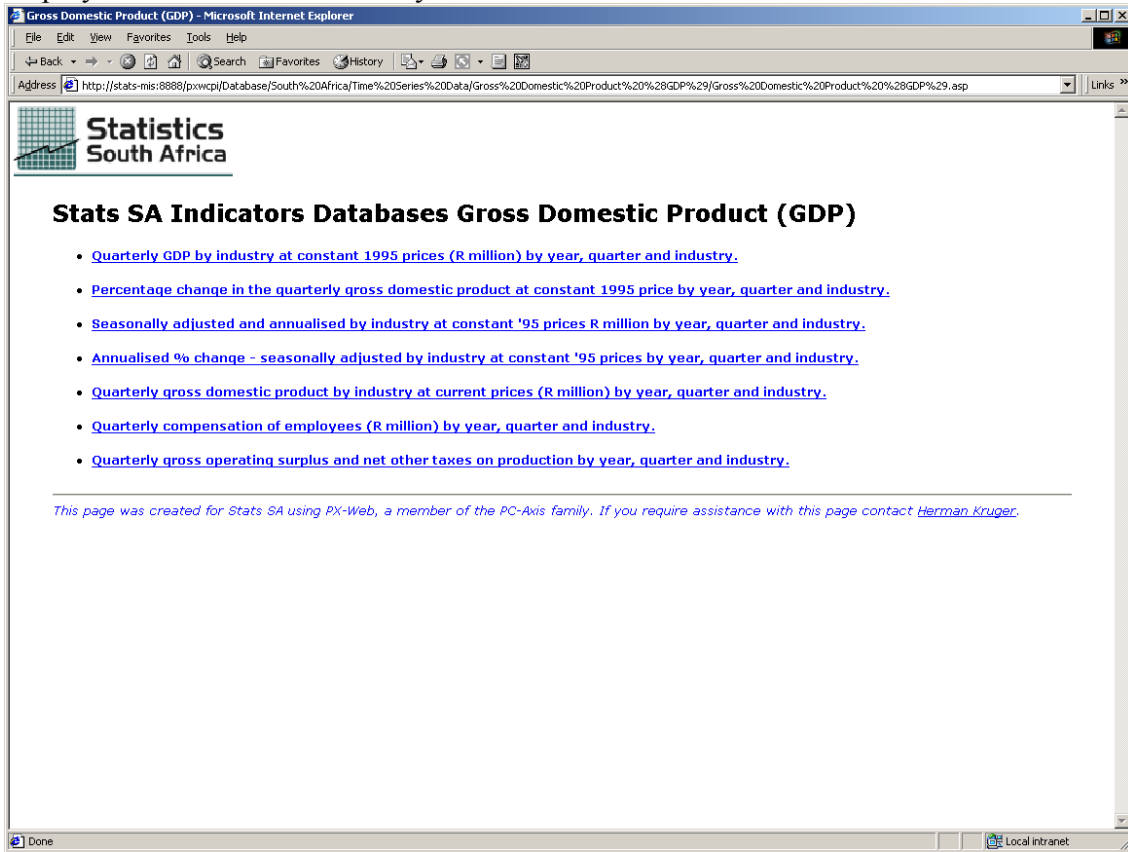
Now you can choose the database that you would like to query.
Choose the database for Gross Domestic Product (GDP).



Notes:

Step 3 Choose your table to query

Every database consists of one or more tables. Choose the ‘Quarterly compensation of employees’ table for further analysis.



Notes:

Step 4 Choose your variables

Lets choose the following variables:

From the “year” column- 1999,2000,2001,2002. (Multiple selection can be made by using Ctrl + click)

From the “quarter” column- 1,2,3,4. (Multiple selection can be made by using Ctrl + click)

From the “industry” column- Mining and quarrying, Manufacturing. (Multiple selection can be made by using Ctrl + click)

Click the continue button.

The screenshot shows a web browser window displaying the PX-Web interface. The title bar reads "Table: Quarterly compensation of employees (R million) by year, quarter and industry. - Microsoft Internet Explorer". The address bar shows a URL starting with "http://ion+of+employees+%28R+million%29+by+year%2C+quarter+and++industry%2E&path=.../Database/South%20Africa/Time%20Series%20Data/Gross%20Domestic%20Product%20%28GDP%29/&lang=1".

The main content area features the Statistics South Africa logo and a breadcrumb trail: "Database - Subject area - Table". Below this, the table title is "Table: Quarterly compensation of employees (R million) by year, quarter and industry." with links for "Information" and "Footnotes".

A instruction reads: "Mark you selections and choose between table on screen and file format. [Marking tips](#)".

There are three selection columns:

- year:** Total: 10. Selected: 0. The dropdown menu shows years from 1993 to 1999.
- quarter:** Total: 4. Selected: 0. The dropdown menu shows quarters 1, 2, 3, and 4.
- industry:** Total: 12. Selected: 0. The dropdown menu lists industries: Agriculture, forestry and fishing; Mining and quarrying; Manufacturing; Electricity and water; Construction; Wholesale and retail trade, hotels and restaurants; Transport and communication.

Below the selection area, it states: "The table contains a total of 480 data cells (40 rows and 12 columns) Download total." and "Presentation on screen is limited to 1000 rows and 50 columns." There are input fields for "Number of selected data rows" (set to 0) and "Number of selected data columns" (set to 0).

A "Continue" button is present. Below it, there are options for file format and delimiters:

- Table on screen, layout 1:** A dropdown menu with options: "Table on screen, layout 1", "Table on screen, layout 2", "PC-Axis file", "Excel file", "Text file", "Delimited file with heading", "Delimited file without heading", "Html file".
- For delimited file also choose a delimiter:** A dropdown menu with options: "Tabulator", "Comma", "Space", "Semi colon".
- For text file also decide on:** Input fields for "Line Length" (60), "Page Length" (60), and "Margin" (4).

At the bottom, a note reads: "This page was created for Stats SA using PX-Web, a member of the PC-Axis family. If you require assistance with this page contact [Herman Kruger](#)."

Notes:

Step 5 Build your table

Your table is now being displayed and can be printed. Graphs can also be generated from this table as illustrated in Step 6. Click the “graph” icon to generated your first graph.

Database - Subject area - Table - Variables and values

Quarterly compensation of employees (R million) by year, quarter and industry.

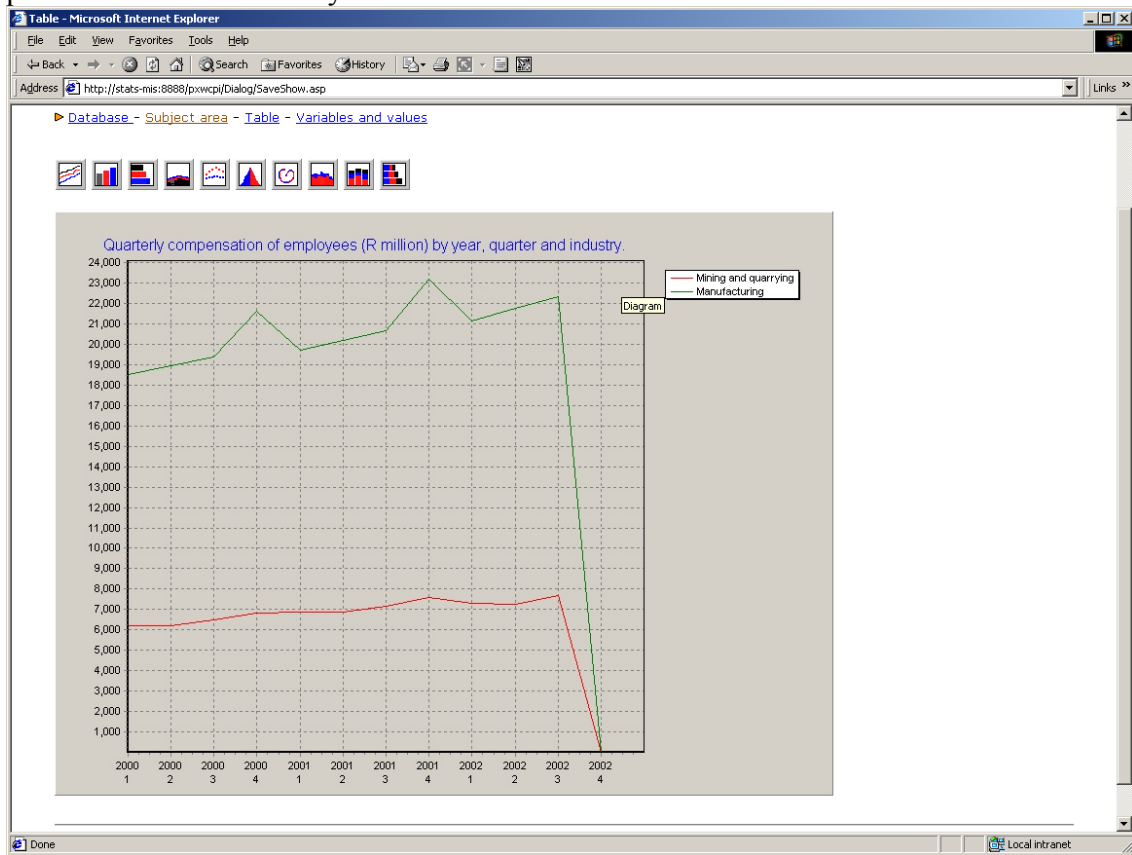
	Mining and quarrying	Manufacturing
2000		
1	6197	18503
2	6214	18945
3	6473	19362
4	6833	21629
2001		
1	6866	19711
2	6868	20205
3	7180	20670
4	7573	23176
2002		
1	7314	21152
2	7240	21756
3	7676	22341
4

Footnote:
.. = not available

Notes:

Step 6 Generating a graph

The default graph generated is a line graph. This graph is in a picture format and can be printed or downloaded to your local machine.



Notes:

Exercise 2

Step 1 Accessing the system

Repeat steps 1 to 4 as above.

Step 2 Build your table

Your table is now being displayed.

	Mining and quarrying	Manufacturing
2000		
1	6197	18503
2	6214	18945
3	6473	19362
4	6833	21629
2001		
1	6866	19711
2	6868	20205
3	7180	20670
4	7573	23176
2002		
1	7314	21152
2	7240	21756
3	7676	22341
4

Footnote:
.. = not available

You can use the “pivot” buttons to pivot your table as shown below.

Table - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Search Favorites History Print

Address <http://stats-mis:8888/pxwcp/Dialog/SaveShow.asp> Links >>

Statistics South Africa

► [Database](#) - [Subject area](#) - [Table](#) - [Variables and values](#)

Quarterly compensation of employees (R million) by quarter, industry and year.

	2000	2001	2002
1			
Mining and quarrying	6197	6866	7314
Manufacturing	18503	19711	21152
2			
Mining and quarrying	6214	6868	7240
Manufacturing	18945	20205	21756
3			
Mining and quarrying	6473	7180	7676
Manufacturing	19362	20670	22341
4			
Mining and quarrying	6833	7573	..
Manufacturing	21629	23176	..

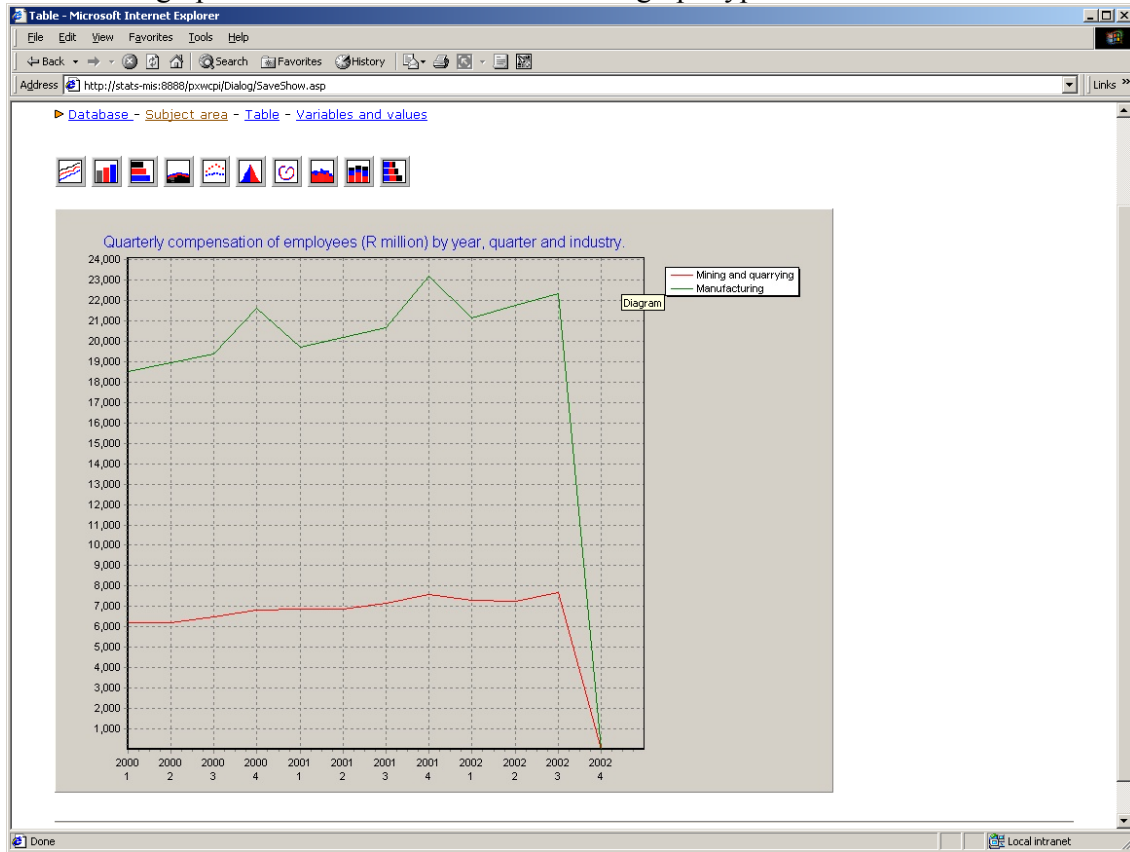
Footnote:
.. = not available

This page was created for Stats SA using PX-Web, a member of the PC-Axis family. If you require assistance with this page contact [Herman Kruger](#).

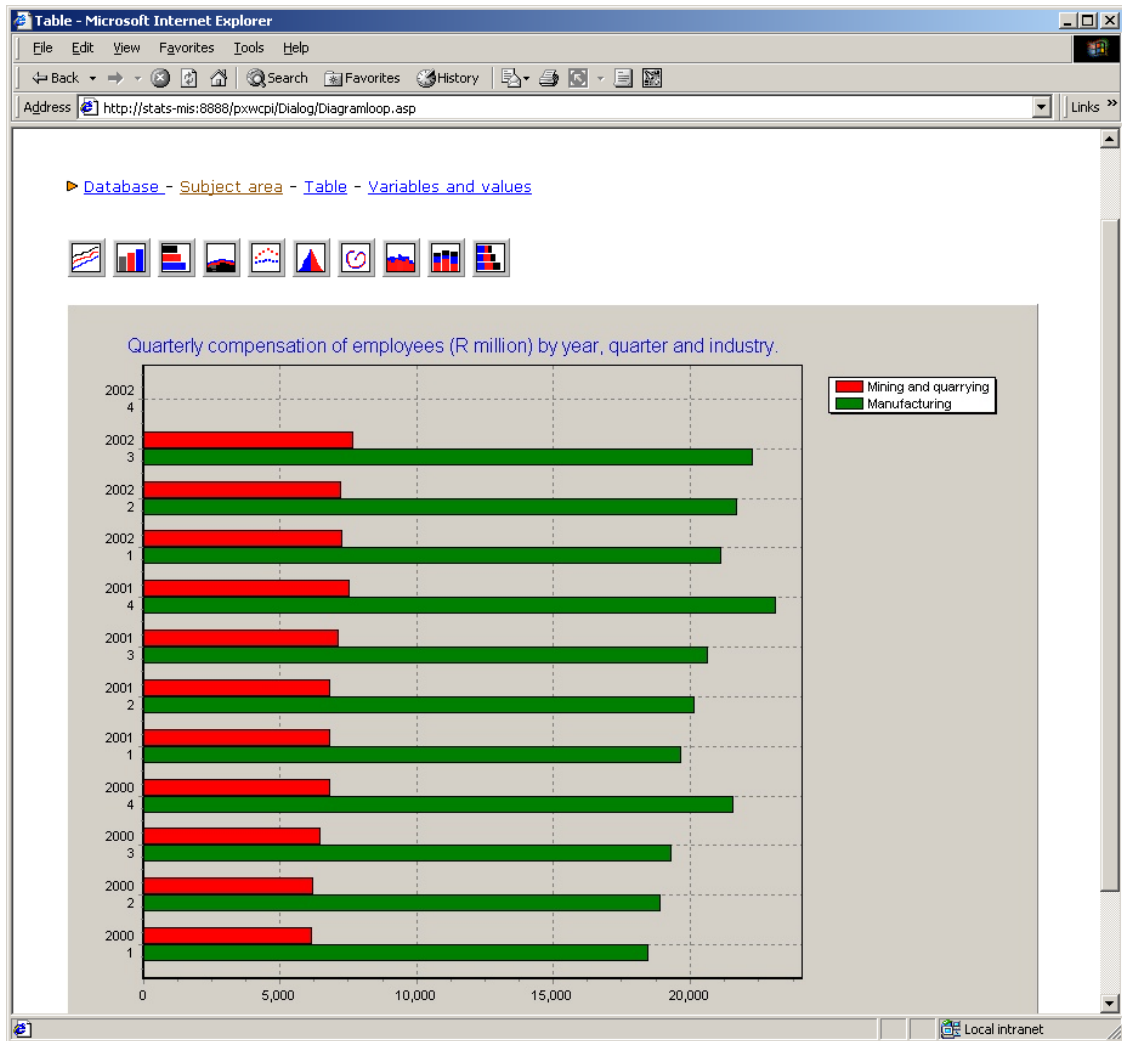
Done Local intranet

Step 3 Generating a graph

The default graph can be formatted to 10 different graph types.



Formatting of graphs are done by using the different graph type buttons. A horizontal bar chart is shown below from the same data as the line chart.



Exercise 3

This is a free exercise; try building tables from any of the available databases.

Some things to try:

- Generate an Excel file for download.
- Save a graph to your local PC.
- Save your query as a Cookie.

7. Contact us.

If you have any queries, questions or comments regarding PX-Web, you are very welcome to contact the Stats SA marketing department at the following numbers:

- Stats SA Marketing Department
Telephone: (012) 310 2112 / 2107 /
2111/ 2108 / 2109 / 2110 / 2105
Fax: (012) 310 8966
- Manual compiled by Herman Kruger
E-mail: hermank@statssa.gov.za