

GOING ONLINE

THE SOUTH WEST REGIONAL ACCOUNTS

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BUSINESS AND ECONOMY

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BACKGROUND TO THE REGIONAL ACCOUNTS

Since 2002, the South West Regional Accounts have been an essential source of high-quality economic intelligence for researchers within the region, bringing together the best sources of regional economic data in a structured way that facilitates analysis.

The Accounts comprise two main elements:

- a detailed snapshot of the economy at a point in time; this snapshot can be interpreted as an economic model from which economic impact multipliers can be derived;
- and a time-series of key variables such as Gross Value Added and numbers of Full-Time Equivalent workers

Data is drawn from a number of disparate sources including, the Annual Business Inquiry 1 & 2, the Annual Employment Survey, the Family Expenditure Survey and HMCE trade data.

The Accounts are delivered through Economic Accounting software called ECON|i. This software and the Regional Accounts database can be downloaded for free from the SWBEM website.

However, user feedback has suggested that there is demand for a more immediate point of access to the data. In December 2006, therefore, the team that put together the Regional Accounts and the ECON|i software began the development of a web-based version of their product which is due to go 'live' in September 2007.

GOING ONLINE

The online project has been led by Plymouth-based company **Economic Systems Consultancy & Research**¹ who teamed up with Manchester-based web-designers **Native Studios**².

The objective of the project was to deliver a more 'immediate' version of the Regional Accounts than was currently available – one that posed fewer barriers in terms of IT system requirements and bespoke skills, whilst maintaining the character and usefulness of the offline system.

The result is a system which retains the general look of the ECON|i software, the menu-driven method of accessing data and the 'what if' economic impact tool. However, there are differences in terms of the scope of data that is available and the flexibility with which the user is able to manipulate the underlying database. For example, the number of industry sectors has been reduced from over 100 to 26, plus the SWRDA Priority Sectors. This move allows much more straightforward and immediate methods of data selection to be employed in comparison to the offline system, yet offers greater detail than, for example, ONS Regional Accounts. The online database is focussed largely on the time series of key variables such as GVA and numbers of FTE workers, rather than the detailed structural map of the economy. Commonly used indicators such as productivity can be derived from the variables within the online database. In terms of geographical coverage, the dimensions of the offline database are largely preserved. Users can access data for the South West, the Unitary/County sub-regions and benchmarks can be made against the GB economy.

The South West Regional Accounts 2007 Online

Welcome to the online version of the South West Regional Accounts. Here, you will find a selection of key statistics from the main South West Regional Accounts for 2007. You will also find a simple economic impact tool. The information can be accessed from the menu structure on the left of the page.

The Regional Accounts are a major information resource for people who work in economic development, policy, teaching and studying economics. They are estimated from the best sources of published and unpublished regional data providing a consistent and structured framework for the information.

There are essentially two components to the Regional Accounts. The first is a structural map of the region's economy at a point in time (currently the map is for 2003). The map shows how industries, workers, households, government etc. link together in terms of supply and demand. This map can be used as a simple economic impact analysis tool (see 'what if?' on the left menu). This tool can be used to value the direct and indirect (multiplier effects) consequences of change within the economy, such as the relocation of a firm to the region, or an increase in tourism.

The second part of the Regional Accounts is a time series of the key economic statistics - GVA, FTE work (i.e. including self-employment) and business numbers. This time series currently spans 1998-2005. Information is available by SIC industries, for SWRDA priority sectors and for sub-regions. Benchmarks against GB are also possible.

What is presented here is a selection of aggregate statistics from the offline Regional Accounts. On the online version, for example, there are 26 SIC industries defined whilst in the main accounts, there are 111; there are just 2 international export markets on the online accounts and 21 markets in the offline version. The offline version contains data not represented here such as industry-occupation/qualification matrices.

The offline Regional Accounts operate within a programme that is installed to your hard-drive. You can download this program from the SW Business and Economy website [here](#).

SIC class	Industry name	Value
20 to 29	Agriculture, forestry and fishing	100.0
30 to 34	Extraction	100.0
35 to 39	Food, drink and tobacco	100.0
40 to 49	Textiles, clothing, leather goods and footwear	100.0
50 to 59	Wood and paper products	100.0
60 to 69	Printing and publishing	100.0
70 to 79	Chemicals and nuclear fuel	100.0
80 to 89	Non-metal products	100.0
90 to 94	Metal products	100.0
95 to 99	Engineering	100.0
00 to 09	Electrical and medical equipment	100.0
10 to 19	Manufacture of transport equipment	100.0
20 to 29	Mechanical engineering	100.0
30 to 39	Electrical and motor	100.0
40 to 49	Construction	100.0
50 to 59	Distribution and retail	100.0
60 to 69	Hotels and catering	100.0

The front page of the online Regional Accounts. On the left is the familiar menu-driven point of access to the database. The main part of the screen provides background information on the Accounts and basic instructions as to how to use the web-site.

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² <http://www.nativestudios.co.uk/>

The online database consists of:

- **Time Series Variables** GVA, number of FTE workers, number of businesses (including the self-employed); plus a range of composite statistics (e.g. GVA per FTE productivity)
- **Time frame** 1998-2005
- **Industry detail** 26 industries defined by SIC plus the SWRDA Priority Sectors
- **Geography** the South West; the SW County/Unitary Authorities; benchmarks against GB
- **Structural Variables** on Exports by industry and spending by Industry and households/tourists. A range of derived statistics (e.g. exports as a % of industry sales). These data for the South West region, 2003 only.

The 'what if' tool of the offline Regional Accounts is retained in the online version. This tool allows the user to calculate the economic impact of changes in the regional economy such as the closure of a manufacturing plant, or an increase in tourism.

Once again, the principal difference between the offline and online Accounts is in the detail. The online version allows changes to be viewed and measured across 26 industry sectors, whilst the offline system offers more than 100. There are also fewer macroeconomic variables to adjust – for example, the offline version allows the user to specify changes in demand for good from specific countries within the EU whilst the online Accounts simply allow changes at an EU level. Furthermore, the impacts are calculated for just two principal economic variables – GVA and the number of FTE workers. Nevertheless, the tool provides a useful starting point for those interested in economic impact analysis.

What If? - Industry Analysis

The Industry Analysis tool allows you to specify changes to SW industries in order to work out the effect of those changes in terms of GVA and FTE. You can specify changes in £m, % changes in output, or numbers of FTE. For example, you could assess what the effect of creating 100 extra FTEs in the printing and publishing industry would be in terms of FTE and GVA in other SW industries. **Note that the model works in 2003 prices.** Monetary inputs (£m) should be firstly deflated to 2003 prices. Estimates of GVA are given in 2003 prices.

Disclaimer: economic impact analysis is a technical field. Sensible answers can only be achieved by asking sensible questions of the model. You are strongly advised to seek the advice of an expert if you are unsure of what you are doing.

Industry	Input	Type	Input (£m)	GVA Initial	GVA Total	FTE Initial	FTE Total
Agriculture, forestry and fishing	-25	£m	-25	-11.53	-11.03	-509.4	-604.8
Extraction	0	£m	0	0.00	-0.00	0.0	-0.1
Food, drink and tobacco	5	£m	5	1.69	1.40	41.4	34.4
Textiles, clothing, leather goods and footwear	0	£m	0	0.00	-0.01	0.0	-0.2
Wood and paper products	0	£m	0	0.00	-0.02	0.0	-0.7
Printing and publishing	0	£m	0	0.00	-0.06	0.0	-1.7
Chemicals and nuclear fuel	0	£m	0	0.00	-0.06	0.0	-1.2
Non-metal products	0	£m	0	0.00	-0.04	0.0	-1.2
Metal products	0	£m	0	0.00	-0.01	0.0	-0.4

Economic Impact Analysis - output from the 'What if' tool of the online Accounts

In terms of functionality, the website operates a ‘tabbed’ system for organising output from the menu. A typical enquiry is illustrated below. Each enquiry produces a principal tab or ‘Set’. This set tab encompasses a family of subordinate tabs comprising of a table of output and a selection of charts. The user can browse between different enquiries (the ‘Set’ tabs), or within the output of one particular enquiry (e.g. between table and chart output).

South West GVA (including FSIM) Current Prices, Index 1998=100

SIC GROUP	Industry Name	1998	1999	2000	2001	2002	2003	2004	2005
00 to 05	Agriculture, forestry and fishing	100.0	100.3	91.8	92.3	98.3	107.3	114.5	113.2
10 to 14	Extraction	100.0	106.6	167.7	201.8	109.7	110.6	108.4	124.1
15 & 16	Food, drink and tobacco	100.0	92.3	96.1	96.9	88.2	92.9	104.4	113.3
17 to 19	Textiles, clothing, leather goods and footwear	100.0	101.8	104.9	101.9	97.6	68.3	65.3	69.6
20 & 21	Wood and paper products	100.0	103.5	111.4	107.6	109.4	105.2	101.5	116.7
22	Printing and publishing	100.0	103.3	114.3	103.6	114.6	103.5	97.7	108.4
23 & 24	Chemicals and nuclear fuel	100.0	116.2	119.2	108.3	129.3	108.8	120.7	124.2
25 & 26	Non-metal products	100.0	102.2	83.8	90.9	94.3	88.7	93.5	89.9
28	Metal products	100.0	94.5	86.4	92.3	98.9	97.7	97.0	93.9
29	Engineering	100.0	93.8	99.9	99.9	96.7	100.6	122.4	118.2
30 to 33	Electrical and medical equipment	100.0	117.5	124.9	84.1	92.6	84.8	90.7	91.2
34 & 35	Manufacture of transport equipment	100.0	101.0	84.3	101.2	120.8	114.1	109.5	102.8
36 & 37	Miscellaneous manufacture	100.0	108.2	111.0	110.7	119.4	113.3	95.1	105.3
40 & 41	Energy and water	100.0	89.1	65.6	89.4	78.7	97.3	105.8	104.2

A Typical Enquiry from the online Regional Accounts.

The user is presented with a fixed selection of charts. At some later point of development, it is anticipated that the user will be able to generate bespoke charts from the table output.

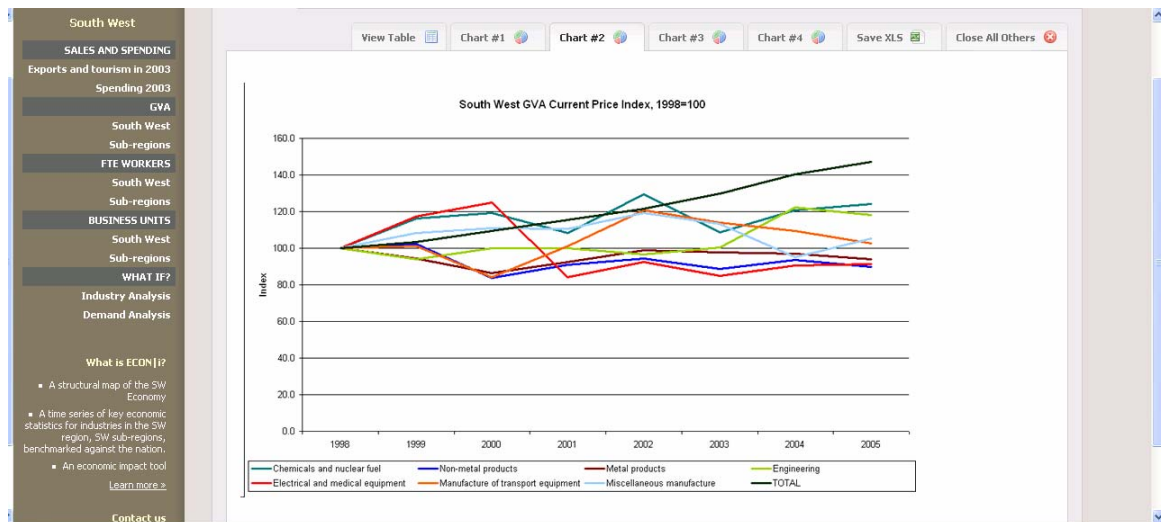


Chart Display within the online Regional Accounts

The database will be updated in line with the detailed Regional Accounts. A comprehensive update is currently provided each year in the Springtime.

To access the online and offline Regional Accounts, visit the SWBEM website **www.swo.org.uk/bem** . Remember, the Regional Accounts and the software are a free resource.

If you have any questions or queries regarding the Regional Accounts contact Dr Brand at escr@economicsystems.co.uk

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The Business and Economy Module of the South West Observatory provides a dynamic source of economic and business research and intelligence, with comprehensive data and analysis to support regional development and evidence based decision making. To improve the availability of regional data the Business and Economy Module has developed a set of Regional Accounts which are freely available to all. For further information please visit the Business and Economy Module website (www.swo.org.uk/bem).

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