

The Economic Impact of S4C on the Welsh Economy 2002-2006

July 2007

Private and Confidential



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Appendix 1

Executive Summary

S4C commissioned DTZ, together with WERU, to estimate the economic impact of their activities on the Welsh economy for each of the five years from 2002-2006.

Background

As a public broadcasting authority, S4C operates under the Communications Act 2003, and receives grant funding from the Department of Culture, Media and Sports (DCMS). This is supplemented with additional income from sources such as advertising and sponsorship. Over the study period, S4C revenue has remained relatively constant at around £96 million per annum.

In estimating S4C's economic impact, detailed financial information was collected from S4C and Welsh production companies. The Welsh Input Output tables were used to model the wider local economy interactions and to estimate the total economic impact of S4C¹ for each of the years.

Economic Impact of S4C

Over the five-year period, the direct impact of S4C was to provide employment for over 175 full time equivalent employees (FTE) per annum. As a commissioning organisation, content provision absorbs the largest single expenditure. In the latest year, over £76 million was spent on the independent sector, of which around £72 million of which was spent in Wales. This activity, together with the headquarters activities in Llanishen and Caernarfon is estimated to have supported around 2,250 FTE jobs within the Welsh economy.

These impacts are mainly concentrated in the Welsh media related sector, which is important given the qualities associated with employment in the sector, which is broadly recognised as being highly skilled, well paid and technology-oriented. Total employment in S4C has reduced over five-year period, but this has been partially offset by an increase in employment in the independent production sector.

Table E.1 – The Estimated Employment and Value Added Impacts of S4C on the Welsh Economy 2002-06

	2002	2003	2004	2005	2006
S4C Gross output (£m)*	£95.9m	£94.5m	£95.0m	£95.6m	£96.7m
Estimated Employment Impact of S4C on the Welsh Economy	2,240FTE	2,180FTE	2,150FTE	2,120FTE	2,250FTE
Estimated Value Added Impact of S4C on the Welsh Economy	£77m	£82m	£80m	£82m	£87m
*Total S4C spend/turnover. Note figures have been rounded					

Translating employment effect into value added effect shows that over the five-year period, S4C activity has supported over £77 million in the Welsh economy per annum.

¹ The scope of this report does not include the impact of programmes provided by BBC Wales for transmission on S4C as part of the statutory hours.

1 Introduction

S4C commissioned DTZ to estimate the impact of their activity on the Welsh economy from 2002 to 2006, with the assistance of the Welsh Economy Research Unit at Cardiff University.

S4C impacts the economy directly and indirectly. The purpose of this study is to review and assess these impacts, to understand supply chain linkages and the impact on the local economy.

This report presents the findings from this research and is structured as follows:

- Section 2 sets out the **background** to the study, highlighting the context of S4C both within the Welsh economy and the media industry;
- Section 3 sets out the **methodological approach** for estimating the economic impact of S4C;
- Section 4 presents the **findings** from the research, highlighting the quantifiable direct and indirect impact of S4C activity for 2002-2006; and
- Section 5 **concludes** the study by summarising the main findings.

2 Background

The following chapter sets out the contextual background to this study. In order to understand the impact of S4C on the economy, it is helpful to understand the supply chain and the market in which S4C operates. This chapter briefly explains this context and sets out why S4C is interested in understanding the impact that it has on the economy.

2.1. S4C – an Overview

2.1.1 S4C Background

S4C is a public broadcasting authority that was established by the 1980/81 Broadcasting Acts and first went on air at 6.00pm on Monday 1 November 1982.

S4C's main objective² is to provide a television service of a high standard. S4C's core aim is *"to provide a comprehensive, high quality, Welsh language television service that reflects and enriches the life of Wales"*.

In meeting its remit and this core aim, the S4C Authority has set a number of specific objectives and targets³.

The public service remit on analogue is to, broadcast between 18.30 and 22.00 every day of the week, programmes that are mainly in Welsh, and the programmes that are not Welsh are normally programmes which are or have been broadcast on Channel 4. On digital its remit is to broadcast a broad range of high quality and diverse programming of which a substantial proportion is in Welsh.

Over the period 2002-2006, S4C has operated as a commissioning broadcaster⁴. This means that in meeting its objectives and targets, S4C commissions the vast majority of the original programming from the independent sector⁵. Therefore, as the main purchaser of Welsh language programming⁶, S4C has an important impact on the Welsh industry through its policies and purchasing decisions.

As a public broadcasting authority, S4C operates under the 1990 Broadcasting Act (as amended by the 1996 Broadcasting Act) and the Communications Act 2003 and is regulated by Ofcom⁷ and the S4C Authority.

² As set out in the Corporate Plan

³ Detailed in Programme Strategy, the Corporate Plan, and the Annual Statements of Programme Policy. These Strategies, Plans and Policies incorporate the requirements of Communications Act 2003 and Ofcom, which S4C must meet.

⁴ S4C's in-house production included Planed Plant and the Weather- both of which have been put out to tender in 2007.

⁵ For the purpose of this study, we include ITV Wales within our definition of the independent sector.

⁶ The BBC supplied S4C with approximately 10 hours of original programming each week over the study period, which included an element commissioned from the independent sector. The scope of this report does not include the impact of programmes provided by BBC Wales for transmission on S4C as part of the statutory hours.

⁷ This body replaces five separate regulatory organisations (Independent Television Commission, Broadcasting Standards Commission, Radio Authority, Radio Communications Agency and OFTEL). Ofcom was established following the Communications Act 2003, as the single body charged with regulating the UK communications industries.

The following table presents an overview of the services that S4C currently offers.

Table 1.1 Overview of S4C Services

Name of service	Nature of Service	Platform
S4C	Welsh only during peak hours and best of Channel 4 at other times	Analogue
S4C digidol	Welsh language programming.	Digital terrestrial Digital Satellite (including red button and interactive services) Digital Cable
www.s4c.co.uk/e_watch.shtml	Live streaming of the major parts (rights allowing) of S4C digidol. Live streaming of major Welsh events. On demand catch up service.	Broadband
www.learnons4c.co.uk	Dedicated service for Welsh learners using S4C programmes as a learning tool	Broadband
Freewire	Streaming of S4C digidol through Partnership with INUK	IPTV
S4C2	Welsh Assembly Coverage 09:00-18:00 Tuesday- Thursday Additional coverage of national events.	DSat DTT D Cable

The following table shows the revenue available to S4C to deliver its services. The total revenue that S4C has received over the study period has remained relatively stable. The DCMS grant has increased in line with inflation (RPI).

Table 1.2 S4C Revenue by Source, 2002 to 2006

	Total £m (current)				
	2002	2003	2004	2005	2006
DCMS	81.468	83.634	85.729	88.690	90.857
Programmes/Airtime sales	12.957	9.581	8.329	5.849	5.353
Publishing/merchandising	0.488	0.289	0.279	0.312	0.321
Multiplex exploitation	0.867	0.870	0.565	0.646	-
Other income	0.213	0.139	0.142	0.156	0.169
Total	95.993	94.513	95.044	95.653	96.70

2.1.2 S4C's Relationship with the Independent Production Sector

S4C have changed the way it operates and engages with the independent sector since 2004. S4C have developed more transparent terms of engagement, tendering. These are designed to encourage a competitive market, with a healthy independent production sector that understands S4C's requirements.

The inter relationship between government policy, S4C policy, technological development and market changes are complex but complimentary. For example, the Communications Act 2003, enable the production sector to maintain their programme rights. This allows the sector to exploit the market opportunities available through, for example, technological convergence⁸. S4C policy took this further in appreciating that in order to meet future challenges (e.g. digital switchover), there is a need for a strong independent sector, strengthening their own and S4C's future.

S4C's programme of reform with regard to its content and its relationship with its suppliers seeks to respond to the opportunities inherent in technology, legislative and market changes. This approach has been adopted to ensure that the creative industries reach S4C's goal of creative excellence to benefit S4C and to maximise and build on the commercial benefits of their products in any language and on all platforms.

The new S4C Terms of Trade have changed the way in which business is conducted. In addition S4C have offered a reassignment of programme rights to programme makers, and developed an open tender process to encourage competitiveness. S4C has also reviewed how development support is allocated and distributed within the Welsh independent sector.

This reflects S4C's strategic commitment since the adoption of the Programme Strategy to stimulate a competitive, commercial and highly creative environment in order to secure its future and that of its suppliers, stimulate creative excellence and ultimately to ensure the delivery of high quality content to audiences.

Therefore, it is clear from this overview that the independent production sector is at the heart of S4C activity.

2.1.3 S4C Programme Strategy

S4C developed the Programme Strategy (also known as the Creative Excellence Strategy) in 2004, in response to the legislative, market and technological opportunities facing the sector. The Programme Strategy was designed to stimulate a competitive, commercial and highly creative environment in order to secure its own future and that of its suppliers. The main components of this strategy include the introduction of the Codes of Practices and Terms of Trade, which detailed how S4C would engage with the sector, and present more open and transparent relationship. Further initiatives included:

Tendering and Commissioning

Content is now commissioned in accordance with the Code of Practice and Terms of Trade, which is annually reviewed. Tendering and commissioning procedures are inclusive and transparent. S4C has developed a line of communication through its website which is

⁸ Technology convergence means that broadcast materials can be transmitted via broadband/IPTV, televisions and computers, and through digitalisation data can be translated into a universally communicable format

accessible to all. S4C also offer longer-term contracts, facilitating investment in their businesses. This has and will continue to improve the economic efficiency of the sector.

The Development Fund

S4C has changed its development funding policy so that rather than offer relatively small amounts of financial support on a piecemeal project basis, firms were invited to apply for more significant funding to cover development costs over a longer time period. Currently, five companies have development funding allowing them to put into place sustainable business frameworks. The funding has also prompted the leverage of further funding and investment, facilitating the development of talent and long term business planning. These measures, coupled with the reassignment of rights on current and future work, boosts the value of the independent sector and has already stimulated investment.

Reassignment of Programme Rights

In the past S4C, in common with other broadcasters retained the programme rights on commissioned outputs, and had sole control over the sale, distribution and usage of materials. S4C has now, uniquely, offered a reassignment of those rights to the original creators, providing they can meet required criteria, including adequate care of archived content. The reassignment of historic rights goes beyond the requirements of the Communications Act 2003. Those companies successfully applying for this reassignment have the potential to realise wider commercial benefits from re-working back catalogue materials to develop new commercial outputs and launch these outputs on new platforms.

Other changes that S4C have implemented that will effect the Welsh production sector and economy include:

- Making training plans a prerequisite of every commission
- Annually investing in training in the sector.

Both of which are clearly designed to enhance the skills base within the sector, which have important contributions to make to the economy.

2.2 The Production Sector – an overview

There are three primary reasons why the production sector is an important component of this study.

- Firstly, as a broadcaster (regulated by Ofcom), S4C has a duty in terms of its interactions with the independent sector (e.g. Code of Practice).
- Secondly, S4C purchases the vast majority of their original programming from the independent sector in Wales, which will have economic impact effects.
- Thirdly, as technological changes are occurring, the environment in which broadcasters and producers operate changes, leading to future potential economic impact affects.

Economic Impact

The independent production sector represents S4C's largest expenditure category, accounting for over 80 percent of S4C's total spending in Wales in any one year. Therefore, there is a clear need to understand that S4C's economic impact extends beyond its direct employment which is relatively small. For example, S4C pays an independent production company to produce an agreed amount of hours of original programming. In order to produce that output the company will then purchase goods and services (e.g.

camera operators, lighting equipment etc). All of these factors need to be considered when estimating the economic impact of S4C and a full understanding of the supply chain linkages is needed. The process of estimating these supply chain linkages, in order to estimate the economic impact, is discussed in Chapter 3.

S4C recognises the crucial importance of the supplying sector and works on the premise that sustainable and sustained economic growth is needed in order to achieve prosperity, and is of the view that a healthy production sector is one that supports and promotes creativity and innovation.

S4C currently commissions from a supply base of approximately thirty companies, of varying size and locations, but usually based in Wales. S4C believes that sustaining a production sector that mainly services the Welsh broadcast requirements is not feasible. The production sector in Wales is already in the process of changing from one that has served the needs of a regionalised and local broadcast market to one that is economically stronger, and one that competes in the wider UK and international market. With this recognition, S4C have stepped back from some practices such as providing insurance cover to the sector.

The following table shows the reduction in the number of companies supplying S4C over the study period. It is clear from the table the S4C's supply base has consolidated over the study period, reducing from 42 in 2002 to 31 in 2006.

Year	Number of Production Companies Supplying S4C
2002	42
2003	35
2004	35
2005	31
2006	31

Source: S4C

Consolidation of the sector is perceived to have the potential benefits to the industry of scale economies, enhanced market experience and greater portfolio of work, then stimulating further growth and investment, finally enhancing the quality of outputs and securing the future of the sector.

Economic Context

In addition to its remit as a Public Service Broadcaster, providing important educational, cultural and language outputs, S4C's impact on the creative industries is also important. The Welsh economy, across a number of headline measures, performs relatively badly compared to the UK average. In particular, Gross Value Added per head in 2005 was around 80 percent of the UK average. In reducing this performance gap, there is a desire to enhance employment and output from those sectors of the economy that add the greatest level of value added. The broadcasting and media sector in general is recognised as being a relatively high wage, high skilled and high technology sector, providing higher value adding employment opportunities and benefiting the economy.

This is recognised in the National Assembly paper *A Winning Wales* that identifies the 'creative industries' as one of the 10 sectors important for the future economic growth in Wales. Whilst 'creative industries' include more than the broadcasting sector and its suppliers, they play a key role. In addition, *Wales: A Better Country*, the strategic agenda of the Welsh Assembly Government, includes a commitment to establish a "Knowledge

Bank”, “to encourage new and expanded business in high added-value activities”. There are two Welsh production companies supported within this specialist scheme.

Annual Business Inquiry employment data shows that in Wales; employment in radio and television (SIC code: 9220) activities account for approximately 0.2 percent of the total Welsh employment across all industries. This compares to the GB average of 0.3 percent. Therefore, whilst total employment in radio and television activities is quite low in absolute terms (approximately 2,800 employed in 2005), this is similar to the GB employment focus.

S4C can have an impact on the relative standing of the creative industries sector in Wales through its policies, its purchasing decisions and the influence that it has on the sector.

For example:

- By purchasing from Welsh companies, S4C stimulates the Welsh creative industries sector;
- by providing longer-term contracts, S4C may encourage production companies to invest in capital; and
- by stipulating that training plans are a condition of commissioning, S4C encourage an investment in skills development.

Therefore, whilst S4C policies and actions are designed to ensure that it is able to “provide a comprehensive, high quality, Welsh language television service that reflects and enriches the life of Wales” to reach its goal of Creative Excellence, it is clear that S4C also impacts the Welsh economy. Understanding this policy context, while not necessarily influencing S4C behaviour or actions, is valuable when considering the impact it has from its supply chain interactions.

2.2.1 Summary

S4C’s role in Wales is not primarily driven by its need to positively impact the economy of Wales but to fulfil its public service driven remit of providing Welsh Language audio visual services. This report does not examine or attempt to quantify or value the impact of S4C on Welsh language, culture or heritage.

Notwithstanding this, S4C, through its activity does impact the economy. Over 80 percent of its total spending in Wales (and income) is in the independent production sector.

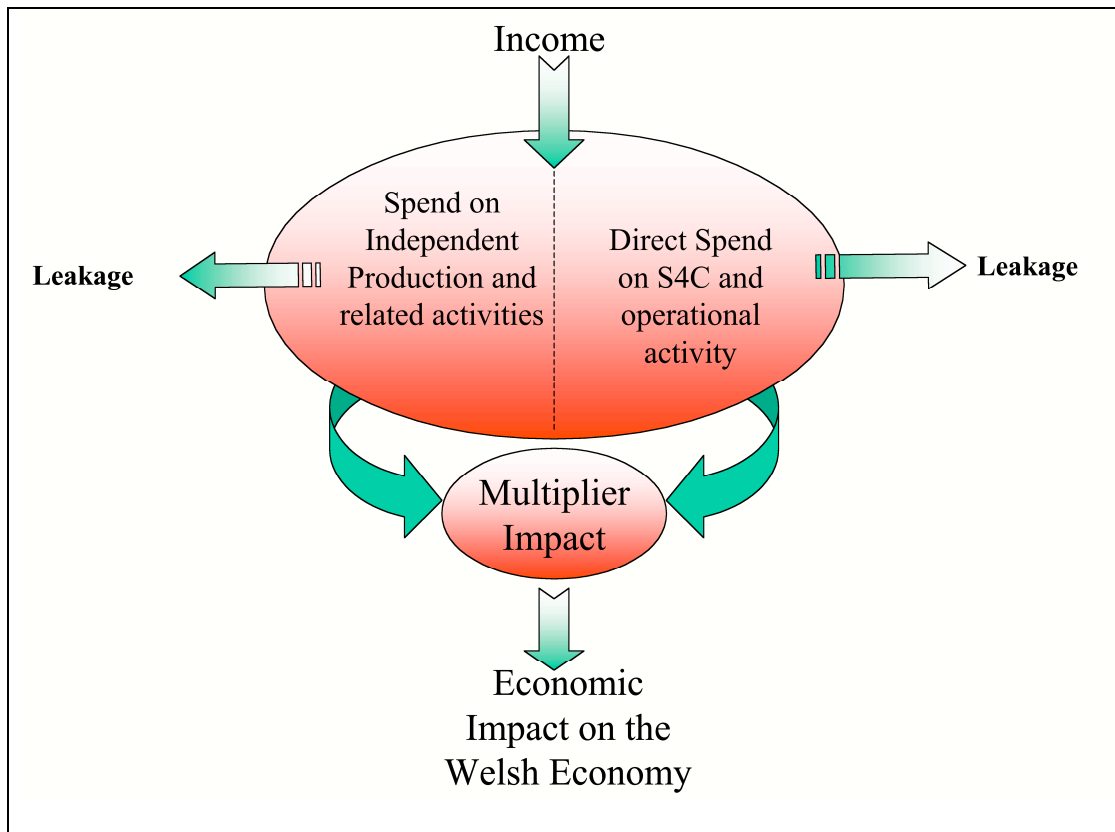
S4C spending decisions impact on the economy and determine, to an extent, what proportion of its spend remains in Wales and what proportion is spent outside Wales.

Whilst employment in television and radio activities in Wales is relatively small, it is comparable to the GB average. Being characterised as a technology intensive, high skill, and high value adding sector, it is recognised as a key growth area by the National Assembly for Wales, particularly when the poor performance of the Welsh economy, relative to the UK average is considered.

3 Methodology

This chapter sets out our methodological approach used to estimate the economic impact of S4C. Further detail is provided in Appendix 1.

Figure 3.1 Economic Impact



The diagram above sets out the key elements of the economic impact calculation. The diagram shows how the income that S4C receives (as set out at Table 1.2) is spent on its own staff and headquarter activities and on the independent sector and related activities.

As S4C spends its income, it impacts upon other Welsh sectors. Naturally, the Welsh economy cannot supply all the inputs required so some must be sourced from outside Wales.

As set discussed, S4C spends the largest share of its budget on the independent production sector. These independent companies then directly employ people in order to create original programme outputs. However, the impact extends beyond this. As well as employing people, the independent production sector itself also purchases goods and services. They often need to subcontract the services of freelance camera or sound personnel, for example, and the equipment they use. These freelancers, in their turn, then purchase goods and services from the media and broadcast sector and other sectors in the Welsh economy. This continues throughout the supply chain, across all purchases. The ratio between the first round of expenditure and the sum of subsequent rounds is known as the multiplier.

3.1 Modelling

S4C requested that the economic impact of their activity was estimated for each of the years 2002-2006. This required detailed information for each year separately, and a model for each of these years.

Two key elements required reviewing in order to model these impacts. First, detailed spending data was needed from S4C to calculate how much of this was retained in Wales. Secondly, as S4C is a commissioner, it was important to examine in detail how S4C suppliers' spent the revenue they received from S4C. The economic impact of their activity was dependent on how much of their expenditure was retained in Wales. This is the **supplier effect**.

In addition to these are induced income effects. Employees spend their wages and salaries in their locality on goods and services, which then generates demand. In estimating the economic impact, these **income induced effects** need to be added to the **supplier effects** to provide the **total indirect effect** of S4C.

In order to estimate the economic impact of S4C activity, detailed financial information was derived from a sample of companies in the sector⁹. The sample reflected the varying type, size, style and location of suppliers, which were then used to understand the different spending patterns of companies operating in the sector. The financial information provided by companies is confidential.

This information was combined and scaled up to create an aggregate sector showing purchases made from other Welsh sectors, which then generate the economic impact throughout the whole of the Welsh economy.

This information was then placed into a Welsh Input-Output table¹⁰ which details transactions between different sectors of the economy and beyond, in order to estimate the impacts of these financial trading relationships in Wales, allowing the effect of the target sector to be traced through the entire Welsh economy.

Therefore, in estimating the economic impact, three key pieces of information were required:

- S4C Spend
- Supplier Buying Patterns (or spend)
- Input Output Table (how the economy interacts with various sectors)

Please note the scope of this report does not include the impact of programmes provided by BBC Wales for transmission on S4C as part of the statutory hours.

⁹ 20 production companies were interviewed as part of this research, capturing a large proportion of the total number of production companies supplying S4C.

¹⁰ Welsh Input-Output tables are constructed by the Welsh Economy Research Unit at Cardiff Business School. Further information is detailed in Appendix 1 and can also be found at www.weru.org.uk

3.2 Summary

In estimating the economic impact of S4C for each of the years 2002 to 2006 audited and published S4C figures were used. This information was important for two key reasons. Firstly, it was used to calculate the direct impact of S4C (e.g. direct employment) and secondly was used to model changes in the purchasing patterns of S4C across each of the years. In order to estimate what impact changes in S4C spending would have on the economy, a detailed understanding of S4C suppliers was required. Detailed financial information was collated from a broad range of S4C suppliers to build a picture of how the sector operated in terms of buying and employment patterns. Information from the Input Output table was then used to show how the local economy interacted and the impact that changes in one sector would have on another, and so forth. This allowed the economic impact of S4C for the years between 2002 and 2006 to be estimated.

Further detail of the methodology and the Welsh Input Output Table can be found in Appendix 1 and at www.weru.org.uk

4 The Economic Impact of S4C

This report assesses the impact of S4C's activities on the Welsh economy in terms of employment and value-added.

A quantitative assessment that relies solely on the nature and magnitude of trading relationships will always be incomplete. However, estimating the quantitative impacts provides a benchmark in assessing the economic significance of broadcasting activities, and provides a framework for understanding the consequences of change.

4.1.1 S4C Spending In Wales

Table 4.1 gives S4C total spending in each of the five years (reported in current money). Table 4.2 then shows S4C expenditure **in Wales**, while Table 4.3 shows this expenditure as a Welsh share of S4C total spending.

Table 4.1 – Total Spending by S4C

	Total spending £m (current)				
	2002	2003	2004	2005	2006
Direct Labour Costs	7.624	7.874	7.939	8.219	7.908
Independent product. services + related expenditure*	70.122	67.243	76.222	74.644	76.487
Transmission and distribution costs	7.360	6.562	6.525	6.529	6.312
Cost of sales	6.159	3.994	3.849	3.397	3.821
Administration and training	2.487	2.611	1.988	2.007	1.562
Rent/lease of property	0.259	-0.256	0.113	0.095	0.059
Electricity, gas and water	0.103	0.096	0.103	0.122	0.145
Postage & telecoms	0.232	0.262	0.259	0.220	0.218
Maintenance & repair	0.165	0.113	0.245	0.256	0.071
Equipment hire & leasing	0.130	0.124	0.110	0.109	0.093
Transport services	0.162	0.127	0.126	0.093	0.069
Hotels and catering	0.104	0.093	0.088	0.081	0.050
Financial and business services/telecoms	1.030	1.014	1.020	1.152	1.009
Subcontracted services and labour	0.154	0.152	0.129	0.154	0.113
Total	96.091	90.009	98.716	97.078	97.917
Note: *Related expenditure includes the cost of subtitling, marketing, audience research, and web development and licences.					

Wage expenditure has a high level of retention in Wales. Other high local impact expenditures are, of course, on the independents and related programme expenditure, which have maintained a steady 95% of the total spend on the independent production in Wales. Utilities, maintenance and repair and sub-contract services are also high local impact purchases; the latter being fully resourced within Wales.

On the whole S4C maintains a strong record of local sourcing, which means that a large proportion of the overall potential economic impact is retained in Wales.

Table 4.2 - Spending by S4C in Wales

	Total spending in Wales, £m (current)				
	2002	2003	2004	2005	2006
Direct Labour Costs	7.62	7.87	7.93	8.21	7.90
Independent production services + related expenditure*	64.86	63.20	72.41	71.13	72.66
Transmission and distribution costs	2.06	2.03	1.82	1.24	0.94
Cost of sales	0	0	0	0	0.49
Administration and training	1.41	1.43	0.61	1.22	0.96
Rent/lease of property	0.22	-0.18	0.09	0.09	0.05
Electricity, gas and water	0.05	0.02	0.02	0.02	0.01
Maintenance & repair	0.12	0.07	0.17	0.17	0.07
Equipment hire & leasing	0.06	0.06	0.05	0.04	0.03
Transport services	0.05	0.04	0.04	0.03	0.03
Hotels and catering	0.05	0.05	0.05	0.05	0.02
Financial and business services/telecoms	0.30	0.18	0.19	0.25	0.30
Subcontracted services and labour	0.13	0.11	0.10	0.10	0.11
Total	76.99	74.9	83.52	82.61	83.64
Note: *Related expenditure includes the cost of subtitling, marketing, audience research, and web development and licences.					

Table 4.3 - Welsh Share of S4C Spending (%)

	Welsh Share (%) of S4C spending				
	2002	2003	2004	2005	2006
Direct Labour Costs	100	100	100	100	100
Independent prod. services + related ex.	92.5	94	95	95.3	95
Transmission and distribution costs	28	31	28	19	15
Cost of sales	0	0	0	0	13
Administration and training	57	55	31	61	62
Rent/lease of property	87	72	80	97	100
Electricity, gas and water	56	22	23	20	10
Maintenance & repair	74	69	70	70	100
Equipment hire & leasing	53	52	46	45	42
Transport services	37	34	34	42	51
Hotels and catering	56	54	57	62	49
Financial and business services/telecoms	30	18	19	22	30
Subcontracted services and labour	85	77	82	70	100
Total	80	83	85	85	85
Note: *Related expenditure includes the cost of subtitling, marketing, audience research, and web development and licences.					

4.1.2 Spending by the Welsh Independent Production Sector

Table 4.4 shows the estimated distribution of spending by the **Welsh independent sector** i.e. Welsh language programme content providers who have supplied S4C, from 2002 to 2006. During the course of their operations, companies in the independent sector purchase labour and production services. This includes payments to self-employed freelancers

undertaking, for example, direction, production, sound and camera services, grip, runners, music and costume etc. It also includes payments to sub-contract post-production services, which would involve editing and other associated activities. A large portion of this money is therefore used to pay people for work done within the industry.

As programme production is a labour intensive activity, it is also evident that a significant amount of money is spent by the independents on direct employment. This amount is shown below the sub-total in the row 'direct labour costs'. Also below the sub total is an estimate of expenditure on items that were sourced outside Wales or 'imported'. The final row gives total expenditure by the independent sector in Wales.

While the apparent precision of these figures is a consequence of the survey and 'scaling-up' process it is, nonetheless, possible to suggest that direct employment in the independents appears to be on an upward trend, while employment generated by freelance and post-production activity has been relatively stable over time.

Table 4.4 – Estimated Spending by the Welsh Independent Sector

	£m				
	2002	2003	2004	2005	2006
Total purchased in labour and production services	20.58	20.01	19.48	18.64	21.24
Energy, water	0.68	0.55	0.58	0.55	0.47
Hire of broadcast equipment etc.	8.59	8.39	8.85	7.88	9.52
Consumables, non-broadcast equipment	2.87	2.67	3.11	3.07	3.37
Finance and business services	1.12	0.95	0.56	0.57	0.64
Transport, post, telecoms, etc	1.44	1.45	2.10	2.32	3.13
Other items not already listed	4.55	3.44	7.39	6.56	8.50
Sub-total	39.84	37.46	42.07	39.58	46.87
Imports of goods and services	7.29	6.31	9.41	7.81	5.82
Direct labour costs	16.78	18.66	20.46	21.64	27.57
Other value added	6.45	5.40	10.18	8.52	6.22
Gross Output/ Turnover	70.35	67.84	82.12	77.54	86.48
FTEs	599	602	620	637	766
Note: columns may not sum due to rounding. Table shows estimated distribution of spending by Welsh language programme content providers who have supplied S4C (in the period 2002 to 2006).					

This upward employment trend is connected to an increase in aggregate turnover reported in the last row but one, over the five-year period. However, it is important to note that some of this growth has been generated through exploiting new commercial opportunities outside Wales, (which may not be directly connected to S4C), or through mergers that may involve established revenues streams outwith Wales. The important point is that the figures reflect that the sector perhaps has an improving capacity to respond commercially in a highly competitive climate, in accordance with the objectives of S4C's Programme Strategy, which seeks to encourage the pursuance of sustainable business practices and creative excellence.

4.1.3 The Economic Impact of S4C

The direct spending of S4C in Wales shown in Table 4.2 and most of the spending by the independent sector shown in Table 4.4 then impacts on the economy as successive rounds

of purchases are made by suppliers to suppliers (supplier effects) etc. In addition ‘induced-income’ effects are generated as employees of S4C, and S4C suppliers (and their suppliers and so on) spend their incomes, thereby creating further demands and employment. These total impacts were estimated using the Welsh Input-Output Tables, and the results of this process are set out in Table 4.5.

Table 4.5 – The Estimated Employment Impacts of S4C on the Welsh Economy 2002-06

	Employment (FTEs)				
S4C Gross output*	£95.9m	£94.5m	£95.0m	£95.6m	£96.7m
	2002	2003	2004	2005	2006
<i>Which then supports employment in:</i>					
S4C	205	206	196	185	177
Independent production services	525	537	521	558	605
Sub-contractors to independents	654	640	549	510	536
Other media and public services	123	111	155	181	197
Hotels, retail, wholesale	268	258	275	270	287
Other sectors	464	431	450	420	452
Total	2,240	2,183	2,146	2,124	2,254

Note: columns may not sum due to rounding

*Total S4C spend/turnover.

The direct consequences of S4C’s activity on the local economy are relatively straightforward to assess. In each of the five years to end December 2006 S4C generated an average annual turnover in excess of £95m, providing between 206 and 177 full-time equivalent (FTE) jobs within the organisation over the period.

These directly employed individuals are mostly highly skilled managers and professionals, and hence are well paid. Excluding employers’ national insurance and pension contributions but including overtime payments, the average gross salary at S4C is just under £35,000, which compares favourably to the Welsh average for managerial occupations. Average wages in S4C are consistent with the broadcast tv sector, as detailed in recent surveys such as the Skillset Workforce Survey 2005, which showed that average wages in the broadcast tv sector were in excess of £35,000 in 2005 (£35,902). Furthermore, a recent report by Televisual¹¹ stated that “*average pay across the business is up from £39.6k in 2004 to £42.6k in 2006*”, identifying that average wages amongst executive producers, producers and directors were around £85,000, £55,000 and £48,000 respectively. Over the last three years S4C has reduced the size of its operational staff from 206 FTEs in 2003 to 177 in 2006, making it a leaner organisation. This decrease in employment has been partially offset by an increase in employment in the independent production sector.

The top line of Table 4.5 shows the gross output or turnover of S4C in each of the 5 years. S4C’s direct activities support jobs (and incomes) in other sectors of the economy. These impacts are concentrated within other parts of the media-related sector (due to the high levels of spending on this sector shown in Tables 4.2 and 4.4), but also spread to other industries. The ‘supplier’ and ‘induced-income’ effects generate jobs in hotels, catering and retail industries, and in other services sectors (including business services and the public sector).

¹¹ Televisual February 2007

The final row of Table 4.5 shows the total impact of S4C on the local economy. Over the five-year period the activities of S4C were found to support, through multiplier effects, over 2,100 FTE jobs. While it may be premature to suggest that the S4C impact on employment is persistently upward, there can be no doubt that one of S4C's principal economic contributions is its strongly stabilising employment influence, amid the many uncertainties that face the sector. Stability in the 'employed' part of the sector improves the prospects for skills development, investment and creative excellence.

Table 4.6 translates the employment effects shown in Table 4.5 into value-added, and shows the financial impact of S4C on the Welsh economy. The key components of value-added are gross wages and salaries and profits/surpluses. The top line of Table 4.6 gives the estimated value-added for S4C for each of the study years, and shows some variation. This variation from year to year is due to the pattern of incomes and expenditures. For example, in 2004 S4C's operational wage and non-wage spending exceeded income, generating a loss of around £4m, whereas in 2003, there was a surplus of around £4m.

The second line of Table 4.6 gives the value-added that can be connected to the activity of the independent production sector. Taking 2006 as an example, Table 4.5 shows that 605 FTE jobs in the independent production sector were supported by S4C spending in that year, and Table 4.6 shows that these jobs related to almost £28m of value-added. In total S4C activity supported an estimated £87m of value-added in the Welsh economy in 2006.

Table 4.6 – The Estimated Value-Added Impacts of S4C on the Welsh Economy 2002-06 (£m)

	2002	2003	2004	2005	2006
S4C	7.29	11.89	4.06	6.49	6.47
Independent production Services	20.97	21.93	26.67	27.27	27.70
Sub-contractors to independents	21.17	20.67	19.50	18.64	20.44
Other media and public services	2.61	2.41	3.47	4.15	4.62
Hotels, retail, wholesale	5.46	5.42	5.92	5.93	6.46
Other sectors	19.80	19.25	20.13	19.68	21.43
Total	77.30	81.58	79.75	82.17	87.12

Note: columns may not sum due to rounding

Please note the scope of this report does not include the impact of programmes provided by BBC Wales for transmission on S4C as part of the statutory hours. The funding of these programmes is provided from the Television Licence Fee. In the relevant reviews the BBC Wales has reported the following spend and hours provided.

Table 4.7 BBC Wales Spend and Hours Provided on Programmes Transmitted on S4C

	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007
Hours	532	521	533	531	524
Value £m	19.0	20.3	20.4	21.0	20.6
Note: Financial year runs from April to March					
Source: BBC Wales Annual Review					

4.1.4 Summary

This chapter has assessed the economic impact of S4C over the years 2002 to 2006. The process of estimating the economic impact of S4C over each of the five years involved the use of survey data from S4C and the independent production sector together with a derived Input-Output table for each year.

This report shows that S4C itself is an extremely lean organisation now employing 177 FTE staff, following a steady reduction over the last five years. The broadcaster has a stable level of revenue each year. As discussed, S4C sources the vast majority of its services from Wales. This means that little of S4C's spending is lost from the Welsh economy.

The economic impact of S4C on the Welsh economy has been to support over 2,100 FTE jobs, equivalent to over £77 million of value-added each year.

5 Summary and Conclusion

This report has estimated the economic impact of S4C activity on the Welsh economy between 2002 and 2006.

There are two ways in which S4C impacts the economy, both directly through employing staff and indirectly through its spending in the economy. Detailed financial information was collected from S4C to understand these direct impacts and spending patterns.

S4C spends the majority of its revenue on the production of Welsh programmes through the independent production sector in Wales. In order to estimate the impact of S4C, it was important to understand how these production firms operated within the economy and the goods and services that they procured. This would inform how the rest of the economy would respond to changes in spending in the production sector.

The Welsh Input Output Tables, produced and updated by WERU, show how sectors within the economy interact. This is important to show how changes in one sector impact upon the other sectors of the economy. Information collected from S4C and the independent production sector showed what happened in the Welsh industry over the last five years and the Input Output tables were used to calculate the impact this has had on the Welsh economy.

As with any modelling, there are limitations to what can be calculated. It should be noted that the information is based on a sample of data from the Welsh production sector and not the entire population. Secondly, the process produces a number of snapshots of the economy for each of the five years. Thirdly, the model does not take into account what impact a change in demand would have on the cost of supply, the effect of scale economies or the consequences of resources becoming more scarce and expensive. Despite these caveats, the method is widely recognised as being a powerful tool for estimating the impact of a sector on the economy.

The economic impact of S4C on the Welsh economy is shown in table 4.5 above. Taking 2006 as an exemplar year it shows that from a total output of £96.7 million, and a Welsh spend of £83.64million, S4C supported an estimated 2,254 FTE jobs in Wales.

The majority of these jobs (1,515 FTEs in 2006) are in the production sector and related services. This is important given the qualities associated with employment in the sector, which is broadly recognised as being highly skilled, well paid and technology-oriented. These are important qualities in the context of the Welsh economy, and help to reduce the relative performance gap between Wales and the UK average.

This report has only focused on the economic impact of S4C and has not attempted to quantify the wider impact the S4C activity and does not assess the qualitative impact of S4C. When considering S4C and its impact on Wales, these should be considered.

Appendix 1 Methodology for Assessing the Economic Impact of S4C

Quantitative Methodology

In order to undertake an analysis of the economic significance of an activity, industry or an individual organisation, it is necessary to separate direct economic effects from those which are indirect. Direct economic consequences are associated with the activity itself whilst indirect effects are felt in the rest of the local economy dependent on how, when and where monies are spent.

The first objective of this assessment was to estimate the direct employment effects of S4C activities from 2002 to 2006, using detailed information from S4C accounts. This information was then used to estimate the indirect employment effects of the supported activity on the Welsh economy.

The direct spending associated with S4C's operational activities will have indirect consequences according to how that money is spent. For example, expenditure by S4C on financial services in Wales generates demand for inputs from other Welsh industries, such as business services and other goods and services. These producers in their turn spend money on the outputs of other Welsh industries, and so on. These are 'supplier' effects, and their economic importance is determined by the level of local sourcing for the particular sector, and then the levels of local sourcing of suppliers, and so on. Clearly, some of the demands made by S4C and its suppliers (as is the case for other broadcasters in Wales) cannot be fulfilled locally. An example of this might be media-specialised technical equipment.

There are other economic impacts that can be estimated over and above these supplier effects. For example, in 2006 S4C provided 177 full time equivalent jobs (FTEs) directly. These jobs add to local incomes, and a proportion of these incomes will be spent locally, further adding to local demand. Similarly, some proportion of employment in local suppliers (media and non-media related) will be supported by S4C spending, and some of this will be local. These are 'induced-income' effects, and must be added to the 'supplier' effects to assess the total indirect consequences of the direct local economic activities. As is the case with direct effects, indirect effects can be categorised in terms of output, incomes and jobs.

There are two broad requirements for the estimation of these indirect or multiplier consequences. First, the spending patterns of the target group (in this case S4C and the independent producers from whom it commissions outputs) must be examined. While the population of independent production companies has been experiencing consolidation, and much is known about the sector, it was not possible to examine each and every one of the companies at the level of detail that was required. It was therefore necessary to derive a sample of companies in order to shed light on differences in spending patterns arising from variations in the size and style of companies operating within the sector and then weight that information accordingly. In order to achieve this it was necessary to use a 'purposive' (rather than a random) sample. With a small and easily identifiable population the size of the sample was less important than the quality of information. Financial information derived from each company is confidential. These financial outputs were then combined to create an aggregate sector representing the buying patterns (or for modelling purposes the 'vector') which create the economic impacts which then reverberate through Wales.

The second requirement then was for a 'model' of the local economy which can estimate the impacts of these financial trading relationships in Wales (i.e. through their sales and purchasing patterns), which allows the effect of the target sector to be traced through the entire local economy. An Input-Output table details transactions between different sectors of the economy and beyond, and this information was transformed into a modelling framework to allow the sector impacts to be quantified.

Model Limitations

Whilst Input-Output analysis provides a powerful modelling tool, it does have a number of limitations. The tables on which the model is based provide an estimate of the Welsh economy in one particular year, with the latest Welsh tables relating to 2003. Full survey-based Input-Output tables are only derived periodically due to the significant time and resource costs involved. In addition, the purchasing and sales patterns of industries and consumers do not change significantly enough in the short term to justify a survey-based table for each year. Hence in order to model economic impacts for each of the 5 years from 2002-2006 a separate table was estimated for each year by a simple adjustment to the 2003 tables to reflect price differences between the other years. Hence the 2003 tables were deflated to 2002, and inflated to generate tables for 2004, 2005 and 2006. The survey derived data for S4C and the independent production sector for each year was then incorporated into the relevant model in order to estimate impacts for each year.

The Input-Output modelling process relies on a number of key assumptions. The model is demand-driven, and will reflect the employment and output consequences of a given level of demand, without adjusting for the effect of supply on the cost of those demands. In the real world a change in the level of demand in an economy may induce change in the cost of inputs depending on the tightness of the supply of demanded goods and services in affected sectors. Input-Output analysis does not incorporate these supply-side adjustments but rather reflects an equilibrium position that might take a number of years to be resolved (the so-called long-run). In addition, the modelling process does not incorporate factors such as technology change, or economies of scale, which will change the way industries purchase inputs. However, as noted above, in the short-term, these changes are unlikely to be significant.

These caveats notwithstanding, the Input-Output approach does provide a very detailed description of an economy, and is a popular, accepted and transparent methodology useful for assessing the marginal impact or significance of industries or activities to their local economies.

Other Examples

The Welsh Input-Output tables are constructed by the Welsh Economy Research Unit at Cardiff Business School, and are the product of a continuing research project to develop and analyse the structure of the Welsh economy, and the way it is changing over time. These tables have been used as the basis for a range of impact studies of different industries in Wales, for example, tourism, arts and cultural industries, the forestry industry, the higher education and further education sectors and the steel industry. They have also been used to estimate the effect of broadcasting in Wales. More information about these studies, and the Welsh Input-Output project can be found at www.weru.org.uk.

Qualitative Methodology

One last caveat in the context of this particular study relates to the handling of ‘lumpy’ revenue and spending occurring in the individual companies which inform the modelling. In connection with this, some companies may do well in one round of commissioning at the expense of other companies with the overall impact of the sector directly emanating from S4C, year on year, being constrained to S4C’s direct commissioning budget. The quantitative method can only model the impact of this spend.

The economic impact of S4C in terms of its influence on the capacity of individual companies to behave commercially and competitively, while no less vital, has to be handled descriptively. For example, seed-corn money or funds which have the effect of raising confidence, generating matched funding or leverage tend to fall outside the realm of the method, while clearly the method does provide a means of speculating fairly accurately about associated impacts, as is done in this report.