O&O Advisory

Trends in TV Content Investment

Final Report: Non-Confidential

Prepared for Ofcom by Oliver & Ohlbaum Associates

Summary

Introduction

[✂] denotes material redacted for publication.

The analysis detailed in this report took place February – April 2015.

We would like to thank all interviewees and contributors to this analysis for your invaluable input into the research.

Summary
Background

While the Public Service Broadcasters (PSBs) continue to account for the bulk of investment in first-run non-sport UK content, there has been a fall in spending on all programmes.

Between 2003 and 2013, originated content investment by the four UK PSBs decreased slightly – from £2,494 million to £2,410 million. This amounts to a 24.7 per cent decrease in real terms.*

More recently, during the Ofcom PSB Review period 2008-2013, originated content investment by UK PSBs decreased from £2,919 million in 2008 to £2,413 million in 2013: a 17 per cent decrease in real terms.*

The majority of this decline is explained by the five main network channels. Considering the most recent years: between 2007 and 2013, originated content investment by the four UK PSBs on the five main network channels fell from £2,276 million to £2,188 million.

At the same time, there has been (arguably) no loss on-screen quality, as audience satisfaction with PSB output has not been affected.

We have sought to understand:

1. how the reduction in originated content spending has been achieved over a 2007-2013 review period; and
2. what this means for the next five years.

Broadly, there are five key factors explaining any movement in spending:

- **Volume:** are fewer hours being made?
- **Genre mix:** has there been a move to lower cost genres?
- **Third party finance:** has there been greater reliance on deficit finance, co-production, squeezed producer margins, or tax credits?
- **Input prices:** has the cost of programme inputs remained flat or decreased?
- **Efficiency gains:** have producers been able to make the same programmes for less money (e.g. by using smaller teams / fewer days), or adjust inputs/focus on cheaper formats?

* using CPI

Summary

Key findings

We quantified the individual drivers of the overall £88 million decline in originated content investment on the five main network channels.

- **Genre mix:** was the single most important driver of reduced content investment. Broadcaster budgets have been under pressure and, to deliver the desired level of originated content, they have moved towards cheaper genres.

The change in genre mix explains the £88 million reduction on its own, but there has been conflicting upwards pressure on the level of investment.

- **Volume:** the overall volume of output reduced, but a movement out of cheap daytime content towards more expensive peak time output drove an increase in costs.
- **Input prices:** increased between 2007 and 2013, adding £142 million to the cost of programme making over the period.

The impact of these factors was cancelled out by reduced spending on night time originations and the response of producers, who:

- generated significant cost savings though production efficiencies, and
- reduced their margins and/or financed more productions upfront, thus reducing the price paid by broadcasters.

The quantity of the contribution by each individual driver is set out on the next slide.

Defining content investment:

Originated content investment relates to the prices paid by commissioning broadcasters for original programmes. This means the cost of either producing programmes in-house, or the price paid to independent producers.

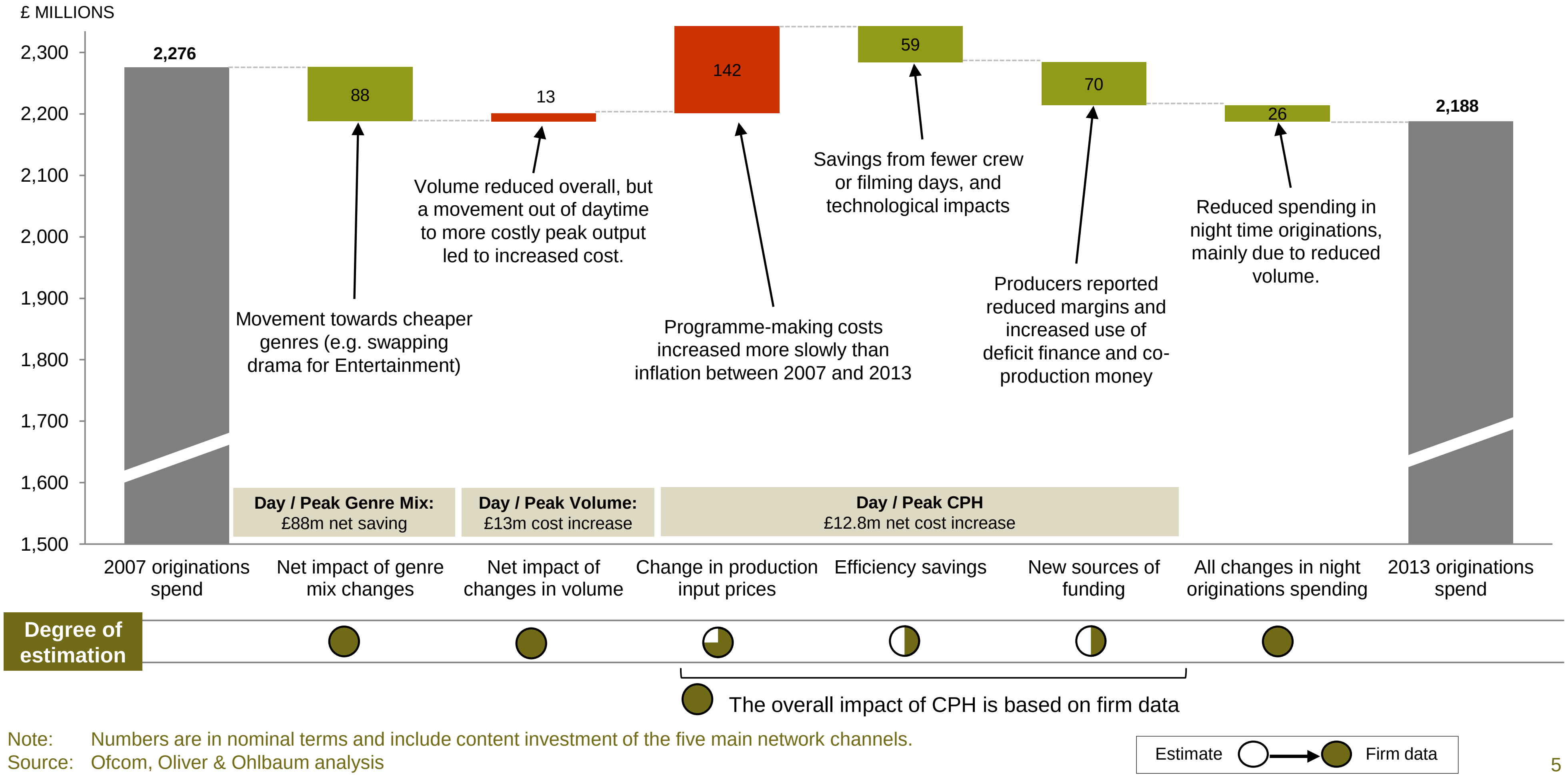
In investigating the change in content investment on independent productions, we distinguished between the costs incur in producing programmes, and the independent producers' profit margins. We identify the change in profit margin separately as a driver of the change in content investment.

Summary

Drivers of investment

Movement to cheaper genres was the largest driver of reduced origination investment by the five main networks, accounting for an £88m saving 2007-2013. Efficiency savings and new funding sources, such as reduced producer margins and co-production funding, largely cancelled out the impact of higher programme-making prices.

Overview of drivers of change in PSB network originations spending (nominal terms), 2007-2013



Note: Numbers are in nominal terms and include content investment of the five main network channels.
Source: Ofcom, Oliver & Ohlbaum analysis

Summary

Historic trends in content investment, 2007 to 2013

Genre mix & volume

- Broadcasters have a fixed programme budget and need to adjust the costs to live within it – when under cost pressure, this inevitably puts greater emphasis on relatively low cost programmes with broad audience appeal.
- Peak time originated hours increased by 2 per cent overall, but changes in genre mix included a reduction in the volume of drama, with strands such as *The Bill* and *Heartbeat* being retired, and a move towards more Factual Entertainment and Entertainment & Comedy programmes, such as *Flog It, MasterChef* and *Alan Carr.*
- Daytime originated hours fell by 7 per cent. The key changes in the mix included moves away from Children's and Sport, towards General Factual programmes such as *What's Cooking*, as well as Entertainment & Comedy programmes such as *Pointless* and *Lorraine.*

Input prices

- Input prices increased more slowly than inflation between 2007 and 2013 as pressure on programme budgets kept price rises subdued.
- This is particularly true for equipment and studio hire and production staff who do not have a direct on-screen impact.
- So a real terms decline based on CPI may be overstated – other measures of inflation over the period were lower.

Efficiency gains

- Smaller crews and fewer filming days have been used where possible to lower costs and protect producer margins.
- Post production has seen the largest technological gains, with digitisation significantly reducing cost for standard work.
- Producers have also made savings from changes in inputs and approach. For example, in Factual, which includes programmes like *Escape to the Country* and *Who Do You Think You Are*, self-shooting can reduce costs.
- Some genres, such as Entertainment & Comedy, which includes pre-recorded programmes like *Deal or No Deal* and *Million Pound Drop,* have been able to film more episodes in a day.

Third party finance

- Producer margins have been squeezed, producers reported that reliance on deficit finance has increased, particularly for BBC commissioned programmes.
- Deficit finance previously focused in drama and comedy (scripted), but is now required across all genres to a greater extent.

Summary

Future drivers of content investment

		Scope for more?
Genre mix & volume	▪ Genre mix is always available as a lever for broadcasters under ongoing funding pressure ▪ However a further move away from high cost genres – or "internationalised" co-pros – is likely to lead to a less rich schedule and be to the detriment of UK audiences	Yes, but undesirable
Input prices	▪ Upward pressure on input prices has increased since the introduction of UK tax credits; this has had a significant impact since 2013, and so largely falls outside our analysis period. Increased demand is likely to result in production staff and studio costs increasing more rapidly. ▪ Pay for talent out side of the top tier has been broadly flat for the last five years; there is likely to be some upward pressure on these costs over the next few years.	No, prices likely to increase more rapidly
Efficiency gains	▪ Some pure efficiency savings, in terms of producing the same programme with smaller crews or fewer filming days have been realised already, but there is scope for more ▪ Further savings are likely to come from changes to the input mix, which has an impact on screen. ▪ Producers may tend towards pitching more simplistic formats to deliver the required savings.	Further efficiency savings likely to impact on-screen programme quality
Third party finance	▪ Further pressure on producer margins could lead to reduced discretionary spending such as R&D, which could threaten programme quality. ▪ Increased reliance on deficit finance could threaten plurality of producers as smaller producers are unable to take the required financial risks. ▪ Programmes will need to appeal to an increasingly international market which risks a lack of focus on programming demanded by British audiences.	Yes in some genres, but may lead to less UK-centric product

Contents

Overview

Trends in PSB originated content investment: key drivers

The decline in PSB content investment between 2007 and 2013 can broken down into the change in the volume of output hours, change in the genre mix, and change in the cost per hour of programmes.

Historic spending:

- The level of investment by PSB's in the five main network channels has fallen in real terms over the period from 2007 to 2013.
- At the same time, the volume of originated output has decreased slightly – significantly in daytime, but has increased in peak time.
- Audience appreciation has been broadly stable, indicating that broadcasters have delivered the same quality of output at reduced cost.
- We have sought to explain the nominal trend in investment in content for the five main networks, which declined from £2,276m in 2007 to £2,188m in 2013.

Driver	Impact	Comments
Volume	+ £13m	Reduction in (cheaper) daytime originations hours by 7% and an increase in (more expensive) peak originations hours of 2% added £13m of cost overall.
Genre mix	- £88m	Moving output hours from expensive genres to cheap genres generated savings of £88m, of which £76m was in peak time. In daytime, the largest savings were generated by movement away from Children's and Sport, principally by [✂]. These were largely replaced by Entertainment/Comedy, and General Factual. In peak, the largest savings were generated by reducing the proportion of Drama hours, by [✂], with Specialist Factual, Entertainment/Comedy, and Fact Ent tending to replace this Drama output. Commissioners told us that the movement was in response to audience demand, though 84 per cent of producers thought that decisions were driven by the need to save money. To try to protect their margins, producers may have responded to cost pressure by pitching genres where the impact of production efficiencies has been greatest – such as factual, where new filming methods can be used without adversely impacting quality.
Cost per hour	+ £13m	A number of factors can drive changes in the average cost per hour of programming. These are broken down into more detail on the next slide.

The remaining £26m reduction came from night time originations, predominantly through reduced volume of output.

Overview

Trends in PSB originated content investment: drivers of change in CPH

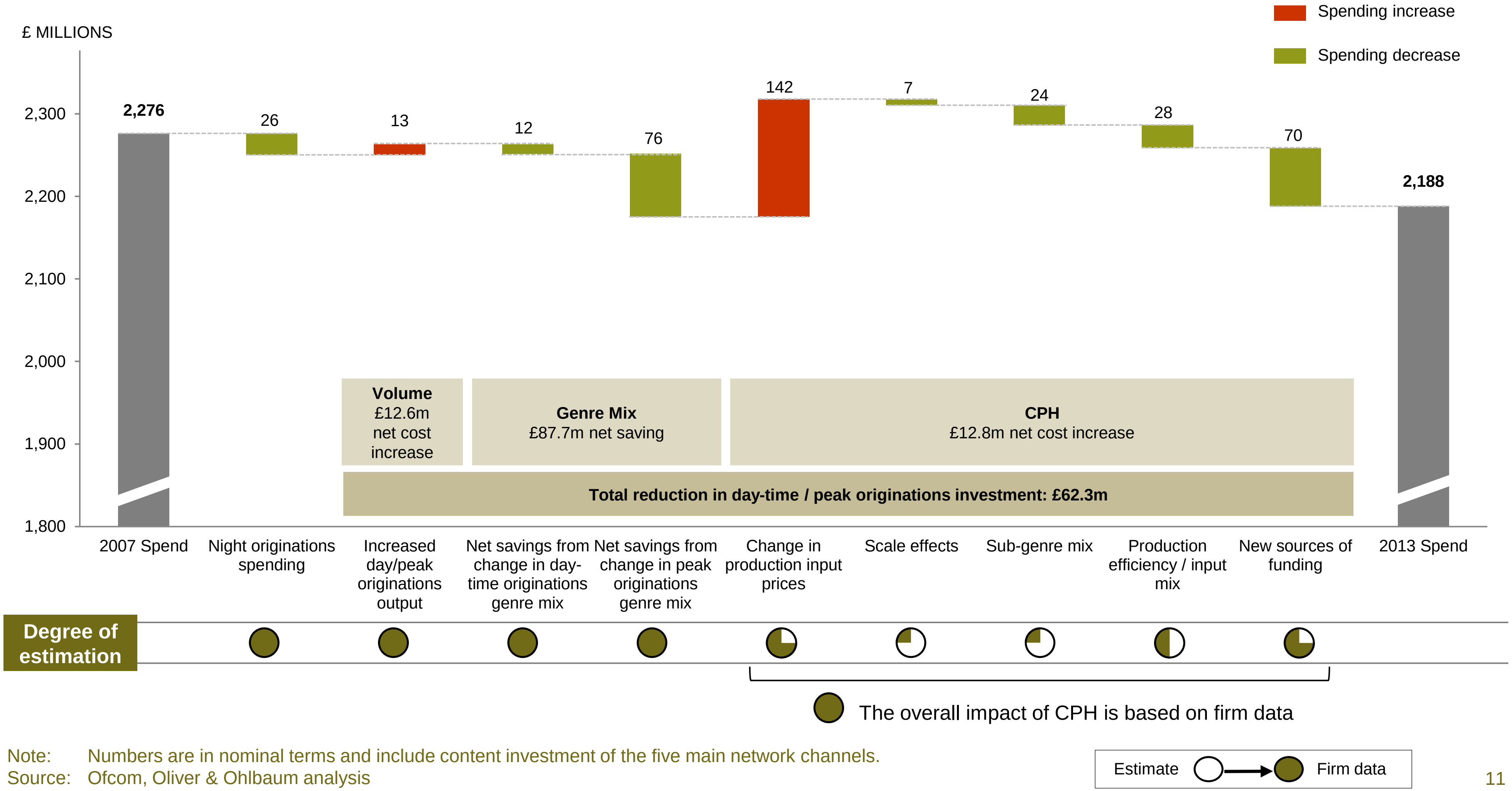
Driver		Impact	Comments
CPH: net increase in investment of £13m	Input prices	+ £142m	Prices increased over the period, though by less than inflation. Talent costs, both on and off-screen, have been broadly flat, with the exception of the top tier, for which rates increased more rapidly over the period. Production staff costs have been broadly flat, increasingly slightly; the increase has been accelerated in recent years driven, in part, by tax credits leading to increased demand for production staff. There has been some pressure on studio space but, like production staff, this has been felt more in recent years as a result of growing demand due to tax breaks in drama – which impact on the cost of resources required across all genres.
	New sources of funding	- £70m	New funding, whether deficit finance, reduced producer margin, or co-production has increased. Deficit finance, in particular, is now regularly used in genres such as factual whereas it was previously largely reserved for drama and comedy. Producers told us that their margins have been squeezed and this is supported by the data we have from the Pact Census, which shows a reduction in net margin from 9.3 per cent in 2007 to 5.3 per cent in 2013. Tax credits were used to increase the spec of programmes rather than to save money.
	Production efficiency and input mix	- £28m	Producers indicated that production efficiencies – such as reduced crew sizes and fewer filming days – were broadly achieved first, to protect margins, and increasingly the input mix has changed to reduce costs. In some areas, technology has increased cost, such as the need for more editing time due to production teams producing more digital output – particularly in factual programming.
	Scale effects	- £7m	Commissioning more episodes, or bulk buying series helps broadcasters push prices down in some instances, but this is not a new thing, and has not had a large impact on content investment over the period. Returning series do not tend to offer large cost savings beyond the second series, since R&D costs and other set up costs have already been incurred. Producers may accept a reduced or flat fee per episode, in exchange for certainty of commission but this is likely to hit their margin. Commissioning longer runs does allow for savings, since producers can spread fixed costs over a larger number of episodes, filmed in one block – this is not new, though in some genres commissioners add compilation episodes which are low cost.
	Change in sub-genre mix	- £24m	Moving to cheaper formats within a given genre was not generally acknowledged by commissioners as a conscious move, and is likely to have had a relatively small impact, potentially driven by producers pitching cheaper formats where their margins are most easily protected. However, respondents to our Pact survey were clear that cheaper formats have emerged in Comedy, Entertainment, and Factual, and our Programme Database analysis identified the same trend.

Overview

Quantifying the drivers of change in PSB content spending

Genre mix accounted for £88m savings, compared to volume and CPH each driving a £13m cost increase, although within CPH there were some significant impacts for a number of individual sub-drivers

Drivers of change in PSB network originations spending, 2007-2013



Note: Numbers are in nominal terms and include content investment of the five main network channels.
Source: Ofcom, Oliver & Ohlbaum analysis

Overview

Scope for further reduction in investment in PSB content

Volume and genre mix can be manipulated by commissioners to generate cost savings, but this will likely impact on audience approval. Most of the other drivers of reduced investment are likely to result in on-screen impacts in future.

Driver		Future driver?	Comments
Volume		Some scope	Though it is unlikely that broadcasters would wish to reduce originated volume significantly, there is scope to focus on fewer programmes with greater 'value' in terms of impact and reach.
Genre mix		Limited scope	While this generated a large cost saving it is likely to be a one-off opportunity, since – whether driven by audiences or the desire to reduce cost – broadcasters will need to retain a diverse range of genres across the schedule to keep audiences happy.
CPH	Input prices	Upward pressure on costs	Prices were rising in the latter part of the 2007-2013 analysis period, but have increased most significantly since the introduction of tax breaks for high end drama in 2013 – this will put pressure costs of production staff, facilities, and talent.
	New funding	Limited scope	Deficit finance and margin squeeze has a limit. Sustained pressure on producers could lead to plurality issues as not all producers can compete for commissions. Increased co-production could result in a loss of Britishness for some content, which could impact audience approval.
	Production efficiency and input mix	Limited scope	Digitisation provided one-off savings opportunities which are now done. Some on-going technological improvements are likely to be off-set by a move to 4K/UHD. There is limited scope for further production efficiency savings, and changes in the input mix are likely to have an impact on screen. This is already happening for example, in factual, where producers are using more self-filming.
	Scale effects	No future impact	Scale had very little impact on spending between 2007 and 2013 and does not represent a new means of driving down prices. It is therefore unlikely to have any future incremental impact on programme investment.
	Change in sub-genre mix	Some scope	After co-production finance, this was identified by producers as the second most important contributor to potential future reductions in programme costs. Commissioners will have to consider the extent to which further movement towards cheaper formats will impact audiences.

Source: Oliver & Ohlbaum analysis

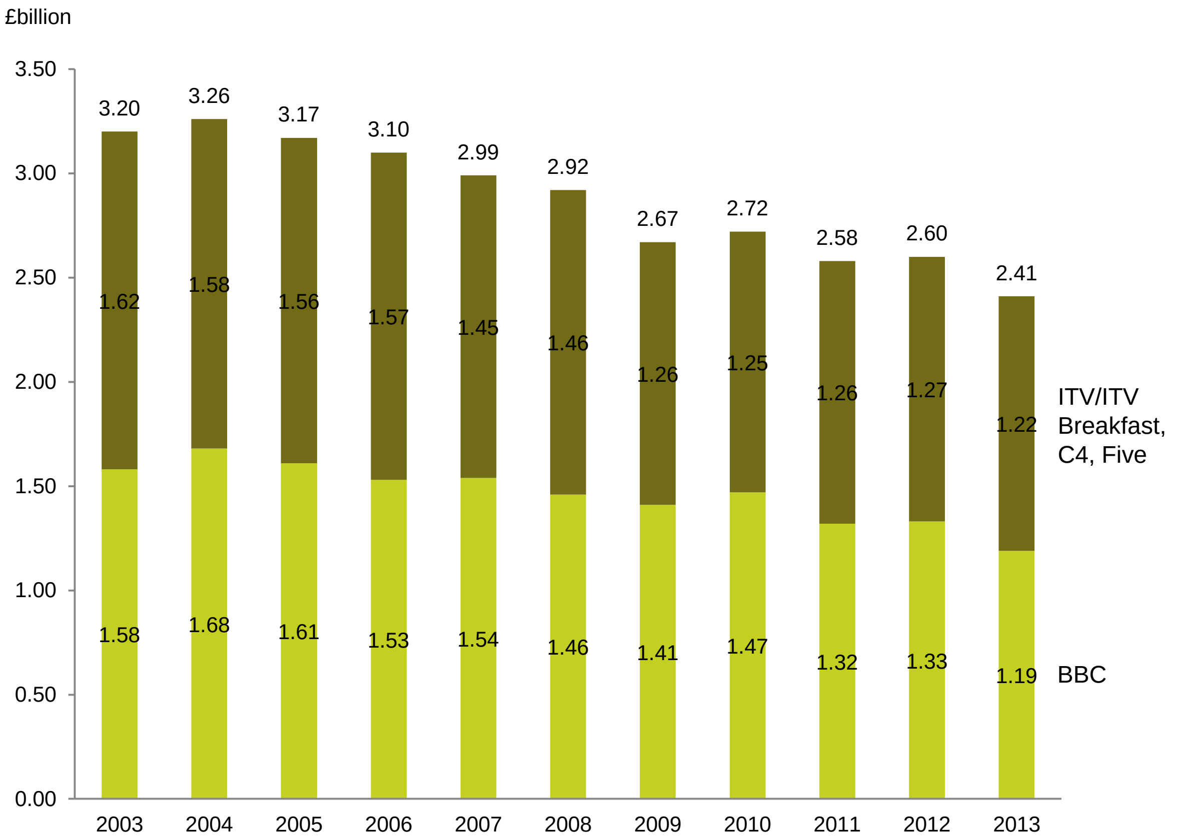
Contents

Introduction

Long-term trends in PSB spending

Original content investment by UK PSBs has fallen by 24.7 per cent in real terms over the last decade. However, there has been no significant volume loss and no noticeable quality loss.

PSB spend on first-run originations; real terms, 2003-2013



Note: Figures are expressed in 2013 prices.
BBC figures include BBC One, BBC Two, BBC Three, BBC Four, CBBC, CBeebies, BBC News, BBC Parliament. ITV figures consist of network content only. Figures exclude nations/regions programming.

Source: Ofcom's PSB Annual Report 2014. Oliver & Ohlbaum analysis

Scope

This project seeks to understand:

1. What has underpinned this reduction in production costs?
2. Whether it is sustainable, and which drivers can continue to contribute?
3. Whether considering trends in real terms is helpful?

We have focused our analysis on the main five networks, which account for the vast majority of origination spending.

We have sought to understand the trends and key drivers at channel, genre, and day part level.

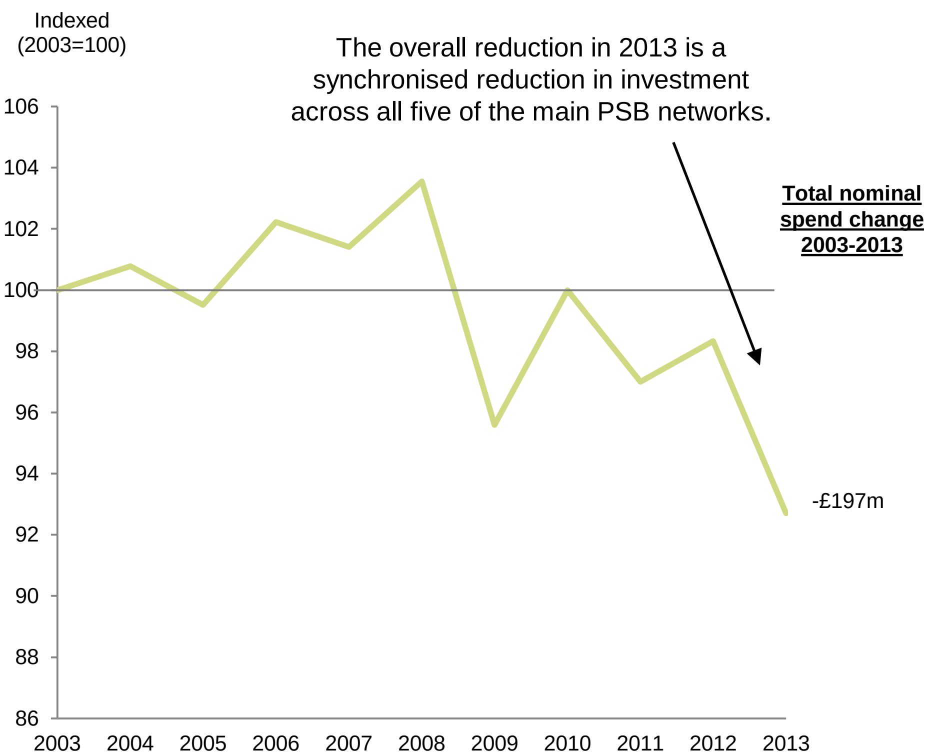
BBC Portfolio channels accounted for £224 million of investment in 2013; the breakdown is not available back to 2003, hence they are included in this chart. The BBC Portfolio channels are, however, excluded from all subsequent analysis in this report

Introduction

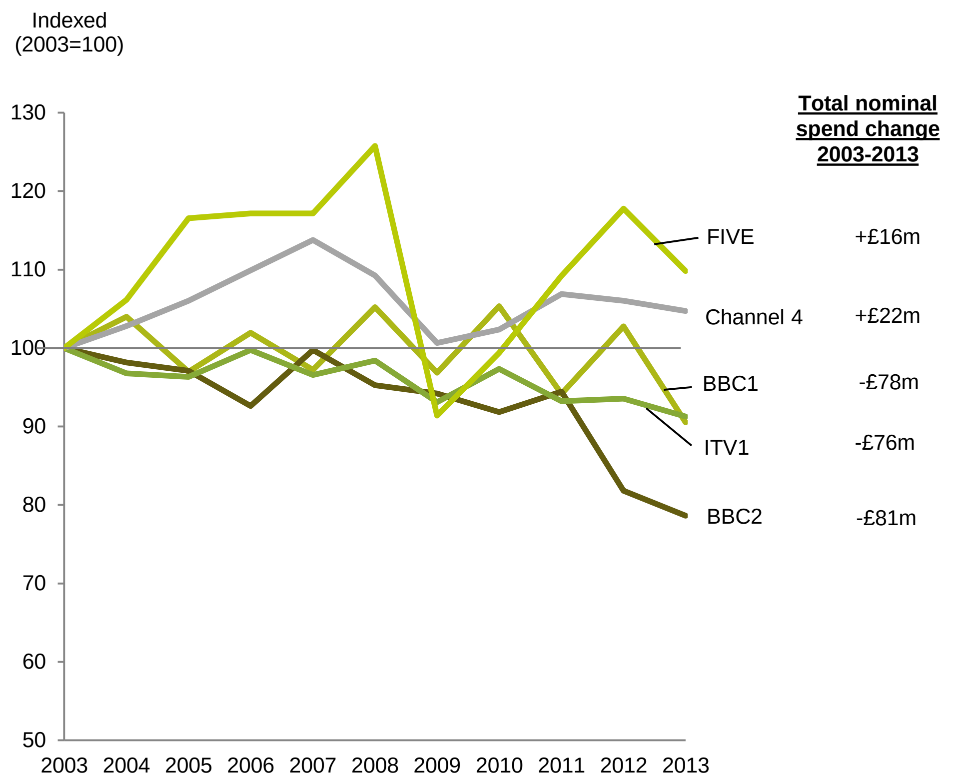
Long-term trends in PSB spending II

Prior to 2008, PSBs had been steadily increasing programme spend year-on-year; in 2009, they reduced spending considerably, and further decreases have taken place since

Indexed total programme costs for PSB main channels, 2003-2013



Indexed total programme costs for PSB main channels, by channel, 2003-2013



Note: Excludes regional programme spending
Source: Ofcom, Oliver & Ohlbaum analysis

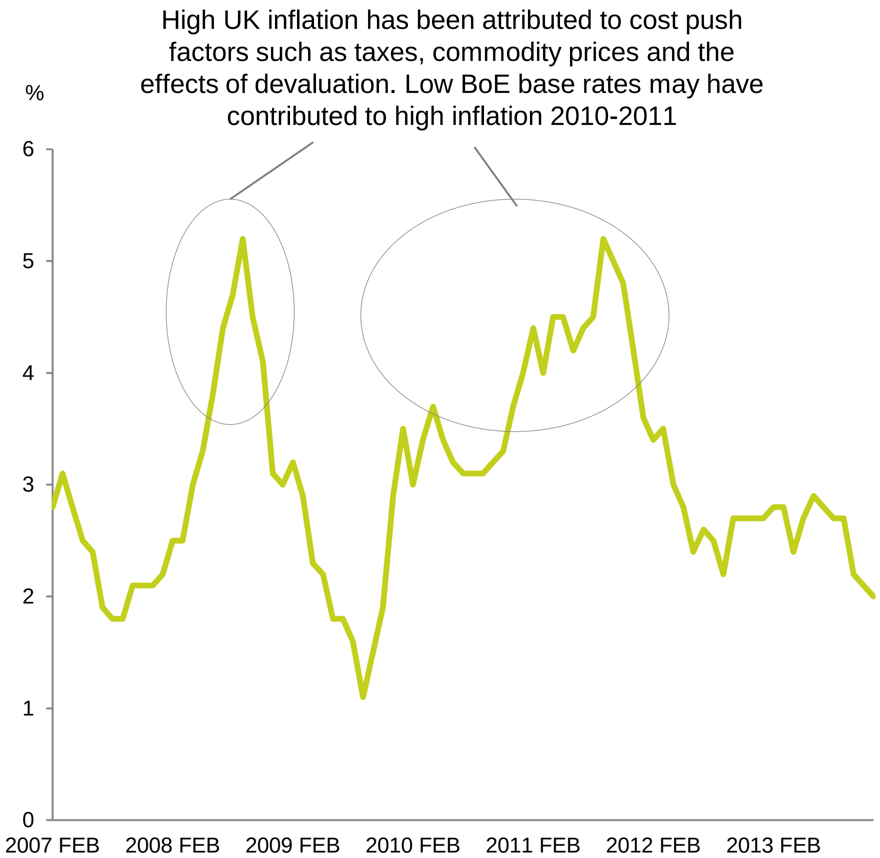
Introduction

Long-term trends in PSB spending III

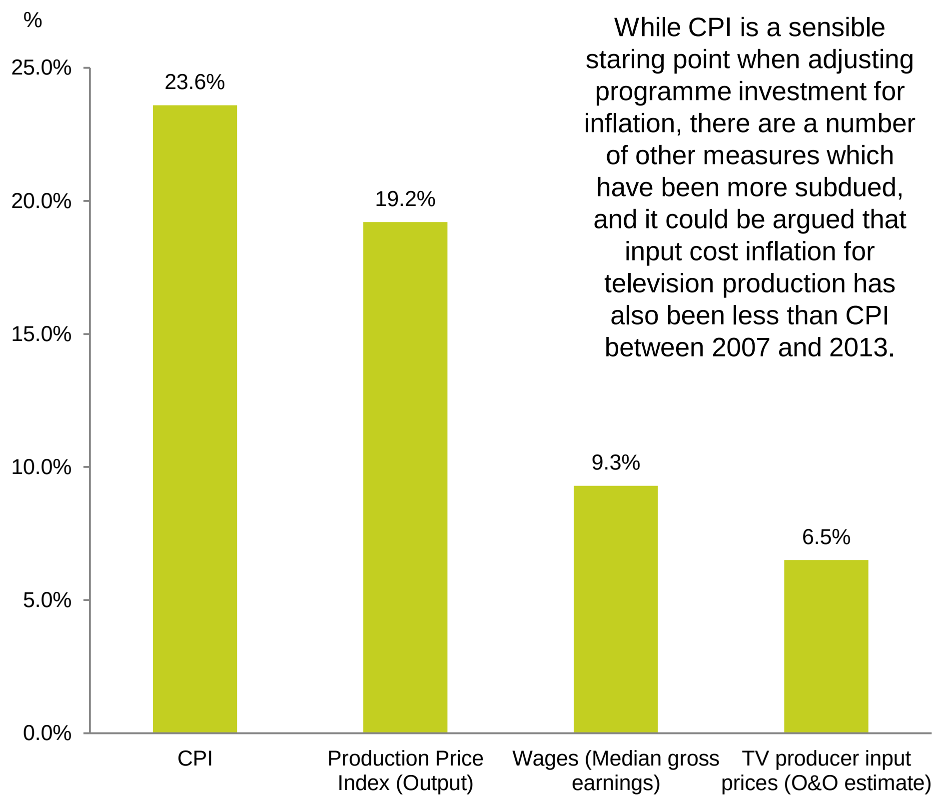
Ofcom uses CPI as a deflator, which has been high over the period…

… other measures of cost change have been more subdued

CPI: annual year-on-year percentage change (2007-2013)



Value of other deflators, Jan 2007 – Dec 2013



While CPI is a sensible staring point when adjusting programme investment for inflation, there are a number of other measures which have been more subdued, and it could be argued that input cost inflation for television production has also been less than CPI between 2007 and 2013.

Source: Ofcom, Oliver & Ohlbaum analysis

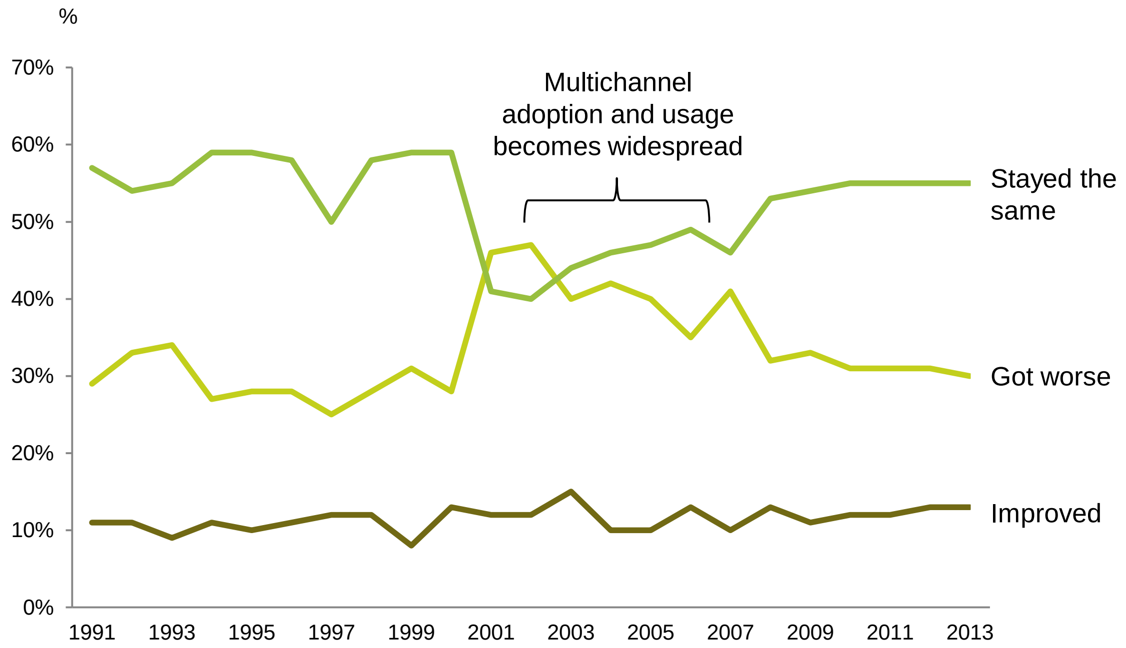
Introduction

Audience satisfaction

Despite decreased investment, audience satisfaction has remained broadly stable. However, it is possible that these metrics do not fully reflect programme quality.

Audience opinion on programmes over the past 12 months, 1991-2013

Do you feel that over the past year, television programmes have improved, got worse or stayed about the same?



Audience rating for delivery of PSB HIGH QUALITY characteristic: *it shows well-made, high-quality programmes*	**58**	**57**	**59**	**65**

Audience satisfaction is a good proxy for programme quality, but may reflect the overall quality of the schedule:

- **Audiences have greater choice:** access to multichannel, PVRs and on-demand services means audiences only watch programmes they like
- **Most viewers watch in peak hours:** maintained or increased quality of peak-time output could mask any reduced appreciation among day-time viewers

This report focuses on the cost of programmes, and does not capture any change in programme quality or perceived satisfaction.

Source: Ofcom, Oliver & Ohlbaum analysis

Introduction

Analysis framework

O&O Advisory

Our analysis covered the three ways originations investment can be reduced – Volume, Genre Mix and CPH – and within CPH, analysed the five sub-drivers we identified that could be affecting the cost-per-hour a broadcaster pays

Drivers		Description
A. Volume		Effect of overall reduction in output hours, controlling for the effect of genre mix and CPH changes
B. Genre Mix		Effect of shifting the output mix to cheaper genres, controlling for overall volume and CPH changes
C. Cost per hour	**1. Input prices**	Change in like-for-like spending on production inputs e.g. production staff wages or studio hours
	2. New funding	Co-production, producer contributions / margin squeeze and tax breaks
	3. Production. Efficiency and Input Mix	Changing programme-making techniques, e.g. shifting to self-shooting, or using a different mix of inputs, e.g. more extras and less CGI. While production efficiencies and input mix could in theory be regarded as separate – the former having no on-screen impact, and the latter resulting in observable changes to the finished programme, in practice, it proved difficult to distinguish between the two
	4. Scale effects	Shift to more returning strands over new strands to reduce R&D costs, or commissioning longer strands, are thereby lower cost per episode. In our analysis, Scale Effects are calculated as a subset of Production Efficiency / Input Mix
	5. Sub-genre mix	Shifting programme format to cheaper sub-genres, e.g. moving to low-cost, high-volume studio quizzes and gameshows rather than other forms of Entertainment show

Source: Oliver & Ohlbaum analysis

Introduction

Report structure

We examine and quantify each of the historic drivers of PSB content investment in turn, estimating their overall contribution where the exact value is unknown. We then consider the potential for each driver to contribute to further reductions in content investment, and the likely impact on programmes and genres.

Drivers of historic reduction in PSB content investment	Volume and Genre mix	Quantified precisely based on broadcaster returns
	Cost per hour	Total impact quantified based on broadcaster returns. Impact of individual drivers addressed in turn and estimated
Future outlook	Considered for each driver in turn	Potential for future contribution discussed
	Impact of continued reduction in investment	Considered in terms of programme quality. Case studies for drama and factual

Contents

Approach and methodology

Drivers of change in PSB content spending

Potential drivers of reduced content investment are set out below. Broadcaster returns analysis gave us a complete and accurate picture of Volume and Genre Mix impacts: within CPH, we used a battery of analysis methods to understand and, insofar as possible, quantify the impact of the five main drivers.

Drivers		Description	Inputs to Analysis					
			B'caster Returns	Pact survey	Interviews	Case studies	Programme Database	Published Research
A. Volume		Effect of overall reduction in output hours, controlling for the effect of genre mix and CPH changes	✓					
B. Genre Mix		Effect of shifting the output mix to cheaper genres, controlling for overall volume and CPH changes	✓					
C. Cost per hour	**1. Input prices**	Change in like-for-like spending on e.g. production staff wages or studio hours	Provides overall impact of CPH changes, but not detail on the relative importance of the 5 drivers of CPH changes	✓		✓		✓
	2. New funding	Co-production, producer contributions / margin squeeze and tax breaks		✓	✓			✓
	3. Input mix / prodn eff.	Reducing production specifications, e.g. fewer cameras, less CGI		✓	✓	✓		
	4. Scale effects	Shift to more returning strands over new strands to reduce R&D costs, or commissioning longer strands			✓	✓	✓	
	5. Sub-genre mix	Shifting programme format to cheaper sub-genres, e.g. panel shows rather than sitcoms			✓	✓	✓	

Source: Oliver & Ohlbaum analysis

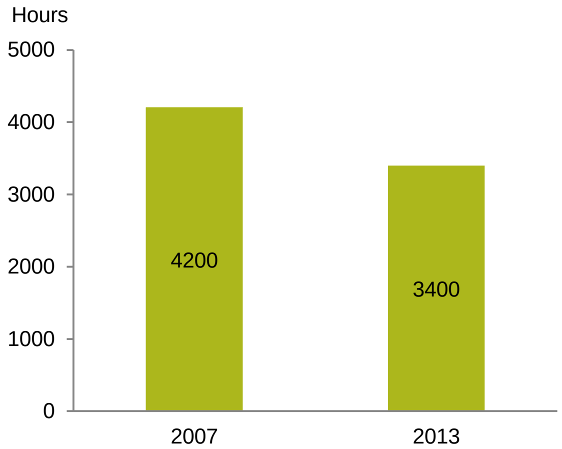
Approach and methodology

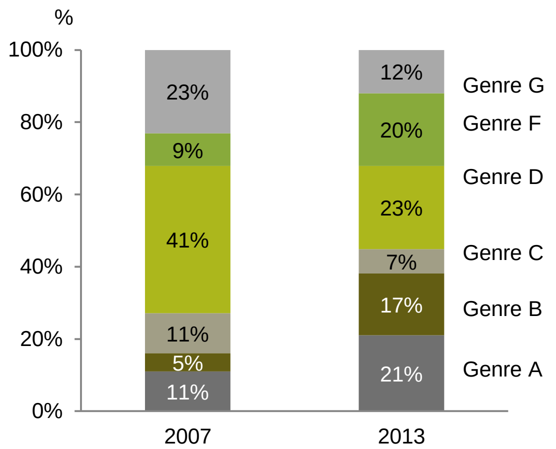
Broadcaster Returns

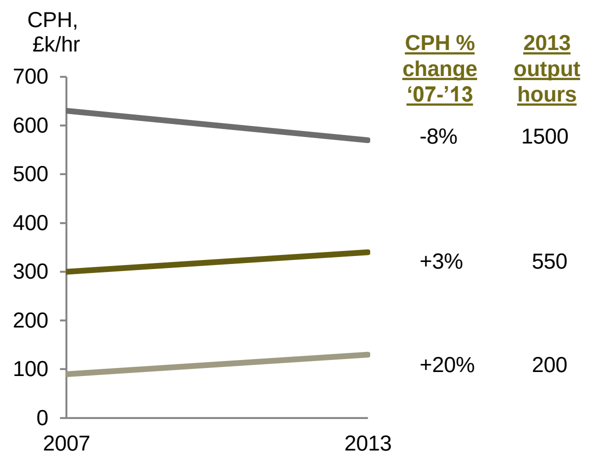
Broadcaster returns analysis quantifies the overall effect of the three major ways to change the level of originations investment in a given genre and day part – volume, genre mix and CPH – but does not provide insight on individual drivers of CPH change

Randomised values for illustration

A. Volume	B. Genre Mix	C. CPH
Illustrative: output hours '13 vs '07	Illustrative: proportion of output mix by genre, 13 vs '07	Illustrative: CPH by genre, 2013 vs 2007







	A. Volume	B. Genre Mix	C. CPH
Impact on spending calculated:	% Change in hours '07-'13 **x** Total 2007 spend	Change in output hrs for genre, less expected output given volume change **x** 2007 CPH	2013 output hours **x** 2007 CPH **x** % change in CPH '07-'13
Rationale:	Need to calculate effect of change in output hours assuming there has been no change in genre mix or CPH	Need to calculate the cost implications of shift in relative proportions of output by genre, assuming constant CPH overall volume	If volume/mix had not changed since 2007, what were the cost implications of a change in CPH

Genre mix and CPH spend change factors calculated by channel, genre and day part, giving 210 spend change factors (5 channels x 14 genres x 3 day parts) for genre mix and CPH. Volume spending changes calculated at channel and day-part level.

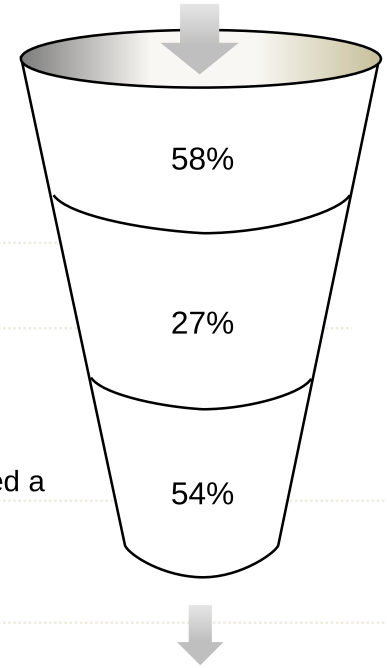
Approach and methodology

Pact survey

We issued a survey to Pact members, to help quantify the effect of changing input prices, new funding and production efficiency on CPH, and hence on overall content investment

Response to Pact survey

1. Survey invite issued to: **417**
2. % opening email: 58%
3. Of which % clicked on survey link: 27%
4. Of which % provided a response: 54%
5. **Total responses** **35**



Scope of the survey

- **Extent of squeeze:** How programme price squeezes reported by independent producers varied by genre / day part
- **Commissioners' attitudes:** Whether commissioners were willing to accept reduced programme specifications
- **Factors affecting CPH:** Which key factors drove a reduction in programme prices in the past and which could drive further reductions over the next 5 years:
  - Shift to cheaper formats within a given genre
  - Change in input prices
  - New sources of funding (co-production, deficit finance, tax credits)
  - Squeezed producer profit margins
  - Efficiency savings
- **Sub-genre mix:** Extent of shift in formats within genre, by genre, and the extent to which this shift was driven by pressures to save money vs responding to changing audience preferences
- **Input prices:** how typical market prices have changed over the period for production inputs
- Producers were also invited to contact us should they wish to provide any further details or insights

Approach and methodology

Interviews

O&O Advisory

We used a structured approach to our interviews in order to provide a consensus view, complemented by data gathered through our Pact survey and case studies.

Company Type	Company Name
Independent producers	All3Media Group
	Studio Lambert
	Company Pictures
	Objective
	Lion Television
	Zodiak
	Endemol
	Shine
	Dragonfly
	Remarkable
	Shed (inc Time Warner)
	TwoFour Group
	Fremantle
	Novel Entertainment
	Keo Films
	Sony
	NBC Universal
	Voltage

Company Type	Company Name
Broadcasters	BBC
	BBC Studios and Post Production
	Channel 4
	ITV (Broadcasting)
	ITV Studios
Others	Pact

- In addition to the 24 companies and groups we spoke to through our interview programme, we reached a large number of independent producers (35) through our online survey.
- In all cases, we discussed the possibility of using interviewees' programmes as case studies. Some chose to share data with us, while others decided not to, largely due to limitations on their time.
- We approached a number of independent producers to request case studies only, rather than full interviews, so as not to draw too heavily on their time. The complete list of those agreeing to share data with us is set out on the next slide.

Approach and methodology

Case studies (programme budget analysis)

The case studies are key to understanding changing input mix, and support calculation of the impact of input price changes, scale effects, sub-genre mix changes, and production efficiency

Company Type	Company Name	Number of case studies	
		Programmes	Series
Independent Producers	Company	2	4
	Dragonfly	2	9
	Fremantle	5	10
	Nine Lives	1	2
	Remarkable	3	14
	Shed	2	4
	Shine	11	16
	TwoFour	2	4
	NBC Universal	1	5
Broadcasters	ITV and ITV Studios	3	9
	BBC / BBC Studios	8	32
	Channel 4	3	5
TOTAL		**43**	**114**

We aimed for case studies covering key genres, with a focus on longer-running strands. Case studies help us to validate interview findings and examine:

- **Input prices:** the proportion of production budgets, by genre, allocated to specific cost lines
- **Scale effects:** For multi-year strands, the typical cost savings for returning series
- **Sub-genre mix:** Comparing costs for different programme formats
- **Input mix:** Comparing long-running strands and exemplars of programmes of specific genres across years to understand how relative input mix has changed
- **Production efficiency:** evidence for reduced spending on specific line items over and above any price changes in market rates, where output remained the same

We have coverage of all major genres for originated commissioning:

- Drama: 21% of titles
- Factual: 36% of titles
- Entertainment & Comedy: 17% of titles
- Factual Entertainment: 26% of titles

Approach and methodology

Programme database and published research

O&O Advisory

Analysis of O&O's programme database and published research, including previous O&O studies, provided a foundation for calculating scale effects, sub-genre mix and new sources of funding

Source	Description	Use for data
O&O / BARB / Attentional	O&O Programme Database: a database of every programme broadcast 2007-2013, coded for numerous attributes	▪ **Scale effects** − New vs returning: the proportion of returning series by channel by genre − Series length: the average number of hours per strand ▪ **Sub-genre mix:** shifts in commissioned formats by channel by genre
O&O / Pact	Independent Production Sector Financial Census and Survey	▪ Independent producer margin squeeze ▪ Independent producer reported deficit finance and co-production funding
Office for National Statistics	Annual Survey of Hours & Earnings	▪ Used as comparator for wage inflation data provided by Pact survey
BFI	Research & Statistics Report: Film, high-end, animation programmes and video games production in the UK	▪ **Tax credits** for high-end television production ▪ **Co-production** funding in high-end television
IMDB Pro	Starmeter: actor / actress ratings	▪ **Input mix:** for drama, analysis of quality of talent used in programmes (referring to O&O Programme database for output by strand)

Approach and methodology

Linking CPH drivers to the macro story

Based on the broadcaster returns, we know the overall impact of change in CPH, we have estimated the relative importance/scale of each sub-factor by combining insights from our interviews, the Pact survey, and our case studies.

Drivers		Planned approach for calculating cost impacts		
		Methodology	**Description**	**Potential Limitations**
Volume		Based on broadcaster returns analysis	Using the broadcaster returns, we can **accurately quantify** the impact of changes in volume, genre mix, and CPH.	None
Genre Mix				
CPH	**1. Input prices**	a) Calculate line-by-line changes in market prices based on consensus from Pact survey b) Sense test against unit prices seen in our case studies c) Combine with proportions of budgets allocated to each line, by genre, from case studies	The Pact survey estimates of line-by-line cost changes are from a reasonably-sized pool of respondents. Sense checking via our case studies helps to validate our estimate.	Accuracy of survey respondents and representativeness of case studies
	2. New funding	a) Co-production, deficit finance and indie margin from Pact survey and previous O&O Pact Censuses b) Tax credit data from BFI research	Using available data allows us to make a **good estimate** of the overall impact on PSB investment in content.	Accuracy of estimates of producer deficit finance and co-production funding
	3. Input mix / prodn eff.	a) Estimate overall programme-making cost increase from case studies, and deduct cost increase expected from input price changes b) Triangulate with interview and case study insights	Comparing prog. cost changes as predicted by price change alone with actual prog. cost changes provides an **estimate** of the combined impact of input mix, production efficiency and scale effects.	Accuracy of values reported in Pact survey / representativeness case studies
	4. Scale effects	a) Take assumption about proportion of Input Mix / Production Efficiencies driven by Scale Effects b) Triangulate with extent of shifts to returning series / more hours per series seen in O&O Programme Database and insights from case studies and interviews	Scale effects have played a part in cost savings, though it is **challenging to quantify** – we heard in our interviews that the overall impact is likely to be small.	Difficulty in generalising due to uniqueness of programme negotiations
	5. Sub-genre mix	a) Determine extent of shifts between formats from O&O Programme database and Pact survey b) Estimate cost impact of this from case studies / interviews c) Compare with balancing figure needed to reach overall figure for CPH figures as determined from PSB returns	We were able to demonstrate sub-genre mix changes in **day-time Entertainment & Comedy**, and estimate the cost impact of this, and extrapolate this finding to other genres	Representativeness of case studies, inconsistencies in source data used to compile Programme database

Further detail on how we developed our estimates for the five CPH factors are included within the relevant section later in the report

Contents

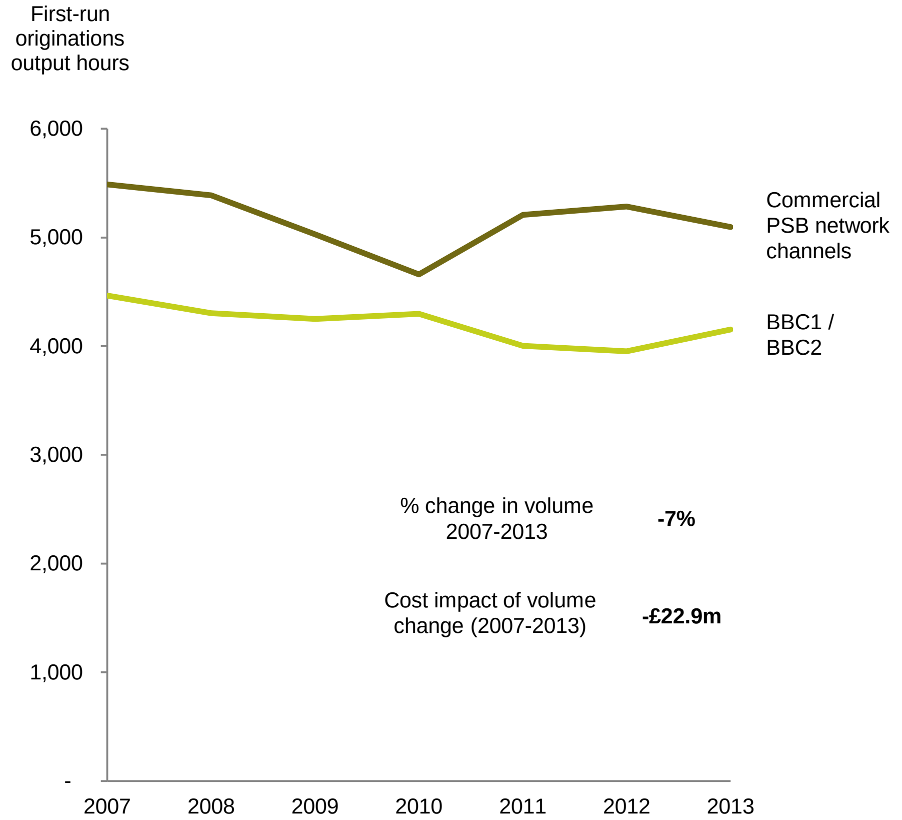
Change in volume and mix, 2007-2013

Output volume

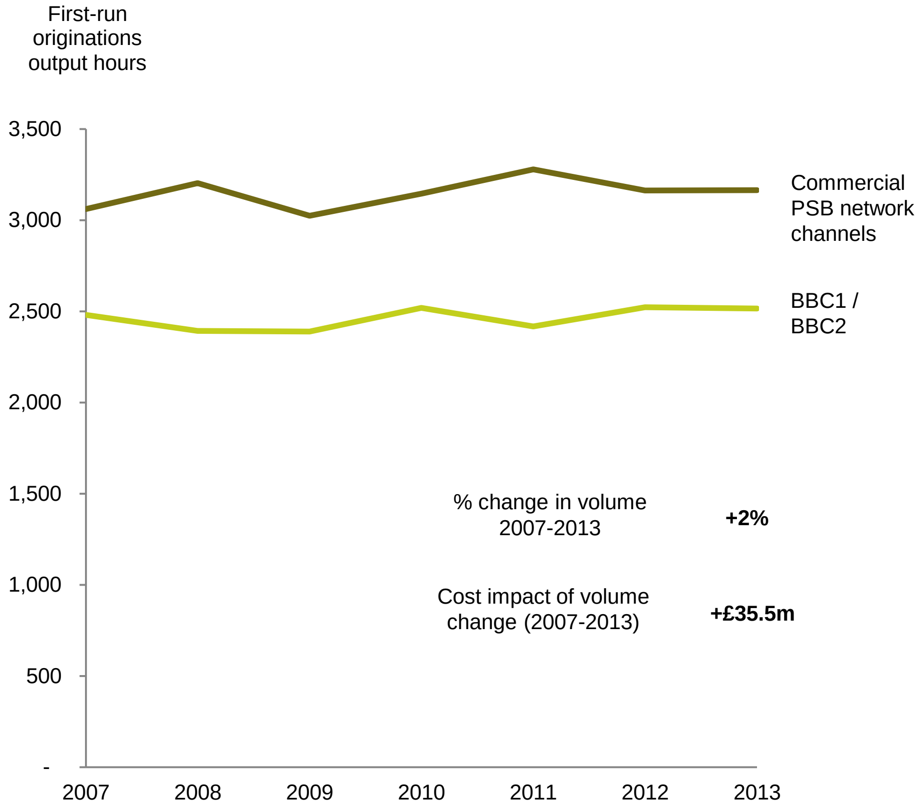
Ignoring the effect of CPH and genre mix changes, the impact of changes in originations output hours volume was a shift in spending from daytime to peak, with a net overall spend increase of £12.6m

First-run originations output volume changes and implied impact on originations spending, 2007-2013

Day



Peak



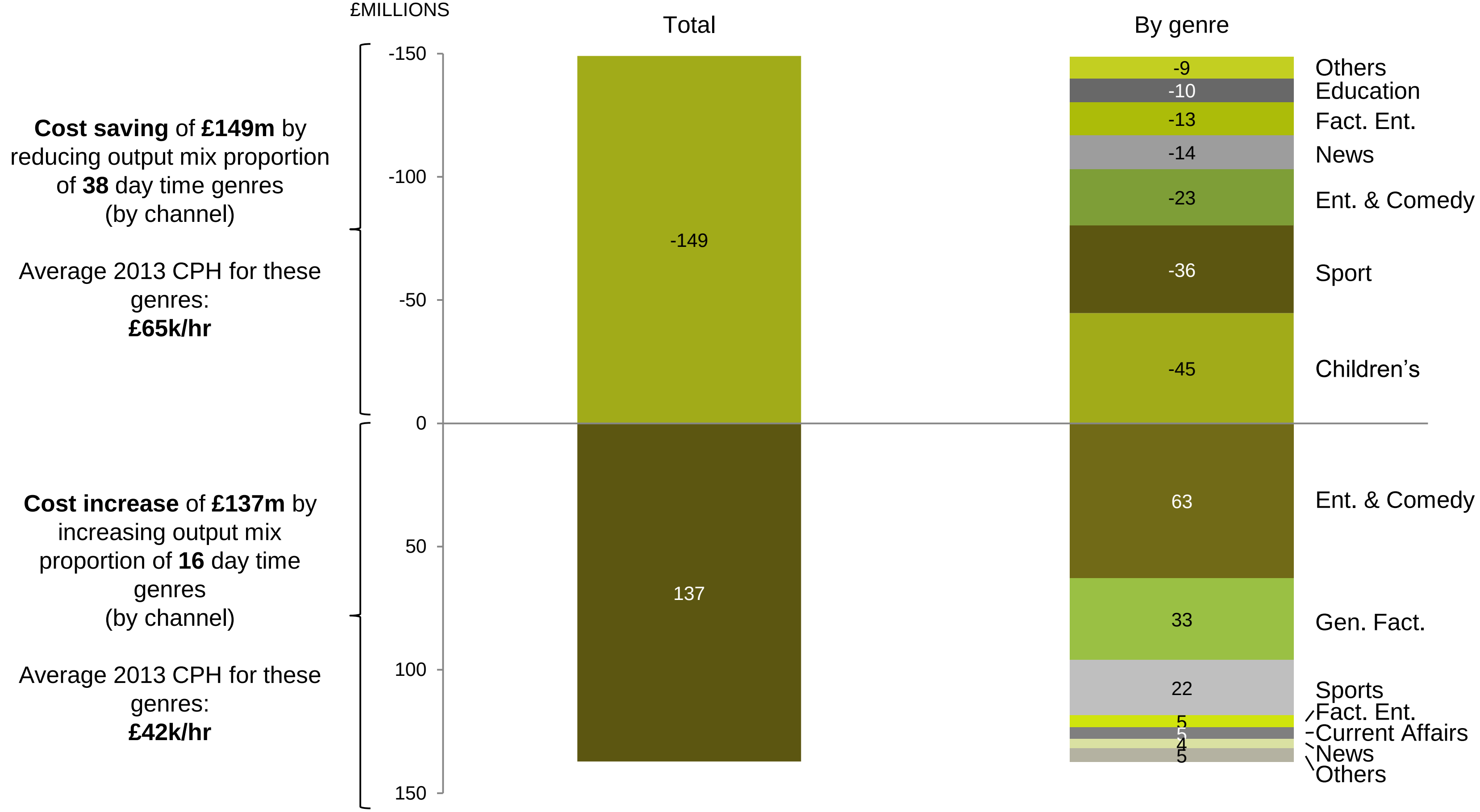
Note: Commercial PSB network channels are ITV1, Channel 4 and FIVE
Source: Ofcom, Oliver & Ohlbaum analysis

Change in volume and mix, 2007-2013

Genre mix: daytime

Ignoring the effect of CPH and overall changes in volume, changes in genre mix for daytime programming has caused a net shift toward cheaper genres, and a cost saving of £12m

Cost impact of changes in relative proportions of output by genre, daytime programming, 2007 vs 2013



Note: A description of the genres and example programmes is included as an appendix

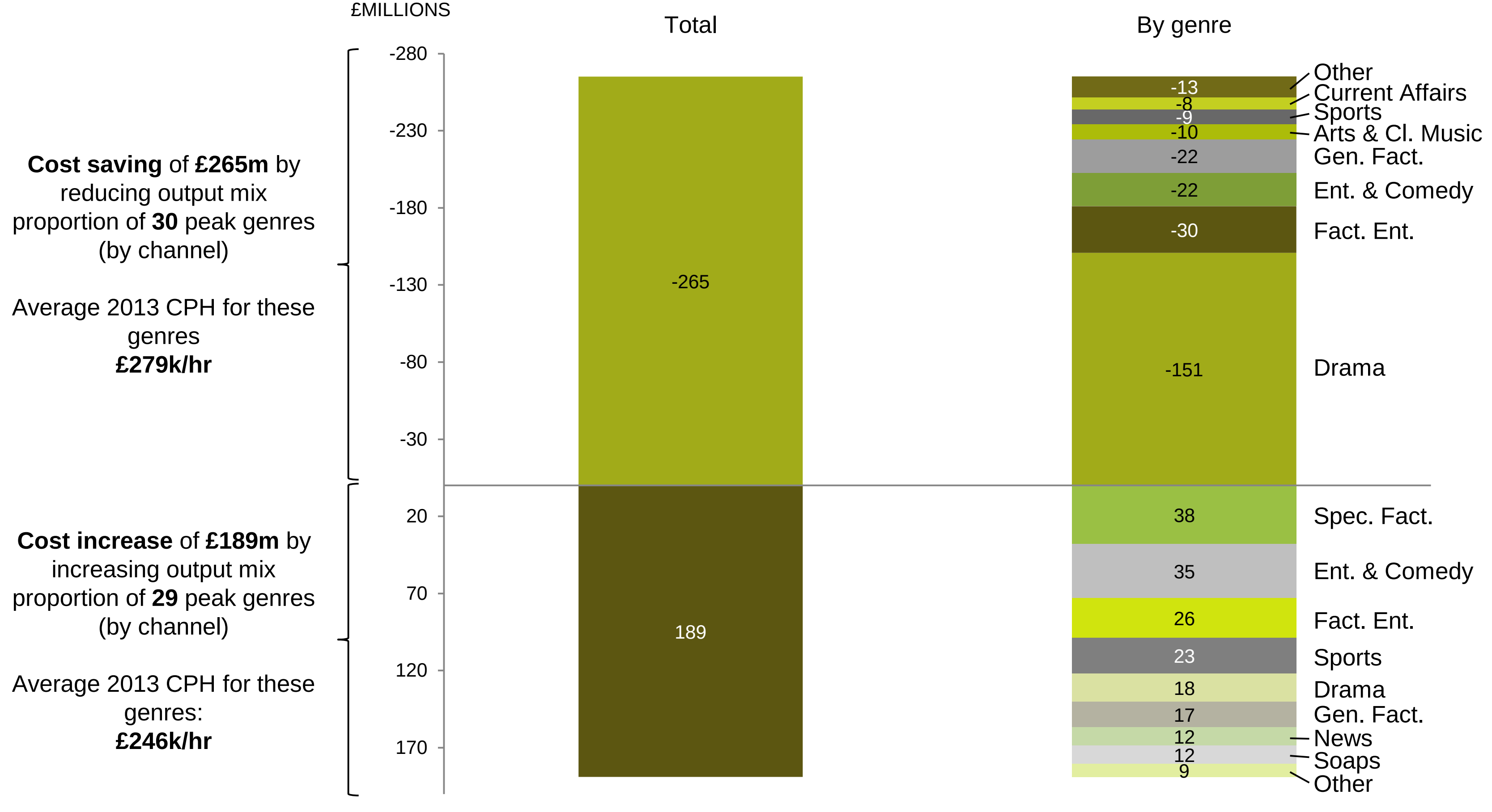
Source: Ofcom, Oliver & Ohlbaum analysis

Change in volume and mix, 2007-2013

Genre mix: peak time

The output mix in peak time has seen an even greater shift towards commissioning proportionately more hours of lower-cost genres, realising a net saving of £76m

Cost impact of changes in relative proportions of output by genre, peak time programming, 2007 vs 2013



Note: A description of the genres and example programmes is included as an appendix

Source: Ofcom, Oliver & Ohlbaum analysis

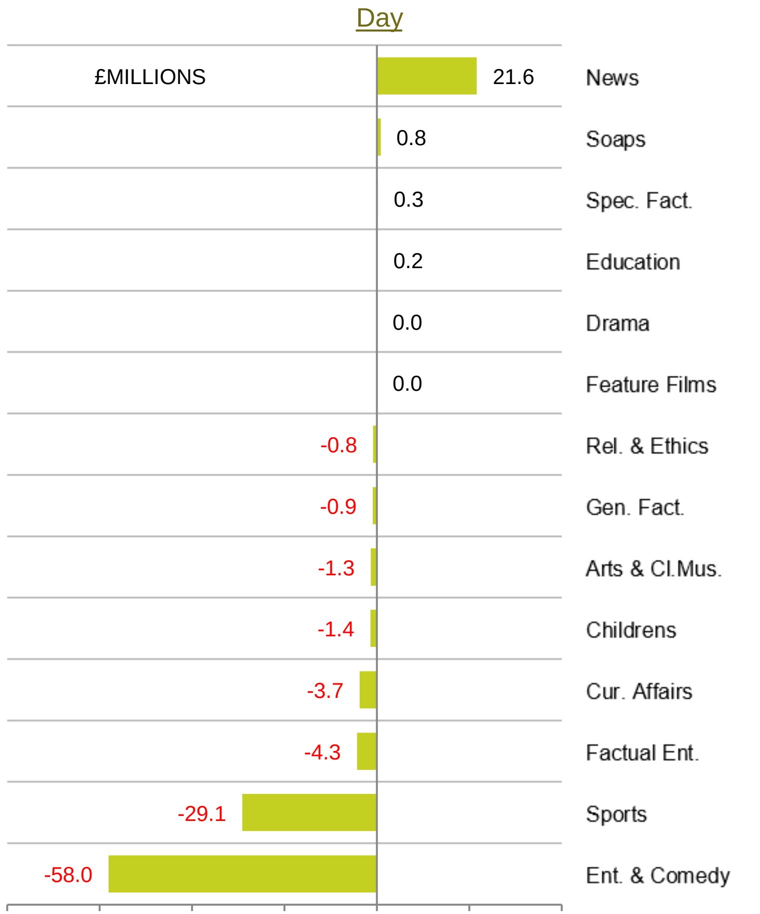
Contents

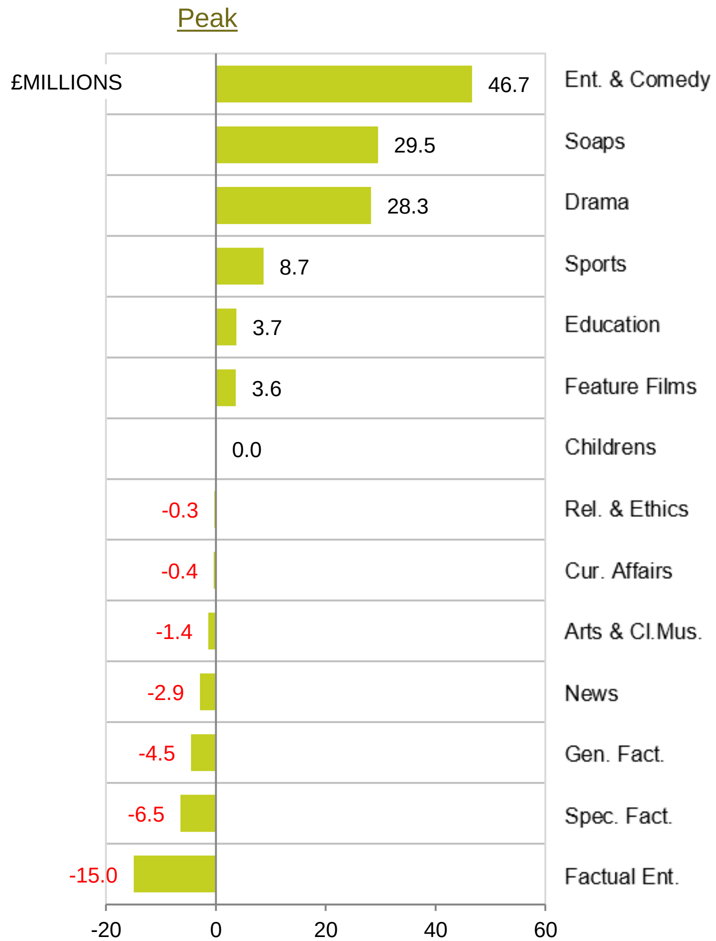
Change in CPH, 2007-2013: Overall

Savings by genre / day part / channel from changes in CPH

Changes in CPH created a net saving of £76.6m in daytime, but there was a net increase in peak spending of £89.4 as a result of higher CPH: a total net impact of a £12.8m spending increase

Impact of changes in day CPH, by genre (2007 vs 2013)





Our analysis of drivers for changes in CPH focuses on the genres, by channel and day part where reduction in CPH caused a significant spending impact (>£5m).

Key genres are:
- **Drama**
- **Fact Ent**
- **Gen Fact**
- **Ent & Comedy**

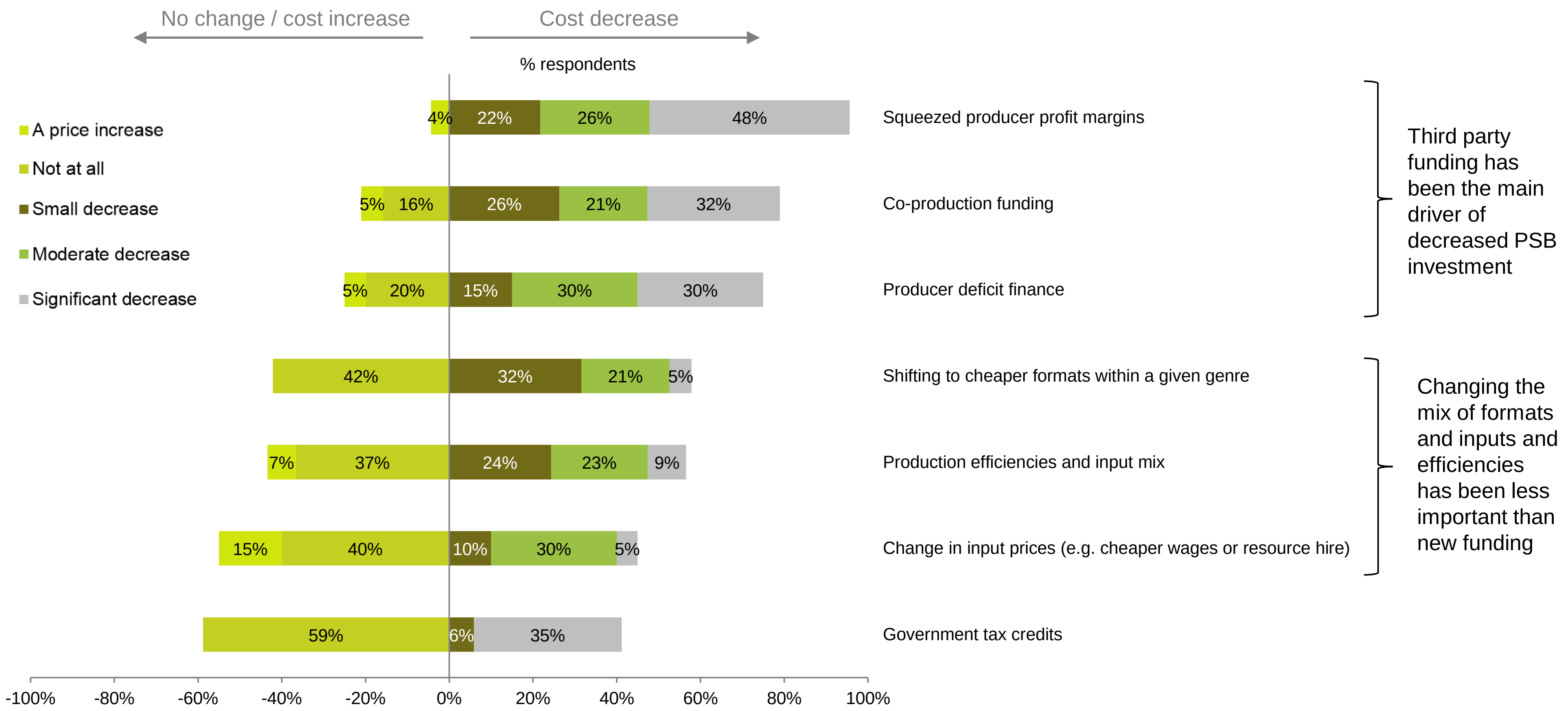
Source: Ofcom, Oliver & Ohlbaum analysis

Change in CPH, 2007-2013: Overall

Historic drivers of change in CPH: Pact survey

Producers reported squeezed profit margins and increased third party funding have been the main drivers of reduced CPH, while cheaper formats and production efficiencies contributed to a lesser extent.

Main drivers of historic reduction in CPH, Pact survey respondents



Note: n=35
The impact of production efficiencies and input mix, are split out in more detail on slide 55.
Source: Pact, Oliver & Ohlbaum analysis

Change in CPH, 2007-2013: Overall

Estimated impact of change in CPH on programme investment

We know from our broadcaster returns analysis that the net impact of change in cost per hour was a £13 million increase in content investment; input prices was the factor increasing the level of spending, while other efficiency factors reduced it

Estimated impact of new sources of funding on production spending, 2007 vs 2013

Driver of change in CPH	Estimated impact, 2013 vs 2007	Comments
Input prices	**+ £142 million**	This is based on a weighted average increase of 6.5 per cent in input prices between 2007 and 2013. This is derived from our case studies and based on the proportionate split of budgets across cost lines.
New sources of funding	**- £70 million**	Estimate assumes £20m of £60m co-production funding, and none of the tax break funding would otherwise have been spent by PSBs (slide 49). We estimate a £50m margin squeeze on independent producers based on net margin figures.
Input mix and production efficiency	**- £28 million**	The net impact of these three drivers is the £59m balancing figure not explained by the more quantifiable drivers of change in CPH. • **Input mix and production efficiency:** identified by producers as the most important drivers of historic CPH savings (slide 55) • **Scale effects:** Some evidence from the Programme Database and case studies, but interview suggest this has had a small impact, since it is not new. • **Sub-genre mix:** Using our case studies, we will establish an estimate of the average cost per hour of key sub-genres. We will then link to changes in the number of hours of each sub-genre identified from our Programme database analysis.
Scale effects	**- £7 million**	
Sub-genre mix	**- £24 million**	
TOTAL:	**+ £13 million**	Based on broadcaster returns analysis, we know changes in CPH facilitated a net saving of £13 million

Note: the supporting evidence and detailed methodology underpinning these estimates is set out on the slides which follow

Contents

Input prices

Interview findings: Talent

While talent outside of the top tier has been broadly flat, there has been increased pressure elsewhere driven by commissioners becoming more risk averse, and increased foreign investment using a fixed resource pool

Talent

On-screen: increased rates for top talent

- Top tier talent costs have increased since 2007 as commissioners have become more risk averse, increasing demand for top talent who guarantee an audience.
- This is particularly the case in comedy/entertainment and drama where talent has the biggest draw and is most important to audiences.
- In drama, top tier talent costs have increased as UK television has to compete with foreign producers and Hollywood for the biggest names.
- Outside of the top tier, talent costs have been broadly stable for the past 5 to 7 years; commissioners and producers have been able to hold down prices due to large pool of talent wanting to work in the industry.

Off-screen: slight increase across the board

- Director and producer costs have saw slight increases across all genres between 2007 and 2013 – though this has been broadly flat or reducing in real terms.
- However, as for on-screen talent, there has been some more rapid increases for off-screen talent, brought about by increased demand for a fix pool of writers, directors, and producers
- In recent years, this has been most prominent in drama, driven by the availability of tax breaks, which has driven international competition for UK off-screen talent.

Input prices

Interview findings: Production staff

Production staff costs increased relatively slowly over most of the period. More recently, there has been increased upwards pressure on rates due to increased demand from new entrants, driven, in part, by tax breaks for drama

Production staff

There is little difference by genre and day part

- With the exception of off-screen talent, such as writers and directors, the unit cost of production staff is broadly consistent regardless of genre or day part.
- The difference in cost derives from the level of experience required, with some genres requiring more experienced production staff than others.
- Rates increase with experience, and some genres/programmes require more experience.

Rates have increased due to increased demand

- Supply of production staff is fixed in the medium term and there has been increased demand due to increased content investment from pay TV providers such as Sky, which has been investing heavily in drama, as well as international platforms such as Netflix.
- The tax breaks available in drama have also contributed to the increased demand for production staff, as well as a willingness to pay higher rates in some cases.
    - Increasing day rates paid to production staff is a quick way to push a programme budget into the price level which will qualify for a tax break.
    - Many production staff will work across multiple genres, so the increased demand for drama effects the rates expected by and paid to production staff across all genres – though drama was impacted first.

Input prices

Interview findings: Studios and Equipment

Unit costs of cameras and filming equipment are likely to have come down, in real terms, over the period, due to advances in technology.

Studios and Equipment

Little variation by genre and day part

- While the use of studios and other recording equipment varies by genre, resources are generic and the unit costs subject to the same cost pressures.
- Scope to change the input mix varies by genre, for example, factual programmes are more likely to benefit from the emergence of new formats due to technological changes in equipment; we examine changes in input mix separately.

Rates have increased slightly

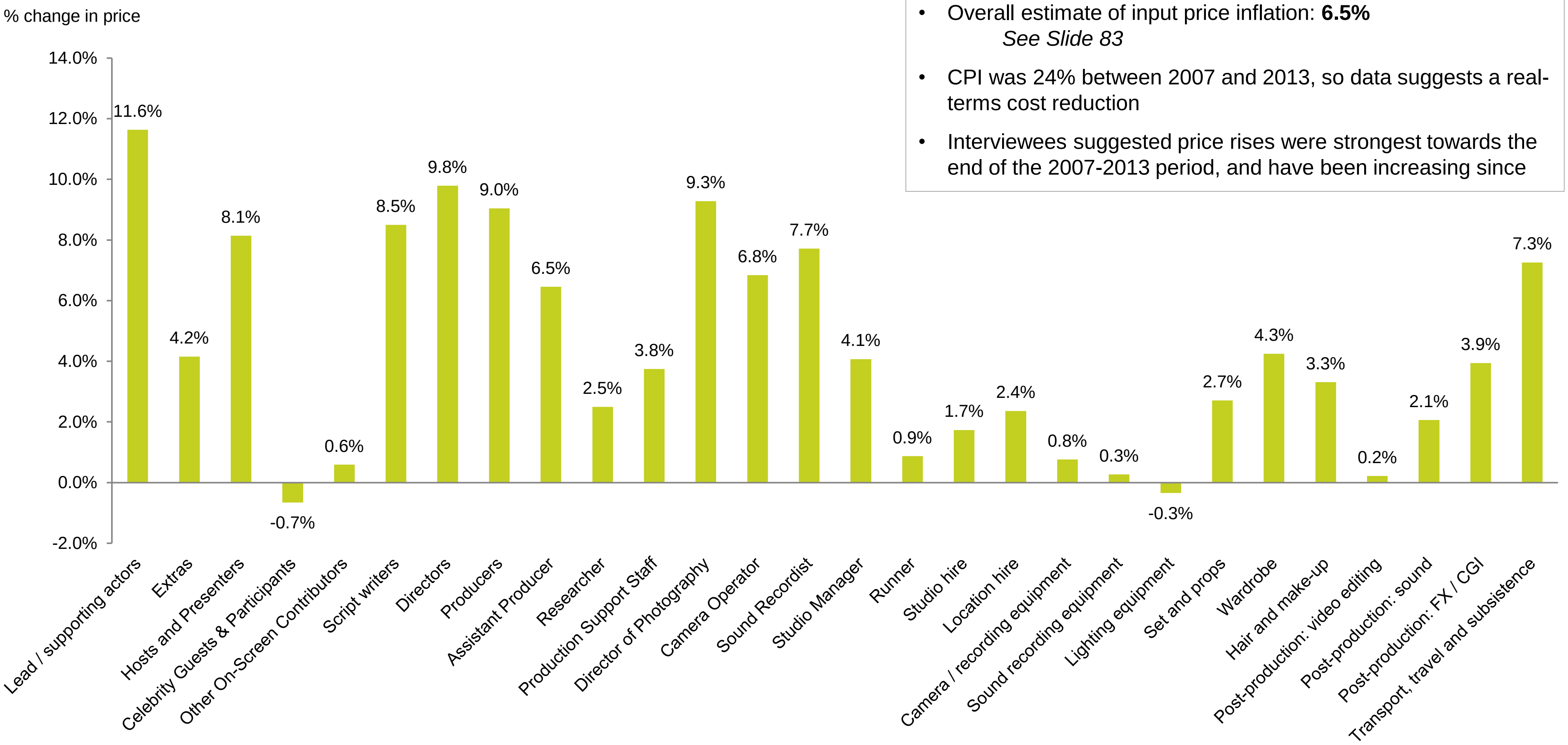
- As for production staff, there has been some upwards pressure on the unit cost of studio time, driven by increased demand from foreign producers and new UK entrants.
- At the same time, there has been a reduction in the supply of UK studio space, as the BBC's TVC has undergone redevelopment – this is likely to change in the future as TVC comes back into play, and the redevelopment/expansion of Pinewood is completed.
- Overall, for most of the period, the increase has been relatively subdued; buoyed in more recent years by the impact of UK tax credits on foreign investment.

Input prices

Pact survey

Based on our Pact survey, we have estimated price inflation for each key line in the production budget. We combine this with case study analysis of typical spend against each line item to calculate overall TV input price inflation

TV input price inflation 2007-2013 for individual cost line



Comments

- Overall estimate of input price inflation: **6.5%**
  See Slide 83
- CPI was 24% between 2007 and 2013, so data suggests a real-terms cost reduction
- Interviewees suggested price rises were strongest towards the end of the 2007-2013 period, and have been increasing since

Note: n=35
Source: Pact, Oliver & Ohlbaum analysis

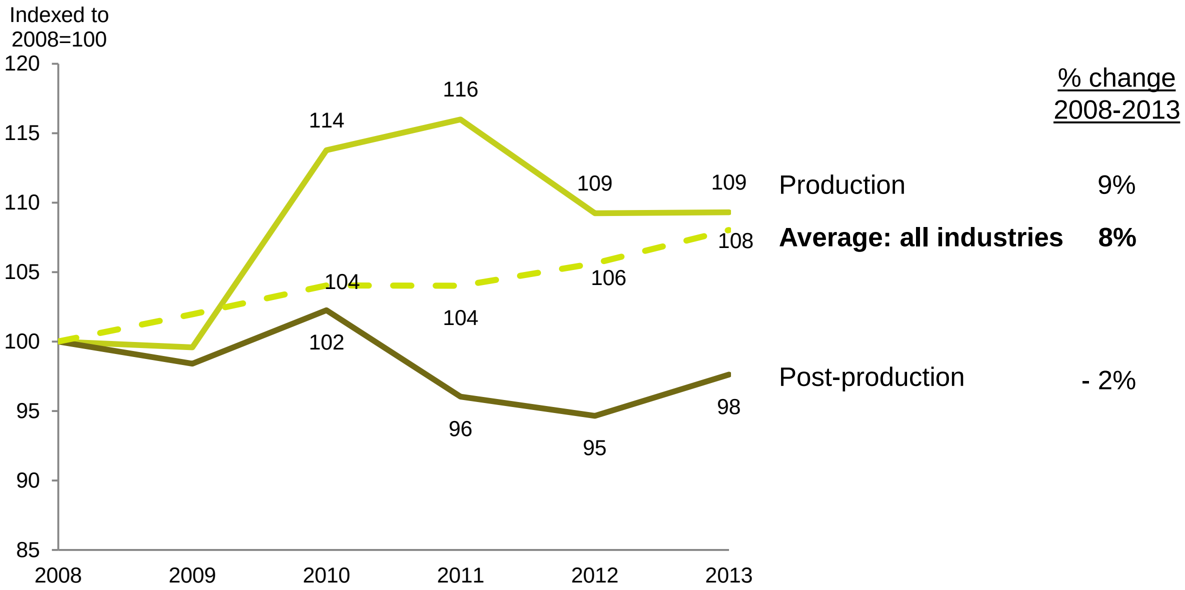
Input prices

Secondary data: Wages

There are sources for secondary data available on wage changes in television, but none without significant limitations, so we have based our analysis primarily on the Pact survey data

ONS Data

Nominal average weekly wages in television and video industries, 2008-2013



Limitations:

- Due to changes in SIC code classification, it is not possible to extend this analysis to 2007
- Conflation with non-TV "video industries", particularly film
- Lack of granularity

Televisual Pay Survey Data

Wage changes in select TV roles, 2010-2013

	2010 (£k)	2013 (£k)	% change
Director	67.7	58.2	- 14%
Producer	73.1	53.3	- 27%
Assistant Producer	39.8	37.9	- 5%
Edit Assistant	18.8	18.0	- 4%
VFX Artist	42.0	34.0	- 19%
Dubbing Mixer	43.9	52.3	19%
Runner	15.5	15.0	- 3%
Production Manager	36.7	30.3	- 17%
Camera Operator	38.9	30.0	- 23%
Exec. Producer	63.3	93.5	48%

Limitations:

- Sample selection bias
- Lack of availability of data throughout analysis time period (2007-2013)
- Incomparability of data: inconsistent role types and definitions, inconsistency in reporting broadcast/indies salaries separately vs industry average

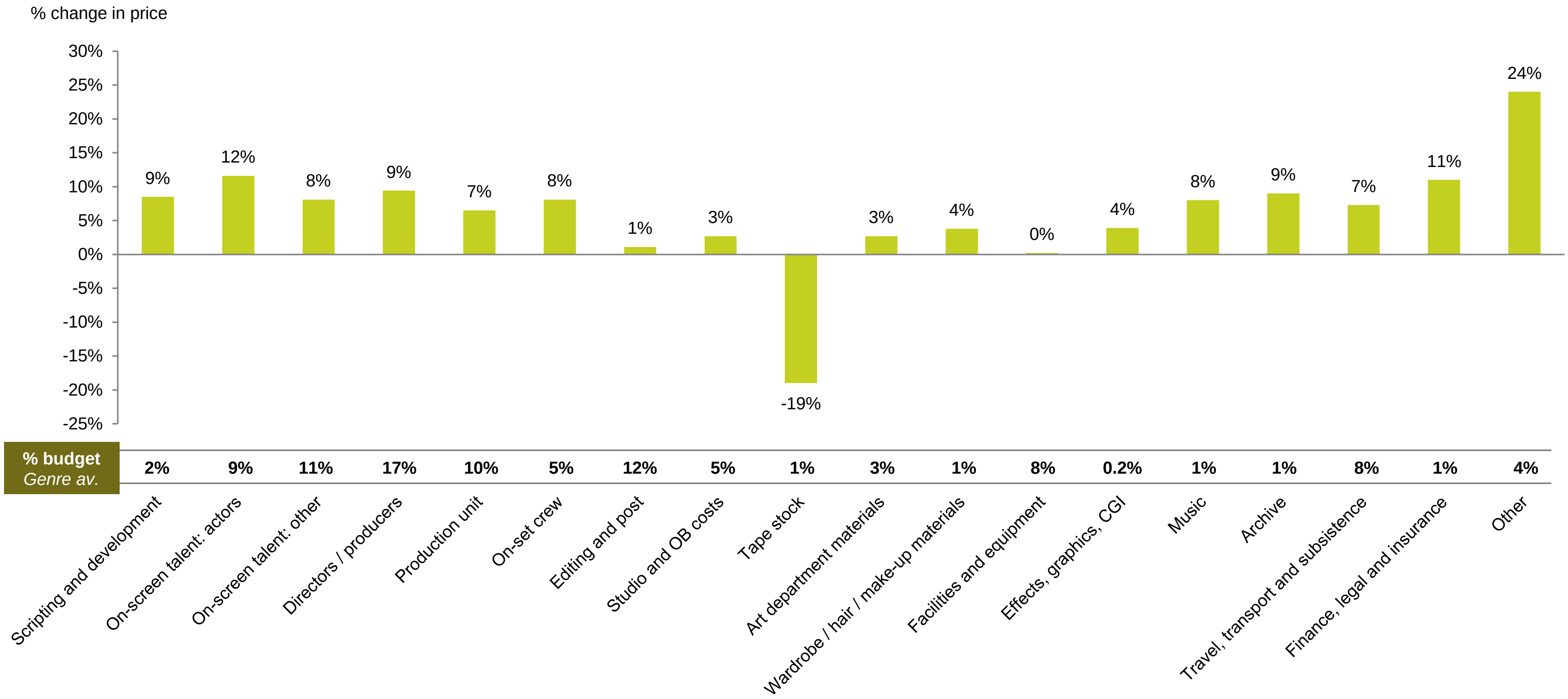
Source: ONS, Televisual, Oliver & Ohlbaum analysis

Input prices

Price inflation by cost line

Combining Pact survey data with data from our cases studies provided our overall view of cost changes by budget line, and the relevant weighting of each budget line. The cost line weighting did not vary significantly between genres.

TV input price inflation 2007-2013 for individual cost line



Note 1: n=35
Note 2: % budget is a flat average across all genres for which we gathered case studies: Factual Entertainment, General Factual, Drama, Entertainment and Comedy. This average is shown here for illustrative purposes, we calculated the cost inflation separately for each genre in our analysis
Source: Pact, Oliver & Ohlbaum analysis

Input prices

Estimated impact on programme investment

Combining our interview findings, Pact survey, and case studies provided an informed estimate of the impact of input prices. Between 2007 and 2013 we estimate increased input prices led to increased programme investment of £142 million

Pact survey: inflation by line type

Our Pact survey provided insight into how prices changed for different programme inputs between 2007 and 2013 (see slide 40).

But did not tell us the proportion in which these inputs contribute to typical programme budgets.

Case studies: budget proportions

Our case studies allowed us to sense test the price changes reported in our Pact survey for different budget lines.

We used the case studies to understand the proportions in which different cost lines contribute to programme budget – thus providing a means of apportionment of the reported cost increases to programme investment

Verification: interview findings

Our interview findings agreed with the findings of our survey and case studies in confirming that input prices have increased, but less rapidly than CPI.

Interviewees advised against using rate cards from equipment providers to assess price changes, on the grounds that producers rarely pay stated prices.

Using our case studies, we split programme budgets into 18 areas of expenditure, mapping cost lines reported on in our Pact survey to those areas.

We used this to calculate weighted cost inflation for each of the genres analysed: factual (7%), factual entertainment (6%), entertainment & comedy (5%), and drama (8%). For genres not covered by our case studies we used the average split.

We weighted these genre-level cost inflation figures to produce an overall originations cost inflation figure of **6.5%,** which was applied to expected 2013 originations spending (after adjusting for volume and genre mix) of £2,175m

Estimate

£142m increase

Limitations:

- Producer estimates of cost inflation may under-state inflation due to difficulties remembering historic costs

Note: More detail on our calculations is included as an appendix

Contents

New sources of funding

Interview findings

In general, producers have become more reliant on third party funding across all genres. This essentially means that they have to consider two potential customers when pitching programme ideas.

Deficit finance and co-production

There has been increased reliance on deficit finance

- Previously deficit finance was only used in drama and comedy, but increasingly, other genres such as factual are using deficit finance to top up their budgets.
- Broadcaster expectations of producers to provide the funding have changed – though this differs by broadcaster – and deficit finance is the norm.
- For returning strands, broadcasters know what indies make on the back end, so can drive a hard bargain

Deficit finance may risk plurality of ideas, and the Britishness of content

- Given the increased financial risk taken on by producers, only the biggest producers which are able to diversify across a relatively large portfolio, can afford to compete for commissions.
- Producers need to consider two customers when making programmes – which could remove the Britishness of some programmes.

Tax breaks

- Additive to investment which would have been made anyway – tax breaks help producers deliver against their original programme ambition, rather than helping make cost savings per se

Producer margin

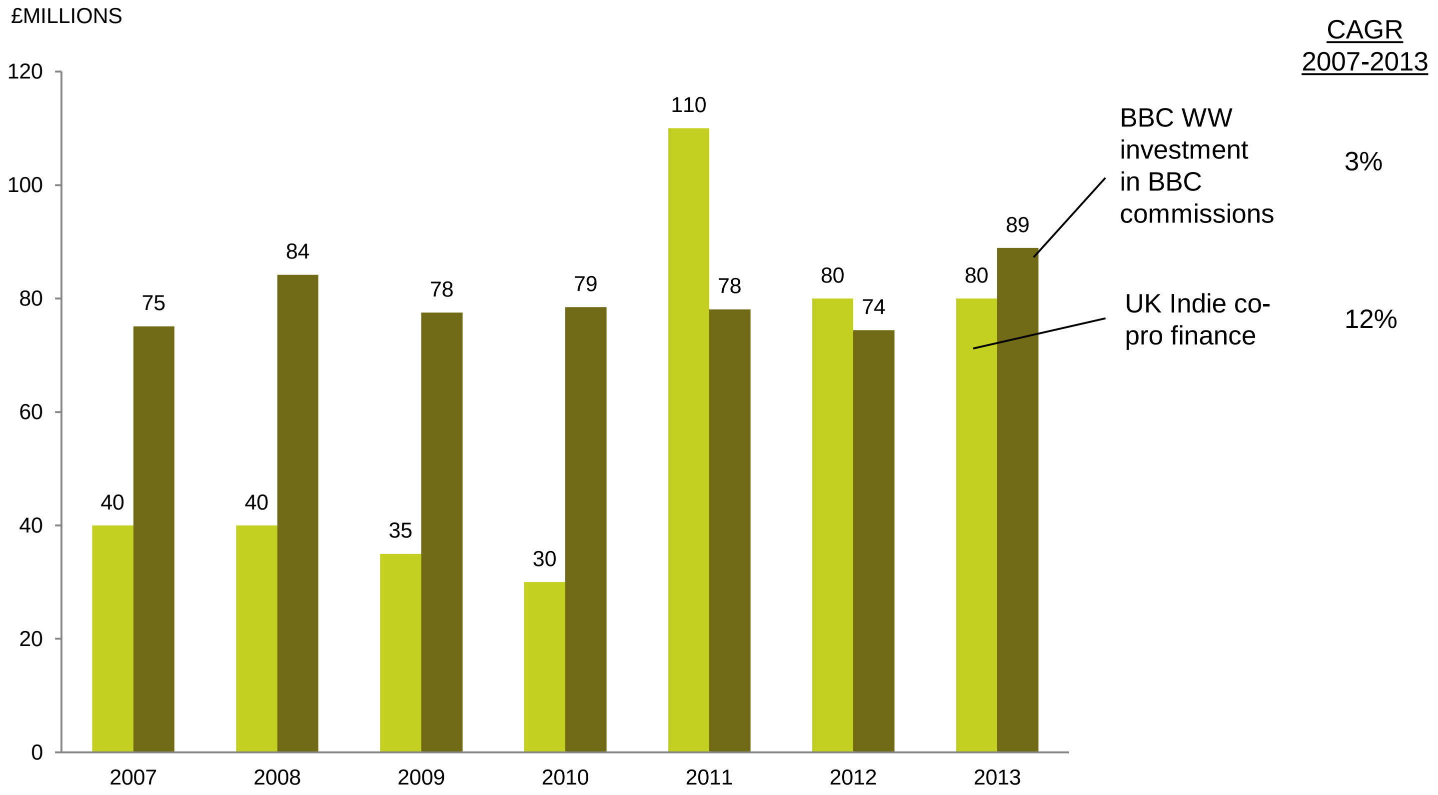
- Commissioners put pressure on programme prices, to either hold flat or decrease.
- Input costs have increased and, with returning strands, spec and talent costs also tend to increase over time.

New sources of funding

Co-Production

High-end co-productions have been increasing in number – whether made in the UK or overseas – providing a new source of funding for flagship drama and specialist factual programming, in particular

Value of co-production finance from independent producers and BBC Worldwide, 2007-2013



- BBCWW has contributed an additional **£14m**
- UK indies have secured an additional **£40m** – at least some of this may have been through Group M Entertainment, which was estimated to have invested £50m in UK content in 2013
- We estimate other sources of co-production (predominantly ITV Studios productions) may have secured a further **£5m-£7m**

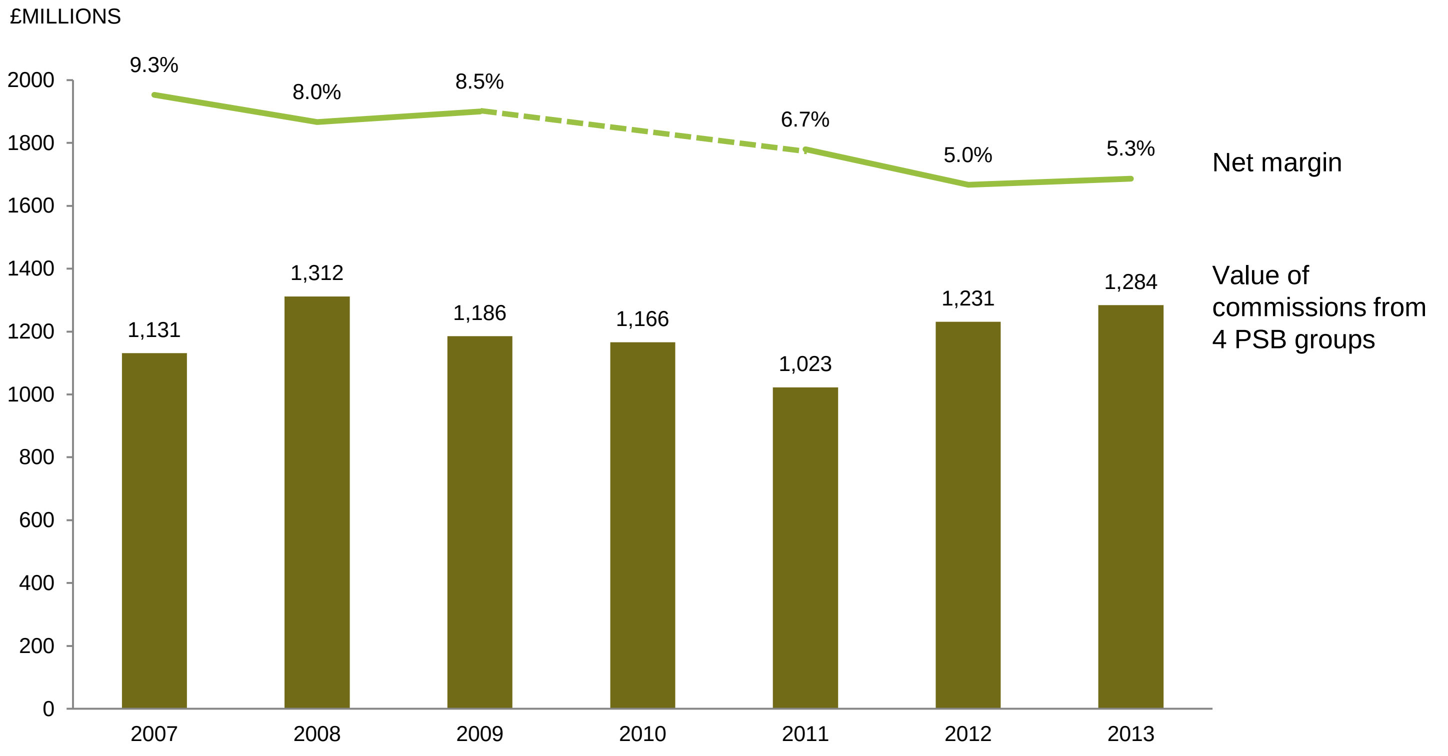
Note1: Indie co-production finance is not limited to PSB commissions
Note 2: UK Indie co-pro finance estimates from annual O&O / Pact Census and subject to reporting / industry sampling errors
Source: BFI, Pact, BBC, Broadcast, Oliver & Ohlbaum analysis

New sources of funding

Producer contributions

There has been a squeeze on independent producer margins, resulting in a net benefit to PSBs of approximately £50m based on 2013 commissioning volumes

Independent producer UK PSB revenues and margins, 2007-2013



- **62%** of Pact survey respondents felt that squeezed profit margins had enabled PSBs to reduce spending by a moderate-significant amount
- Only **25%** felt there was scope for continued margin squeeze to contribute to further reductions in PSB spending over the next 5 years

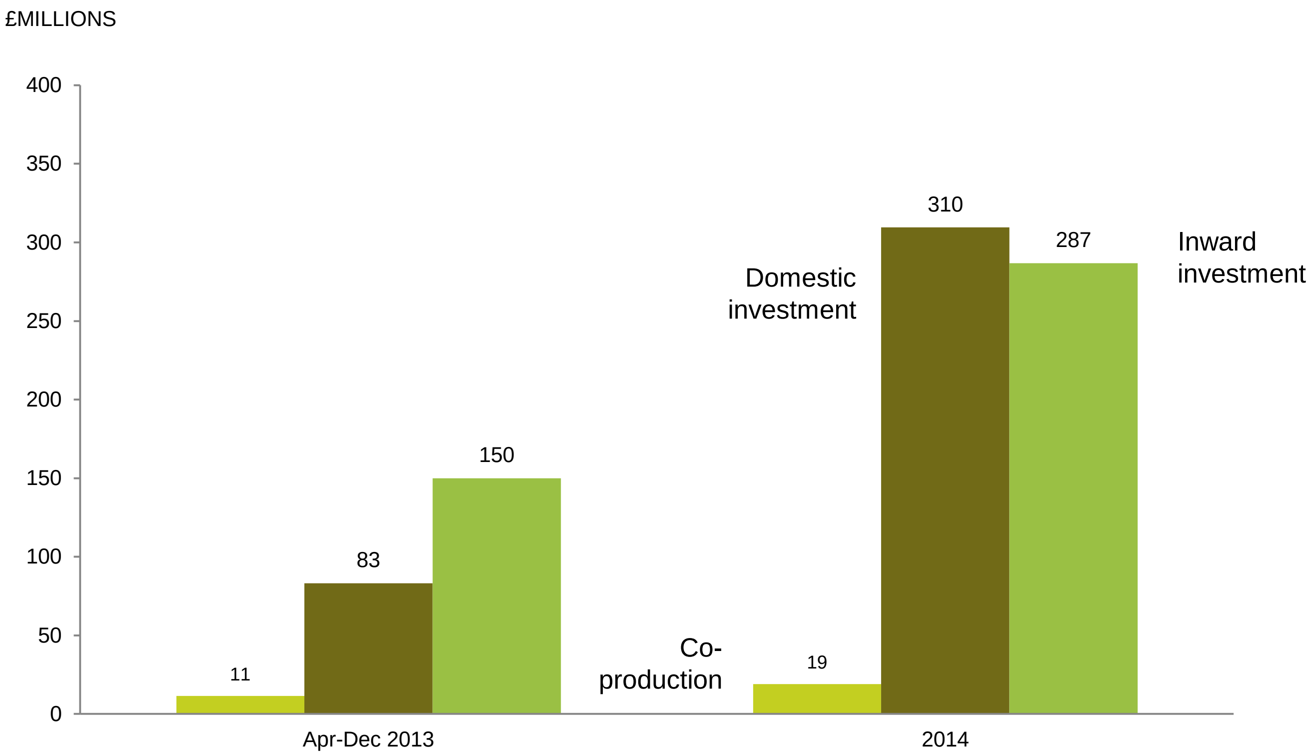
Note 1: 2010 margin excluded due to data inconsistency
Note 2: Assumes net margins for PSB commissions are per average margins for all indie revenue
Note 3: UK Indie co-pro finance estimates from annual O&O / Pact Census and subject to reporting / industry sampling errors
Source: Ofcom, Pact, Oliver & Ohlbaum analysis

New sources of funding

Tax breaks

Tax credits for high-end UK television productions are having an impact on budgets, although interviewees felt the additional money was being spent on higher specifications and may be causing price inflation rather than reducing costs

Investment in high-end productions qualifying for tax credits, 2013-2014



- Already seen significant increase in take-up in the scheme in its second year, and the Chancellor has announced plans to extend it to Childrens live action, so we see room for growth in tax credit funding
- However, interviewees reported that tax credit funding was being used to fund higher specifications (e.g. better talent), and may be causing inflation in input prices, especially in light of the influx of overseas money

Source: BFI

New sources of funding

Estimated impact on programme investment

Co-production finance and independent producer margin squeeze have contributed around £110m more to PSB originations budgets in 2013 than in 2007, though not all co-production funding has facilitated reduced PSB spending.

Impact of new sources of funding on production spending, 2007 vs 2013

Source of additional funding	Impact on PSB spending (2007 vs 2013)	Comments
Co-production	**£20m**	We believe that co-production money is often used to increase editorial specifications: this money is largely incremental to what the broadcaster would otherwise have spent on the commission However, interviewees reported that some co-production money is used to replace PSB expenditure which would have otherwise been spent if co-production finance had not been available. We estimate that 33% of the £60m increase in co-production money was used to realise savings from PSB commissioning budgets
Independent producer contributions: squeezed margin and deficit finance	**£50m**	Based on data from the Pact census.
Tax credits	-	No net impact: all tax credit money used to further editorial ambition, or deliver against original ambition, rather than reduce budgets, at least in 2013

Total PSB cost saving from new sources of funding (2007 vs 2013):	**£70m saving**

Contents

Input mix and Production efficiency

Interview findings

Producers tended to consider changing input mix and production efficiency as the same thing, particularly going forward since any further efficiencies are likely to have an on-screen impact. None identified a conscious shift in in-genre mix.

Changing input mix

- While producers acknowledged that some of the reduction in investment has been enabled by production efficiency; more recent trends have been to change the input mix, with some on screen impact – but still delivering the programme specification required by commissioners.
- The available inputs, and their relative cost, may also influence the types/formats of new programmes pitched to commissioners.

<u>There has been an increase in self-shooting</u>

- Cameras are now smaller, lighter, and less costly. This has changed the approach to filming in some genres, with a movement towards self-shooting both as a new way of producing the output, but also as a means of producing programmes more cheaply. This has been seen most in factual.

<u>There has been a movement towards lower cost talent</u>

- Driven by the BBC's talent policy, there has been a movement away from the very highest earners, towards more 'mid tier' performers.

<u>Filming locations have been changed in some cases</u>

- Some movement out of London, to cheaper studios. The fixed studio supply means that changing demand has increased prices in some areas. Some producers have been creative in converting warehouses or using other alternative spaces. Though this does not necessarily decrease costs, it reduces pressure on studio supply.
- Location filming is more costly, so there has been a reduction in London based location filming where possible – locations themselves cost more, filming takes longer, and the cost of the crew if also higher and for a longer period.

Input mix and Production efficiency

Interview findings II

Supported by improved technology, production efficiencies such as reductions in the crew sizes and filming days have reduced costs. Most recently, and going forward, opportunities are from changing input mix, with on screen impact.

Producing the same for less

The size of production teams has reduced

- Fewer people are required to make like for like programmes – driven, in part, by new technology for filming and editing. This has particularly been the case for factual programmes.
- Enabled largely by the technology, allowing people to do more roles. The next generation of production staff are likely to work across more stages of production than has traditionally been possible.

Filming and resulting staff days have reduced

- Technology has also helped reduce the number of shooting days required – this is applicable across all genres, with the possible exception of comedy and drama, where shooting days have been fairly constant.
- Producers can now review shots at the time of the shoot, rather than having to wait until the end of the day – so the minutes per day have increased.

Digitisation has made filming easier but has increased edit time

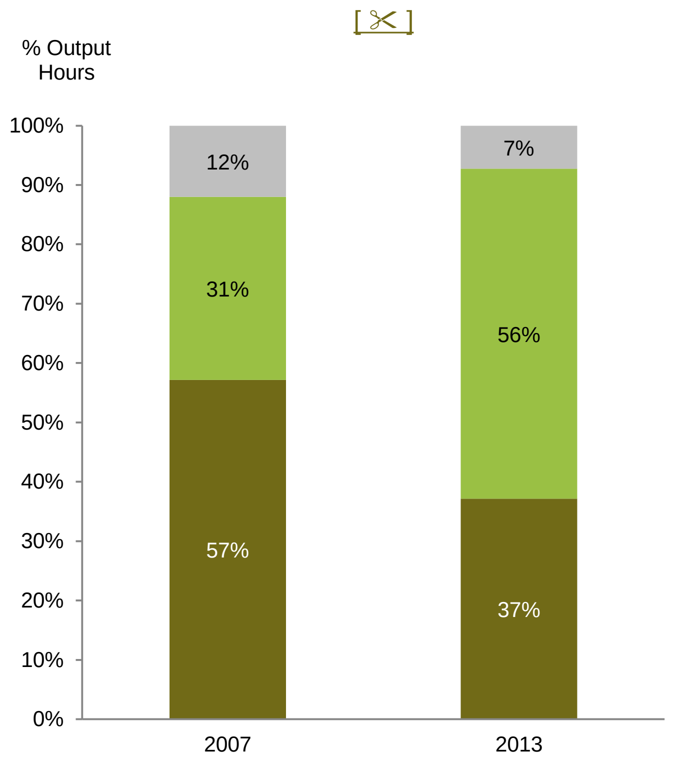
- Lower cost of rental or ownership of equipment has allowed producers to take some money out of production and deliver the same quality of output.
- The loss of the discipline of film has increased the amount of time required to edit programmes, and thus the associated edit costs.
- There has been an impact on the cost of post production across all genres.
  - Standard post (e.g. editing and adding credits etc.) is now cheaper
  - Specialist post (e.g. CGI) is also cheaper, but is now expected/used to a greater extent.

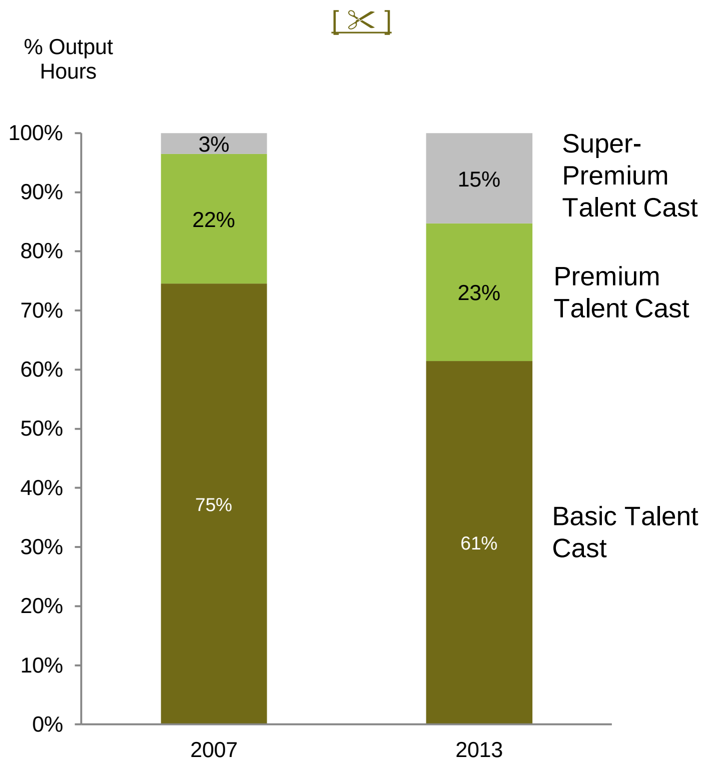
Input mix and Production efficiency

Input mix: Talent costs

Some broadcasters achieved reductions in peak Drama CPH while reducing the proportion of dramas using a less recognisable cast

Proportion of peak-time drama output hours, by level of talent used in the cast 2007 vs 2013





Output hrs	[✂]	[✂]	[✂]	[✂]

Definitions	
Super-premium	Show casts 1-2 megastars in key 5 roles (top 750 IMDB STARmeter), e.g. Benedict Cumberbatch, Idris Elba
Premium	Show casts 0 megastars, but 4-5 of the key 5 roles are ranked 750-10,000, e.g. Olivia Colman, Hugh Bonneville
Basic	Three or fewer of the key 5 roles are ranked 500-10,000

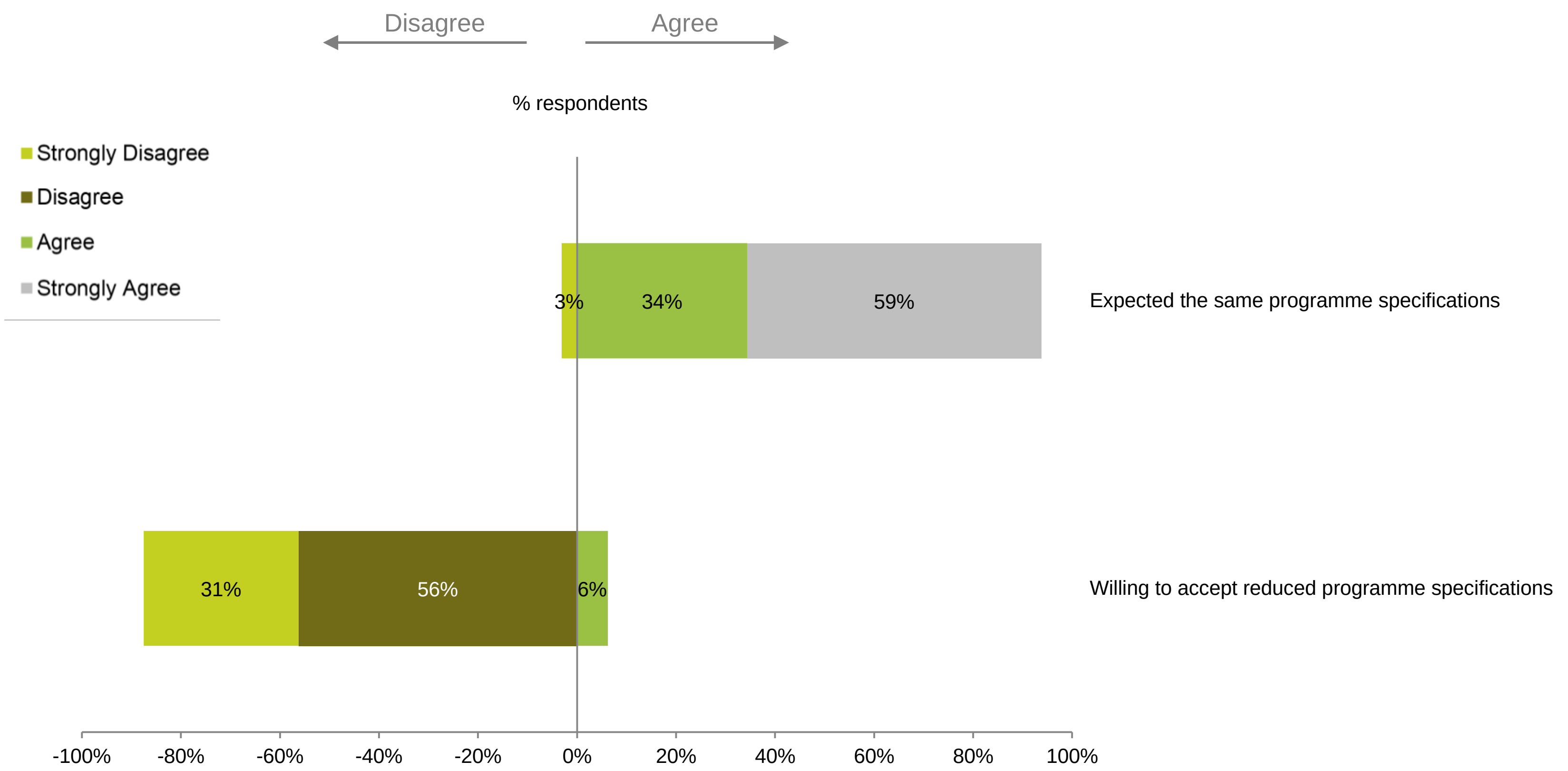
Note: Talent rating based on the IMDB STARmeter ranking for top five cast members at the time of programme's release
Source: IMDB, Ofcom, Oliver & Ohlbaum analysis

Input mix and Production efficiency

Input mix: Other costs

We found little evidence for other shifts in input mix underpinning significant cost savings, and the Pact survey indicated that commissioners had little tolerance for any input changes that would affect programme specifications

Extent to which producers agreed commissioners were willing to accept reduced / expected the same programme specifications when negotiating lower programme prices



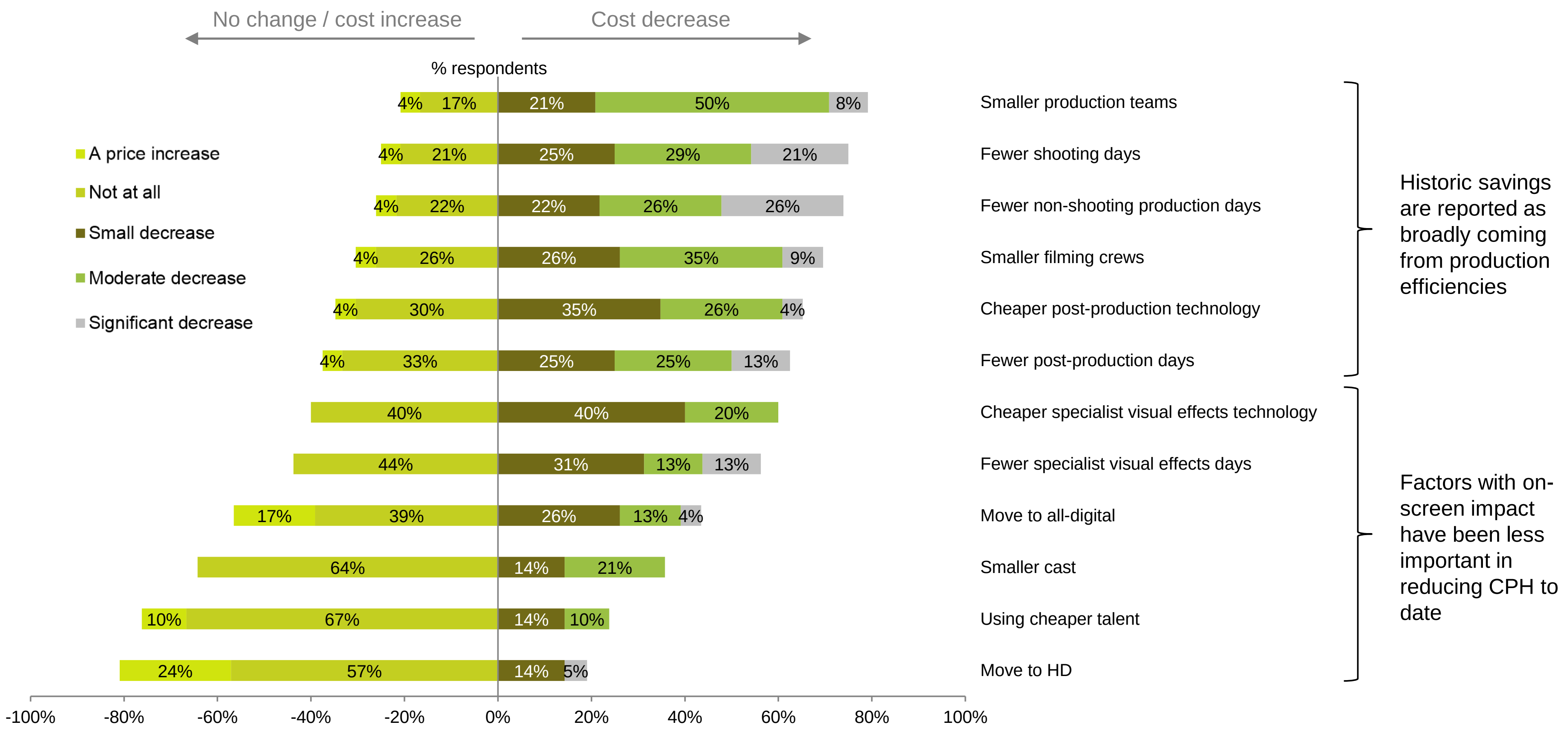
Source: Pact, Oliver & Ohlbaum analysis

Input mix and Production efficiency

Production efficiency: Pact survey

Smaller teams and compressing production into fewer days were most widely felt to be driving production efficiencies

Impact of production efficiency factors on programme costs



Note: n=35
Source: Pact, Oliver & Ohlbaum analysis

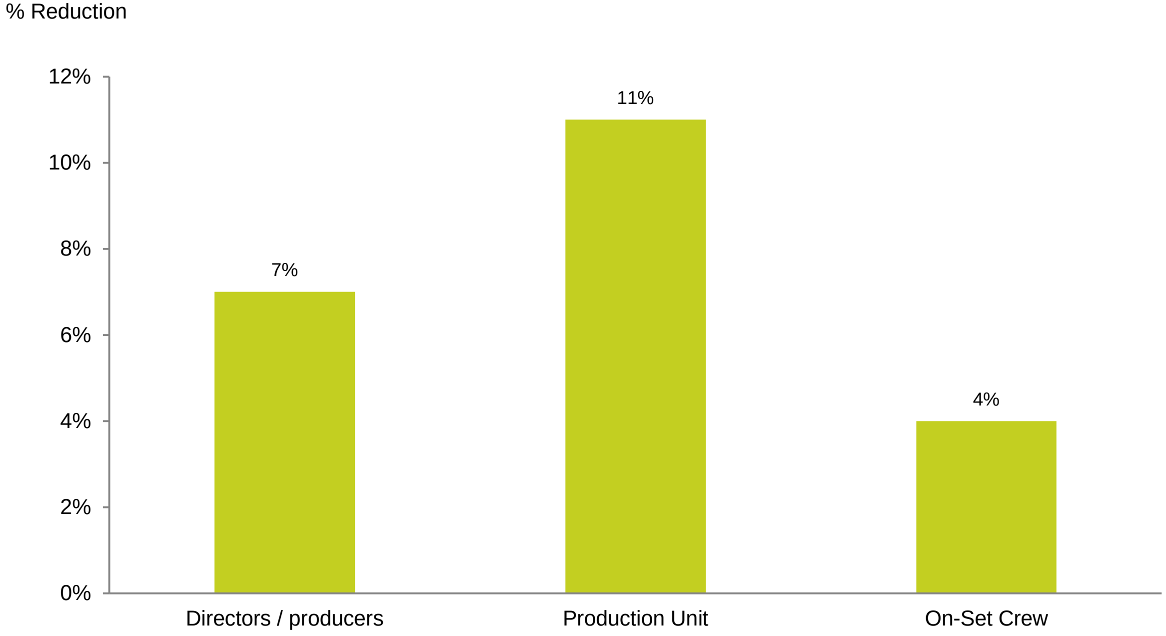
Input mix and Production efficiency

Production efficiency: case studies

Advisory

We performed a detailed analysis on the inputs used in six of the series case studies, demonstrating how some of these production efficiencies were realised in practice

Average % reduction in man-weeks for key production elements in six long-running series, first vs last series for which data was available, 2007 vs 2013



Notes			
Notes	All but one case studies showed a reduction in director-producer man-weeks	All but one case studies showed a reduction in production unit man-weeks	Three case studies showed a reduction, one an increase, and one no change in on-set crew man-weeks

- The six programmes we selected for this analysis were chosen because they all:
  a) Included multiple series spanning a number of years
  b) Had detailed line-by-line cost data
  c) Appeared consistent in form, style and content between years
  d) Covered all major genres
- We compared the number of man-weeks in the first vs last series for which we had data within given areas of the production
- These findings should be treated as indicative only, as they are conflated with scale effects: four of the programmes showed increases in the total number of episodes commissioned

N = 6
Source: Oliver & Ohlbaum analysis

Input mix and Production efficiency

Estimated impact on programme investment

O&O Advisory

We used case studies to estimate programme-making cost increases; this cost increase was less than that predicted by price inflation alone, implying producers had found efficiency savings to partially off-set the price rises

O&O Estimate of Input Price Changes

We estimated that price inflation should increase programme prices by **£142m** (slide 43)

Programme cost CAGR: case studies

Our programme case studies have shown an average CAGR of **0.8%** in programme-making costs between 2007-2013

This is an average rise over the period: from our interviews, we believe costs were broadly flat during the first half of the period, starting to rise from around 2010.

Verification: Pact survey

The Pact survey identified input mix and scale effects as the single most important driver of reduced content investment between 2007 and 2013, after new sources of funding.

The impact of efficiency and input mix changes is challenging to quantify, but should be significant, and the largest of the CPH sub-drivers identified.

The 1.0% CAGR implied by our £142m estimated price increase exceeds the observed 0.8% CAGR increase between 2007 and 2013.

The difference between case study rise and the rise predicted by price inflation alone is **£35m**

This saving is due to changes in input mix, production efficiency, and scale.

We estimate 20% (**£7m**) of these efficiencies are related to commissioning longer runs (see next section on Scale Effects); leaving **£28m** for all other production efficiencies

Estimate

£28m saving

Limitations:

- Relies on the estimate of price inflation, which may be an underestimate, so this estimate in turn may also be an under-statement.
- Case study sample may not be representative, e.g. consisted of long-running series which could be hard to find efficiencies after first few series.

Note: Analysis based on 18 of the 43 case study titles, which were all those titles for which we had more than one year's worth of data in the 2007-2013 period and excluding two titles which had major changes in production-making technique

Source: Oliver & Ohlbaum analysis

Contents

Scale

Interview findings

The number of series is not a major lever in driving cost reductions as it does not generally facilitate efficiencies for producers. It does, however, provide certainty, which can be used to drive down, or hold flat, the prices for future series

The number of returning strands

Commissioning more series is not a significant driver of cost savings

- Commissioning series in bulk creates certainty for producers, but does not necessarily allow them to reduce costs unless both series can be filmed together – so accepting a reduced price may result in reduced margin.
- Generally, there has been no increased tendency towards commissioning returning strands – this is the case across all genres.
- This is with the possible exception of Channel 4, which has sought more/new long running strands recently

The longer a series has been running, the harder it is to find further efficiencies

- When commissioning a second series, there is scope for cost savings on the basis that production teams are familiar with the approach to the programmes some one off costs, including R&D, have been incurred.
- Many long-running series have already been subject to significant cost-saving exercises, making it harder to find any incremental savings

Hit shows have more leverage

- Bargaining power varies significantly by programme – after one series, a programme will be established as either ‘must have’ or not.
- Production companies will not tend to allow budgets to be pushed down for ‘must have’ shows, and will tend to try to push the budget up for subsequent series. This is particularly true for big Entertainment programmes.
- For less successful programmes, producers are more likely to accept a cheaper price in exchange for certainty.

Scale

Interview findings II

Increasing the number or length of episodes, which can be filmed as a block, is more likely to reduce costs since the production teams are already in place, and there are no incremental setup/admin costs.

The number/length of episodes

<u>Commissioning longer production runs does generate some cost saving</u>

- Producing more in a single block can reduce costs for producers since set up and other fixed costs are spread over more output.
- The crew are already together and know what they are doing.
- Splitting into more than one filming block creates difficulties in sourcing the same team – particularly where talent can be booked up on other projects (both on-screen and off-screen).
- However, to make a significant difference to costs, the commissioner needs to add more than just one or two episodes.

<u>Some movement towards longer runs has facilitated reduced cost</u>

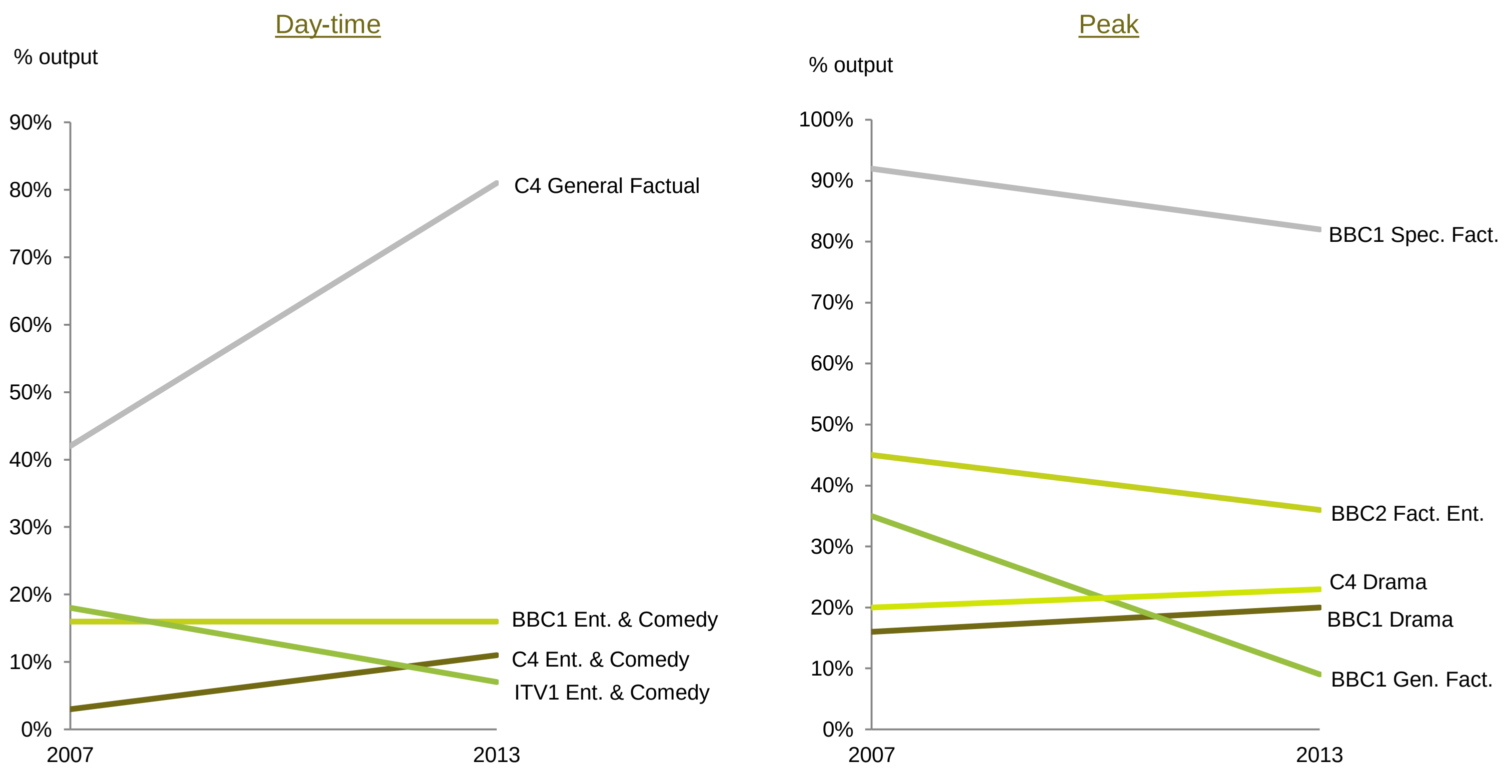
- Some commissioners have sought to push programme prices towards the lower bounds of existing tariffs, though Producers tend to resist reduced per episode budget.
- One tactic is to offer more episodes at a reduced cost per episode. This may include a compilation episode which is priced as any other episode but can be produced at minimal incremental cost.
- This is predominantly seen in factual entertainment, which is well suited to 'best bits' style episodes.
- There is limited scope for this to continue to impact on overall content investment – since it will have had a small impact to date and commissioners do not want to increase the number of episodes in all series.

Scale effects

New vs returning strands

Interviewees were clear that returning series could be made more cheaply, but that this was nothing new. We saw minimal evidence for a systematic shift toward returning strands between 2007-2013 among the genres that showed reduced CPH

Proportion of output hours from new (vs returning) strands, select genres 2007 vs 2013



- Returning series could be cheaper to make as a result of lower R&D costs, and some set / production costs, for example
- Initial interview data suggests that this may apply predominantly to low/mid-tier programmes with limited negotiating power
- The budget squeeze, if any, tends to be applied to the second-fifth series, after this, there is usually little scope for further savings

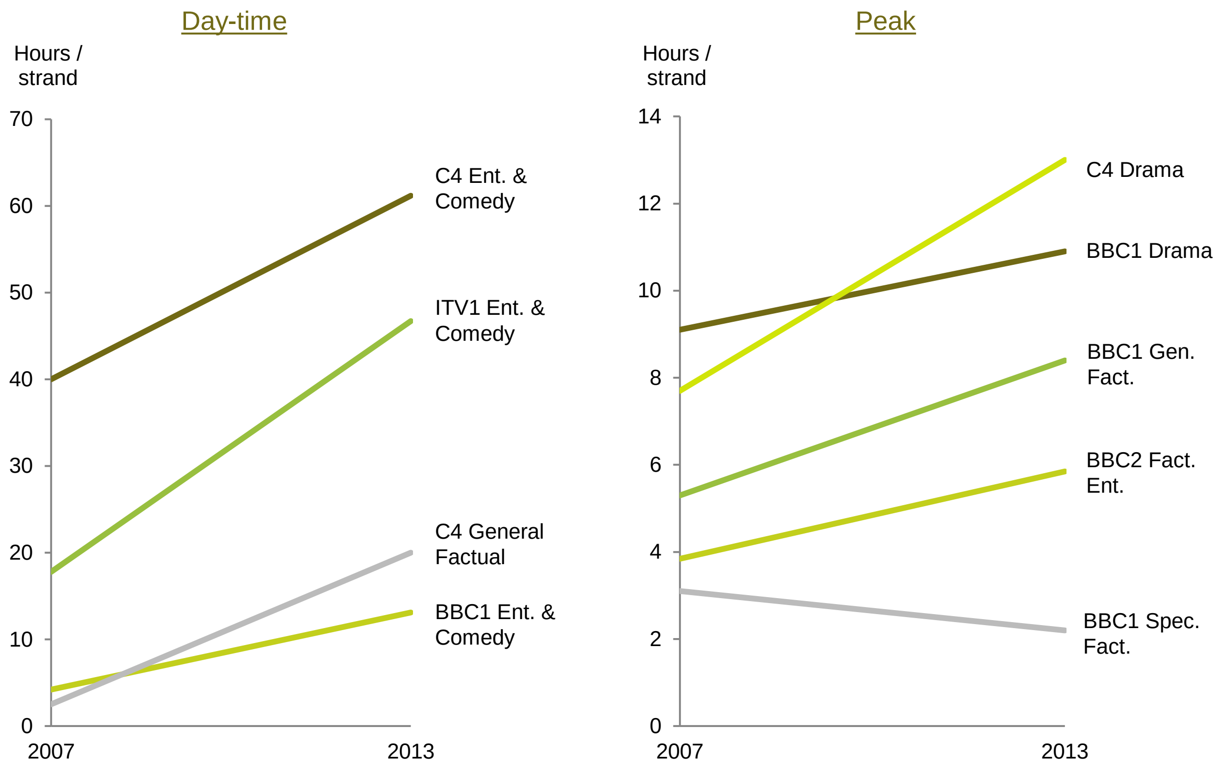
Source: Attentional, BARB, Ofcom, Oliver & Ohlbaum analysis

Scale effects

Hours per series

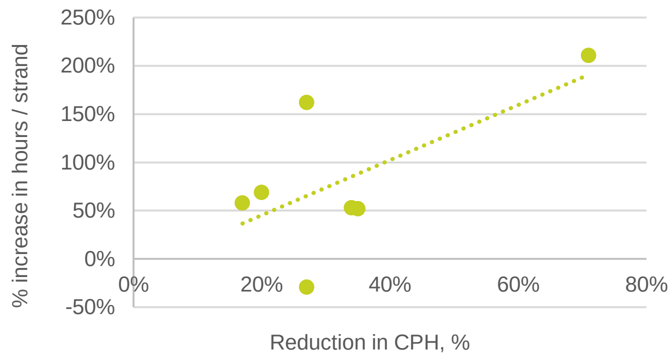
There has been a shift towards more hours per series in genres which saw a fall in CPH, particularly in daytime. Evidence from interviewees has been consistent that longer runs reduce costs.

Average first-run output hours strands, select genres 2007 vs 2013



- Commissioners may offer producers additional episodes, or commission multiple series to be made at the same time, in return for agreeing a lower price per episode
- We heard that commissioners have started to accept a compilation episode, providing an additional episode of output at minimal incremental cost
- The greater the increase in average hours per strand, the greater the CPH reduction observed:

% increase in hours per strand '07-'13 vs CPH % reduction '07-'13, select channel / genres



Source: Attentional, BARB, Ofcom, Oliver & Ohlbaum analysis

Scale effects

Estimated impact on programme investment

We see evidence for an increase in average hours per strand having a cost-saving impact. Our analysis treats this scale effect as a sub-set of the overall Production Efficiencies figure calculated on slide 57

O&O Estimate of Input Price Changes

We estimated that price inflation should increase programme prices by **£142m** (slide 43)

Programme cost CAGR: case studies

Our programme case studies have shown an average CAGR of **0.8%** in programme-making costs between 2007-2013

This is an average rise over the period: from our interviews, we believe costs were broadly flat during the first half of the period, starting to rise from around 2010.

Verification: Programme database

The Programme database analysis provides evidence that average hours / strand has increased for most genres/channels which have seen a reduction in CPH.

Comparing the magnitude of the hours / strand increase with the level of CPH reduction suggests that that a greater hours / strand increase is associated with a greater CPH reduction.

Our analysis on slide 57 identified an estimated cost reduction of **£35m.**

Attributed to change in input mix, efficiency savings, and scale effects.

Estimating the proportion relating to scale effects is challenging.

Interviewees and the Pact survey suggested that scale has had a small impact overall.

We therefore estimate that 20% (**£7m**) of these efficiencies came from commissioning longer runs

Estimate

£7m saving

Limitations:

- Relies on the estimate of price inflation, which may be an underestimate, so this estimate in turn may also be an under-statement
- Estimate attempts to capture anecdote and producer feedback, though has no firm numerical basis.

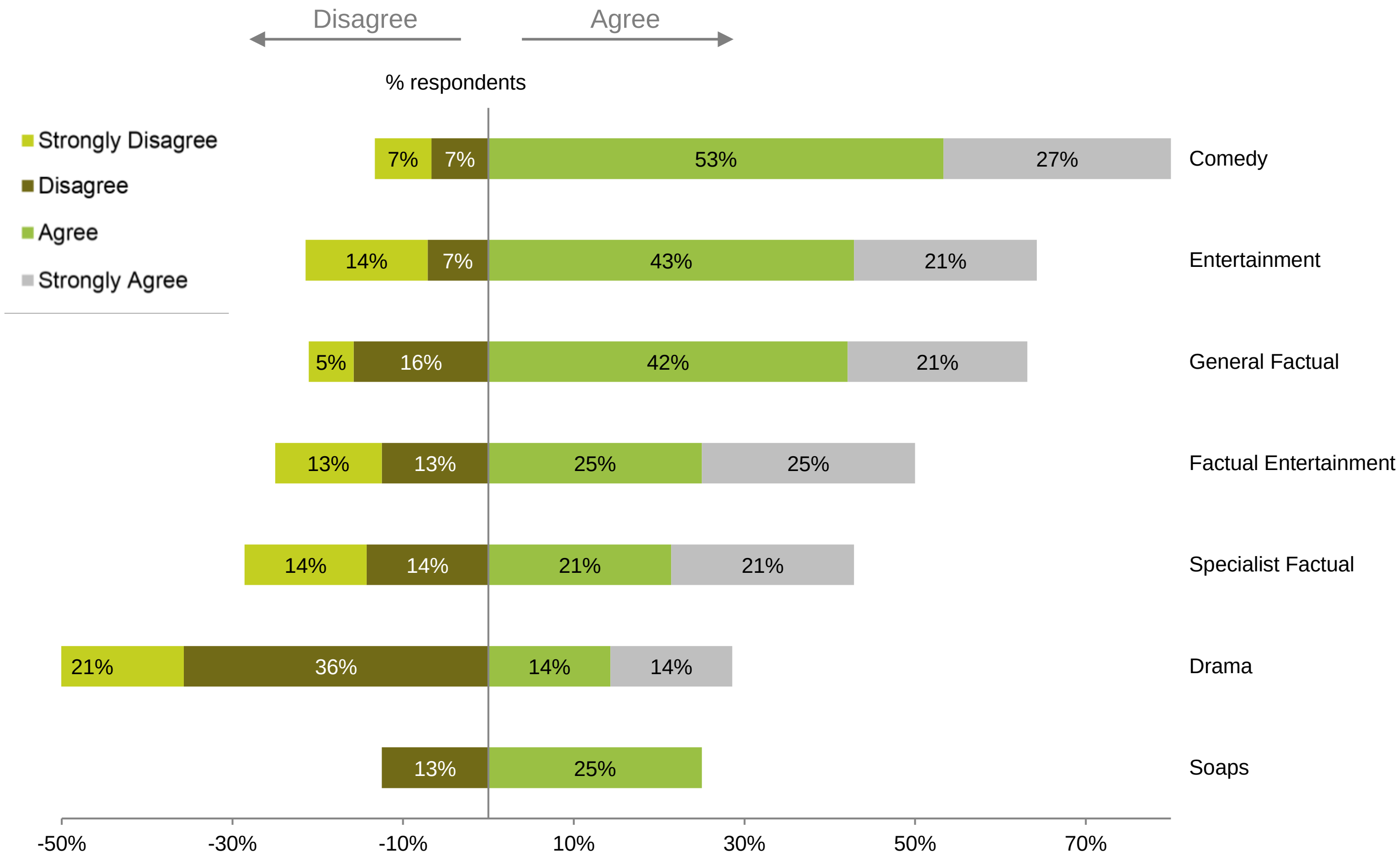
Contents

Sub-genre mix

Pact survey

Producers felt there had been a shift to commissioning cheaper formats in Comedy, Entertainment and General Factual

Extent to which producers agreed there had been a shift to commissioning cheaper formats, by genre



84% of respondents agreed that commissioning decisions were driven by a need to save money

While just **38%** agreed that the decisions were driven by changing audience preferences

Producers commented that:

- Entertainment shows have shifted to daytime at reduced spec
- Gameshows have seen reduced spec and costs
- Sitcoms have disappeared in favour of cheaper comedy
- Format shifts can reduce costs be up to 30 per cent.

These findings are in line with our broadcaster returns analysis, which suggests Comedy, Entertainment, Factual Entertainment and General and Specialist Factual saw the largest decrease in CPH. These were therefore the focus of our genre mix analysis using our Programme database

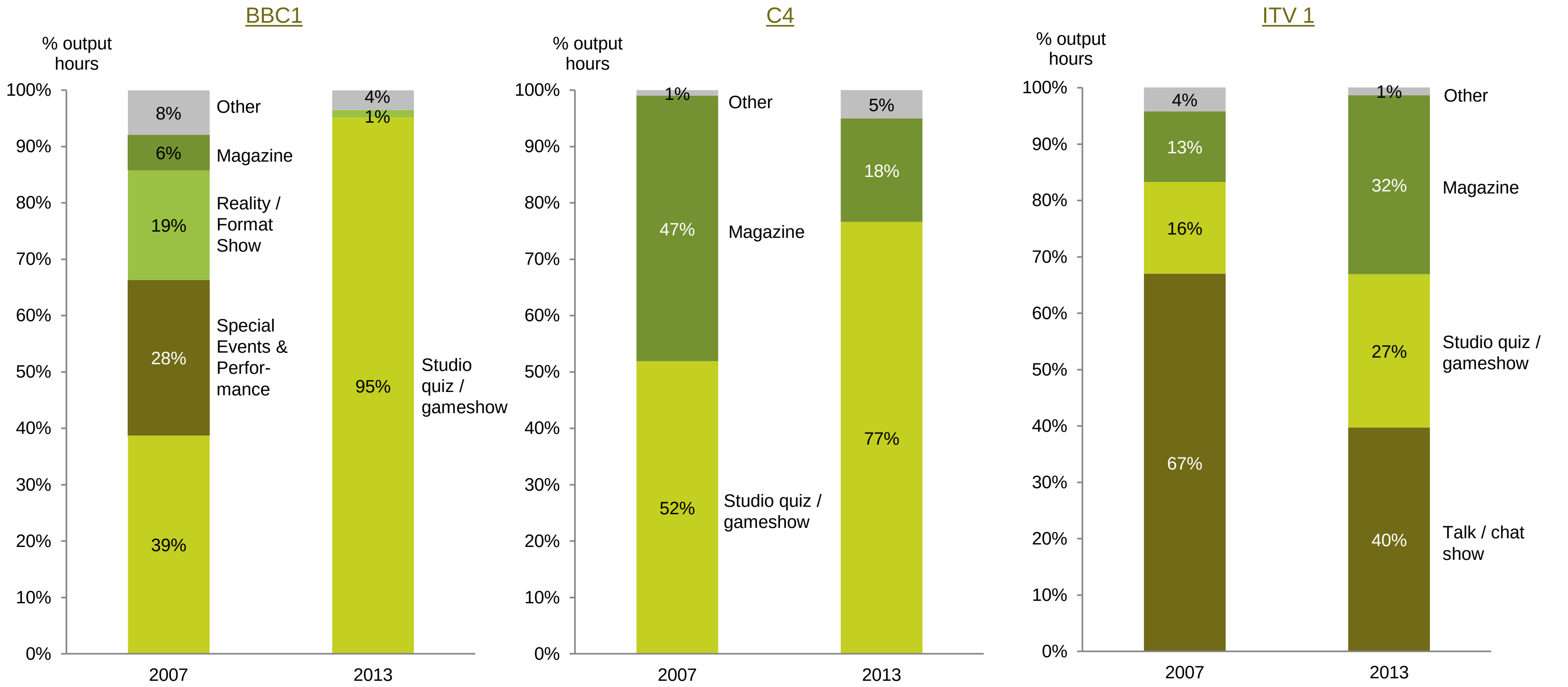
Note: n=35
Source: Pact, Ofcom, Oliver & Ohlbaum analysis

Sub-genre mix

Programme database: day-time entertainment and comedy

There has been a marked shift towards studio quizzes and gameshows, which interview and case study data agree confirm can be made more cheaply than most other Entertainment & Comedy sub-genres

Proportion of daytime entertainment and comedy output hours by format, 2007 vs 2013



Output hrs	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

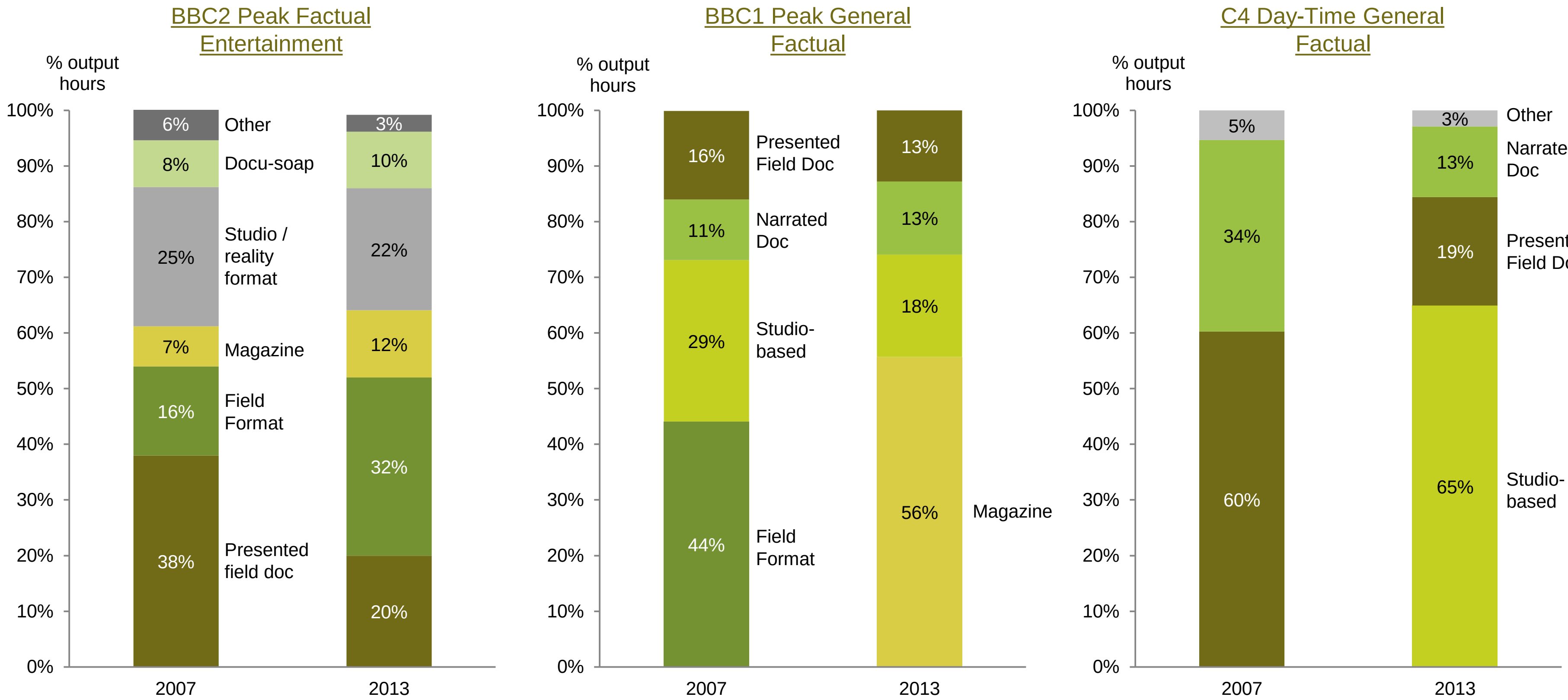
Source: Attentional, BARB, Ofcom, Oliver & Ohlbaum analysis

Sub-genre mix

Programme database: general factual and factual entertainment

We saw evidence for shifts in sub-genres in other genres by channel / day part, although the variance seen in costs within given sub-genres makes it harder to link this clearly to a cost saving

Proportion of factual output hours by format, 2007 vs 2013



Output hrs	2007	2013	2007	2013	2007	2013
	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: Attentional, BARB, Ofcom, Oliver & Ohlbaum analysis

Sub-genre mix

Estimated impact on programme investment

O&O Advisory

The five CPH sub-drivers collectively contribute a £13m net increase in spend; our estimates of the other four sub-drivers leaves £24m to be explained by changes in sub-genre mix. We sense test that number here.

Illustrative sub-genre shift cost saving in Entertainment & Comedy: Programme database / case studies

Our producer data base analysis identified a shift towards studio quiz / gameshow formats in daytime Entertainment & Comedy as the most significant change in sub-genre mix, likely to have the largest cost impact. We estimated the cost impact of this sub-genre shift:

Estimated impact of shift in sub-genre mix in day-time Entertainment & Comedy, 2007 vs 2013

Channel / genre	2007 Entertainment & Comedy CPH for the channel	Extra hours of studio quiz due to shift in sub-genre mix	CPH discount of studio quiz vs channel genre average CPH in 2007	Sub-genre shift impact on PSB spending (2007 vs 2013)
BBC1 Daytime Ent. & Comedy	[✂]	133 hrs	30%	[✂]
ITV1 Daytime Ent. & Comedy	[✂]	149 hrs	30%	[✂]
C4 Daytime Ent. & Comedy	[✂]	59 hrs	30%	[✂]
Data source:	Broadcaster returns	O&O Programme Database sub-genre split applied to broadcaster returns output hours volume	Comparison of a daytime quiz case study CPH to channel average CPH for daytime Entertainment and Comedy	30% of 2007 Ent & Comedy CPH multiplied by additional hours of studio quiz implied by sub-genre mix change

Total PSB cost saving from shift in sub-genre in Entertainment & Comedy mix (2007 vs 2013): £12.3M

Top-down view

Broadcaster returns analysis indicates a net £13m increase in spend driven by CPH changes: if all other CPH factor estimates are accurate, we would expect a **£24m** impact from sub-genre shifts

Savings in other genres

Cost implications of sub-genre shifts, beyond the move towards quiz and gameshow formats in Entertainment and Comedy, are less clear cut and likely to be much smaller.

To reconcile with the top-down view, we estimate a **£12m saving** from sub-genre shifts in all other genres, which seems reasonable in light of our analysis.

Estimate:

£24m

Relies on the accuracy of all other CPH factors estimates.

Source: Attentional, Ofcom, Oliver & Ohlbaum analysis

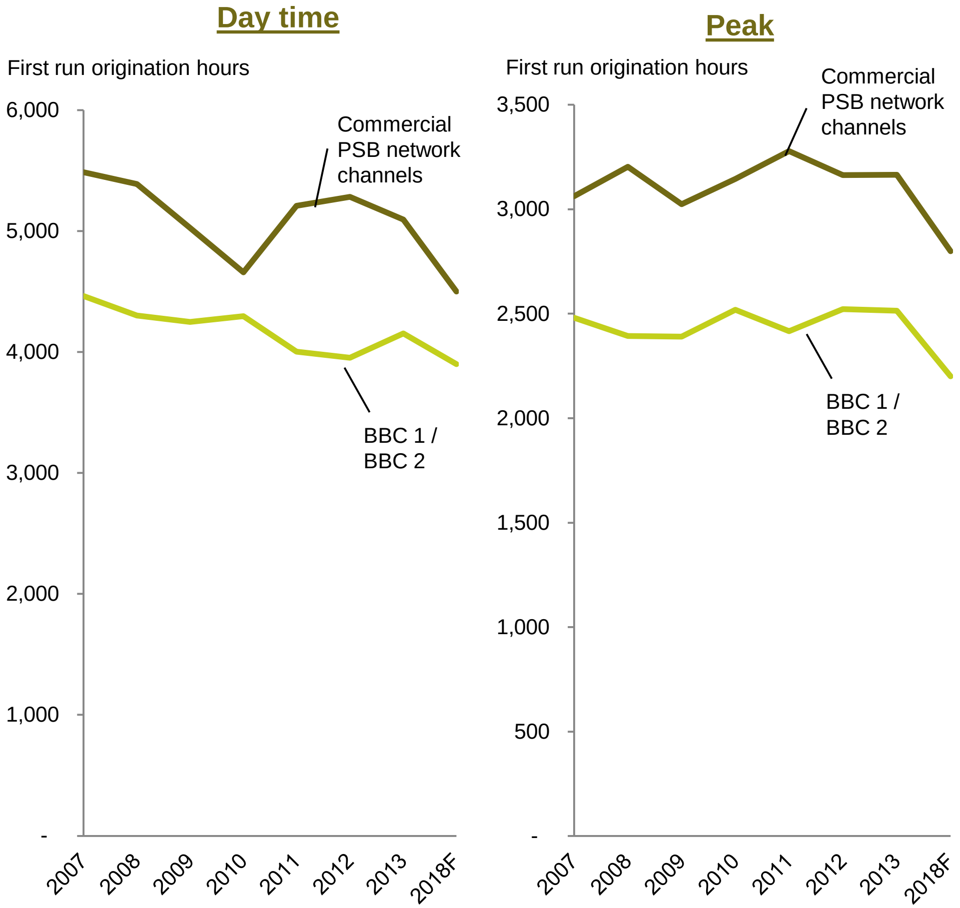
Contents

Future outlook

Further changes in volume

For both daytime and peak, no broadcaster produced its fewest ever originated hours in 2013, indicating that there is scope for further reduction in volume. However, recent increases suggest that this is not broadcasters' preferred approach to taking out cost.

Output hours by channel, 2007-2013



In both peak and daytime programming, all channels have previously produced fewer originated hours then they did in 2013. While this was often during the recession, it demonstrates a potential floor that broadcasters could return to if they sought (or were required) to further reduce programme investment.

Day time volume:

- The volume of originated output in daytime reduced significantly between 2007 and 2013, saving £23 million.
- There may be scope to take more out of daytime, by relying more heavily on repeats, though it is unlikely that the reduction could not be repeated on the same scale without damaging audience approval.

Peak volume:

- The volume of peak programming increased between 2007 and 2013, resulting in increased spending.
- There may be scope to reduce originated hours in peak time slightly, though audiences are more sensitive to peak programming and it is likely that any significant reduction would result in reduced approval.

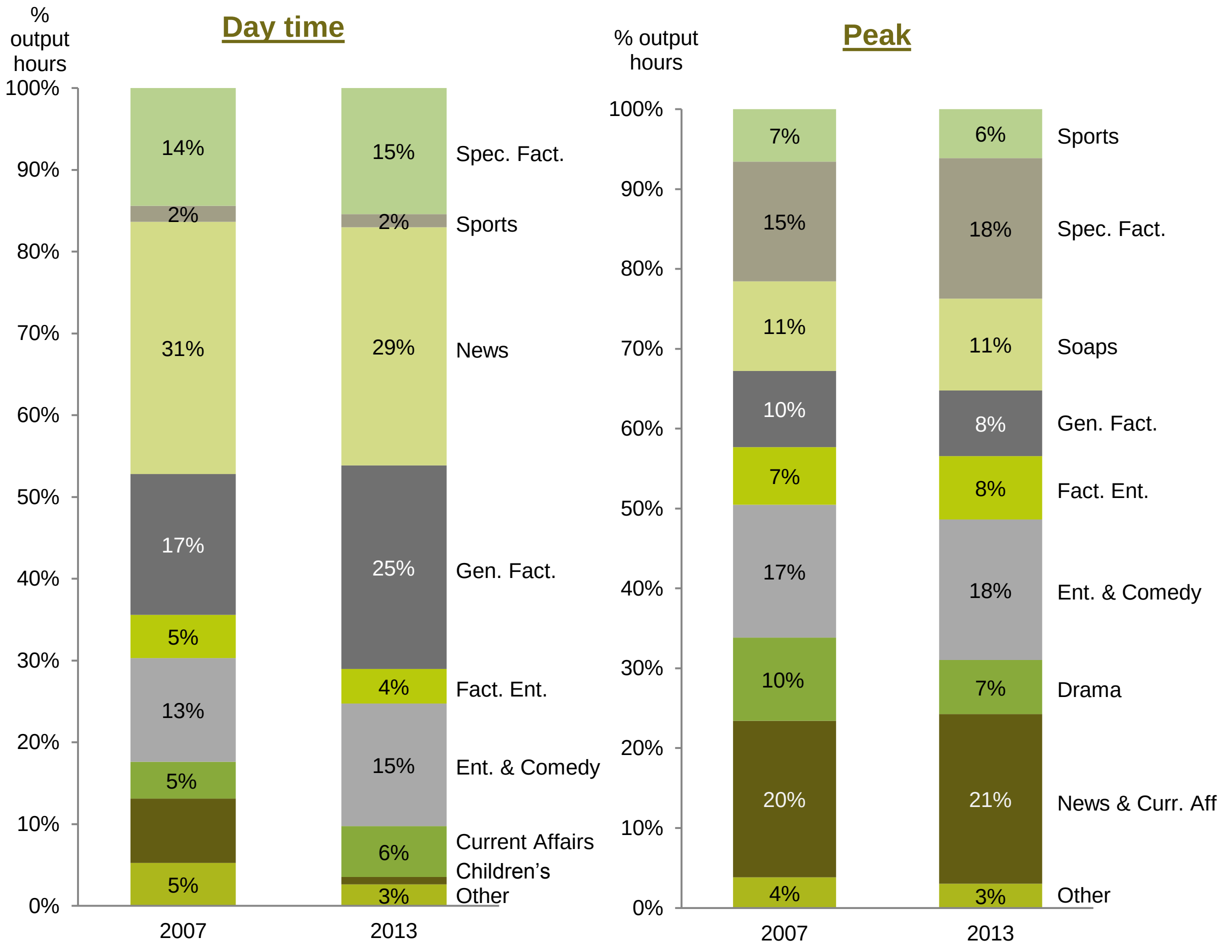
Note: The cost impact of the change in output hours varies by channel.
Source: Ofcom, Oliver & Ohlbaum analysis

Future outlook

Further changes in volume and genre mix

Change in genre mix was the single largest driver of reduced content investment by PSBs from 2007 to 2013. While further saving could be achieved by adjusting the genre mix further, this is likely to begin to impact on audience satisfaction.

Originations output by genre, 2007-2013



- Commissioners we spoke to indicated that the change in genre mix has followed audience tastes and preferences
- However, the tendency for increased factual programming seen between 2007 and 2013 correlates with relatively large efficiency gains in that genre – e.g. from self filming.
- Production companies appear more likely to pitch ideas where there's the most scope for efficiency savings – and potentially higher margins.
- The BBC's policy of Fewer Bigger Better allows it to continue to substitute relatively high cost genres for those with lower costs.
- So there is some scope to continue to change genre mix, though it may ultimately impact on audience numbers – particularly given investment in genres such as drama by Sky and from overseas which competes for PSB audiences.

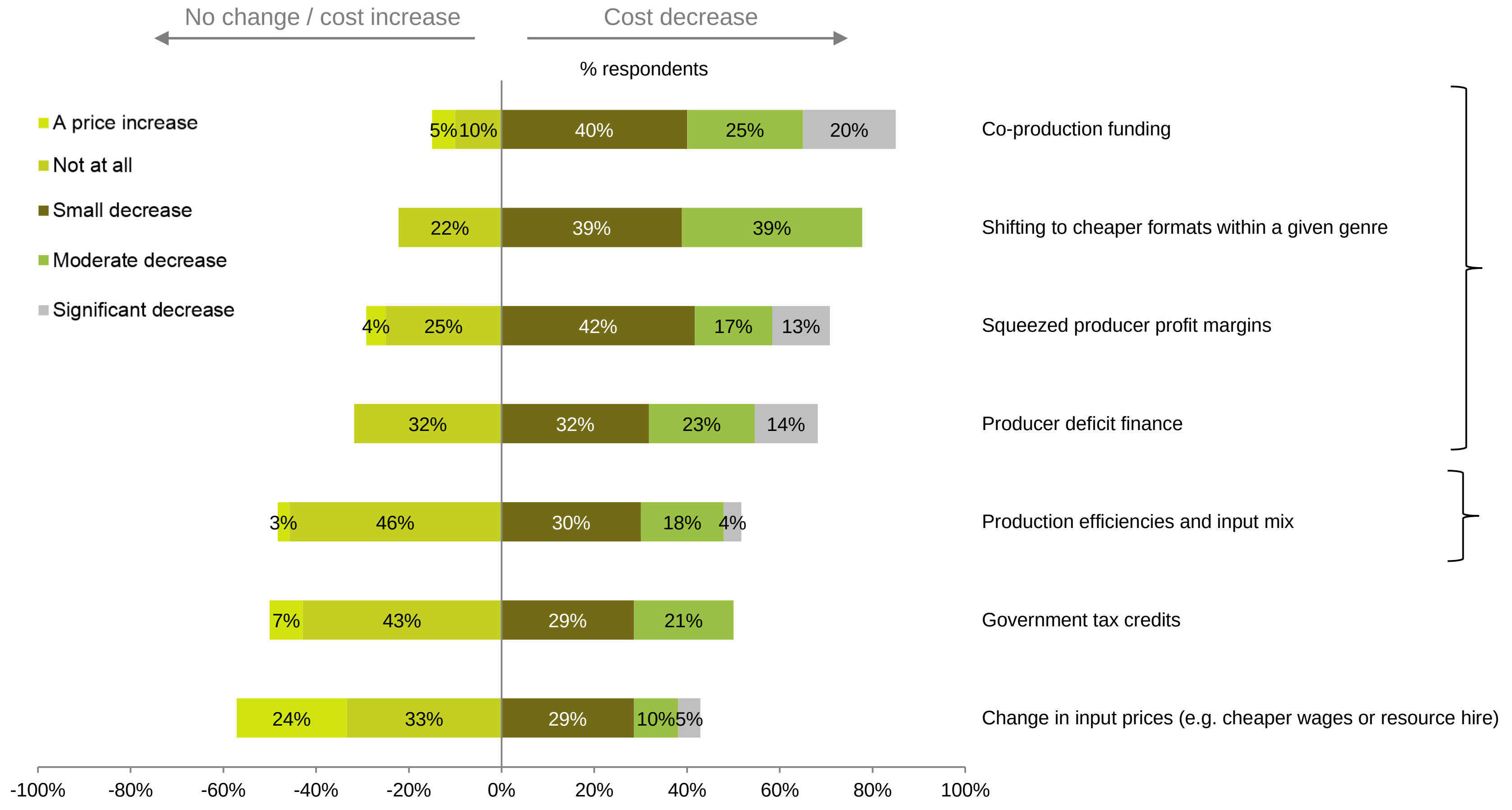
Source: Ofcom, Oliver & Ohlbaum analysis

Future outlook

Further reductions in CPH: potential future drivers: Pact survey

While margin squeeze was identified as contributing the most historically (slide 34), the largest contributions to decreased PSB spending in future are expected to come from co-production and use of cheaper formats.

Potential future drivers of reduced CPH, Pact survey respondents



Third party finance will continue to be important in reducing investment.

Interestingly, co-funding was identified as likely to contribute the largest decrease.

Scope to make savings from efficiencies and input mix have reduced..

.

Note: n=35

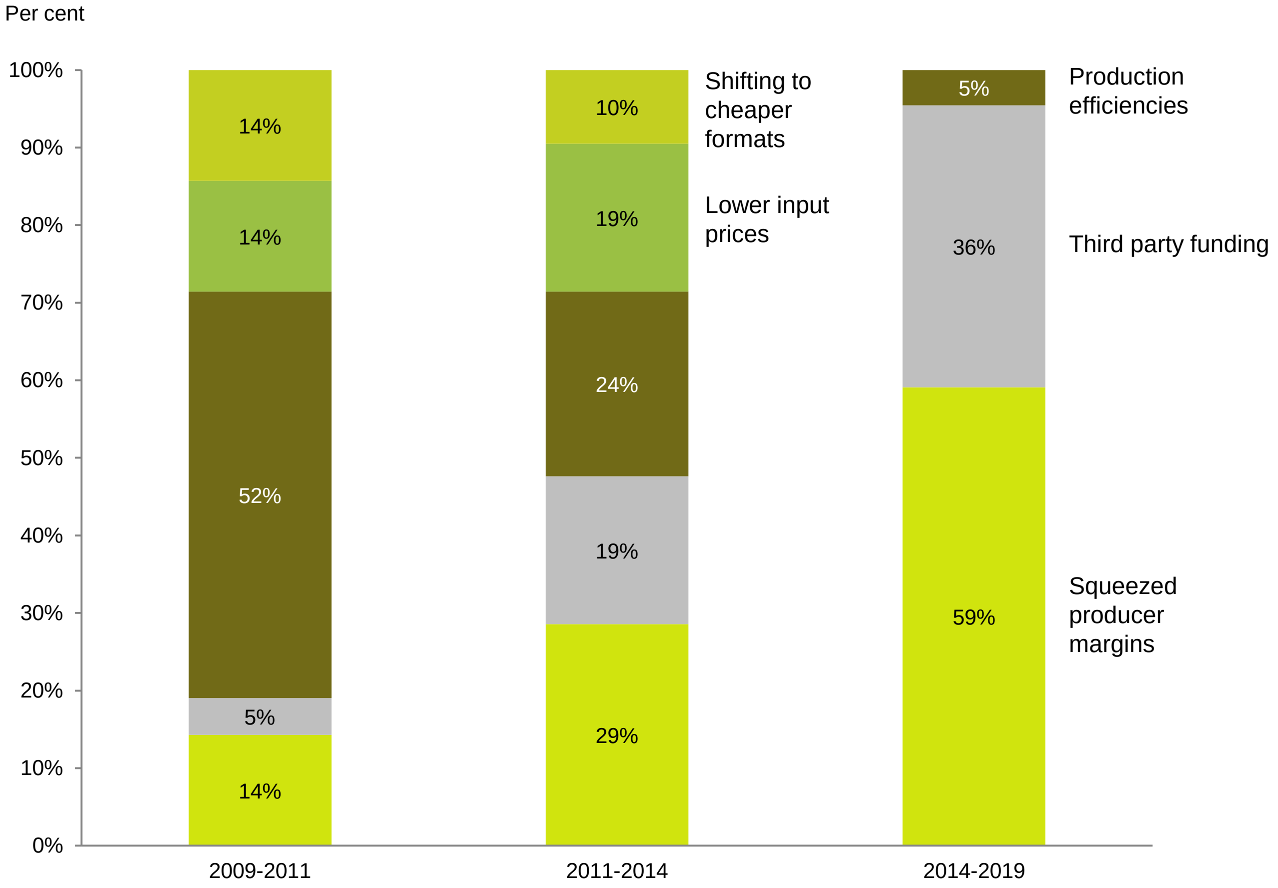
Source: Pact, Oliver & Ohlbaum analysis

Future outlook

Further reductions in CPH: single most important driver: Pact survey

Producers reported that cost savings from production efficiencies were a key driver of reduced cost per hour in earlier periods; going forward, further savings will need to come from squeezed producer margins and third party funding.

Single most important driver of reduced programme spending, Pact survey



Note: n=35
Source: Pact, Oliver & Ohlbaum analysis

We asked producers which single factor was most important in driving reduced cost per hour across three different time periods; two historic, and one future.

Possible drivers were:

- Production efficiency
- Shifting to cheaper formats
- Lower input prices
- Third party funding
- Squeezed producer margins

Respondents could only select each factor for one time period in order to highlight changes in the key drivers over time.

Producers reported that production efficiencies were most important between 2009 and 2011, but going forward, squeezed producer margins and third party funding are expected to be the main means of making programmes cheaper for PSB.

Future outlook

Further reductions in CPH: input prices, scale effects and sub-genre mix

Input prices

- Average input prices increased more slowly than inflation between 2007 and 2013, this is likely to continue, though there could be some increased upward pressure.
- Talent costs are likely to increase after 5 years of flat for those outside the top tier.
- Production staff costs have increased relatively rapidly in recent years in response to increased demand brought about, in part, by the availability of tax breaks in drama.
- Equipment cost inflation has been subdued by falling technology prices, which are likely to continue

Scale effects

- While scale effects had some impact on the level of investment between 2007 and 2013, negotiating tactics around series lengths and multiple commissions are nothing new.
- There's limited scope for any further savings to be realised as a result of increased scale, without making the schedule less diverse.

Change in sub-genre mix

- Discussions with commissioners did not identify a conscious shift to cheaper sub-genres, though our analysis suggest that such moves contributed a modest cost saving between 2007 and 2013.
- Our Programme Database analysis indicated shifts towards different, in some cases cheaper, sub-genres for some channels and day parts between 2008 and 2013 (analysis is being updated for 2007).
- Producers identified shifts to cheaper formats as an important means of realising future savings (slide 72), so there is scope for changing sub-genre mix to continue to contribute to reduced PSB investment – and producers may propose more low cost sub-genres – but there will come point at which this impacts on audience appreciation.

Future outlook

Further reductions in CPH: production efficiency, input mix, and new funding

Production efficiency and input mix

- We found that productive efficiency facilitated some reduction in content investment between 2007 and 2013, but producers tended to consider this inseparable from changes in the input mix.
- Pure production efficiency gains tended to happen earlier in the period, either as a result of:
  - technology changes allowing the same output to be produced using fewer people or in fewer days
  - Added impetus from budgetary pressure reducing waste, for example entertainment programmes now film more episodes per day.
- These types of gain have generally been made now, and the fact that producers are seeing their margins squeezed demonstrates that there is little waste in production inputs.
- Changes in the input mix may continue in future, such as the move to self filming in factual, though these gains are likely to be more subdued going forward.

New funding

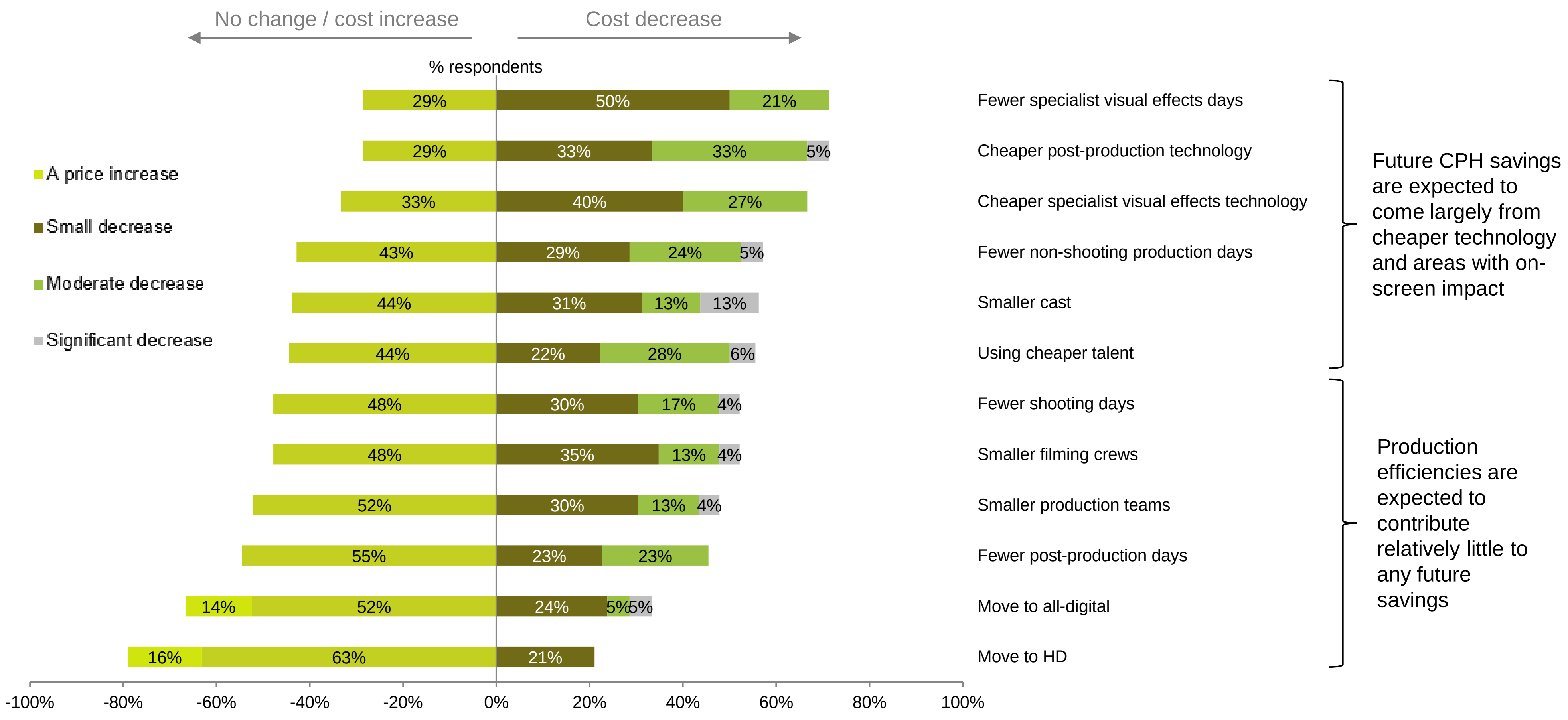
- Budgetary pressure from commissioners, combining with increased ambition in some genres has lead to increased reliance on third party funding, through a combination of deficit finance, co-production and squeezed producer margins.
- Tax credits in drama have impacted on input prices, but have not contributed to falling PSB investment, since the additional funding has been used to deliver higher spec programming.
- Producer margins cannot continue to be squeezed, and the willingness of producers to put up increased deficit finance is likely to be close to its limit – particularly if previous investments have not delivered the expected levels of return.

Future outlook

Further reductions in CPH: Production efficiency: Pact survey

In contrast to their responses on historic drivers (Slide 55), Pact members reported that production efficiencies are expected to contribute relatively little to future savings, with cheaper inputs and technology likely to drive savings.

Potential future drivers of production efficiency



Note: n=35
Source: Pact, Oliver & Ohlbaum analysis

Future outlook

Potential impact on programmes

Further reductions in investment could be achieved using the historic means we have seen, though increased third party funding, and the approaches resulting in an on-screen impact appear the most likely – which could have consequences for audience satisfaction.

Continued cuts in investment could harm programme quality and/or schedule diversity

- Broadcasters can change the volume of originations and the genre mix as much as they like, though at some point it will lead to an adverse reaction from audiences.
- It like for like programme budgets continue to face downward pressure, there will come a point when the resulting on screen impact will lead to reduced levels of audience appreciation for PSB output.

Increased reliance on third party funding could reduce plurality

- Increased reliance on deficit finance could limit the number of producers competing for commissions – deficit finance requires producers to take on more financial risk; larger producers can diversify this risk over a number of programmes, while smaller producers do not have the scale to do so.
- If smaller indies can afford to compete, they will fall out of the market and the plurality of ideas and sources of programming will be reduced.
- Similarly, if producers are required to accept further squeezes in margin, those with smaller programme portfolios and less scope for economies of scale across back office and research costs are likely to fair, reducing the richness of programme ideas available to commissioning broadcasters.

Spending on R&D may be cut

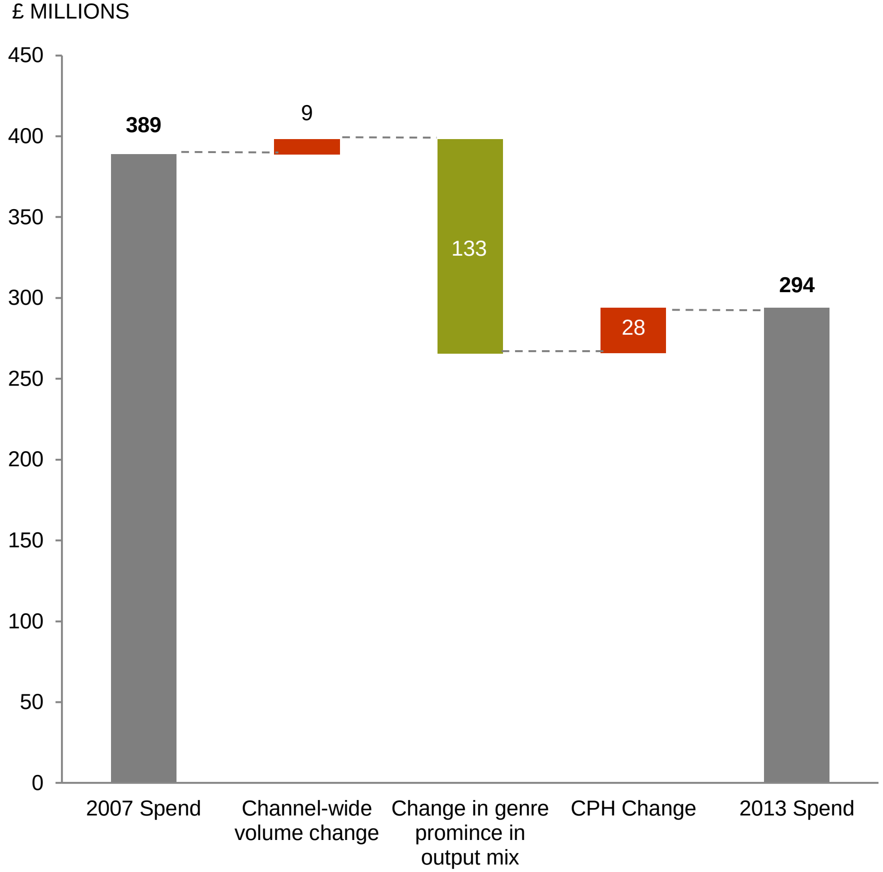
- Where producers are required to continue to deliver programmes for a fixed or reducing fee, in spite of cost pressures, R&D is one area where spending can be sacrificed.
- Reduced R&D spending could reduce the number and quality of ideas pitched to commissioners and ultimately impact on the quality of programming on offer to audiences.

Future outlook

Potential impact on programmes: drama (peak)

Fewer high quality dramas was the trend between 2007 and 2013. Buoyed by tax credits and increased third party, funding potential for UK drama is stronger then ever at present, but may have to lose some of its Britishness to broaden appeal.

Peak time drama spending changes, 2007 – 2013



Increased volume of output:

- The overall volume increase would have resulted in increased spending on peak drama of £9 million between 2007 and 2013, had the genre mix and CPH remained unchanged.

Reduced share of mix:

- The share of drama programming reduced significantly; with the exception of [✂], broadcasters moved away from drama.
- This resulted in an overall reduction in investment of £133 million between 2007 and 2013.

Increased cost per hour:

- While less drama was produced, the increased average cost per hour led to increased investment by most channels.
- This reflects increased ambition for peak time drama programming and, in the case of the BBC, reflects its Fewer, Bigger, Better, strategy.

Future prospects:

- Though not fully captured in these figures, the introduction of tax credits in 2013 has helped producers deliver greater ambition and attracted foreign investment in UK productions.
- This will likely continue as tax credits are made more accessible; the minimum level of UK expenditure will reduce from April 2015.
- Drama is increasingly aimed at an international audience as producers use deficit finance and co-production to increase PSB budgets and compete with Sky, Netflix and other new entrants.
- Commissioners could cut lower cost drama further, and transfer output to cheaper genres – or we could see further polarisation, with a reduction in mid-cost drama and a focus on cheap daytime and costly flagship programmes.

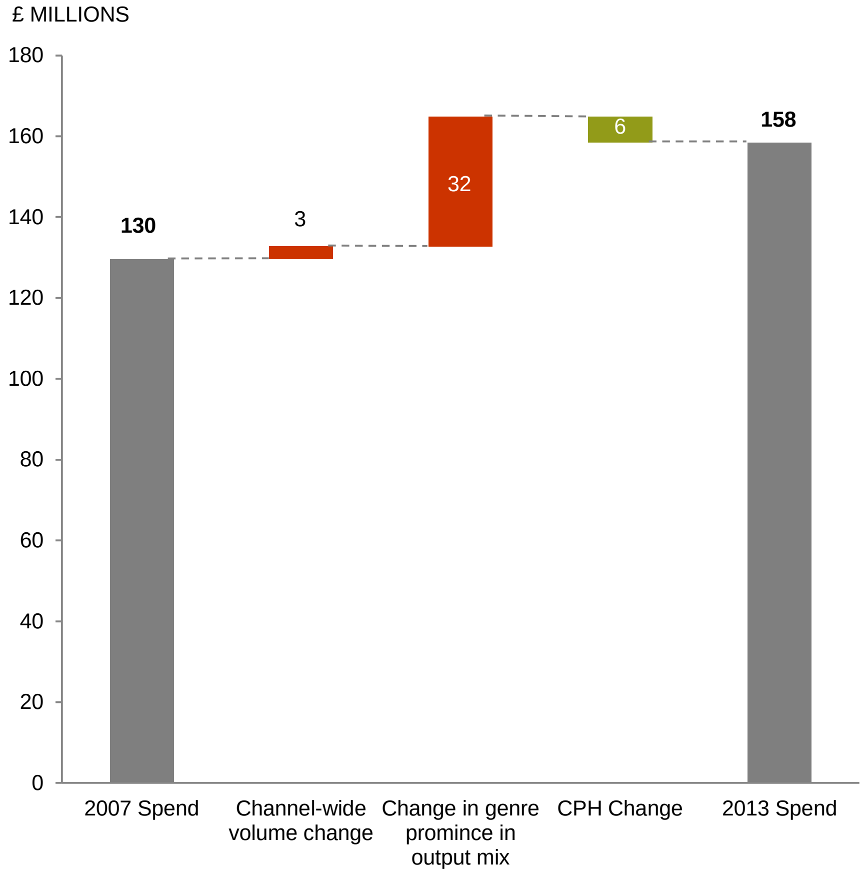
Source: Ofcom, Oliver & Ohlbaum analysis

Future outlook

Potential impact on programmes: specialist factual (peak)

Specialist factual has seen output hours increase as, overall, broadcasters moved towards lower cost genres. If cost pressure continues, commissioners may have to move to cheaper genres still, if further CPH savings cannot be found.

Peak time specialist factual spending changes, 2007 – 2013



Increased volume of output:

- The overall volume increase would have resulted in increased spending on peak specialist factual of £3 million between 2007 and 2013, had the genre mix and CPH remained unchanged.

Increased share of mix:

- The share of specialist factual programming increased significantly; all broadcaster except [✂] moved towards specialist factual.
- This resulted in an overall increase in investment of £32 million between 2007 and 2013.
- Specialist factual is low cost, compared to genres such as drama – so this increase in the share of specialist factual output facilitated reduced investment for the PSBs – see slide 31.

Decreased cost per hour:

- Reduced average cost per hour in specialist factual is likely to be driven by a combination of:
  - lower cost programming, within the genre, being preferred; and
  - greater scope for cost savings though changing input mix and reduced resource requirements – such as through self filming.

.**Future prospects:**

- Growth in overall spending on specialist factual is a good sign for the genre – which is clearly seen as representing good value as an alternative to more costly programming.
- It is likely to retain its appeal, though with production and input mix efficiencies already realised, further cost pressure could result in a shift towards even cheaper genres.

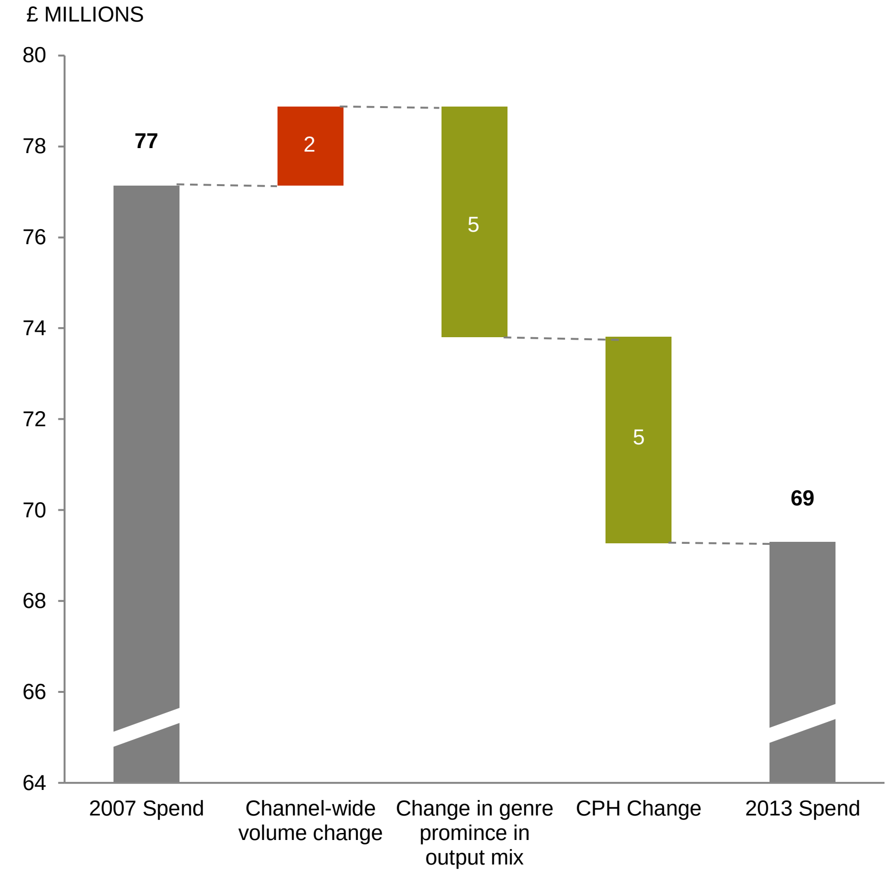
Source: Ofcom, Oliver & Ohlbaum analysis

Future outlook

Potential impact on programmes: general factual (peak)

Changes in genre mix and the CPH of general factual generated a cost reduction for PSBs overall, though the picture varied by broadcaster. The impact of any future reduction in investment will largely depend on broadcasters' preferred genre mix.

Peak time general factual spending changes, 2007 – 2013



Increased volume of output:

- The overall volume increase would have resulted in increased spending on general factual of £2 million between 2007 and 2013, had the genre mix and CPH remained unchanged.

Reduced share of mix:

- The share of peak general factual programming reduced overall, though this varied by broadcaster, [✂].
- This resulted in an overall reduction in investment of £5 million between 2007 and 2013.

Decreased cost per hour:

- All broadcasters except [✂] realised a cost saving through the reduction in the cost per hour of general factual programmes.
- This is likely to be due to a combination of factors, including movement towards cheaper programmes within genre, and efficiency savings.

Future prospects:

- The direction of travel for general factual programming is less clear than for specialist factual – with approaches differing by broadcaster and channel.
- Overall, the movement in investment was relatively small between 2007 and 2013 and, as with specialist factual, much of the efficiency saving opportunity may have already been realised.
- The impact of further reduction in broadcaster investment will depend on the will of the broadcasters, and their preferred genre mix.

Source: Ofcom, Oliver & Ohlbaum analysis

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Appendix A
Genre definitions

Our genre analysis was based on the 14 genres as defined by Ofcom for reporting purposes:

Genre	Description	Examples
Arts & Classical Music	Cultural or artistic performance, events or comment	The Proms, The Culture Show
Children's	All types of programmes designed for a children's audience	Horrid Henry, The Fimbles
Current Affairs	Current events and issues in politics, industry, business and finance	Dispatches, Tonight
Drama	All drama and TV films, including docu-drama, excluding soaps	Broadchurch
Education	Programmes with a clear educational purpose	Schools programming
Entertainment & Comedy	Panel, chat, quizzes, gameshows, pop music, satire, stand-up, sitcom, sketch	Top Gear, X Factor, Peep Show
Factual Entertainment	Popular factual material including reality shows and docu-soaps	The Hotel Inspector, Big Brother
Feature Films	All feature films that have had a prior theatrical release	Harry Potter, 12 Years a Slave
General Factual	Consumer affairs, lifestyle, hobbies and leisure, daytime magazine / talk	Gardener's World, Saturday Kitchen
News	Newscast, news bulletin, news magazines, parliamentary coverage, weather	BBC News at Ten, 5 News
Religion & Ethics	Programmes focussing on religious belief or morality, ethics or spirituality	The Big Questions, Songs of Praise
Soaps	Drama with continuous storyline and fixed cast, normally >1 episode	Coronation Street, EastEnders
Specialist Factual	History, nature and wildlife, science and technology	Natural World, Human Planet
Sports	All sports programming, including coverage of sporting events	Match of the Day, live sports events

Appendix B
Cost inflation estimate

Estimates of cost inflation by cost line were mainly derived from the Pact survey. We used our case studies titles to apportion spend cost line, for the different genres, in order to weight the cost line inflators appropriately

Inputs to cost inflation estimate by genre, 2007-2013

	Proportion of programme budgets by cost line					Inflation Estimates by Cost Line	
	Fact Ent	Gen Fact	Spec Fact	Drama	Ent & Com	Data source	Inflation Estimate
Scripting and development	1%	0%	0%	8%	4%	Pact Survey	8.5%
On-screen talent: drama actors	0%	0%	0%	19%	0%	Pact Survey	11.6%
On-screen talent: other	10%	13%	13%	0%	11%	Pact Survey	8.1%
Directors / producers	22%	27%	27%	9%	9%	Pact Survey	9.4%
Production unit	10%	14%	14%	7%	8%	Pact Survey	6.5%
On-set crew	2%	2%	2%	14%	6%	Pact Survey	8.1%
Editing and post	19%	17%	17%	9%	4%	Pact Survey	1.1%
Studio and OB costs	3%	0%	0%	1%	24%	Pact Survey	2.7%
Tape stock	1%	1%	1%	0%	0%	Case studies	-19%
Art department materials	1%	1%	1%	7%	7%	Pact Survey	2.7%
Wardrobe / hair / make-up materials	0%	0%	0%	2%	1%	Pact Survey	3.8%
Facilities and equipment	11%	7%	7%	8%	12%	Pact Survey	0.2%
Effects, graphics, CGI	0%	0%	0%	0%	1%	Pact Survey	3.9%
Music	1%	1%	1%	1%	1%	Case studies	8%
Archive	0%	3%	3%	0%	0%	Case studies	9%
Travel, transport and subsistence	12%	10%	10%	9%	5%	Pact Survey	7.3%
Finance, legal and insurance	2%	2%	2%	1%	1%	Case studies	11%
Other	5%	4%	4%	6%	4%	CPI	24%

Source: Oliver & Ohlbaum analysis