Cultural Tax Reliefs Impact Review

February 2026

Project Oversight Group

Arts Council England commissioned this report alongside an Oversight Group, whose members were: Art Fund, Arts Council Northern Ireland, Arts Council Wales, Association of British Orchestras, Association of Independent Museums, Contemporary Visual Arts Network, Creative Scotland, Department for Culture, Media & Sport (DCMS), Museums Association, National Museum Directors Council, National Lottery Heritage Fund, One Dance UK, Society of London Theatre (SOLT) UK Theatre.

About the report authors

Nordicity

Nordicity is a leading international consulting firm providing private and public-sector clients with solutions for economic analysis, strategy and business, and policy and regulation across three priority sectors: arts, culture and heritage; creative industries; and digital economy and innovation. With offices in London, Toronto and Vancouver, Nordicity is ideally placed to assist our clients to succeed in the rapidly evolving global markets.

Ipsos

Ipsos works closely with national governments, local public services and the not-for-profit sector. Its c.200 research staff focus on public service and policy issues. Each has expertise in a particular part of the public sector, ensuring that Ipsos has a detailed understanding of specific sectors and policy challenges. Combined with our methods and communications expertise, this helps ensure that our research makes a difference for decision makers and communities.

Saffery LLP

Saffery LLP is a well-established UK top 20 accountancy firm, with over 1,300 partners and staff across nine offices in the UK, as well as offices in Ireland, Guernsey, Cayman Islands, Dubai, Geneva, Dublin and Zurich. It specialises in providing bespoke advice on how artists and creative entrepreneurs can maximise their existing business and take advantage of new opportunities. Through its work with government and trade bodies, Saffery has been instrumental in lobbying for improved legislation for the creative and cultural tax reliefs and the introduction of the television production incentive.

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Impact of the UK Cultural Tax Reliefs

Theatres, Orchestras, and Museums and Galleries

Background

Introduced between 2014-2017 to support the culture sector

Enhanced rates during COVID-19 (2021) – providing up to 50% relief

Committed continuation confirmed during Autumn Budget 2024

As of April 2024:

- £892 million in Theatre Tax Relief (TTR) disbursed since April 2014
- £164 million Orchestra Tax Relief (OTR) disbursed since April 2016
- £115 million in Museums and Galleries Exhibition Tax Relief (MGETR) disbursed since April 2017

Historical Impact

Economic outcomes

+37% more earned income per year: **+£44,200** per organisation

+162% more international income: **+£16,500** per organisation

CTR had a **significant mitigating effect during the pandemic**, increasing organisations' resilience to economic shocks

Cultural outcomes

+30,550 additional performances made available to the public annually: **+110** per organisation

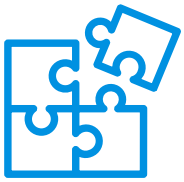
CTR helped organisations mitigate the downturn in performances during the pandemic

Social outcomes

+3.8% more concessionary tickets: **+32** per organisation

CTR increased organisations capacity to **innovate and take risks** – enhancing the UK's cultural output and delivering more to the public

Further enhancements



£326.4 million GVA and **3,622 FTE jobs** generated by further TTR enhancements

£23.9 million GVA and **378 FTE jobs** generated by further MGETR enhancements

A packed evening at the Oldham Open in the Gallery Photograph: Victoria Smith

Executive Summary

With the success of the UK's creative industry tax reliefs for film, high-end television, television animation, children's television and video games (introduced between 2007 and 2013), the government sought to extend this model of fiscal support to the cultural industries.

- In September 2014, the government introduced the **Theatre Tax Relief (TTR)** for touring and non-touring theatre production companies. It offered tax relief of 25% for touring theatre production companies' qualifying core expenditure and a rate of 20% for non-touring theatre production companies. As of April 2024, theatre companies had claimed £892 million in TTR since April 2014.
- This was followed by the introduction of the **Orchestra Tax Relief (OTR)** in April 2016, offering orchestras of 12 or more instrumentalists 25% tax relief on their qualifying core expenditures. As of April 2024, orchestras had claimed £164 million in OTR since April 2016.
- In April 2017, the government introduced the **Museums and Galleries Exhibition Tax Relief (MGETR)**. It offered tax relief of 25% of qualifying core expenditure for touring exhibitions and 20% for non-touring exhibitions. As of April 2024, museums and galleries have claimed £115 million in MGETR since April 2017.

With the onset of the COVID-19 pandemic, the government enhanced the rate of relief on each of the cultural tax reliefs (CTRs) beginning in October 2021. The TTR rates were increased from 20% (non-touring) and 25% (touring) to 45% and 50%, respectively. The OTR rate was increased from 25% to 50%. And the MGETR rates were increased from 20% (non-touring) and 25% (touring) to 45% and 50%,

respectively, and the present government stated its commitment to the tax reliefs in the Autumn Budget 2024. These temporary COVID-19 rate rises have since been replaced by permanent rates at 40%-45%.

Prior to the Spring Budget 2024 announcement, the CTR rates were planned to begin tapering down from the enhanced rates until they reverted to their original rates. What's more, the MGETR was facing a sunset clause in April 2026, having been extended on successive occasions. This sunset clause was removed in the Spring Budget 2024 by the previous government.

Given that the CTRs have been in operation for over a decade and have, along the way, been subject to uplifts and other adjustments, Arts Council England, in collaboration with the UK's other national arts agencies and several leading UK arts bodies, (a full list of these organisations can be found in Appendix D: Oversight group members[1]) sought an independent review of the impact of the CTRs. Arts Council England commissioned Nordicity, Ipsos and Saffery LLP to conduct this impact review.

This report assesses the impact the CTRs have had to date, through a robust empirical analysis of Arts Council England's National Portfolio Organisation (NPO) data to draw out relationships between CTR adoption and key economic and social outcomes, and to quantify the impact CTR has had on NPO organisations, relative to those that did not claim CTRs. While Arts Council England's NPOs do not represent the entire population of organisations in the UK that claim CTR, they do represent a substantial sample of those organisations. NPOs claimed an estimated £36 million in CTR in 2021, which represented 36% of the £99 million of total CTR claimed in 2021-22, according the HMRC statistics.[2]

Through primary research in the form of a survey of cultural organisations, Nordicity also analysed the impact of the enhanced rates of CTR introduced during the COVID-19 pandemic. Finally, this impact review outlines the positive impact of a range of potential, but not exhaustive, further enhancements to the CTRs.

Analysis of historical impact[3]

Nordicity conducted an econometric analysis[4] of the Arts Council England NPO database to assess the relationship between claiming CTR and specific outcomes from that claiming activity. The purpose of this was to quantify the benefit that CTR had on organisations and the sector's contribution to the economy. The results of the econometric analysis of historical NPO data highlighted relationships between CTR and numerous outcomes. Although analysis of outcomes did not always show a statistically significant relationship, this does not mean that there is no relationship at all, but rather that it cannot be said with confidence based on the data and modelling. Organisations claiming tax relief saw improvements in their financial performance, cultural output and social impact.

[1] Arts Council England, the national arts agencies and arts organisations formed a project Oversight Group to oversee this CTR impact review.

[2] HMRC (2025) Creative industries statistics: August 2025.

[3] An explanation of terminology used in discussion of the econometric analysis and what is meant by 'statistically significant' is available in section 1.4.4

[4] Econometric analysis is the application of statistical methods to verify a hypothesis. In the case of this report, the hypothesis is that claiming CTR led to better financial, cultural and social outcomes for organisations than if the relief had not been in place.

Headline results

- **CTR claimants earned 37% more income annually after adoption compared to non-claimants.** Based on the NPO data, this equated **to an additional £44,200 in earned income**[5] annually per organisation, on average.
- **Organisations claiming CTR earned 162% more income from international activity** than those that did not claim CTR. On average, this equated to **an additional £16,500 more income from international activity** annually per organisation.
- In terms of cultural output, organisations claiming CTR were able to put on **an additional 110 performances** annually on average compared to those that did not. **CTR mitigated the overall reduction in performances during the pandemic**. In particular, in 2021 and 2022. Results indicate that CTR helped organisations recover quicker following the pandemic, allowing them to return to staging performances in the post pandemic period quicker and more substantially than those that did not claim
- Overall, based on the NPO data, for 279 organisations claiming CTR in the sample, an additional 30,550 performances were made available to the public.
- **Organisations claiming CTR were able to increase their concessionary ticket offering as a share of total tickets by 3.8%, indicating that CTR enabled organisations to increase their social impact**. This translated into an additional 32 concessionary tickets provided per year, per organisation on average.
- Finally, **CTR had a significant mitigating effect during the pandemic**, increasing organisations' resilience to economic shocks; over time, organisations were better able to leverage CTR to improve their financial performance.

[5] Earned income is the total earnings of an organisation, including income from the organisations core activity, educational activity and any supplementary activity.

The findings from the econometric analysis of historical Arts Council England NPO data are summarised below:

Table 1: Summary of casual impacts of CTR on outcomes

Outcome	Average impact of CTR relative to the control group	Average annual increase per organisation	Statistical significance
Earned income	+37%	+£44,200	95%
International earned income	+162%	+£16,500	99.9%
Number of performances (TTR and OTR only)	+110 performances	+110 performances	99.9%
Total number of exhibitions (MGETR only) †	+6.0 exhibitions	+6 exhibitions	<90%
Number of tickets sold/given	+3.4% tickets	+118 tickets	<90%
Concessionary tickets	+3.8% concessionary tickets	+32 concessionary tickets	95%

Source: Nordicity/Ipsos/Saffery analysis based on data from Arts Council England
†Total number of exhibitions includes both touring and onsite
Note: Where no significance value is provided indicate that the relationship between CTR and outcome is unable to be confidently attributed to CTR adoption.

Impact of enhanced rates of cultural tax reliefs

The results of Nordicity's survey of cultural organisations showed that the enhanced rates of CTR during the pandemic had important benefits across the reliefs and across different categories.

- **Cultural impact:** Over 50% of all respondents across the three CTRs strongly agreed or agreed that the CTR enhancements allowed their organisation to increase the number of productions, exhibitions and displays or performances as a whole. MGETR recipients agreed that CTR allowed their organisation to increase the number of international touring dates.
- **Employment impacts:** CTR had a strong positive influence on increasing employment in theatre productions in particular, and exhibitions and displays to a lesser extent.
- **Financial impact:** The vast majority (over 77%) of organisations surveyed across all three reliefs stated that CTR improved their financial position, decreasing their reliance on reserves and increasing their resilience to economic shocks. Across the theatre and orchestra sector, CTR also allowed for innovation by reducing organisations aversion to risk.
- **Social impact**: CTR also increased organisations' professional development and community outreach capacity. CTR enabled 32% of theatres and orchestras to lower their ticket prices.

Potential impact of further enhancements to cultural tax reliefs

The final aspect of this impact review was more forward-looking in nature and examined further 'non-rate' enhancements to the CTRs. Specifically, it examined:

- an extension of the **TTR** qualifying costs to include expenditures on audience outreach and education
- the inclusion of international touring, and education and outreach costs among **OTR** qualifying costs
- an extension to the definition of **MGETR** qualifying costs to include exhibition running costs

This analysis and modelling was not based solely on the NPO data. Instead, it drew upon data from a survey of arts and culture organisations – NPO and non-NPO, commercial and non-for-profit. Furthermore, the results from this survey were extrapolated to represent sector-wide impacts, and therefore, were designed to account for impacts within the commercial and non-for-profit segments of each cultural sub-sector.

The analysis and modelling found that the **TTR** enhancement would likely result in an annual fiscal cost to the Exchequer of £73.3 million, but generate increases of 10 to 12% in theatre companies' earned income (+£188.5 million), contributed income (+£113.0 million), annual number of performances (+3,660), total audiences (+965,000) and freelancer employment (1,730). These benefits generate additional revenue through taxation to the Exchequer, helping to offset the cost of the enhancement. The net cost to the Exchequer is estimated to be just under £7.0 million. Additional earned income and combined income earned as a result of the TTR enhancements would generate an estimated 3,622 FTEs of employment and £326.4 million in GVA for the UK economy. Based on the total cost to the Exchequer, this yields a benefit-cost ratio (BCR) of 49.4 FTEs or £4.5 million in GVA for every £1 million invested.

The fiscal costs of **MGETR** enhancement are estimated at £29.6 million, but would likely lead to increases in contributed income (+£729,400), freelancer employment (+103) and compensation of employees[6] (+£13.4m), and more exhibitions and displays (+29) and commensurately larger audiences (+322,800). Based on these estimated benefits, the total cost to the Exchequer is an estimated £22.1 million annually. Additional earned income and combined income earned as a result of the MGETR enhancements would generate an estimated 378 FTEs of employment and £23.9 million in GVA for the UK economy. Based on the total cost to the Exchequer, this yields a BCR of 12.8 FTEs or £0.8 million in GVA for every £1 million invested.

Finally, under a scenario where **OTR** was expanded to include international touring activity and educational activity, the additional fiscal cost to the Exchequer in 2023/24 would have totalled an estimated £6.5 million.

It is worth noting that the analysis and modelling, and BCR estimates only took into account producer surplus impacts related to market-based transactions – whether for end-products or intermediate inputs. This approach invariably understates the overall economic benefit when viewed from a social welfare perspective. With appropriate data from the Department for Culture Media and Sport's

[6] COE, or compensation of employees, refers to the total wage and non-wage income earned by employees, both permanent and freelance, of businesses and organisations

(DCMS's) Culture and Heritage Capital (CHC) portal, this analysis's estimate of additional theatre audiences could be used to estimate the consumer surplus associated with these CTR enhancements. A similar approach could be used using CHC Portal research and the study's estimates of additional attendees to museum and gallery exhibitions.

Table 2: Summary of costs and benefits of CTR enhancement scenarios

	TTR	**OTR**	**MGETR**
CTR enhancement	Inclusion of audience outreach and education costs	Inclusion of international touring activity and educational activity	Inclusion of exhibition running costs
Fiscal costs			
Static	£59.1m	£6.5m	£28.2m
Behavioural	£14.2m	--*	£1.4m
Total	**£73.3m**	**£6.5m**	**£29.6m**
Additional revenue to the Exchequer	£66.4m	--*	£7.5m
Net cost/benefit to the Exchequer	**(£7.0m)**	**(£6.5m)**	**(£22.4m)**
Top five economic, cultural and social outcomes	1. Earned income (+12.4%, **£188.5m**) 2. Contributed income (+12.3%, **£113.0m**) 3. Annual number of performances (+10.9%, **3,660 performances**) 4. People employed as freelance labour (+10.5%, **1,730 freelance employees**) 5. Total audience (+10.5%, **965,000 additional audience**)		1. Freelancer compensation (+3.4%, **£13.4m**) 2. Freelance employment (+3.4%, **103 freelance employees**) 3. Annual number of exhibitions/displays (+2.8%, **29 exhibitions/displays**) 4. Physical attendance to exhibitions and displays (+2.8%, **322,800 additional attendees**) 5. Contributed income (+1.5%, **£729,400**)
Economic Impact			
FTEs			
Direct	1,307		201
Indirect	1,317		102
Induced	998		74
Total	**3,622**		**378**
GVA			
Direct	£164.5m		£12.1m
Indirect	£99.8m		£7.2m
Induced	£62.1m		£4.6m
Total	**£326.4m**		**£23.9m**
Benefit-cost ratios**			
FTEs/£1 million spent	49.4		12.8
Total GVA/£1 million spent	£4.5m		£0.8m

Source: Nordicity analysis based on data from online survey and Arts Council England.

* Behavioural costs and benefits not estimated due to limitations in data.

Note: all results extrapolated from survey sample to represent the population of all arts and culture organisations in each sub-sector, including commercial theatre within the theatre sub-sector.

Beyond the scenarios modelled in this section, this report also sets out a range of further enhancements and expansions to the existing reliefs, as well as recommendations for new reliefs that have the support of the sector. The relief enhancement scenarios in section 4 are examples of what could be done to the existing reliefs and based on consultations with stakeholders and the Oversight Group. The wide-ranging further recommendations presented at the end of this report are not analysed and costed to the same degree of detail as those in Section 4 and can be viewed as potential next steps or areas for future research. Both should not be seen as an exhaustive list of sector asks and recommendations but reflect the key priorities of the sector as reported by members of the Oversight Group.

BH Live. Aladdin pantomime, 2019. Photo (c) Allan Jones

1. Introduction

1.1. Background

With the success of the UK's creative industry tax reliefs for film, high-end television, television animation, children's television and video games (introduced between 2007 and 2013), the government sought to extend this model of fiscal support to the cultural industries.

- In September 2014, the government introduced the **Theatre Tax Relief** (**TTR**) for touring and non-touring theatre production companies. It offered tax relief of 25% for touring theatre production companies' qualifying core expenditure and a rate of 20% for non-touring theatre production companies.
- This was followed by the introduction of the **Orchestra Tax Relief** (**OTR**) in April 2016, offering orchestras of 12 or more instrumentalists 25% tax relief on their qualifying core expenditures.
- In April 2017, the government introduced the **Museums and Galleries Exhibition Tax Relief** (**MGETR**). It offered tax relief of 25% of qualifying core expenditure for touring exhibitions and displays and 20% for non-touring exhibitions and displays.

With the onset of the COVID-19 pandemic, the government enhanced the rate of relief on each of the cultural tax reliefs (CTRs) beginning in October 2021. The TTR rates were increased from 20% (non-touring) and 25% (touring) to 45% and 50%, respectively. The OTR rate was increased from 25% to

50%. And the MGETR rates were increased from 20% (non-touring) and 25% (touring) to 45% and 50%, respectively.

As part of the Spring Budget 2024, the government announced their commitment to these enhanced rates of tax relief available for the CTRs on 6 March 2024 that. In addition, the April 2026 sunset clause for the MGETR would be removed from its legislation. As a result, from April 2025 the TTR has been available indefinitely at rates of 45% (touring) and 40% (non-touring). The OTR has been available indefinitely at a rate of 40% and the MGETR at rates of 45% (touring) and 40% (non-touring).

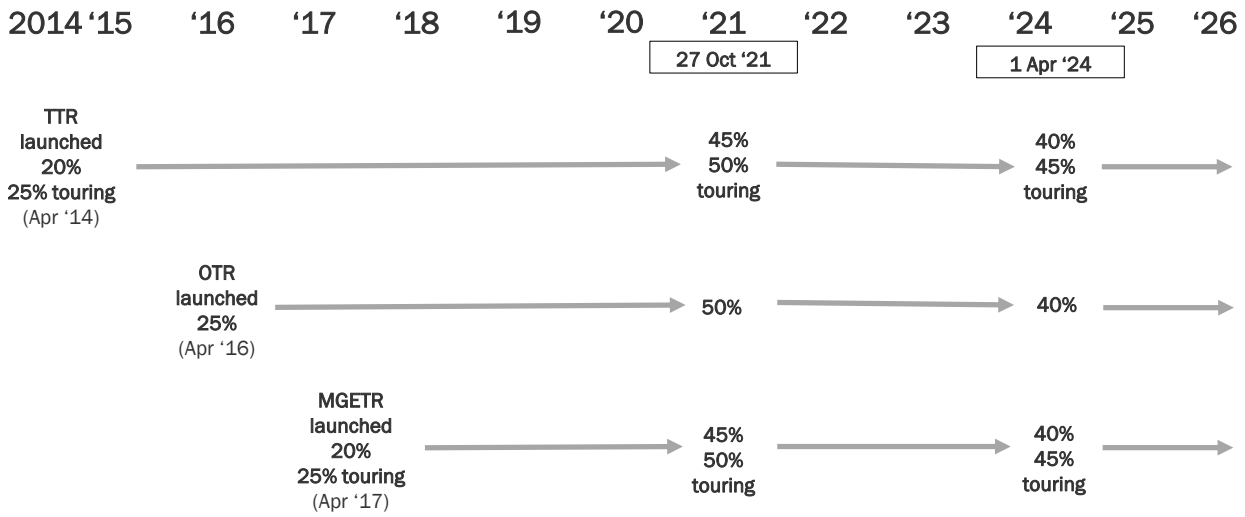
"TTR staying at the higher rate was essential – otherwise would have drastically reduced our touring output…"

"The permanent rate of higher theatre tax relief helps to reduce the risk on touring shows to a greater degree than resident ones."

"Theatre tax relief being maintained at the current rate is a lifeline."

Source: The Audience Agency Touring Research, 2024/2025[7]

Figure 1: Path of cultural tax relief rates



Source: HMRC

According to statistics published by HM Revenue and Customs (HMRC), as of April 2024, the:

[7] During 2024/25, The Audience Agency (TAA) were commissioned by Arts Council England to undertake a research project to better understand the current state of the theatre, dance, music and combined arts touring sectors and ecology, particularly in relation to presentation venue geography and artform, including genre. The Arts Council to understand how touring has changed since before the Covid-19 pandemic and to explore the relationship between commercial and subsidised organisations. This project was interested in the touring of theatre, dance, music and combined arts activities to venues, presenting work on indoor stages with seated capacity above 150+.

In order to explore these areas of the touring ecosystem, TAA designed a survey and undertook a series of co-design open sessions and ran a series of focus groups to look at specific areas of Touring in more detail. Quotes relating to cultural tax relief were drawn from either open text responses from the survey or from the transcriptions that were generated by Otter.ai using the recordings of the focus groups.

- TTR had provided £892 million financial support to 29,000 theatre productions, since April 2014.
- OTR had provided £164 million in financial support to 4,480 orchestra productions, since April 2016.
- MGETR had provided £115 million in financial support to 11,155 exhibitions and displays, since April 2017.

Taken together, by the end of 2024, the CTRs would have likely provided the UK's cultural sector with nearly £1 billion in financial support since their introduction.

1.1.1 Original policy objectives

At its original introduction in 2014, the objective of the TTR was to use a targeted tax measure "*…to encourage and support UK theatre producers to continue to develop [theatre productions] and to specifically incentivise touring productions.*"[8] By doing so, the government sought to extend the success that the creative tax reliefs had already had for the UK's annual production of films and TV programmes to the production of plays, musicals, opera, ballet and dance. The government also sought to "*recognise the unique cultural value that the theatre sector brings to the whole of the UK*" through "*groundbreaking [sic] productions*"[9] made by its "*innovative theatre companies producing*"[10] and thereby help maintain the sector's "*continued cultural and economic importance*"[11] in the UK and globally.

In a similar way, the government's introduction of the OTR in 2015 was also intended to extend the success of the creative tax reliefs to the UK's orchestras.[12] The original objective of the OTR was to "*make sure that orchestras [could] continue to thrive in the UK*"[13] and "*promote British culture in a sustainable way*" [14] In particular, OTR was viewed as a tax measure that could encourage the UK's orchestras to perform across the whole of the UK and tour internationally, and contribute to "*improving the way the UK is viewed around the world*".[15]

With the introduction of MGETR, the government sought to "*support [museums and galleries] to develop creative new exhibitions and to display their collections to a wider audience*"[16]. So similar to the other CTRs, the MGETR was designed to encourage touring exhibitions and displays.

[8] HM Treasury (2014) Theatre tax relief: consultation. March. P. 5.
[9] HM Treasury (2014) Theatre tax relief: consultation. March. P. 5.
[10] HM Treasury (2014) Theatre tax relief: consultation. March. P. 5.
[11] HM Treasury (2014) Theatre tax relief: consultation. March. P. 5.
[12] HM Treasury (2014) Consultation outcome: Orchestra tax relief consultation. 24 March.
[13] HM Treasury (2014) Consultation outcome: Orchestra tax relief consultation. 24 March.
[14] HM Treasury (2014) Consultation outcome: Orchestra tax relief consultation. 24 March.
[15] HM Treasury (2014) Consultation outcome: Orchestra tax relief consultation. 24 March.
[16] HM Treasury (2016) Consultation outcome: Museums and galleries tax relief. 5 December.

1.1.2 Policy objectives of subsequent rate changes

As noted, the rates for the TTR, OTR and MGETR were temporarily increased on 27 October 2021 in order to support these audience-facing sectors "*in their economic recovery from COVID-19*".[17]

As of 1 April 2025, the planned tapering of temporarily higher rates of tax relief for each of the CTRs was suspended. Each of the temporarily higher rates introduced in October 2021 were reduced by five percentage points and then made permanent. These permanently higher rates – though not as high as the temporary rates during COVID-19 – were made permanent "*to continue to offset [the] pressures on these industries and boost investment in [the UK's] our cultural sectors*"[18].

1.2. Research brief

The HMRC statistics demonstrate that the CTRs have become an important source of funding for the UK's theatre companies, orchestras, museums and galleries. Crucially, the previous Conservative Government's actions in the Spring Budget 2024 demonstrate it recognised this importance.

Prior to the Budget 2024 announcement, the CTR rates were due to begin tapering down from the enhanced rates until they reverted to their original rates. What's more, the MGETR was facing a sunset clause in April 2026.

Given that the CTRs have been in operation for over a decade and have, along the way, been subject to uplifts and other adjustments, Arts Council England, in collaboration with the UK's other national arts agencies and several leading UK arts bodies, sought an independent review of the impact of the CTRs.

In October 2023, Arts Council England – in partnership with Art Fund, Arts Council Northern Ireland, Arts Council Wales, Association of British Orchestras, Association of Independent Museums, Contemporary Visual Arts Network, Creative Scotland, Department for Culture, Media & Sport (DCMS), Museums Association, National Museum Directors Council, National Lottery Heritage Fund, One Dance UK, SOLT/UK Theatre) (the "Oversight Group") – commissioned Nordicity, Ipsos and Saffery LLP to conduct this independent impact review. The following report presents the results of this impact review.

1.3. Report outline

The remainder of **Section 1** provides an overview of the approach used by Nordicity, Ipsos and Saffery LLP.

Section 2 provides an analysis of the historical impact of the CTRs. It draws upon an econometric analysis of Arts Council England National Portfolio Organisation (NPO) data to investigate the statistical relationship between the use of CTRs and cultural organisations' various positive economic, cultural and social outcomes.

[17] HMRC (2024) Policy paper: Permanent 40% and 45% rates for theatre, orchestra, museum and galleries tax reliefs. 6 March.

[18] HMRC (2024) Policy paper: Permanent 40% and 45% rates for theatre, orchestra, museum and galleries tax reliefs. 6 March.

Section 3 draws upon data from a survey of arts and culture organisations in the UK to specifically examine how the enhanced rates of relief introduced in October 2021 had a positive impact on arts and culture organisations.

Section 4 is more forward-looking and draws upon the same survey of arts and culture organisations to examine the degree to which further enhancements to the CTRs could further improve their ability to stimulate increased positive economic, cultural and social outcomes across the cultural industries.

Section 5 provides a summary of the key findings from the research and offers several recommendations for future CTR research and for the design of the CTRs themselves.

1.4. Approach

Nordicity used a combination of research interviews; direct and indirect survey data; econometric analysis; quantitative modelling; and case study research to conduct this impact review. All of the research and analysis was guided by the development of a data plan.

1.4.1 Research interviews

At the outset of the project, Nordicity conducted research interviews with the members of the Oversight Group and several other leading organisations within the UK's theatre, orchestra, and museums and galleries industries. These interviews were used to better understand the role of the CTRs in cultural organisations' business models, identify outcomes for assessing cultural organisations' economic, cultural and social outcomes; identify data sources; plan the industry survey; and gather other industry insights.

Nordicity conducted a total of 18 research interviews, including interviews with all 12 Oversight Group members, as well as the National Theatre, the English National Ballet, HM Treasury and HMRC.

Figure 2: List of research interviewees

1. Arts Council England
2. Arts Council Wales
3. Arts Council Northern Ireland
4. Art Fund
5. Association of Independent Museums
6. Association of British Orchestras
7. Contemporary Visual Arts Network
8. Creative Scotland
9. Department for Culture, Media and Sport
10. English National Ballet
11. Heritage Fund
12. HM Treasury
13. HM Revenue and Customs
14. Museums Association
15. National Museum Directors' Council
16. National Theatre
17. One Dance UK
18. Society of London Theatre / UK Theatre

1.4.2 Direct survey data

Nordicity used an online survey to directly collect data from theatre companies, orchestras, and museums and galleries. This direct collection of data was used for the analysis of enhancements to the CTRs. The survey was conducted in May and June 2025. Out of an estimated 4,100 cultural

organisations holding membership with the Oversight Group members, a total of 146 arts and culture organisations across the UK completed the survey.[19] This overall response pool included:

- 29 organisations that primarily claimed MGETR
- 44 organisations that primarily claimed TTR
- 44 organisations that primarily claimed OTR
- 29 other organisations (Claim animation or none of the above)

1.4.3 Indirect survey data

In order to evaluate the impact of the cultural tax reliefs in the UK, Nordicity identified two distinct research strands. Through robust statistical analysis of cultural organisational data, Nordicity evaluated and quantified the impact cultural tax reliefs have had historically. Informed by initial consultations with Arts Council England and Oversight Group members, as well as other cultural organisations, Nordicity identified data sources that would allow for econometric analysis of outcome variables over time. Through these consultations, outcomes were identified upon which to evaluate the impact of tax relief and additional research considerations were heard. Nordicity and research partners IPSOS then developed a statistically robust methodology to quantify the impact the Cultural Tax Reliefs have had on organisations, the details of which can be found in section 2.2.

In addition to considering the historical impact of tax reliefs, this paper also considers the impact these reliefs could have in future, or the impact any enhancements to the current rates could provide. Informed by the consultations and in partnership with Arts Council England, a survey was distributed to cultural organisations to collect data that would allow for evaluation of future enhancement scenarios across the three cultural tax reliefs.

1.4.4 Econometric Analysis

The aim of the econometric analysis into the historical impact of CTR on outcomes is to establish whether there were any relationships between CTR use and the selected outcomes. These relationships were validated using econometric models, to establish the percentage difference in outcomes between organisations claiming and those that did not. Below are the definitions of key terms frequently used in the discussion of results to aid understanding.

- **Dependent variable:** a variable whose value depends on another/other variable(s), in this case the outcome variable.
- **Control Variable:** These are variables that may have external influence on the results, beyond CTR usage. These are variables like organisation size or capacity.
- **Statistically significant**: to have confidence that the results and relationships indicated by the models they must be statistically significant. A statistically significant result indicates that you can

[19] HMRC statistics indicate that a total of 1,840 “companies” claimed CTR in 2023-24. However, the actual number of unique organisations claiming CTR may be lower where companies create special purpose vehicles (SPVs) to claim CTR.

be reasonably confident that CTR **actually causes** the increase/decrease in outcome analysed. Please not that where a result is **not** statistically significant, this does **not** mean that there is no relationship, but rather that the relationship indicated by the model may not be caused by CTR but may be caused by other contributing factors.

- **Significance codes**: significance of results are evaluated in this report using a star system to represent percentage significance:
  - Three stars (***): 99.9% confidence that the relationship is associated with CTR, or a 0.01% chance it is random
  - Two stars (**): 99% confidence that the relationship is associated with CTR, or a 1% chance it is random
  - One star (*): 95% confidence that the relationship is associated with CTR, or a 5% chance it is random
  - One dot (•): 90% confidence that the relationship is associated with CTR, or a 10% chance it is random
- **Coefficient of interest**: This is the single number that quantifies the impact of CTR on the outcome. It measures the difference between two differences, the difference in outcomes between organisations that used CTR and the organisations that did not.

Northern Ireland Opera, 'The Juniper Tree'. Photo: Neil Harrison Photography

2. Analysis of historical impact

2.1. Overview

This section presents the results of an econometric analysis of the historical impact of the CTRs on a variety of economic, cultural and social outcomes. Specifically, the econometric analysis uses a difference-in-differences (DiD) modelling approach combined with propensity score matching to evaluate the causal impact of CTRs on the outcomes of arts and culture organisations in England over the period 2013 to 2024.

At its core, the analysis of the historical impact of the CTRs provides robust empirical (i.e. statistical) evidence of whether the CTRs resulted in statistically significant differences in the outcomes than otherwise would have occurred in the absence of the CTRs.

The overriding focus of this analysis was to reject the hypothesis that the CTRs had **no** statistically significant effect on the outcomes (i.e. number of production, exhibitions and displays; financial performance and sustainability; visitors/audiences; domestic/international touring), and then to quantify this effect.

The analysis followed a five-step approach:

1. Outcome identification and data mapping
2. Collation of primary data
3. Establishing a balanced sample of organisations between treatment and control groups
4. Statistical analysis and modelling
5. Reporting

Through initial consultations with Arts Council England, Oversight Group members and other cultural organisations, outcomes against which to evaluate the impact of the CTRs were identified. These metrics allowed for the analysis to consider the potential economic, cultural and social impacts that the CTRs could have on organisations.

Following consultation and data mapping, availability of data in the UK nations dictated that the economic analysis had to be restricted to organisations in the Arts Council England NPO database. This meant that this analysis of impacts is limited to English organisations, but we anticipate the impacts will be similar across the UK nations.

A bespoke longitudinal dataset of organisational outcome variables was assembled by Nordicity using the Arts Council England annual survey of its NPOs, from 2013 to 2024.

A robust empirical methodology was developed by IPSOS and Nordicity. As is the case with many government support programs, an existing treatment and control group of CTR recipients and non-recipients was not available, as CTRs are not typically adopted by 100% of eligible organisations, preventing a traditional experimental design approach from being used. In light of this, as used in many similar studies, this analysis relies on a quasi-experimental design to establish treatment and control groups. The control group was constructed using nearest neighbour propensity score matching.[20]

Further technical details for the methodology can be found in Appendix A. In the remainder of this section, we summarise the methodology and models, and the modelling results.

2.2. Methodology

2.2.1 Dataset and construction of control group

This analysis makes use of the Arts Council England Annual Survey of National Portfolio Organisations (NPOs), 2013/14 to 2023/24. The National Portfolio is a regular funding programme for arts organisations, museums and libraries across England, NPOs help communities everywhere enjoy the best creativity and culture. Arts Council England NPOs are required to provide data on financial, audience, staff and activity metrics annually. Nordicity collated these annual datasets for analysis,

[20] Propensity score matching (PSM) is a quasi-experimental method used to estimate the difference in outcomes between beneficiaries and non-beneficiaries that is attributable to a particular program.

resulting in a longitudinal database featuring over 7,000 observations across over 1,000 unique organisations from which to establish a control group.

As part of Arts Council England NPO reporting responsibilities, organisations are required to complete the annual survey, which asks for information concerning tax relief use and value. These variables were used to create the treatment and control groups, denoted by a binary field indicating use of tax relief at any point during the study period.

The Arts Council England NPO data was cleaned and transformed before construction of the treatment and control groups and the econometric modelling. This included removing missing data, outliers at +/- 3 standard deviations, and transforming variables to improve distribution.

To construct treatment and control groups, organisations in the dataset that claimed CTR were 'matched', using propensity score matching, with similar profile organisations that did not claim CTR, to produce a balanced sample from which to investigate variation in outcomes and assess the extent to which use of CTRs effects the outcomes. Through an iterative modelling process, the extent and significance of relationships between CTR claim and the outcomes was quantified.

2.2.2 Econometric modelling

Binary variables were added to differentiate between organisations that had claimed CTR over the study period and to assign annual observations to the post-treatment period. The interaction term between these two variables formed the basis of the modelling approach, allowing for estimation of the effect of claiming CTR on key outcome indicators in the post-treatment period.

Lags[21] were applied to dependent and control variables to attempt to account for temporal persistence of outcomes, the fact that one year's performance is often highly influenced by the previous year. Lags also help to capture the delayed impact that government interventions of this nature can often have, with benefits taking time to fully materialise.

Controlling for the effects of the COVID-19 pandemic

The study period encompassed the years 2020 to 2023, which were affected by the COVID-19 pandemic. Indeed, the audience-facing arts and culture industries were among the worst impacted by government restrictions and changes in audience behaviours, so any consideration of effects of CTR over this period will naturally be influenced by this. In an attempt to control for the effects of the COVID-19 pandemic, this analysis includes temporal fixed effects to models. This includes binary variables indicating the general pandemic period (2020 onwards) and specific year indicators for 2020, 2021 and 2022 to try and account for the changes in intensity of pandemic impacts and resilience built up by organisations as the pandemic progressed and subsided. Interaction terms between these temporal variables and CTR claim status were also investigated.

[21] A lagged variable is a past observation, i.e. the previous year's value. Used in cases where the previous year's value may be a predictor of future years, or where the impact of a variable may be delayed in having an effect.

The effect of CTR was estimated on the following outcomes:

- **Earned income:** under the hypothesis that CTR has led to improved financial performance, and additional taxation revenue to the Exchequer.
- **International income[22]:** under the hypothesis that CTR permits cultural organisations to not only create more cultural output, but to create output for international audiences, which directly yields additional economic benefits for the UK.
- **Number of performances or exhibitions and displays:** under the hypothesis that CTR enables cultural organisations to produce more cultural output in the form of productions, exhibitions and displays or performances.
- **Number of tickets (sold and free):** under the hypothesis that the CTR enables cultural organisations to reduce prices or price their tickets more competitively and thereby sell more tickets, all other things being equal, than cultural organisations without CTR support.
- **Concessionary tickets (sold and free):** Under the hypothesis that financial sustainability that comes with CTR enables cultural organisations to divert revenues towards providing social value, concessionary tickets serve as a proxy for this.
- **Number of full-time staff:** Is used as a proxy for human capital and delivers domestic economic benefits to the UK through increased cultural employment.

2.2.3 Hierarchy of models

This analysis developed a hierarchy of models to address different econometric challenges and work towards a quantification of the impact of CTR on cultural organisations, through statistically significant, robust causal estimates of the effects of CTR use on the outcomes.

Model 1: Baseline DiD model

Model 1 provides a baseline test of the core hypothesis that CTR has resulted in an increase in the outcomes, controlling for external pandemic induced factors. After ensuring that a fixed effects model was most appropriate for the sample using the Haussman test and F-Test, a fixed effects regression was run on the outcomes of interest. This baseline model did not include any control variables, lags, or pandemic controls.

Model 2: DiD with controls and lagged variables

Once a statistically significant relationship between the outcome of interest and CTR was established, the fixed effect model was refined to account for variables that may be influencing any effects by introducing control variables. External factors were also accounted for by introducing binary pandemic controls and temporal persistence was controlled for by lagging the dependent and control variables, under the assumption that outcome metrics are influenced by previous years' performance.

[22] Includes income earned through touring internationally

This model forms the main specification from which causal inferences are determined in the following section, if effects are deemed significant.

Adding binary pandemic controls to models avoids variation in outcomes as a result of the pandemic across both the treatment and control groups being associated with CTR, under the assumption that the impacts of pandemic induced restrictions and associated economic shocks and audience behaviours were uniformly experienced across the three relief sectors. Introducing pandemic controls also adds an additional layer of analysis, allowing for investigation into any mitigating effect CTR adoption may have had during the pandemic, under the hypothesis that CTR provided organisations with increased resilience in a period that is universally understood to have been disproportionately challenging to the arts and culture sectors.

Model 3: Refined DiD with controls and lagged variables ("Improved model")

The next iteration of the model removed non-significant controls to attempt to improve model fit and derive more robust estimations of causal effect. In some cases where the model fit was not improved following refinement of Model 3, causal inference was derived from Model 3.

Model 4: Dynamic effects

A final dynamic effects model was run to determine if CTR had any compounding effect over on the outcome of interest over time.

This model was used to derive further statistical insights into the impact of CTR on outcomes, allowing for investigation into whether organisations were able to leverage CTR more effectively over time for example, or if the actualisation of the benefits of CTR are delayed.

Sector specific impacts

Nordicity categorised each organisation by main discipline, with the aim of running individual analyses on the specific CTRs, for example to isolate the impacts of OTR on orchestras rather than the CTRs as a collective. This would allow for more targeted causal inference to feed into sector specific policy recommendations. However, the Arts Council England NPO survey questions relating to CTR make no distinction between the reliefs. As well as this limitation in the data, there is the added complication that organisations may be eligible for more than one CTR, and as such, claim a combination of the three, or a different relief from year to year.

Nevertheless, if a statistically significant causal effect was established, the models were run on a subset of the data, using this main discipline categorisation as a proxy for the specific CTR claimed, to investigate whether these impacts remained significant or varied by CTR. These results are caveated by the limitations detailed above. The subdivision of the overall dataset into sector sub-sets reduced the sample sizes significantly[23], thereby reducing the validity of estimates. Where effects remain significant the results are presented in the following sections under the outcome.

[23] Sample sizes for the three reliefs: estimated TTR organisations = 115, estimated OTR organisations = 65, estimated MGETR organisations = 120

2.3. Results

The following section presents the results of the econometric modelling on the selected outcomes and associated causal inference of impacts.

2.3.1 Earned income

Results indicate a statistically significant positive effect of CTR adoption on total earned income, that compounds over time.

Headline results:

- There is **a statistically significant relationship between CTR adoption and earned income**.
- Organisations claiming CTR earn, on average **36.7% more earned income** than those that do not claim.
- Within the sample, this is equivalent to **an additional £44,200 in earned income annually**, per organisation claiming CTR.
- The results suggest that CTR impact on **earned income compounds over time following adoption**, with the strongest impact in the third year after the first CTR claim.

Baseline Model

Across the post-treatment period, earned income decreased overall, across the whole sample, however this decrease was greater amongst the organisations who did not claim CTR.

Amongst organisations not claiming CTR there was a statistically significant 33% (95% CI: 43%, 21%, $p<0.001$) decrease in earned income. Amongst organisations that claimed CTR, this decrease was mitigated by 39% (95% CI: 12.3%, 70.8%, $p<0.002$), although still experienced a 7.4% decrease.

This model has a relatively low R-squared value (0.007), indicating that while the use of CTR had a statistically significant effect, it only explains a small portion of the overall variation. Wider economic influences are likely to be influencing changes in earned income.

Improved Model

After controlling for the effect of the pandemic, and introducing lagged variables, the apparent decline observed in the baseline model results were shown to have been driven by the pandemic, as evidenced by the highly significant string effects.

With these controls in place, model results indicate that CTR provided significant economic benefit, increasing earned income by 36.7% in real terms (exponential transformation), significant at the 95% confidence interval.

Based on the average income of the sample, organisations claiming CTR are earning over £44,200 more in earned income annually, on average, compared to those not claiming CTR. The average earned income annually, across the whole sample of organisations (not just the matched sample) was £681,500, supporting the hypothesis that CTR has improved financial outcomes.

Figure 3: Plot of coefficients, Fixed effects DiD between CTR and earned income

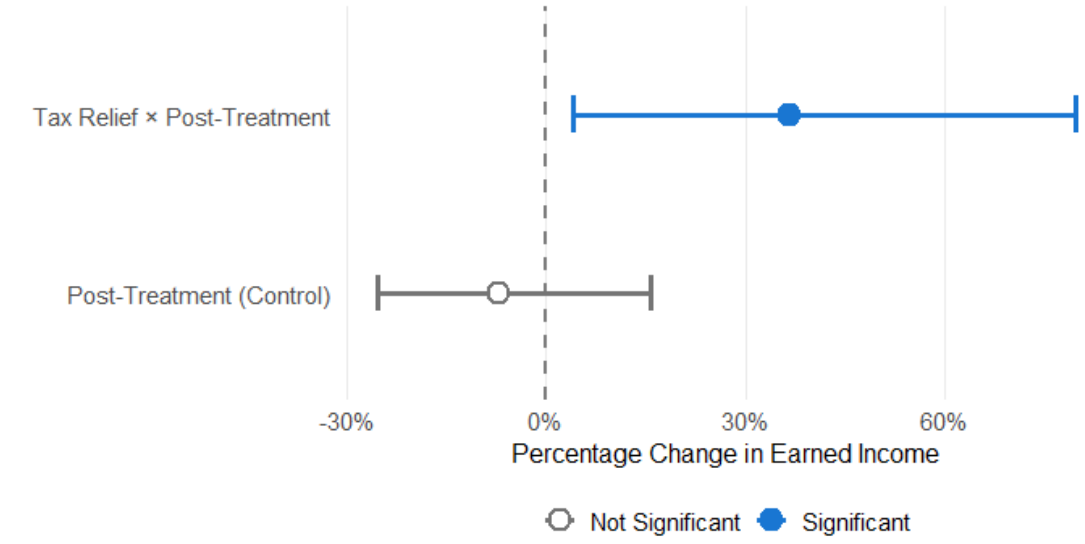
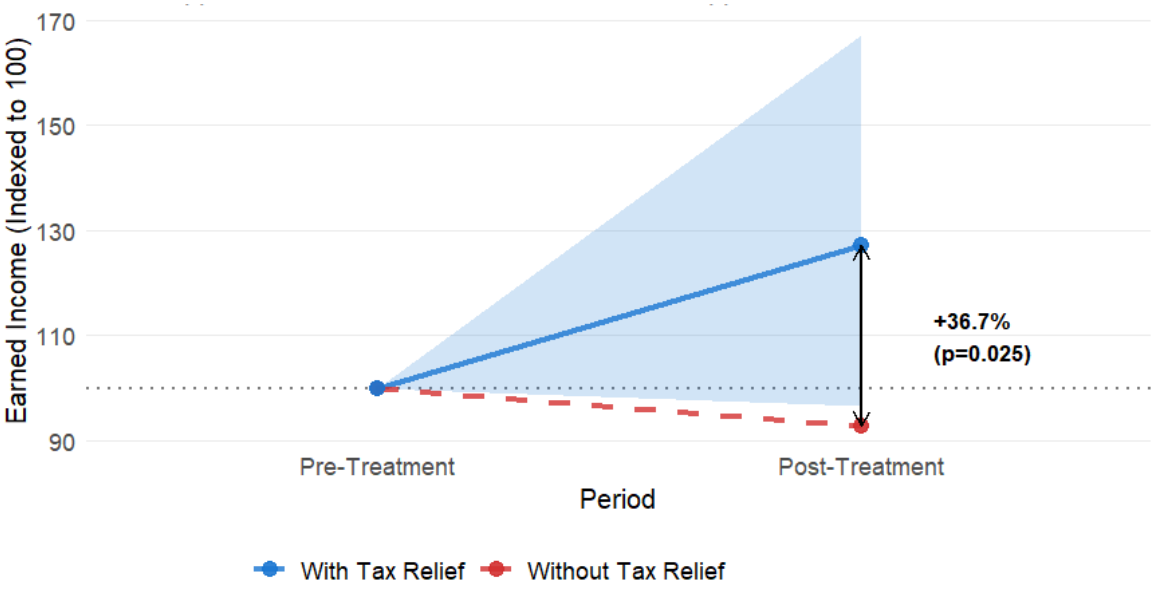


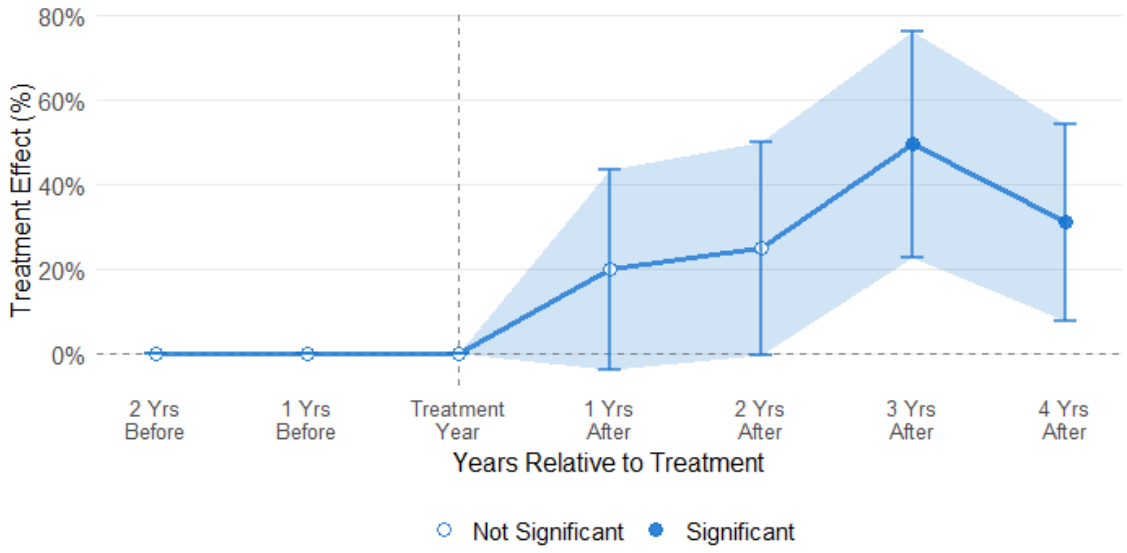
Figure 4: Impact of CTR on earned income, treatment vs control counterfactual



Dynamic effects model

The results from the dynamic effects model indicate that organisations were able to maintain their increased earned income, potentially showing stronger post-pandemic recovery. The results suggest that CTR impact on earned income compounds over time following adoption, with the strongest impact in year 3.

Figure 5: Dynamic effect of CTR on earned income



2.3.2 International earned income

Results indicate a statistically significant positive effect of CTR adoption on income earned from international activity, that compounds over time.

Headline results

- Income earned from international activity has a **statistically significant positive relationship** with CTR use.
- Organisations claiming CTR in the sample analysed **earned 162% more income from international activity than those that did not**.
- Organisations claiming CTR earned, on average across the sample, **£16,500 more from international activity annually** than those that did not.
- **There is a strong compounding effect**, with the additional income organisations claiming CTR earn from international activity relative to those that do not growing year on year after adoption.

Baseline Model

Results indicated a statistically significant positive relationship between CTR and an organisation's international earned income.

Both organisations who claimed CTR and those that did not saw improvement in internationally earned income over the study period. Organisations who did claim tax relief saw a coefficient of 1.144 ($p<0.001$), indicating a substantial increase in income generated from international activity in the post-treatment period, relative to those that did not.

Improved Model

Improving the model specification with lags and pandemic controls improves the robustness of the causal estimates. The positive effect of CTR on international earned income is statistically significant

(p<0.001), with a coefficient of 0.962, representing an estimated 162% increase in international earned income (after taking the exponential of the logged coefficient) compared to the control group.

This translates into an average of £16,500 additional annual international earned income, based on the average international income across the matched sample. The average international earned income annually, across the whole sample of organisations (not just the matched sample) is £19,200, supporting the hypothesis that CTR has improved financial outcomes for recipients.

Figure 6: Plot of coefficients, Fixed effects DiD between CTR and international earned income

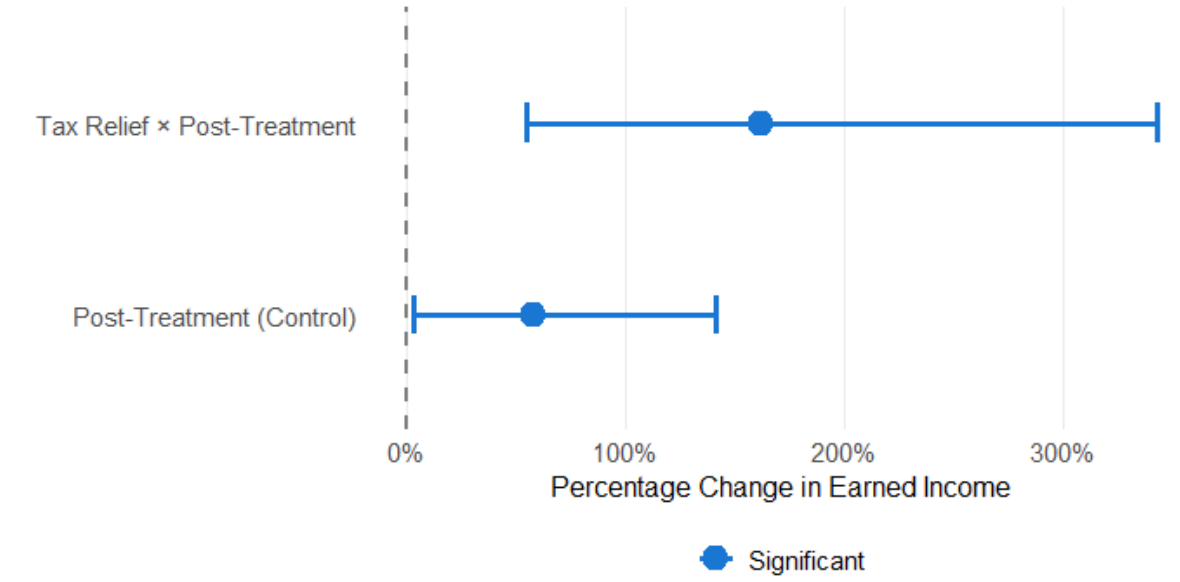
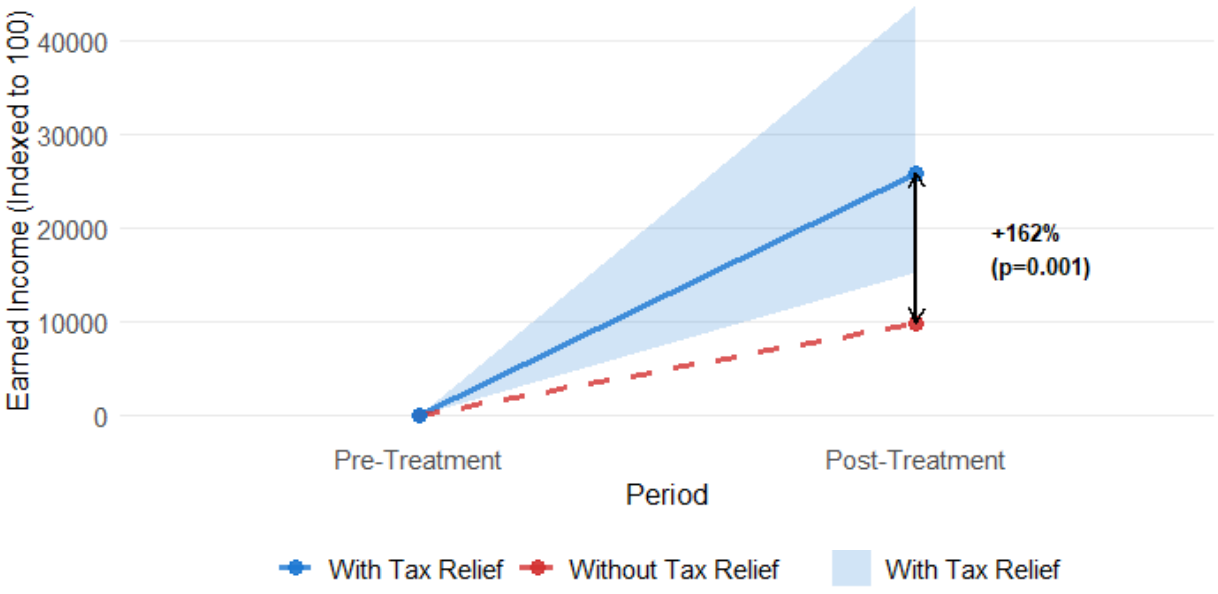


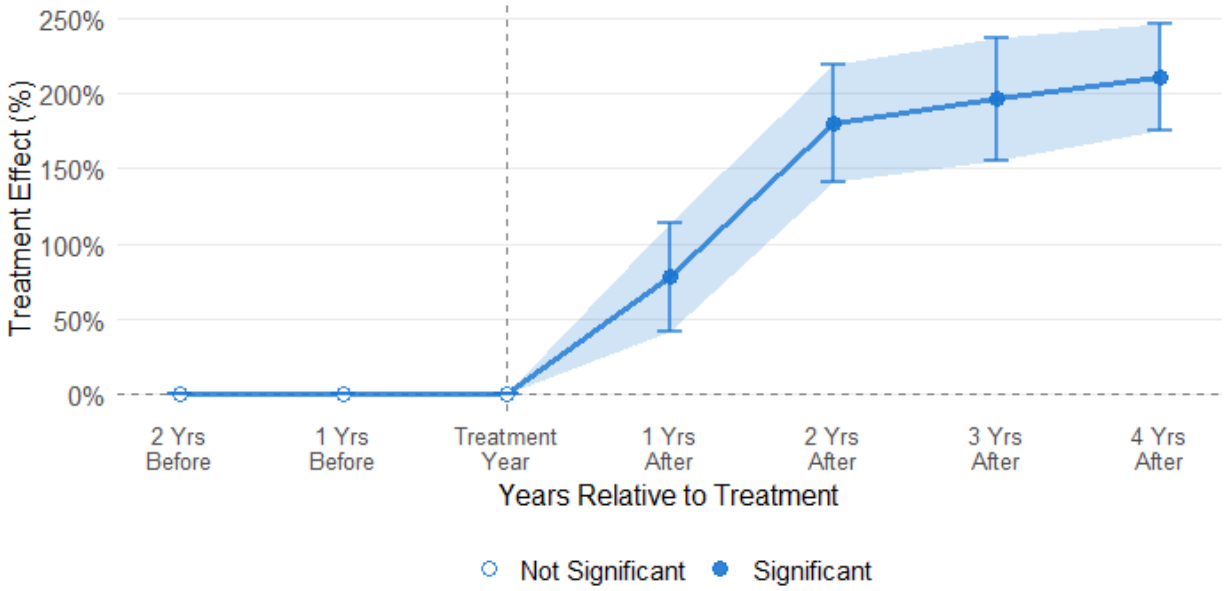
Figure 7: Impact of CTR on international earned income, treatment vs control counterfactual



Dynamic effects model

The results from the dynamic effects model indicate that organisations were able to maintain their increased earned income from international activity, potentially showing stronger post-pandemic recovery. The results suggest that CTR impact on earned income compounds over time following adoption, with the strongest impact in year 4. This compounding effect is significant across four years after adoption of CTR.

Figure 8: Dynamic effect of CTR on international earned income



Sector specific impacts

Analysing the three reliefs individually, this significant relationship is only maintained for the TTR, with the interaction coefficient increasing to 1.372 ($p<0.1$). The sample is reduced to 115 theatre organisations. While the coefficient increases for OTR, the relationship is not significant.

2.3.3 Number of performances

Results indicate a statistically significant positive effect of CTR adoption on the number of performances theatres and orchestras can put on, that compounds over time.

Headline results

- There is a statistically significant relationship between the number of performances an organisation can hold and CTR adoption.
- Organisations claiming CTR held **an additional 110 performances annually** compared to those that did not.
- **CTR had a significant mitigating effect for organisations during the pandemic**, offsetting the overall decrease in performances during this period.

Baseline model

Like earned income, the baseline model results indicate a similar statistically significant effect of CTR on the number of performances an organisation can put on, and it has partially offset the decrease in performances put on by theatres and orchestras.

Organisations not claiming tax relief have seen an estimated decrease of 104 in the number of performances over the post treatment period, while organisations claiming CTR have only seen a decrease of 14 performances. Furthermore, this effect was found to be highly significant ($p<0.001$), although as with earned income, the model only explains a small portion of the total variance and more controls are required to arrive at a better estimate.

Improved model

Perhaps more so than financial metrics, the ability to put on performances was severely impacted by pandemic induced restrictions. As such, when incorporating pandemic controls to the model, results indicate that organisations claiming CTR were able to put on an average of 109.5 additional performances, supporting the hypothesis that CTR enabled organisations to improve their cultural output.

Lagging the dependent variable indicates that previous performance metrics are strong indicators of future performance numbers, an intuitive observation but worth noting nonetheless. The negative coefficient for the pandemic period control indicates the significant disruption caused by restrictions.

The positive interaction term points towards a mitigating effect of CTR.

Figure 9: Plot of coefficients, Fixed effects DiD between CTR and number of performances

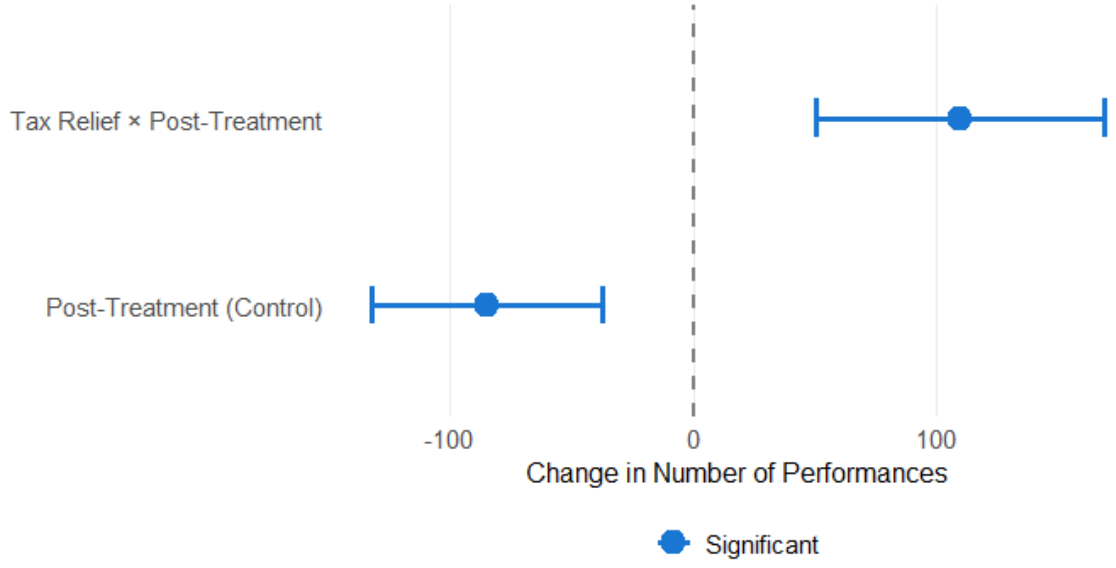
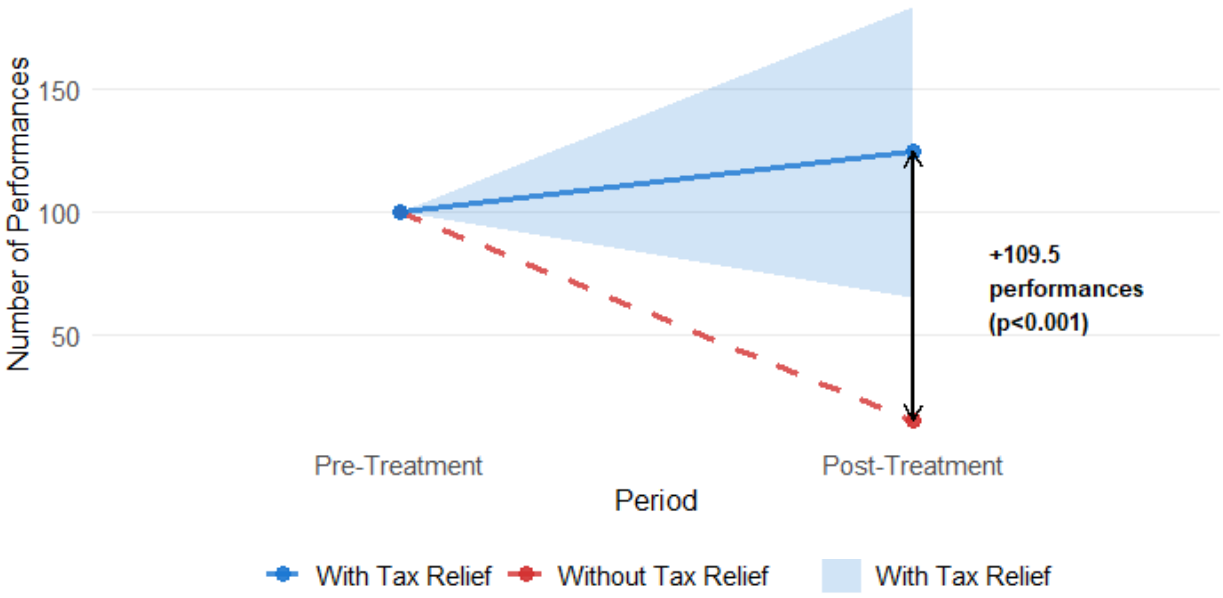


Figure 10: Impact of CTR on number of performances, treatment vs control counterfactual



Dynamic effects model

The results from the dynamic effects model were not statistically significant, suggesting the impact of CTR on the number of performances organisations were able to put on may have been more immediate, rather than having a compounding effect as with earned and internationally earned income. In the case of the number of performances, this makes sense, as there's only so many performances an organisation can feasibly put on in a year unless there is a sudden increase in extra space or additional tours are added into their programme.

2.3.4 Number of exhibitions and displays

The models analysing the effect of CTR on the number of exhibitions and displays organisations put on showed inconclusive results. The baseline model appeared to show a statistically significant reduction of 10 exhibitions / displays a year with the adoption of CTR; however, this effect became non-significant with the introduction of pandemic controls. This inconclusiveness is likely explained by the fact that the data failed the parallel trends assumption in the first instance. This means that the organisations claiming CTR were on different trajectories in terms of the number of exhibitions / displays being held than those not claiming.

2.3.5 Number of tickets sold and given

As with the number of exhibitions and displays, analysis of the impact of CTR on the number of tickets sold or given by an organisation showed no statistically significant relationship, as a whole and across reliefs, with the data initially failing to support the parallel trends assumption. All models showed no statistically significant impact of CTR on ticket sales.

2.3.6 Concessionary tickets sold and given

It is understood, through consultation with organisations claiming CTR and sector bodies [see pg.46, Making Music case studies], that CTR has resulted in numerous social benefits across the three reliefs. Many of these are unquantifiable and not reported in the Arts Council England NPO survey. In this analysis, the share of concessionary tickets sold and given, out of total tickets sales (and tickets given) was used as a proxy for social impact of organisations. The model results indicate a statistically significant positive relationship in concessionary tickets as a percentage of total tickets sold by organisations claiming CTR relative to the control group.

Headline results

- Concessionary tickets made up **3.8% more of total tickets sold and given** for organisations claiming CTR than those that did not.
- This is the equivalent of **an additional 32 concessionary tickets** offered annually by CTR claimants on average.
- **This relationship is significantly related to the pandemic**, particularly in 2021 and 2022, suggesting that CTR enabled organisations to be able to offer concessionary tickets to boost attendance during a challenging period for the sector.

Baseline Model

The baseline model indicated a small positive relationship between CTR and concessionary tickets as a share of total ticket sales, but this wasn't statistically significant. Across the sector, there was a statistically significant increase in concessionary tickets sales after the introduction of CTR,[24] although this may have been a result of policies to increase footfall during and immediately after the pandemic.

Improved Model

When controlling for the pandemic (and adding additional control variables) in the model, this positive effect becomes significant at 95%, with a coefficient of 0.038, or a 3.8% increase in the share of total tickets that were concessionary. This model also revealed strong pandemic effects, with highly statistically significant increases in concessionary ticket provision in 2021 and 2022.Many cultural organisations expanded their concessionary ticketing offerings during the pandemic as restrictions were relaxed in efforts to boost attendances and engagement. These results suggest that CTR enabled organisations to increase their capacity to offer this.

This 3.8% increase translates into an average of 32 additional concessionary tickets offered by CTR claimants compared to organisations not claiming annually.

[24] Due the sample size, individual results are not available for each of the CTR.

Figure 11: Plot of coefficients, Fixed effects DiD between CTR and concessionary tickets as a share of total ticket sales

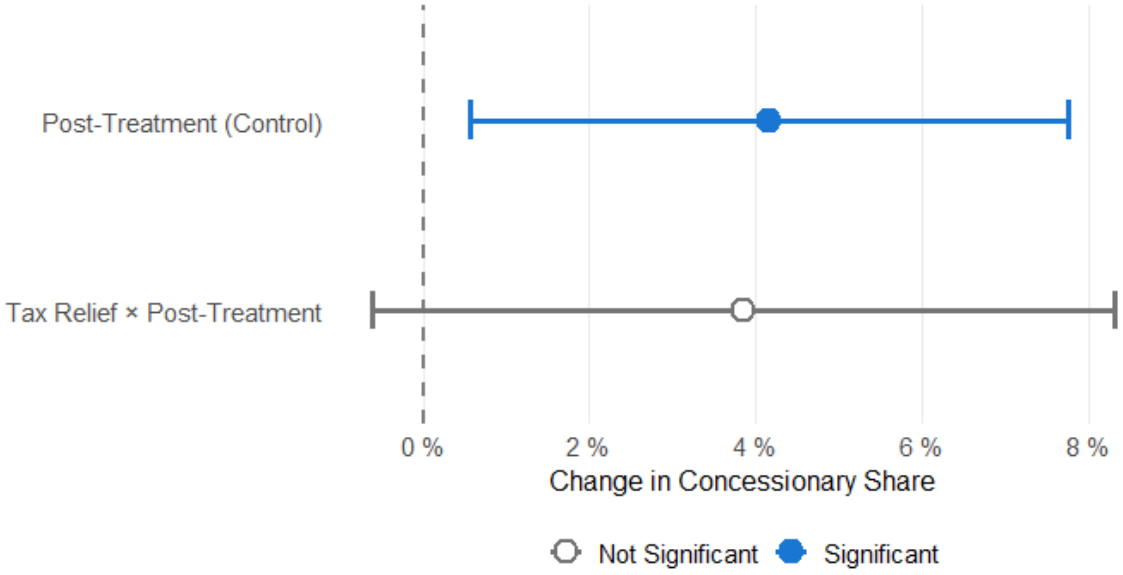
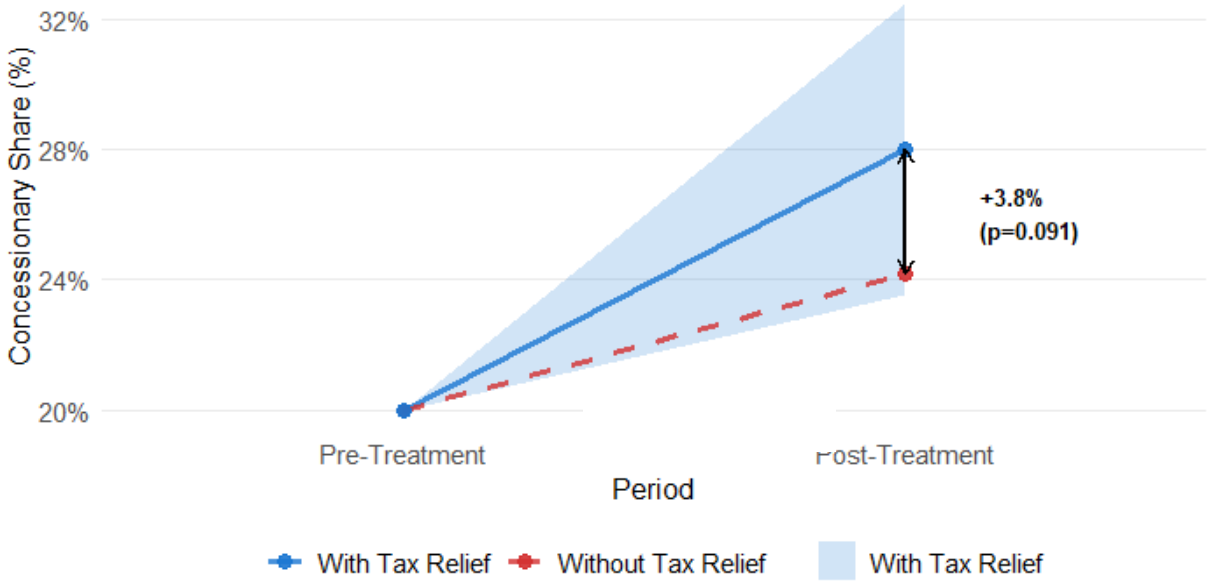


Figure 12: Impact of CTR on concessionary tickets, treatment vs control counterfactual

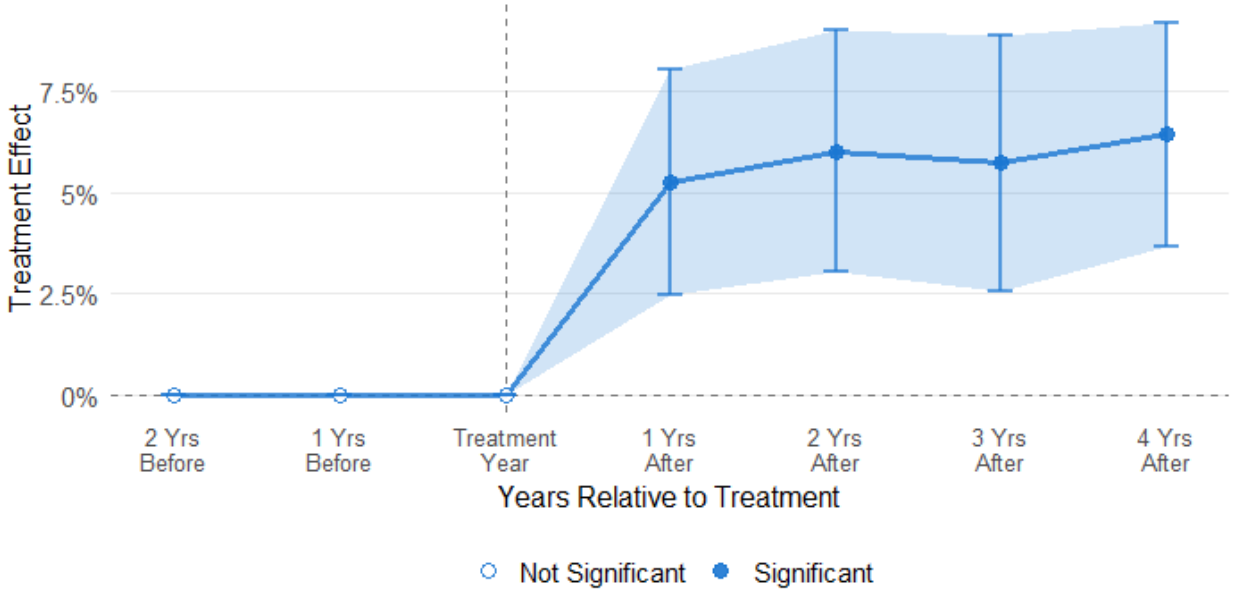


Dynamic effects model

The results of the dynamic effects model were compelling, statistically significant year on year following CTR adoption ($p<0.001$):

Organisations claiming CTR saw increases of 5-6% in the amount of concessionary tickets they were able to offer as a share of total ticket sales, showing how CTR has continued to improve organisations social value.

Figure 13: Dynamic effect of CTR on concessionary tickets as a share of total ticket sales



Sector specific impacts

The statistically significant relationship between concessionary tickets as a share of total ticket sales is maintained for the MGETR, with a coefficient of 0.1 ($p<0.05$), indicating that MGETR claimants were able to offer more concessionary tickets than claimants as a whole.

2.3.7 Employment

Analysis of the impact of CTR on the number of permanent staff employed at an organisation showed **no statistically significant relationship**. Although the data did support the parallel trends assumption, all models showed no statistically significant impact of CTR on employment.

However, the prominence of freelance, or contractual labour, in the sector (around 70% of the theatre workforce are freelance), means that this finding is limited in practice. Although, when running the same analysis on the number of freelance or contractual staff employed as reported in the Arts Council England NPO Survey data, similar results are reported, that is, **no statistically significant relationship is observed between CTR and freelance employment**.

These inconclusive results may be a result of the limitations in the availability of accurate employment data published in the Arts Council England NPO Survey. Arts Council England do not publish total staff numbers, for both permanent and contractual employees at their member organisations to preserve anonymity. As a result, this analysis estimates the number of staff, permanent and contractual, based on totals across the diversity and inclusion categories available in the public datasets. These categories themselves are subject to data suppression and as a result may underestimate the size of workforce within individual organisations.

2.4. Summary

The results of the econometric modelling analysis on the selected outcomes are presented below.

Table 3: Summary of casual impacts of CTR on outcomes

Outcome	Average impact of CTR relative to the control group	Average annual increase per organisation	Statistical significance
Earned income	+37%	+£44,200	95%
International earned income	+162%	+£16,500	100%
Number of performances (TTR and OTR only)	+110 performances	+110 performances	100%
Total number of exhibitions/displays (MGETR only) †	+6.0 exhibitions/displays	+6 exhibitions/displays	<90%
Number of tickets sold/given	+3.4% tickets	+118 tickets	<90%
Concessionary tickets	+3.8% concessionary tickets	+32 concessionary tickets	95%

Note: Where no significance value is provided indicate that the relationship between CTR and outcome is unable to be confidently attributed to CTR adoption.
†Total number of exhibitions/displays includes both touring and onsite

Results indicate that CTR had significant positive relationships on financial, cultural and social outcomes. Financially, CTR claimants earned 37% more income than non-claimants, and 162% more income from international activity, after controlling for the effects of the COVID-19 pandemic and size of organisation. This translates into an additional £44,200 in earned income and £16,500 in income earned form international activity per organisation annually, on average across the sample.

In terms of cultural output, CTR claimants were able to put on an additional 110 performances annually compared to those who did not adopt CTR. Based on the NPO data, this means that for 279 organisations claiming CTR in the sample, an additional 30,550 performances were put on. No relationship was found between CTR and the number of exhibitions and displays an organisation could hold.

Finally, organisations claiming CTR were able to increase their concessionary ticket offering as a share of total tickets by 3.8%, indicating that CTR enables increased social value. As with the number of exhibitions and displays, no statistically significant relationship was observed between CTR and permanent and freelance employment or total ticket sales, therefore no conclusive results can be made about historical impact of CTR on these outcomes.

Teulu exhibition, Aberystwyth Arts Centre. Photo by Emma Goldsmith

3. Impact of enhanced rates of cultural tax reliefs

3.1. Overview

As noted in Section 1, the Covid-19 pandemic was extremely challenging for audience-facing sectors and organisations such as theatres, orchestras, museums and galleries. At the beginning of the pandemic, these organisations had to close to the public. The introduction of social distancing regulations did make it possible for these cultural organisations to resume operations; however, they made it very difficult to carry on in a financially viable manner.

In response, the government enacted enhanced rates of cultural tax relief, as a means to support these cultural organisations in their recovery from pandemic-induced closures and reduced audiences. Beginning in October 2021, the TTR rates were increased from 20% (non-touring) and 25% (touring) to 45% and 50%, respectively. The OTR rate was increased from 25% to 50%. And the MGETR rates were increased from 20% (non-touring) and 25% (touring) to 45% and 50%, respectively.

In this section, Nordicity investigates the impact that these enhanced rates of each tax relief had on organisations and their ability to meet a variety of economic, cultural and social outcomes.

3.2. Methodology

In order to evaluate the impact that the enhanced rates of tax relief had on cultural organisations, Nordicity, via Arts Council England, distributed an online survey to cultural organisations across the cultural industries. With Arts Council England leading on survey communications, they liaised with the Oversight Group to disseminate the survey to their individual members. The survey was structured to allow for individual analysis of the three CTRs, with three separate lines of questioning relevant to the CTR most predominately claimed by each responding organisation.

Launched in April 2025, the online survey remained in the (virtual) field for two months and received a total of 146 complete responses, 117 of which were CTR claimants. The breakdown of these 117 responses by type of CTR, and therefore the sample sizes for each CTR, are detailed in Table 4.

Table 4: Cultural tax reliefs impact survey responses, by CTR

Type of cultural tax relief	Number of survey respondents (n)
TTR*	44
OTR	44
MGETR	29

*The majority of TTR respondents were charitable organisations, as a result that it may not reflect the additional economic activity driven by the commercial sector, and therefore the impacts of the relief will be broader when considering the wider commercial sector. West End Theatres are included in the economic analysis in section 4.

Survey respondents were asked to evaluate the extent to which the enhanced rate for their respective CTR benefited their organisation, by responding to various Likert-scale questions across economic, cultural and social impact outcomes.

3.3. Theatre Tax Relief enhancements

The enhancement to TTR was generally felt to have generated benefits in cultural output across the sample. This was most notable in increasing the number of productions staged annually, with 57% of surveyed TTR recipients agreeing or strongly agreeing with this statement. The TTR enhancements also allowed recipients to increase the number of performances, lengthen show runs and increase the number of UK touring dates.

Surveyed TTR recipients also reported that the enhancements had significant benefits for the employment in productions, with 73% of respondents agreeing or strongly agreeing that the enhancements had allowed their organisation to increase the number of people employed in productions. The enhancements were also reported to have had a positive impact on the number of cast employed in productions, albeit to a lesser extent than overall employment (43%).

The impact of the TTR enhancement on international activity and touring was felt less amongst claimants than other categories evaluated. Only 16% of surveyed TTR recipients agreed or strongly agreed that the enhancements had allowed their organisation to increase capacity to tour internationally, with this figure dropping to 7% for increasing the number of international touring dates.

A key metric for assessing the value of tax reliefs is the extent to which they enable organisations to change financial behaviour, increase resilience and encourage innovation through risk reduction. 80%

of TTR claimants agreed or strongly agreed that the enhancements had allowed their organisation to be less cautious in developing opportunities where there is more perceived risk. 77% agreed or strongly agreed that the enhancements had allowed their organisation to become less reliant on financial reserves to fund operations and that they had been better able to absorb cost shocks (e.g. fuel, energy or production costs). The enhancements also had additional business benefits. TTR recipients felt that the enhancements had allowed their organisation to attract more domestic or international investment (30%) as well as attracting more commercial funding or private investment (32%).

"Theatre Tax Relief is encouraging venues to produce their own work, rather than using touring companies"

"The permanent rate of higher theatre tax relief helps to reduce the risk on touring shows to a greater degree than resident ones."

"*The increase in TTR has encouraged some receiving house venues to choose to make their own family shows for Christmas. This not only enables venues to take advantage of the TTR but also the full box office at this lucrative time of year. Unfortunately, this has had a detrimental effect on touring companies, who would in the past have been programmed for the Christmas slot and rely on this work."*

Source: The Audience Agency Touring Research, 2024/2025

In terms of social impact, over half of surveyed TTR recipients agreed or strongly agreed that the enhancements had allowed their organisation to increase the number of performances for young people or other educational outreach and engagement. Further, 34% agreed or strongly agreed that they were able to lower ticket prices and increase the number of concessionary tickets they could offer.

The TTR enhancements were also felt to have had significant impacts in skills development. Over two thirds of surveyed claimants stated that the enhancements had allowed their organisation to invest more in skills development for their employees and to increase the number of professional development opportunities they could offer.

Overall, the benefits of the enhancements to TTR, according to the survey sample, were felt most strongly in allowing organisations to develop opportunities where there was more perceived risk and improving financial resilience. The enhancements were also important in allowing growth in general employment on productions and providing skills development and professional development opportunities for employees.

TTR has become the difference between playing it safe and continuing to produce the innovative productions they have become known for.

Case Study: National Theatre – TTR, innovation and risk-taking

The National Theatre has long been known for producing innovative, risk-taking work, but as the sector faces funding cuts and economic uncertainty, staging such productions has become increasingly difficult. In this environment, Theatre Tax Relief (TTR) has become an essential way of incentivising innovation and growth.

The cast of the National Theatre's 2025-26 national tour of Dear England. Photo credit: Marc Brenner

TTR enables the National Theatre to take creative risks that would otherwise be much harder. It also enables the National Theatre to share its award-winning work even more widely – the West End transfer of The Motive and the Cue, the international tour of The Lehman Trilogy and the national tour of Dear England were all made possible through TTR.

The relief also allows the National Theatre to programme shorter runs, creating space for more productions across a season. This diversity of programming ensures a greater range of voices and perspectives on its stages.

TTR has become the difference between playing it safe and continuing to produce the innovative productions they have become known for.

Figure 14: Impact of TTR enhancements on cultural output outcomes

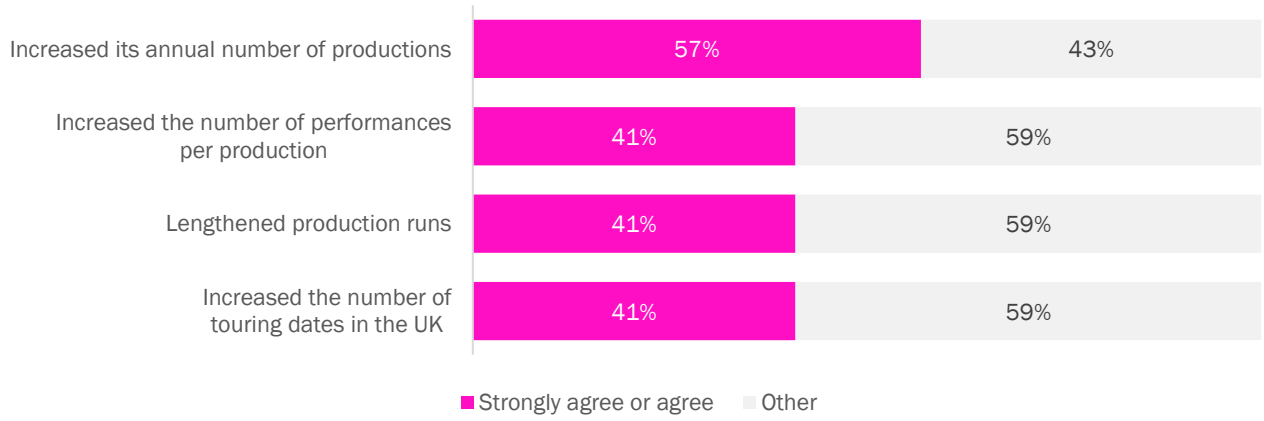


Figure 15: Impact of TTR enhancements on employment outcomes

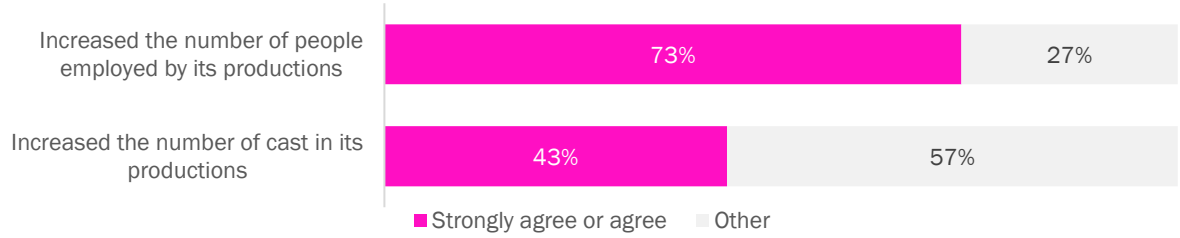


Figure 16: Impact of TTR enhancements on international activity outcomes

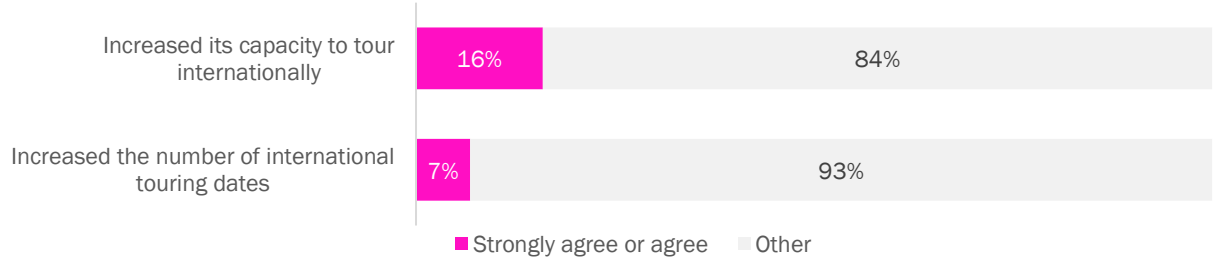


Figure 17: Impact of TTR enhancements on funding and risk-taking outcomes

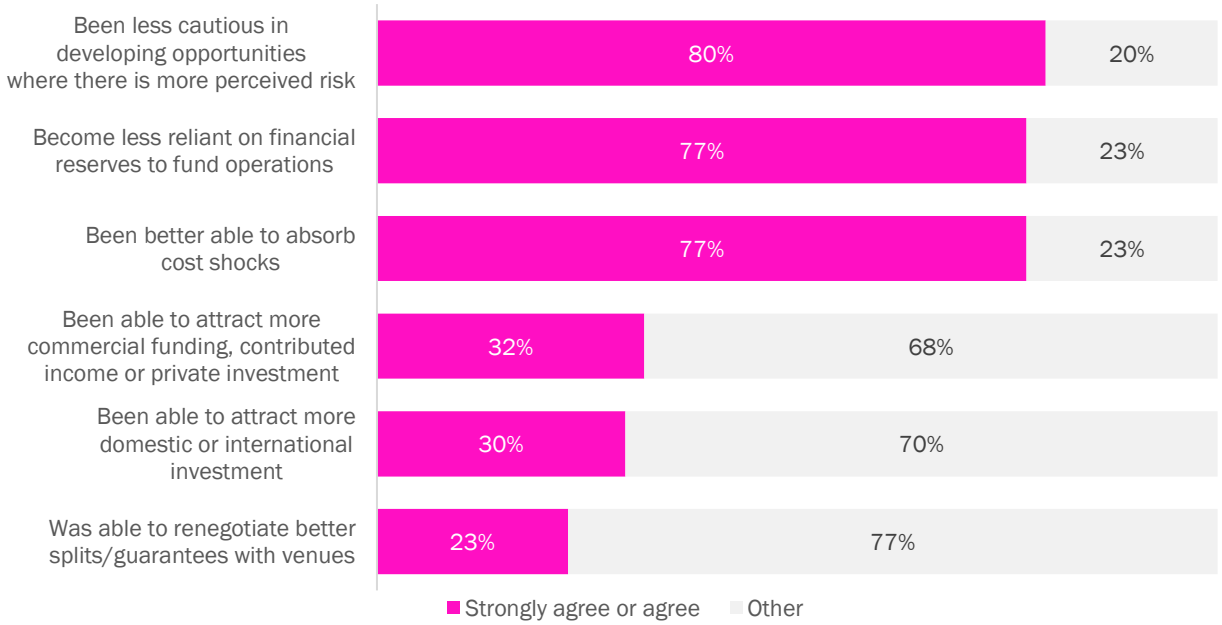


Figure 18: Impact of TTR enhancements on social outcomes

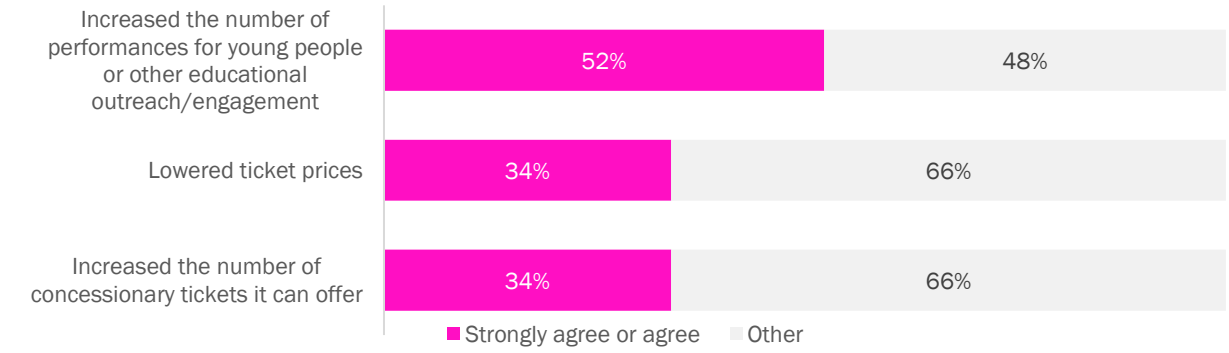
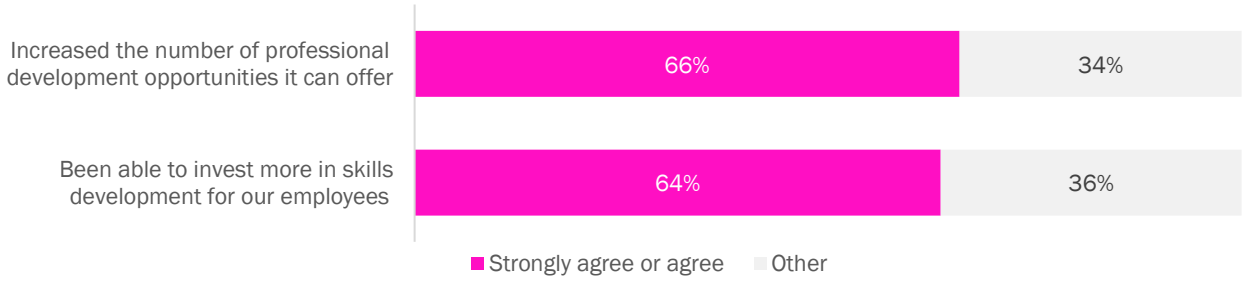


Figure 19: Impact of TTR enhancements on training and skills development outcomes



3.4. Orchestra Tax Relief enhancements

The OTR enhancements had a mixed range of impacts on the sample of orchestra organisation's sampled cultural output. The most strongly felt cultural impact was in the number of productions orchestras held annually, with over half (52%) of survey respondents agreeing or strongly agreeing that the enhancements allowed the organisation to increase their annual number of productions. Over a third of respondents agreed or strongly agreed that they sought more coproductions on account of the enhancements, pointing towards a fairly significant cultural impact of the OTR enhancements. Impacts were also felt to a lesser extent in the number of touring dates in the UK for over a quarter of survey respondents. The enhancements had a limited effect on allowing organisations to lengthen their production runs, with only 11% of those OTR recipients surveyed reporting that the OTR enhancements allowed their organisation to do this.

Again, the OTR enhancements had some impact on employment as reported by the organisations surveyed. 43% agreed or strongly agreed that the enhancements allowed their organisations to increase the number of musicians in their orchestras, with slightly less (36%) reporting that they increased the number of people employed overall by their orchestras on account of the enhancements to OTR.

The OTR enhancements had limited impact on international activity of orchestras, according to the survey. 23% were able to increase the number of international touring dates, while only 20% agreed or strongly agreed that the OTR enhancements allowed their organisation to increase its capacity to tour internationally. Increasing international activity and capacity is however somewhat of a harder impact to achieve across a sector like orchestras, due to the limiting factors like size of orchestra and budgets, as well as the travel restrictions in place during the COVID 19 pandemic.

The OTR enhancements had strong impacts on orchestras financial resilience, almost across the board. According to the survey, the vast majority, 89%, of surveyed organisations agreed or strongly agreed that the OTR enhancements had allowed their organisation to be better able to absorb financial shocks. As well as this, 86% reported that the enhancements had reduced their organisations reliance on financial reserves to fund operations.

The OTR enhancements also had a large positive impact on the encouragement of innovation and the mitigation of aversion to risk. 89% of OTR recipients surveyed agreed or strongly agreed that the enhancement had allowed their organisation to be less cautious in developing opportunities when there was more perceived risk. However, the enhancements weren't felt to have had as much of a positive effect on orchestras ability to attract funding form commercial sources, contributed income or private investment, nor did many organisations feel like the enhancements allowed their organisation to attract more international funding, with just 18% of those surveyed reporting these impacts. Only 11% of orchestras were able to negotiate better splits with venues on account of the OTR enhancements according to the survey.

In terms of social outcomes, over half of OTR recipients surveyed (55%) agreed or strongly agreed that the enhancements allowed their organisation to offer more concessionary tickets, with 32% reporting that they were able to lower ticket prices in general. 43% of those OTR recipients surveyed were able to increase Increased the number of performances for young people or other educational outreach or engagement on account of the enhancements.

Case Study: The Royal Scottish National Orchestra

With a rich 130 year history, the Royal Scottish National Orchestra (RSNO) is not only one of Scotland's leading cultural institutions, but one of Europe's leading orchestras. Operating with the aim to inspire, educate and entertain people throughout Scotland and beyond, the RSNO creates economic and social value, including generating over £17 million in GVA and supporting more than 300 jobs in Scotland. It also nurtures tomorrow's musicians, attracting future audiences and contributing to the UK's cultural reputation abroad.

RSNO 2023, credit: *Martin McCready, Upfront Photography*

The RSNO's presence is significant with diverse engagement throughout Scotland. It has enabled almost 90,000 people to attend live concerts as well as providing over 11,000 hours of viewed digital content and engaging over 25,000 people across communities in Scotland.

The RSNO is particularly active in digital and social innovation spaces. It has been exploring ways to utilise digital technology to reach a wider range of audiences across communities. Successful examples of their recent work include ASTAR and Scotland's Studio.

The RSNO is also at the forefront of education and engagement. To date, nearly 120,000 pre-schoolers have participated in its digital storytelling platform alone. The RSNO's annual National Schools Programme has also been successful in introducing pupils to live performance and the basics of music theory and musical notation, helping to engage the next generation of musicians.

OTR payments contributed around 20% of the RSNO's total income in 2023 and 2024, enabling it to continue to provide the valuable services across Scotland and the UK. Faced with the challenge of increasing expenditures, the permanent fixing of the OTR at 45% in April 2024 has reduced a significant amount of risk for the RNSO. It has not only allowed the RSNO operating as one of the UK's leading performing arts organisations, but to also make those all-important investments in digital innovation, social impact, education-sector engagement, and the development of exportable commercial music services.

Source: RSNO Annual Report and Accounts, BiggarEconomics, *An Economic & Social Impact Assessment of the Royal Scottish National Orchestra,* 2025

OTR enhancements also had a significant impact on organisations ability to increase the number of professional development opportunities it can offer, with 59% of surveyed organisations agreeing or strongly agreeing with this notion. To a lesser extent, 39% of OTR claimants surveyed agreed or strongly agreed that the enhancements had allowed their organisation to be able to invest more in skills development for their employees.

Figure 20: Impact of OTR enhancements on cultural output outcomes

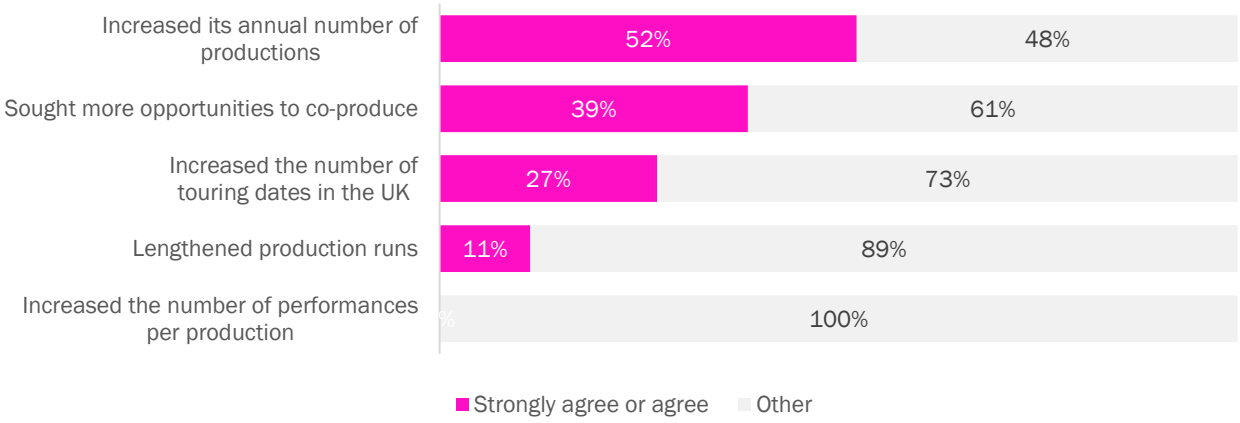


Figure 21: Impact of OTR enhancements on employment outcomes

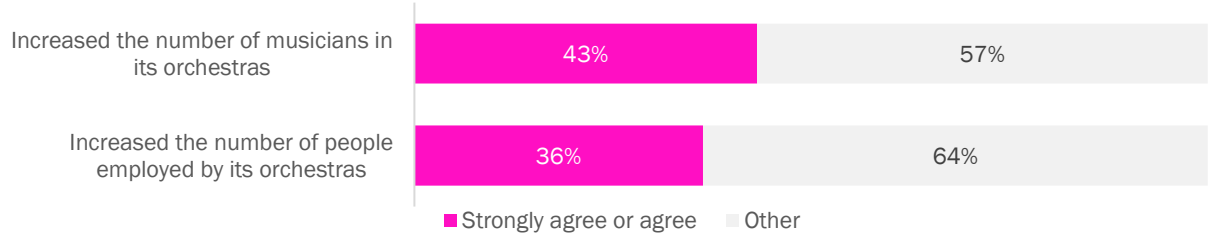


Figure 22: Impact of OTR enhancements on international activity outcomes

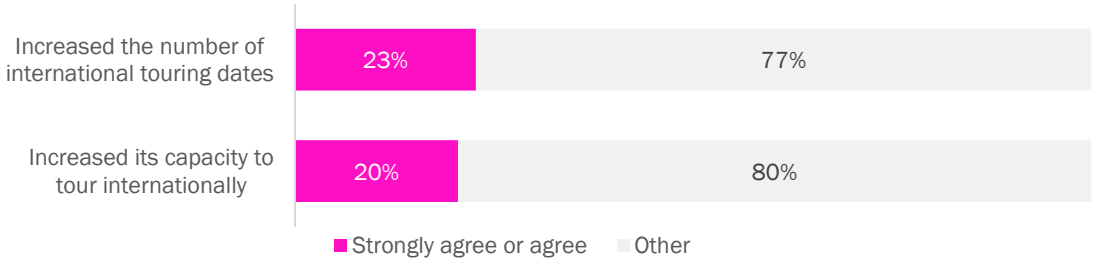


Figure 23: Impact of OTR enhancements on funding and risk-taking outcomes

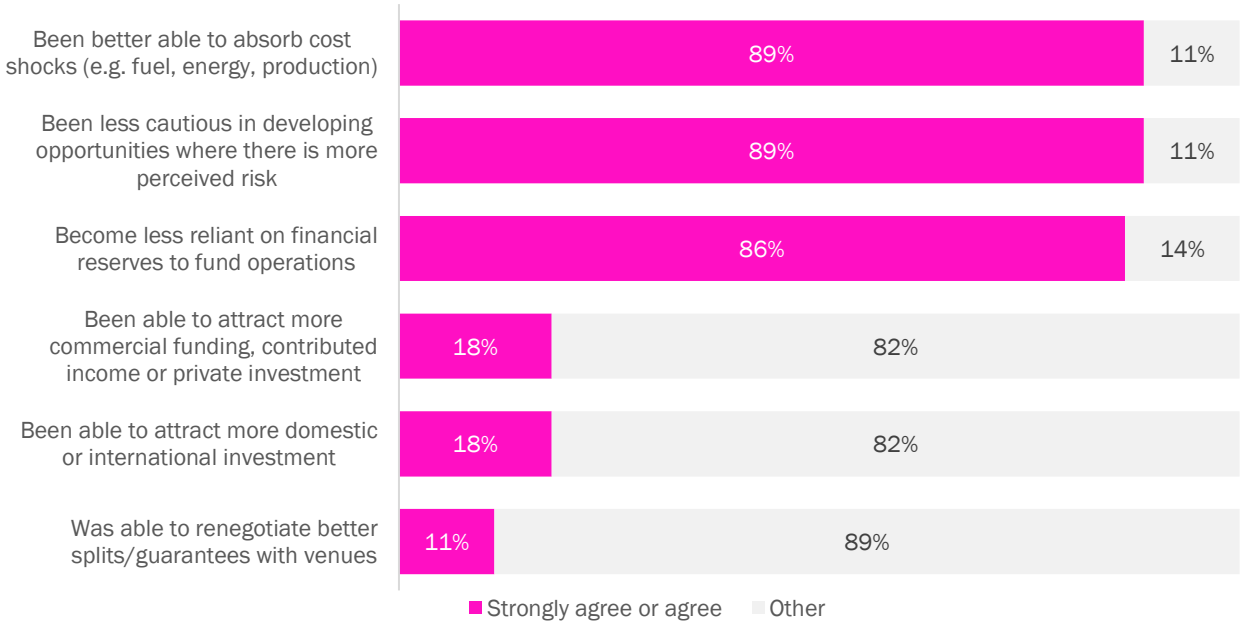


Figure 24: Impact of OTR enhancements on social outcomes

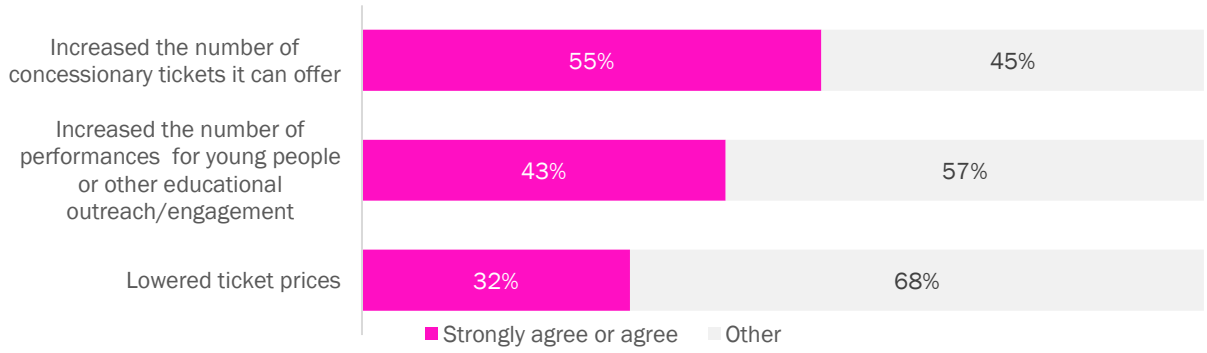
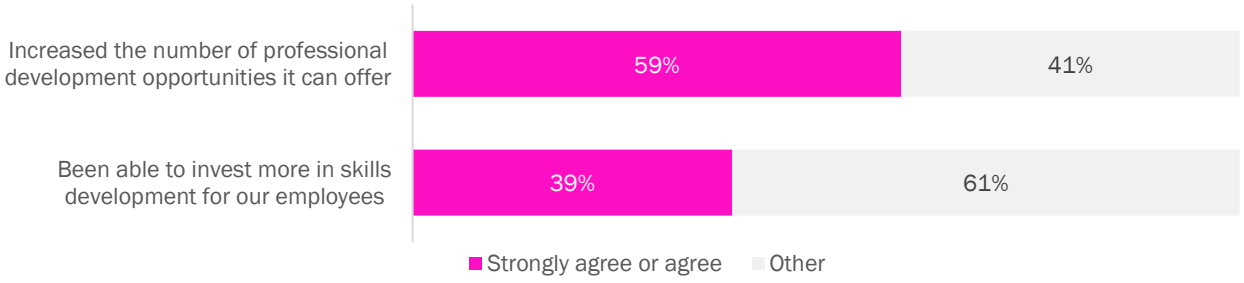


Figure 25: Impact of OTR enhancements on training and skills development outcomes



Case Study: Making Music Members

A survey of Making Music members highlighted the significant impact of the enhanced OTR rates, across a range of different orchestras. Below are a selection of case studies provided by their member organisations that highlight the myriad benefits of the OTR enhancements:

"The uplifted OTR rate allows us to develop and deliver our projects which give opportunities to emerging professional musicians at the start of their careers. To date we have offered opportunities for soloists; orchestral musicians; conductors and composers, all of whom have been very grateful for the experience, expert mentoring and impact on their CVs.

It is extremely hard to raise external funding for projects of this nature and so the OTR payments are a critical part of the funding for these initiatives."

MI/ERSO

"With the additional funding we are building a large, committed and enthusiastic audience, a significant increase on pre-COVID levels, who have told us they appreciate hearing /being educated in music they have not experienced before. We would anticipate a drop in audience numbers and income, if we stopped being so innovative.

We provide free tickets for all under 18s, and also to a group of refugees who would not otherwise be able to attend."

SSO

"The uplifted OTR rate allows us to undertake performances of larger works or collaborations with larger groups, e.g. choirs, with confidence and without the risk normally associated with larger ventures. For example in Dec 2022 we performed Vaughan Williams Sea Symphony twice, where the costs of enlarging the orchestra size and its extra players became viable given the surety on income from obtaining orchestra tax relief."

WO

3.5. Museums and galleries exhibition tax reliefs enhancements

The MGETR enhancements had a positive impact on the cultural outcomes of around half the sample surveyed, allowing 52% of surveyed MGETR recipients to increase their organisations number of annual exhibitions or displays, and 41% to increase the number of exhibition display days.

Again, the MGETR enhancements positively impacted employment outcomes for just over half of surveyed recipients. 52% of MGETR claimants surveyed agreed or strongly agreed that the enhancements had allowed their organisation to increase the number of people employed on developing their exhibitions or displays.

There was less of a pervasive feeling of impact across the sample when considering the effect of the enhancements in increasing international activity outcomes. Only 14% of the surveyed MGETR

respondents felt that the enhancements had increased their organisation's capacity to tour internationally. However, over a quarter of respondents (28%) agreed or strongly agreed that the MGETR enhancements had allowed their organisation to increase the number of international touring dates.

The benefits most commonly felt across the sample of MGETR claimants surveyed were around financial resilience. 86% of respondents agreed or strongly agreed that the enhancements had allowed their organisation to become less reliant on financial reserves to fund operations, and 83% agreed or strongly agreed that the enhancements had allowed their organisation to be better able to absorb financial cost shocks. To a lesser extent, the enhancements also had positive impacts for funding and risk taking. 41% agreed or strongly agreed that the enhancements had enabled their organisation to attract more commercial funding, contributed income or private investment, and 17% had been able to attract more domestic or international investment. Over a third (38%) of respondents agreed or strongly agreed that the enhancements had allowed their organisation to be less cautious when developing opportunities when there is more perceived risk.

Survey results indicate a limited impact on ticket prices, only 7% felt that the MGETR enhancements allowed their organisation to lower ticket prices, and almost a quarter (24%) were able to increase the number of concessionary tickets their organisation could offer. More widely felt, 41% agreed or strongly agreed that the MGETR enhancements allowed their organisation to increase the number of exhibition or display days for young people or other educational outreach or engagement, indicating some level of impact of the enhancements on social outcomes.

Finally, there was significant impact on training and skills development outcomes. Over half (55%) of MGETR recipients surveyed felt that they had been able to invest more in skills development for their employees as a result of the enhancements. Similarly, albeit to a lesser extent, 41% of recipients agreed or strongly agreed that the enhancements had enabled their organisation to increase the number or professional development opportunities it could offer.

Figure 26: Impact of MGETR enhancements on cultural output outcomes

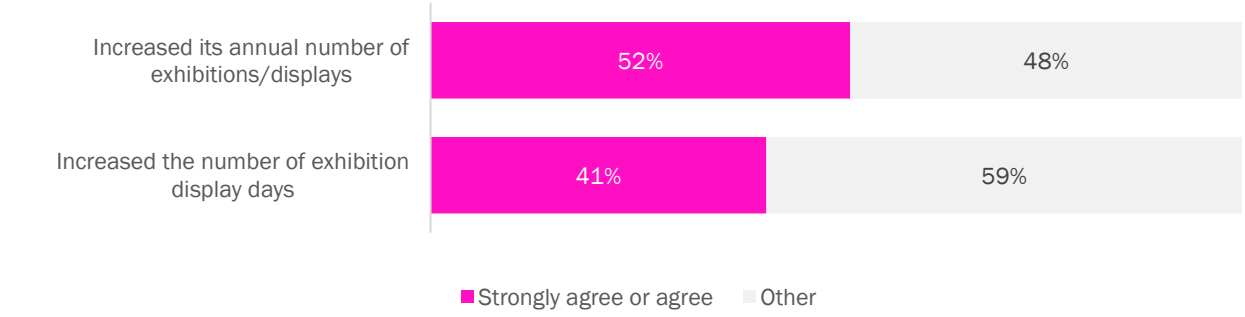


Figure 27: Impact of MGETR enhancements on employment outcomes

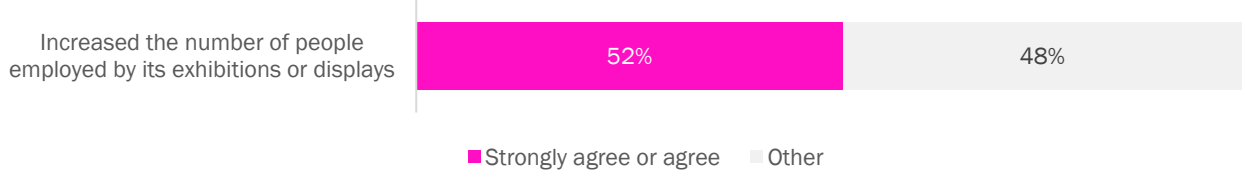


Figure 28: Impact of MGETR enhancements on international activity outcomes

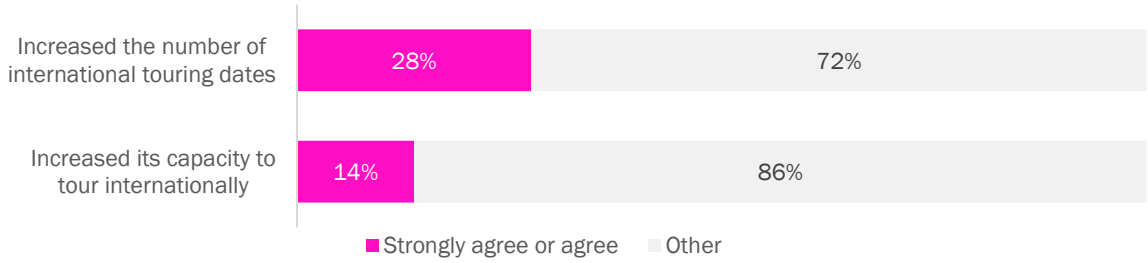


Figure 29: Impact of MGETR enhancements on funding and risk-taking outcomes

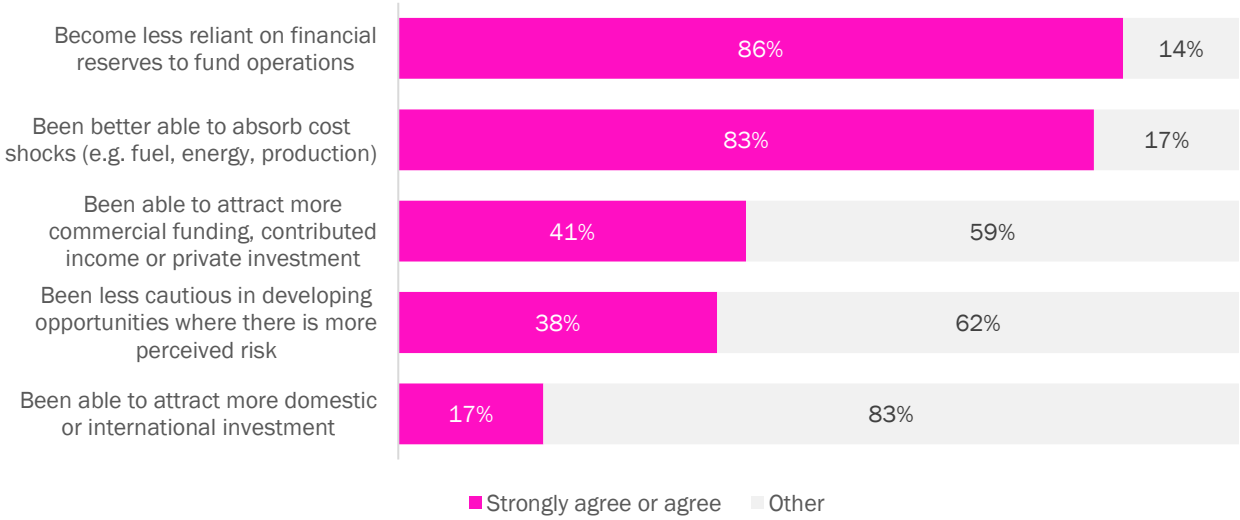


Figure 30: Impact of MGETR enhancements on social outcomes

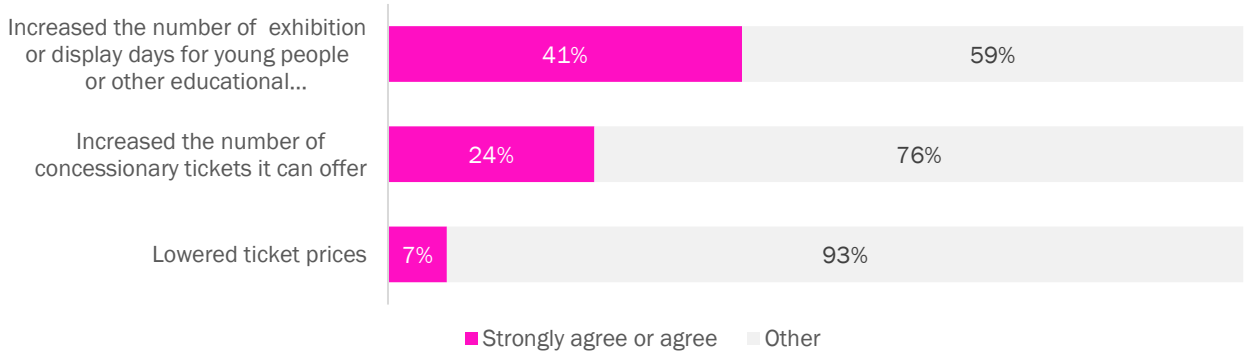
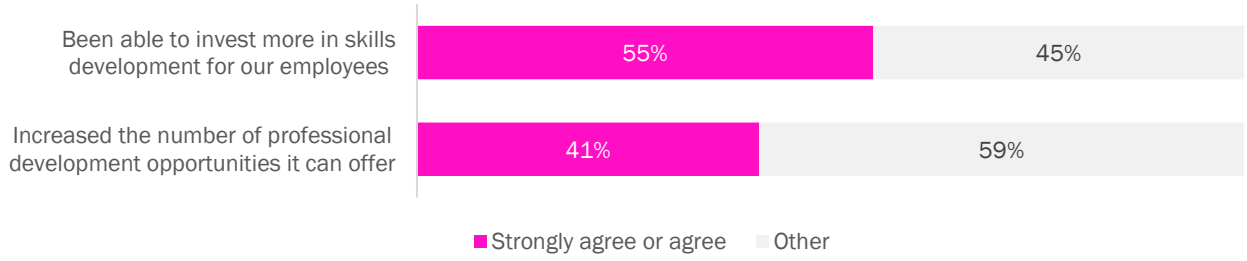


Figure 31: Impact of MGETR enhancements on training and skills development outcomes



3.6. Summary

According to the survey sample, the key benefits of enhancements to TTR as felt by organisations were financial. TTR recipients felt that they were able to develop opportunities where there was more perceived risk and the enhancements improved their financial resilience. TTR enhancements also allowed a majority of organisations to employ more staff on productions and provide skills development and professional development opportunities for employees.

OTR recipients also felt that the enhancements resulted in significant financial benefits to their organisation, allowing for more risk taking and also improving financial resilience. OTR enhancements were also important in reducing reliance on financial reserves to fund operations. For over half of surveyed claimants, the number of annual productions increased, as did the number of concessionary tickets offered as a result of the enhancements, highlighting cultural and social benefits.

MGETR enhancements also had significant financial benefits in terms of innovation and risk taking and financial resilience. The enhancements also increased investment in skills development for employees, the number of exhibitions and displays and the number of people employed by exhibitions and displays for over half of the respondents.

Mozart's La clemenza di Tito Edinburgh International Festival 2025

4. Examination of additional enhancements to cultural tax reliefs

4.1. Overview

In the following section, we draw upon data from the online survey of arts and culture organisations to examine additional 'non-rate' enhancements to the CTRs. Specifically, we examine the following specific adjustments to the CTRs, as developed following consultation with sector bodies and organisations:[25]

- **TTR:** Extension to the definition of qualifying costs to include expenditures on audience outreach and education.
- **OTR:** Extension to the definition of qualifying costs to include international touring and educational activity.
- **MGETR:** Extension to the definition of qualifying costs to include exhibition running costs.

In each case, data from the online survey is used to estimate the **static costs** and **behavioural costs** of each CTR enhancement[26], as well the potential for additional economic, cultural and social benefits (i.e. '**behavioural benefits**'). The fiscal return on investment for the Exchequer has been estimated for TTR and MGETR. The enhancements presented in the following section are not an exhaustive list of potential enhancements, and further recommendations from the sector are set out in section 5.4.

[25] These were the specific enhancement proposals identified by Arts Council England in consultation with the Oversight Group members from each of the CTR sub-sectors.

[26] Static costs only for OTR.

4.2. Methodology

In order to evaluate the potential impacts of additional enhancements to the CTRs, respondents to the online survey were presented with an enhancement scenario to the CTR they predominately claim. Respondents were then asked to report the impact that this enhancement would have on outcomes.

To remove selection bias, respondents were randomly assigned to one of five scenarios for either increased levels of public financial assistance or changes to tax relief guidelines . For TTR and MGETR, respondents were asked to evaluate the impact of a 5%, 10%, 15%, 20% or 25% increase in the amount of public financial assistance they would receive.[27]

Respondents were then required to report on how they believed the scenario they were presented with would lead to increases in outcomes, in percentage terms, at their organisation. outcomes were largely the same across the three CTRs, with tweaks to the wording where appropriate.

The following results take the average of these reported percentage increases for each outcome and each scenario enhancement, then present a comparison of the elasticity for each outcome (i.e. percentage increase in the specific outcome variable per percentage point of enhancement).

Having established estimates of the extent to which a range of increases in financial assistance would impact outcome variables, these elasticities could then be applied to the estimated increase in financial assistance equivalent to the recommended extension of the definition of qualifying costs. For example, if extending the definition of qualifying costs for TTR to include expenditures on audience outreach and education was equivalent to an X% increase in financial assistance, then the survey results could be used to estimate the impact on outcome variables as a result of said X% increase.

4.3. Theatre Tax Relief

As noted, TTR recipients were presented with a scenario under which TTR qualifying costs were expanded to include expenditures on **audience outreach and education**.

Static costs

According to survey respondents, audience outreach and education costs account for, on average, 10.7% of theatre companies' total operating expenditures. Estimates based on data from Arts Council England's 2023 NPO survey suggest that TTR recipients' total operating expenditures were £1.624.4 million across the UK in 2023[28], including an estimated £835.5 million in operating expenditures for non-NPO West End theatres. This implies that audience outreach and education costs totalled £173.8 million (10.7% x £1,624.4 million = £173.8 million) in 2023. The **static cost** to the Exchequer would therefore amount to **£59.1 million** (£173.8 million x 80% x 42.5%[29] = £59.1 million).

[27] Behavioural costs and benefits were not estimated for OTR using the public financial assistance scenario approach, due to limitations in data.

[28] As the NPO survey only accounts for English theatres, the estimate derived from the survey has been grossed up to estimate operating expenditures across the whole of the UK, based on SIC level employment data from ONS .

[29] For the modelling of tax relief costs, the average of the touring (45%) and non-touring (40%) tax relief rates was used.

Behavioural costs

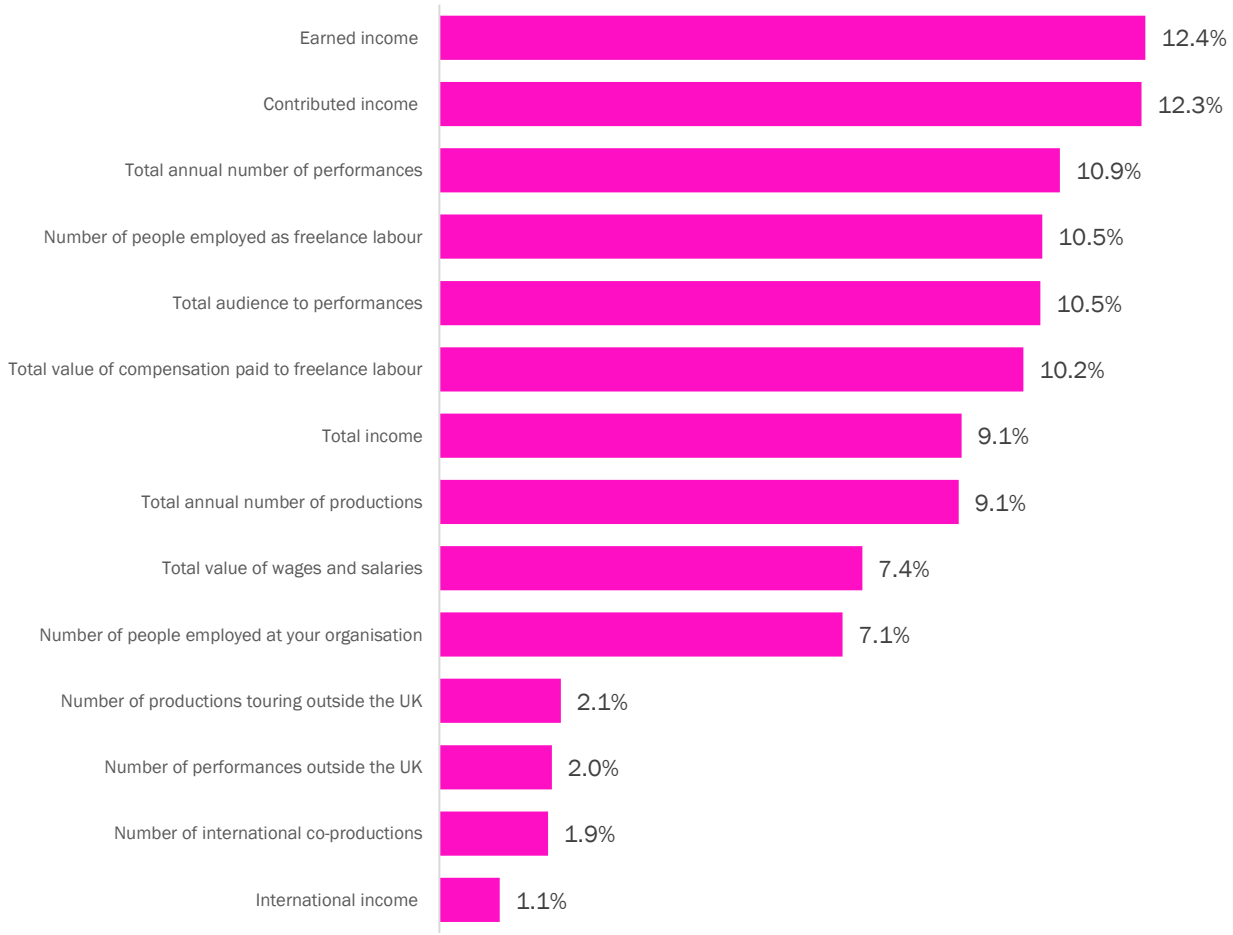
According to survey respondents, if audience outreach and education expenditures were defined as TTR qualifying costs and thereby subject to 40% or 45% tax relief, theatre companies' expenditures on audience outreach and education would increase by 24.1% or £41.9 million (24.1% x £173.8 million = £41.9 million).

These additional expenditures on audience outreach and education would also be subject to TTR payments of **£14.2 million** (£41.9 million x 80% x 42.5% = £14.2 million) – an additional cost to the Exchequer. In total therefore the inclusion of audience outreach and education costs within the TTR qualifying expenditures would present an estimated **fiscal cost** of **£73.3 million** to the Exchequer (£59.1 million + £14.2 million = £73.3 million). The fiscal benefit of this cost is presented in the following section.

Behavioural benefits

As noted earlier, survey respondents reported that audience outreach and education costs account for 10.7% of their total operating expenditures. We estimate that the theatre companies' static and behavioural spending on audience outreach and education suggests that their public assistance would likely increase by 9%. Based on the elasticity research (Figure 32), this 9% increase in public assistance would have the largest impact on earned income, contributed income and the annual number of performances. The projected increase in other outcomes is detailed in Figure 32.

Figure 32: Projected increase outcomes, TTR



Source: Nordicity analysis based on survey of Cultural Tax Relief Impacts, 2025
N = 44

Considering the top 5 outcomes in terms of projected increases in outcomes, these would translate into the following benefits, based on 2023-24 data:

Table 5: Additional impact of TTR enhancements, top five outcomes

Outcome	Baseline (2023-24)	Percentage increase	Additionality
Earned income	£1,520,000,000	12.4%	£188,500,000
Contributed income	£918,900,000	12.3%	£113,000,000
Total number of annual performances	33,600	10.9%	3,700
Total number of people employed as freelance labour	16,500	10.5%	1,700
Total audience to performances	9,190,000	10.5%	965,000

Economic impact analysis

The proposed enhancements to the TTR are estimated to generate an additional £301.5 million in combined earned and contributed income for theatre production companies. This income would generate an estimated 3,622 full-time equivalents (FTEs) of employment and £326.4 million in gross value added (GVA) for the UK economy. This includes 1,307 FTEs of employment and £164.5 million in GVA directly within the theatre sector, and further 2,315 FTEs and £161.9 million in GVA in the supply chain and wider economy.

Table 6: Economic impact of TTR enhancements, UK-wide

	Direct impact	Indirect impact	Induced impact	Total impact
Employment (FTEs)	1,307	1,317	998	**3,622**
Gross value added (£m)	164.5	99.8	62.1	**326.4**

Source: Nordicity analysis based on survey of Cultural Tax Relief Impacts, 2025 and ONS

Benefit-cost analysis

Based the 2023-24 Arts Council England NPO survey and including the income of the West End theatres, organisations claiming TTR had a baseline earned income of £1,520.1 million in 2023-24. With the survey results showing that TTR claimants believe that the enhancements would result in a 12.4% increase in earned income, it is estimated that the public assistance scenario would generate an additional £188.5 million in earned income for TTR claimants. This would generate an additional £56.5 million in revenue for the Exchequer. This increase in earned income is estimated to generate £49.0 million in wages and salaries (£188.5 million x 65% x 40% = £49.0 million), which in turn would equate to £9.8 million in additional revenue to the Exchequer through income tax. Based on the estimated static costs of these enhancements above, this would represent **a net cost to the Exchequer of £7.0 million** (£73.3 million – (£56.5 million + £9.8 million) = £7.0 million).

Considering the total cost to Exchequer of the proposed enhancement to TTR, and the economic impact of the additional income generated, the proposed enhancement to TTR would generate an estimated £4.5 million in total GVA and 49.4 FTEs of employment for every £1 million cost to the Exchequer.

If the induced impacts were to be discounted, the benefit-cost ratio (BCR) would be £3.6 million in GVA and 35.8 FTEs for every £1 million of cost to the Exchequer.

4.4. Orchestra Tax Relief

Rather than test the impact of a specific expansion of qualifying expenditures on outcomes, the static cost to the Exchequer of two recommended expansions to the OTR have been estimated in this section[30]. The recommendations were selected based on consultation with sector stakeholders. The two specific recommendations analysed were:

- Extending the OTR to European Economic Area (EEA) and rest of world (RoW) touring
- Extending the OTR to orchestral work which contributes to creative learning.

Costings are based on data from the 2023/24 Arts Council England NPO survey for organisations that claimed OTR in that financial year to estimate the additional cost to the Exchequer if OTR was expanded to include the above activities.

Static costs

In 2023/24, OTR recipients' expenditures on international touring totalled an estimated £3.3 million[31], according to the 2023/24 Arts Council England NPO survey. This increases to £3.8 million when grossed up to account for international touring expenditures of orchestras in the UK nations not included in the Arts Council England NPO data. Based on these expenditures, if OTR was expanded to include EEA and RoW touring, this would represent and **additional fiscal cost to the Exchequer of £1.3 million** in 2023/24 (£3.8 million x 42.5% x 80% = £1.3 million).

In 2023/24, OTR recipients' expenditures on educational programming totalled an estimated £13.6 million, according to the 2023/24 Arts Council England NPO survey. This increases to £15.4 million when grossed up to account for educational expenditures of orchestras in the UK nations not included in the Arts Council England NPO data. Based on these expenditures, if OTR was expanded to include educational programming, this would represent and **additional fiscal cost to the Exchequer of £5.3 million** in 2023/2024 (£15.4 million x 42.5% x 80% = £5.3 million).

In total therefore, if OTR was expanded to include expenditures on EEA and RoW touring activity and orchestral work which contributes to creative learning, **the total additional fiscal cost to the Exchequer would total £6.5 million**, based on 2023/24 Arts Council England NPO survey data.

[30] Due to the limitations in the survey data this section does not analyse the impact on outcomes of specific enhancements.

[31] In the absence of further information on total touring expenditures, it is assumed that expenditures on international income is equivalent to total spend, under the assumption that international touring activity operates at breakeven.

Table 7: Estimated annual static fiscal costs associated expansion of OTR

	OTR recipient total expenditures, 2023/24 (£m)	Additional fiscal cost (£m)
International touring	3.8	1.3
Educational programming	15.4	5.3
Total	**19.2**	**6.5**

Source: Nordicity estimates based on data from Arts Council England and ONS
Note: Figures may not sum due to rounding

4.5. Museum and Galleries Exhibition Tax Relief

As noted, MGETR recipients were presented with a scenario under which the running costs of exhibitions or displays would also qualify for tax relief. This includes both temporary staff and additional hours of employment for pre-employed staff. Under this scenario, organisations would be able to claim for a range of additional costs, including personnel employed as front-of-house staff, marketing and operating expenses.

Static costs

According to survey respondents, exhibition running costs[32] account for, on average, 5.3% of museum and galleries' total operating expenditures. Estimates based on data from Arts Council England's 2023 NPO survey suggest that MGETR recipients' total operating expenditures were £1,562.5 million across the UK in 2023[33], including an estimated £1.170.9 million in operating expenditures for non-NPO National Museums. This implies that exhibition running costs totalled £82.8 million (5.3% x £1,562.5 million = £82.8 million) in 2023. The **static cost** to the Exchequer of this scenario would therefore amount to **£28.2million** (£82.8 million x 80% x 42.5%[34] = £28.2 million).

Behavioural costs

According to survey respondents, under a scenario where exhibition running costs were defined as qualifying costs and thereby subject to 40% or 45% tax relief, museum and galleries' expenditures on running costs would increase by 5.2% or £4.3 million (5.3% x £82.8 million = £4.3 million).

[32] Exhibition running costs include only those additional staff and supplier costs that your organisation incurs during the running of an exhibition. Exclude staff costs for personnel employed before the opening of the exhibition; include any wages earned by pre-employed staff for additional hours of employment during running of exhibition.

[33] As the NPO survey only accounts for English theatres, the estimate derived from the survey has been grossed up to estimate operating expenditures across the whole of the UK, based on SIC level employment data from ONS.

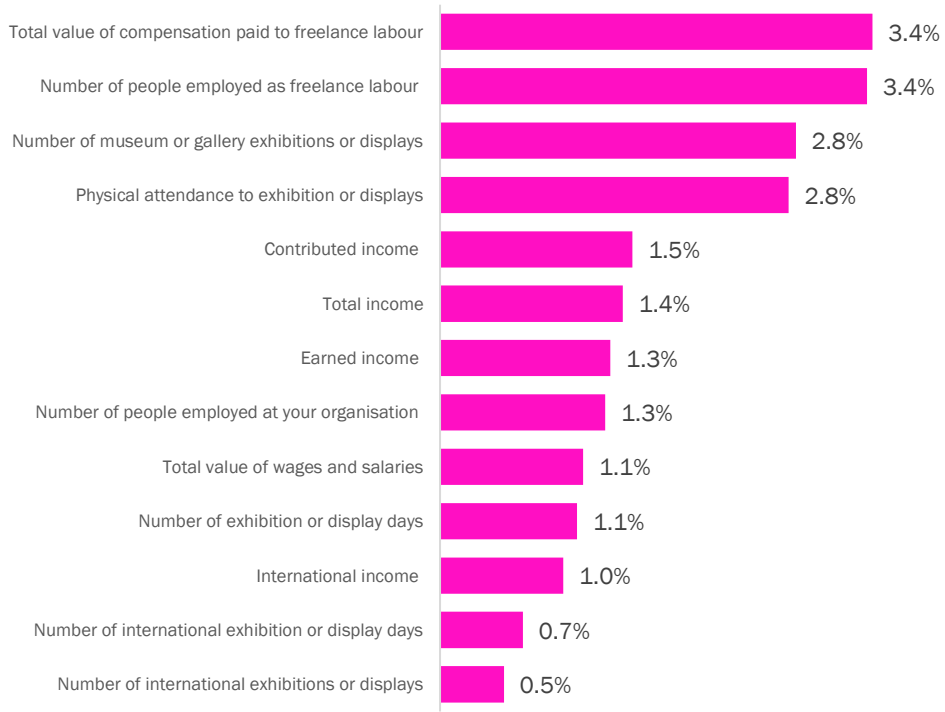
[34] For the modelling of tax relief costs, the average of the touring (45%) and non-touring (40%) tax relief rates was used.

These additional expenditures on exhibition running costs would also be subject to MGETR payments of £1.5 million (£4.3 million x 80% x 42.5% = £1.5 million) – an additional cost to the Exchequer.[35] In total, therefore, the inclusion of exhibition running costs within the MGETR qualifying expenditures would present an estimated **fiscal cost of £29.6 million** to the Exchequer (£28.2 million + £1.5 million = £29.6 million).

Behavioural benefits

As noted earlier, survey respondents reported that exhibition running costs account for 5.3% of their total operating expenditures. We estimate that museum and galleries' static and behavioural spending on exhibition running costs suggests that their public assistance would likely increase by 3.8%. Based on the elasticity research, this 3.8% increase in public assistance would have the largest impact freelancer employment and compensation, the annual number of exhibitions and displays, and the audiences to those exhibitions and displays. The projected increased in other outcomes is detailed in Figure 33.

Figure 33: Projected increase in outcomes, MGETR



Source: Nordicity analysis based on survey of Cultural Tax Relief Impacts, 2025
N = 29

[35] This analysis assumes that the additional tax relief claims would still keep total per-project claims under £80,000 for non-touring projects (£100,000) for touring projects, or that the government would lift the caps to accommodate the average increased in claims.

Considering the top 5 outcomes in terms of projected increases in outcomes, these would translate into the following metrics of additionality, based on 2023-24 data.

Table 8: Additional impact of MGETR enhancements, top five outcomes

Outcome	Baseline (2023-24)	Percentage increase	Additionality
Total value of compensation paid to freelance labour	£395,200,000	3.4%	£13,400,000
Number of people employed as freelance labour	3,000	3.4%	100
Number of museum or gallery exhibitions or displays	1,000	2.8%	29
Physical attendance to exhibitions or displays	11,500,000	2.8%	323,000
Contributed income	£46,600,000	1.5%	£729,000

Economic impact analysis

Based on the estimated additional earned income and contributed income that would be earned by MGETR organisations from the proposed enhancements, organisations earning MGETR would earn an estimated £22.0 million in additional income.

This income would generate an estimated 378 FTEs and £23.9 million in GVA for the UK economy. This additional economic impact includes 201 FTEs of employment and £12.1 million in GVA directly within the museum and exhibition sector, and further 107 FTEs and £11.8 million in GVA in the supply chain and wider economy.

Table 9: Economic impact of MGETR enhancements, UK-wide

	Direct impact	Indirect impact	Induced impact	Total impact
Employment (FTEs)	201	102	74	**378**
Labour income (£m)	8.4	4.0	2.5	**15.0**
Gross value added (£m)	12.1	7.0	4.6	**23.9**

Source: Nordicity analysis based on survey of Cultural Tax Relief Impacts, 2025 and ONS

Benefit-cost analysis

Based the 2023-24 Arts Council England NPO survey and including the income of the National Museums, organisations claiming MGETR had a base earned income of £1,638.2 million in 2023-24. With the survey results showing that MGETR claimants believe that the enhancements would result in a 1.3% increase in earned income, it is estimated that the public assistance scenario would generate an additional £21.3 million in earned income for MGETR claimants. This would generate an additional £6.4 million in revenue for the Exchequer. This increase in earned income is estimated to generate £5.5 million in additional wages and salaries (£21.3 million x 65% x 40% = £5.5 million), which in turn would

equate to £1.1 million in additional revenue to the Exchequer through income tax. Based on the estimated static costs of these enhancements above, this would represent **a net cost to** the Exchequer **of £22.1 million** (£29.6 million – (£6.4 million + £1.1 million) = £22.1 million).

Considering the total cost to the Exchequer of the proposed enhancement to MGETR, and the economic impact of the additional income generated, the proposed enhancement to MGETR would generate an estimated £0.81 million in total GVA and 12.8 FTEs for every £1 million spend by the Exchequer. If the induced impacts were to be discounted, the ROI for the Exchequer y would be £0.7 million in GVA and 10.2 FTEs for every £1 million invested.

4.6. Summary

Table 10 summarises the costs and benefits of the three CTR enhancements examined as part of this analysis. The fiscal costs for the enhancements are estimated to range from £12.3 million of the OTR enhancement, £29.6 million annually for the MGETR enhancement, and £73.3 million for the TTR enhancement.

In the case of the TTR enhancement, the most significant expected benefits include increases of 10-12% in earned income, contributed income, performances, audiences and freelance employment. Based on the estimated increases in earned income and compensation of employees, and associated revenue received by the Exchequer, the net cost to the Exchequer is estimated to be £7.0 million annually.

For the MGETR enhancement, the most significant expected benefits include increases of 1.5 - 3.4% in compensation of employees to freelance labour, total freelance employment, exhibitions and displays, attendances and contributed income. Based on the estimated increases in earned income and compensation of employees, and associated revenue received by the Exchequer, the net cost to the Exchequer is estimated to be £22.1 million annually.

If OTR was expanded to include EEA and RoW touring activity and educational activity, the additional fiscal cost to the Exchequer in 2023/24 would have totalled an estimated £6.5 million.

Table 10: Summary of costs and benefits of CTR enhancement scenarios

	TTR	OTR*	MGETR
CTR enhancement	Inclusion of audience outreach and education costs	Inclusion of international touring activity and educational activity	Inclusion of exhibition running costs
Fiscal costs Static Behavioural **Total**	 £59.1m £14.2m **£73.3m**	 £6.5m **£6.5m**	 £28.2m £1.4m **£29.6m**
Additional revenue to the Exchequer	£66.4m	--	£7.5m
Net cost/benefit to the Exchequer	**(£7.0m)**	**(£6.5m)**	**(£22.4m)**
Top five economic, cultural and social outcomes	1. Earned income (+12.4%, **£188.5m**) 2. Contributed income (+12.3%, **£113.0m**) 3. Annual number of performances (+10.9%, **3,660 performances**) 4. People employed as freelance labour (+10.5%, **1,730 freelance employees**) 5. Total audience (+10.5%, **965,000 additional audience**)	--	1. Freelancer compensation (+3.4%, **£13.4m**) 2. Freelance employment (+3.4%, **103 freelance employees**) 3. Annual number of exhibitions/displays (+2.8%, **29 exhibitions/displays**) 4. Physical attendance to exhibitions/displays (+2.8%, **322,800 additional attendees**) 5. Contributed income (+1.5%, **£729,400**)

Source: Nordicity analysis based on data from online survey and Arts Council England.
* Behavioural costs and benefits not estimated due to limitations in data.
Note: all results extrapolated from survey sample to represent the population of all arts and culture organisations in each sub-sector, including commercial theatre within the theatre sub-sector.

Table 11: Summary of economic impact and benefit-cost ratios of CTR enhancement scenarios

	TTR	OTR	MGETR
Fiscal costs			
Static	£59.1m	£6.5m	£28.2m
Behavioural	£14.2m		£1.4m
Total	**£73.3m**	**£6.5m**	**£29.6m**
Economic Impact		--	
FTEs			
Direct	1,307		201
Indirect	1,317		102
Induced	998		74
Total	**3,622**		**378**
GVA			
Direct	£164.5m		£12.1m
Indirect	£99.8m		£7.2m
Induced	£62.1m		£4.6m
Total	**£326.4m**		**£23.9m**
Benefit-cost ratios (total economic impact)		--	
FTEs/£1 million Exchequer cost	49.4		12.8
GVA/£1 million Exchequer cost	£4.5m		£0.8m
Benefit-cost ratio (direct + indirect economic impact)			
FTEs/£1 million Exchequer cost	35.7		10.2
GVA/£1 million Exchequer cost	£3.6m		£0.7m

Source: Nordicity analysis based on data from online survey and Arts Council England.
* Behavioural costs and benefits not estimated due to limitations in data.
Note: all results extrapolated from survey sample to represent the population of all arts and culture organisations in each sub-sector, including commercial theatre within the theatre sub-sector.

Wellcome Collection, Thirst: In Search of Water. Photograph courtesy of Benjamin Gilbert.

5. Summary of key findings and recommendations

5.1. Historical impact

The results of the econometric analysis of historical NPO data highlighted significant positive relationships between the adoption of CTR and numerous outcomes. Organisations claiming tax relief saw improvements in their financial performance, cultural output and social impact.[36]

The strongest relationships were seen in organisations' financial performance, with substantial increases in earned income and income earned from international activity relative to organisations who did not use CTR. When controlling for the effects of the pandemic on the culture sector, earned income was 37% higher and internationally earned income was 162% higher compared to non-CTR. This equates to an additional £44,200 of earned income and £16,500 in internationally earned income per organisation on average. Beyond increases in earned revenue, the results suggest that CTR had a significant mitigating effect during the pandemic, increasing organisations' resilience to economic shocks. Over time organisations were better able to leverage CTR to improve their financial performance in terms of earned income and internationally earned income. This was borne out by the

[36] Unfortunately due to the size of the data sample available for this study, parts of the analysis cannot provide separate results for each of the CTRs but only for the CTRs as a group.

econometric analysis of the CTRs (see Sections 2.3.1 Earned income and 2.3.2 International earned income). Specifically, this analysis found that the positive effects of CTR on earned income and international earned income increased over time following each organisation's first use of CTR.

In terms of cultural output, while no statistically significant relationship was found between the number of exhibitions and displays MGETR claimants were able to put on, there was a significant positive relationship between CTR and the number of performances. Organisations claiming CTR were able to host an additional 110 performances annually relative to those who did not adopt CTR and again had a mitigating effect during the pandemic. Overall, based on the NPO data, for 279 organisations claiming CTR in the sample, an additional 30,550 performances were put on. Results indicate that CTR helped organisations recover quicker following the pandemic, allowing them to return to staging performances in the post pandemic period quicker and more substantially than those that did not claim.

CTR also had a positive impact on the amount of concessionary tickets that were able to be offered as a share of total ticket sales, used as a proxy for social value. Organisations who adopted CTR on average offered 3.8% more concessionary tickets as a share of total tickets than non-CTR, or 32 additional concessionary tickets per organisation a year on average, with a significant compounding effect up to 4 years after treatment. While there was no significant relationship between CTR and total ticket sales, this further supports the inference that CTR encouraged organisations to offer more concessionary tickets.

The compounding effect CTR was observed to have on financial performance, alongside the mitigating effect during the pandemic and its assistant in post-pandemic recovery emphasises the importance the reliefs and their enhancements had on the sector. This has been particularly evident recently in the case of TTR, where data from the Society of London Theatre revealed that the West End outperformed Broadway at the box office last year[37].

5.2. Impact of enhanced tax relief

The results of Nordicity's survey of cultural organisations showed that the enhanced rates of CTR during the pandemic had important benefits across the reliefs and across different categories.

The vast majority of organisations across all three reliefs felt that CTR improved their financial position, decreasing their reliance on reserves and increasing their resilience to economic shocks. Across the theatre and orchestra sector, CTR also encouraged innovation and reduced organisations' aversion to risk. Over half of all respondents across the three reliefs strongly agreed or agreed that CTR allowed their organisation to increase the number of productions, exhibitions and displays or performances as a whole. CTR also was felt to have increased organisations professional development and community outreach capacity.

[37] SOLT, UK Theatre: *The West End: The Theatre Capital of the World*, 2024

Case Study: The English National Ballet

English National Ballet (ENB) is one of the UK's leading cultural organisations. With a £24 million turnover, around £3 million now comes from creative tax reliefs. This support that has become essential to its work as a touring company and a major producer of new ballet.

Image: Production images of Aaron S. Watkin and Arielle Smith's Nutcracker. Performed 12 December 2024 - 12 January 2025 at the London Coliseum. Photographer: Johan Persson

Tax relief has enabled ENB to expand its ambition and creative output. The company's claim grew from £1.2 million for 2018–19 to £3 million for 2022–23, allowing it to plan new productions with greater confidence. The most striking example is its decision to create a new Nutcracker, greenlit in June 2023 just months after the extension of the relief. The £2.6 million project involved 70 UK-based companies and freelancers in set and costume creation, alongside 18 weeks of rehearsals. Each year, *The Nutcracker* live performances reach 80,000–100,000 people, and over 50% of bookers were first-time bookers, serving as a gateway to the artform. The making of this ballet was also captured for a 3-part documentary by Sky Arts, which extended the opening up of ballet as an artform to 600,000 viewers.

Since the introduction of tax relief in 2016, ENB has doubled its creation of new full-length ballets, moving from one every four years to two, and taking major productions to cities such as Moscow, Chicago and New York. This growth has strengthened Britain's cultural presence overseas and generated new economic and reputational benefits.

Beyond direct financial support, tax relief has unlocked private investment and encouraged greater creative freedom. It has allowed ENB to think more expansively, invest in innovation and compete internationally for talent. However, uncertainty about the scheme's future creates a sense of fragility, a cliff-edge that can discourage risk-taking.

When in place, Theatre Tax Relief provides the confidence and capacity for renewal. It is the catalyst behind new productions, new audiences, and the continued global impact of British ballet.

Survey results also highlight key distinctions in the impact of the three reliefs, insights that were problematic to extract from the econometric analysis. CTR was felt to have had a strong positive influence on increasing employment in theatre productions in particular, and exhibitions and displays to

a lesser extent. However, this impact was felt a lot less pervasively amongst OTR respondents. MGETR recipients agreed that CTR allowed their organisation to increase the number of international touring dates to a greater extent than TTR or OTR organisations, while TTR recipients agreed that CTR increased their international touring capacity as a whole to a greater extent than the other relief claimants. CTR was felt to have enabled both theatres and organisations to lower their ticket prices much more than amongst museums and galleries, where only 7% of respondents agreed that CTR had this effect.

5.3. Further enhancements

The final aspect of this impact review was more forward-looking in nature. It examined further 'non-rate' enhancements to the CTRs. Specifically, it examined an extension of the TTR to include expenditures on audience outreach and education; the expansion of OTR to include EEA and RoW touring, and educational activity; and an extension to the definition of MGETR qualifying costs to include exhibition running costs.

The analysis and modelling found that the **TTR** enhancement would likely result in an annual fiscal cost to the Exchequer of £73.3 million, but generate increases of 10-12% in theatre companies' earned income (+£188.5m), contributed income (+£113.0m), annual number of performances (+3,660), total audiences (+965,000) and freelancer employment (1,730). These benefits generate additional revenue through taxation to the Exchequer, helping to offset the cost of the enhancement. The net cost to the Exchequer is estimated to be just under £7.0 million. Additional earned income and combined income earned as a result of the TTR enhancements would generate an estimated 3,622 FTEs of employment and £326.4 million in GVA for the UK economy. Based on the total cost to the Exchequer, this yields a BCR of 49.4 FTEs or £4.5 million in GVA for every £1 million invested.

The fiscal costs of **MGETR** enhancement are estimated at £29.6 million but would likely lead to increases in contributed income (+£729,400), freelancer employment (+103) and compensation of employees (+£13.4m), and more exhibitions and displays (+29) and commensurately larger audiences (+322,800). Based on these estimated benefits, the total cost to the Exchequer is an estimated £22.1 million annually. Additional earned income and combined income earned as a result of the MGETR enhancements would generate an estimated 378 FTEs of employment and £23.9 million in GVA for the UK economy. Based on the total cost to the Exchequer, this yields a BCR of 12.8 FTEs or £0.8 million in GVA for every £1 million invested.

If OTR was expanded to include EEA and RoW touring activity and educational activity, the additional fiscal cost to the Exchequer in 2023/24 would have totalled an estimated £6.5 million.

It is worth noting that the analysis and modelling, and BCR estimates only took into account producer surplus impacts related to market-based transactions – whether for end-products or intermediate inputs. This approach invariably understates the overall economic benefit when viewed from a social welfare perspective. With appropriate data from thew Department for Culture Media and Sport's (DCMS's) Culture and Heritage Capital (CHC) portal, this analysis's estimate of additional theatre audiences could be used to estimate the consumer surplus associated with these CTR enhancements. A similar approach could be used using CHC Portal research and the study's estimates of additional attendees to museum and gallery exhibitions.

5.4. Potential additional enhancements and future research

Alongside the research and analysis presented in this report, there are a number of other enhancements to the existing relief and ideas for new tax reliefs that have strong support from the sector. The additional enhancements presented in this report are not an exhaustive list but rather represent the priority asks of the sector. Those analysed in section 4 represent those asks that emerged during consultation with stakeholders and the oversight group at the start of this research, while the recommendations presented below have emerged since then and are also not an exhaustive list of additional support that would benefit the sector. These enhancements should be viewed as additional sector asks beyond the scope of this report and will require further analysis to be undertaken in the future to fully cost and assess viability and benefits.

The list of possible expansions to new reliefs presented in this study have been developed by the Oversight Group in collaboration with the study authors, and represent recommendations originating from the sector. However, it is important to note that all decisions regarding tax policy in the UK must be proposed by the Chancellor and approved by Parliament.

In relation to the existing cultural tax reliefs

The following suggestions and recommendations relate to enhancements or expansions to the existing CTRs.

- Increase in the percentage uplift for touring, the true cost of which is not sufficiently covered by tax reliefs, to the detriment of communities across the country.
- Expansion of TTR to include festivals and outdoor arts, including circus, which are not currently covered by tax reliefs, limiting impact on communities and diversity, and limiting the potential of these sectors in terms of opportunity and growth. Many outdoor touring and circus companies' business models do not fit with the requirements of TTR, meaning the relief does not cover their work.
- Acknowledgement within OTR of the definition of instrument to include voice.
- An amendment to the OTR guidance to specifically include performances where the orchestra is one of the primary focuses, rather than a singular one. Companies performing with orchestra (defined as more than 12 acoustic instruments) might significantly increase their overall tax credit claim if they were able to claim OTR instead of TTR. This would significantly benefit both opera and ballet companies, and would especially help companies who tour, however, OTR requires the instrumentalists to be “the primary focus” of the performance. While they are a primary focus for opera and dance, they could not be argued to be more important than the singers and/or dancers.
- Expand MGETR to allow for organisations to claim for audience engagement costs.
- While the inclusion of running costs is analysed for MGETR, the sector also recommends expanding OTR and TTR to include running costs for these organisations as well.

Expansion of the Research and Development Relief:

- Expanding the existing R&D relief to include arts innovation.
- Expand R&D definitions by including AHSS-based research and creative development within the scope of R&D tax relief.
- Update the sector-specific reliefs by revising TTR, OTR and MGETR to cover a broader range of R&D activities and include currently excluded art forms.
- Explore new reliefs or expand existing ones to support music, combined arts, visual arts and digital arts
- Address individual exclusion by investigating the impact on freelancers and sole traders, and explore mechanisms to extend support or develop advisory services for eligible applicants.

In relation to new tax reliefs that would support the cultural sector

Finally, the following recommendations for new tax reliefs relate to areas of the sector that are not currently covered by the existing CTRs but would provide significant support to the cultural sector.

- Expand the creative industries tax relief model to increase opportunities for children and young people (CYP), aged 0-18 years, to engage in creative and cultural activity.
- Expand the creative industry tax relief model to improve the skills and training offer for 16–30-year-olds considering entering the creative industries workforce.
- Consideration of tax reliefs to cover the following subsectors not supported by current tax relief provision. Many aspects of Dance are not currently covered. There is currently no provision for Literature and Publishing and Grassroots and Popular Music

Appendices

Appendix A: Econometric analysis

Data collation and construction of control group

This analysis makes use of the Arts Council England NPO Annual Survey, 2013/14 to 2023/24. Arts Council England member organisations are required to provide data on financial, audience, staff and activity metrics annually. Nordicity collated, cleaned and transformed these annual datasets for analysis, resulting in a longitudinal database featuring over 7,000 observations across over 1,000 unique organisations from which to establish a control group.

As part of Arts Council England NPO reporting responsibilities, organisations are required to complete the annual survey, which asks for information concerning tax relief use and value. These variables were used to create the treatment and control groups, a binary field indicating use of tax relief at any point during the study period.

The data was cleaned and transformed before matching and analysis. This included removing missing data, outliers at +/- 3 standard deviations, and transforming variables to improve distribution, for example taking natural logarithms of financial data such as income.

Organisations in the dataset that claimed CTR were 'matched', using propensity score matching, with similar profile organisations that did not claim CTR to produce a balanced sample from which to investigate variation in outcomes and assess the extent to which CTR has resulted in improved output and performance of cultural organisations. Through an iterative modelling process, the extent and significance of relationships between CTR claim and outcomes was quantified, the results of which are reported below.

Propensity score matching

To evaluate the impact of CTR on organisational performance, it was necessary to establish a counterfactual group, or a control group of organisations that never claimed CTR, to analyse differences in KPIs over time and how they vary between orgs which claimed tax relief vs those that don't.

Establishing a control group when evaluating government support programs using a traditional experimental design is problematic due to the fact that adoption rates amongst eligible organisations are rarely, if ever, 100%. As a result, quasi-experimental approaches are required to attempt to address potential selection bias resulting from the fact that organisations that claim tax relief may systematically differ from those that do not. Propensity score matching (PSM) is one such approach for isolating the effect of the CTR on cultural organisations who made use of the relief, by constructing a control group of comparable organisations who did not. After extensive methodological scoping PSM was the chosen method in this analysis.

Propensity score matching was used to create a balanced sample between organisations that claimed CTR and organisations that did not. This method statistically matched organisations that claimed CTR with those that did not based on profile in the year before an organisation's first claim. That is, if

organisation X first claimed CTR in 2017, then it would be 'matched' with an organisation of similar profile in 2016.

A selection of variables from the NPO dataset were used to match organisations based on profile. The variables used attempt to account for characteristics such as organisation size, turnover, human capital and type of organisation/activity, and were selected following pre-matching logistic regression to identify significant systematic differences between CTR claimers and non-claimers. Variables shown to be a significant predictor of CTR claim were included in the PSM model.

Table A - 1: Pre-matching logistic regression results

Variable	Significance
Organisation's main discipline	***
Total income	***
Total expenditure	*
Total long term liabilities	
Total value of funds	**
Number of productions	•
Number of performances	
Number of exhibitions	
Total tickets sold and given	*
Number of employees	***

Significance codes: *** 100%, ** 99.9, * 99%, • 95%

The propensity score model included key organisational characteristics that could influence both the propensity to claim tax relief and subsequent performance:

- Number of productions: to account for organisation scale and output
- Main artistic discipline: to account for sector difference
- Total tickets sold and given: to account for venue size and audience reach
- Total income: to account for organisation financial size (log-transformed[38])
- Total expenditure: to account for organisations financial capacity (log-transformed)
- Total value of funds: to account for organisations' reserves (log-transformed)
- Permanent full-time staff: to account for size of workforce

We employed nearest-neighbour matching with a 1:1 ratio without replacement, using a calliper of 0.1 to ensure high-quality matches. Exact matching on year was implemented to control for temporal factors affecting all organisations simultaneously.

A variety of matching methods were tested and evaluated to try and achieve the best sample balance between treatment and control groups. Nearest-neighbour, optimal and kernel matching were used and

[38] Where a data set was skewed or contained outliers, outcome variables were 'log transformed' so the econometric analysis focused on the relationship between CTR use and non-use and percentage changes in the outcome variable, rather than absolute unit changes in the outcome variable (e.g. +/-£1,000).

evaluated based on the standard mean differences (SMDs) of covariates. Academic literature recommends SMDs to be <0.1 to ensure covariate balance and reduce bias in treatment effect estimation[39].

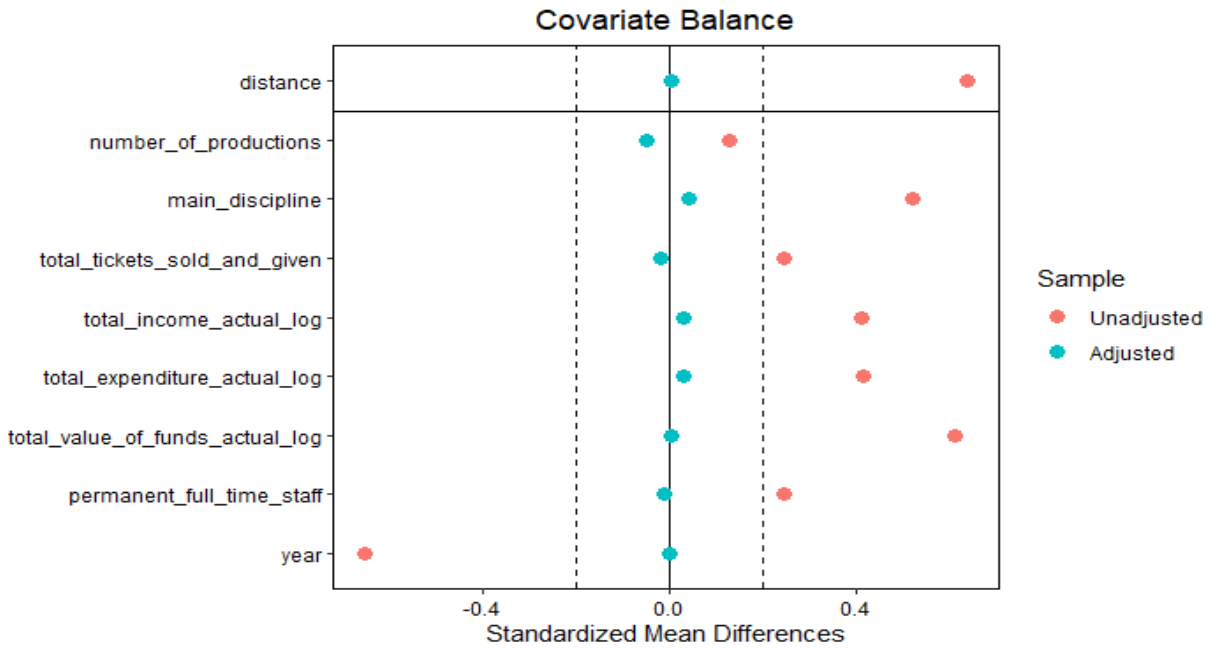
A nearest-neighbour match yielded the most successful match, with SMDs all <0.1, indicating strong balance between covariates. The size of sample after matching was 558 unique organisations, 279 in both treatment and control groups.

Table A - 2: Evaluation of covariate standard mean differences, before and after nearest neighbour propensity score matching

Variable	SMD before matching	SMD after matching
Number of productions	0.1268	-0.0507
Organisation's main discipline	0.5183	-0.0215
Total tickets sold and given	0.2457	0.0276
Total income	0.4087	0.0289
Total expenditure	0.4143	0.0015
Total value of funds	0.6107	-0.0215
Number of employees	0.2453	-0.0112

As the matching was done on the year before CTR claim, the rest of the annual observations for the sample organisations were reintroduced, creating a panel dataset to conduct the analysis.

Figure A - 1: Balance of covariates, before and after nearest neighbour propensity score matching



[39] Zhang Z, Kim HJ, Lonjon G, Zhu Y; written on behalf of AME Big-Data Clinical Trial Collaborative Group. Balance diagnostics after propensity score matching. Ann Transl Med. 2019;7(1):16.

Stuart EA, Lee BK, Leacy FP. Prognostic score-based balance measures can be a useful diagnostic for propensity score methods in comparative effectiveness research.

Econometric modelling

Binary variables were added to differentiate between organisations that had claimed CTR over the study period and to assign annual observations to the post-treatment period. The interaction term between these two variables formed the basis of the modelling approach, allowing for estimation of the effect of claiming CTR on key outcome indicators in the post-treatment period.

Lags[40] were applied to dependent and control variables to attempt to account for temporal persistence of outcomes, the fact that one year's performance is often highly influenced by the previous year. Lags also help to capture the delayed impact that government interventions of this nature can often have, with benefits taking time to fully materialise.

The study period encompasses the years 2020 to 2023, which were affected by the Covid-19 pandemic. Indeed, the audience-facing arts and culture industries were among the worst impacted by government restrictions and changes in audience behaviours, so any consideration of effects of CTR over this period will naturally be influenced by this. In an attempt to control for the effects of the Covid-19 pandemic, this analysis includes temporal fixed effects to models. This includes binary variables indicating the general pandemic period (2020 onwards) and specific year indicators for 2020, 2021 and 2022 to try and account for the changes in intensity of pandemic impacts and resilience built up by organisations as the pandemic progressed and subsided. Interaction terms between these temporal variables and CTR claim status were also investigated.

The effect of CTR was estimated on the following outcomes:

- Earned income: under the hypothesis that CTR has led to improved financial performance
- International income: under the hypothesis that CTR permits cultural organisations to not only create more cultural output, but to create output for international audiences, which directly yields additional economic benefits for the UK.
- Number of performances or exhibitions and displays: under the hypothesis that CTR enables cultural organisations to produce more cultural output in the form of productions, exhibitions and displays or performances.
- Number of tickets (sold and free)
- Concessionary tickets (sold and free): Under the hypothesis that financial sustainability that comes with CTR enables cultural organisations to deliver divert revenues towards providing social value, concessionary tickets serves as a proxy for this.
- Number of full-time staff: Is used as a proxy for human capital and delivers domestic economic benefits to the UK through increased cultural employment.

[40] A lagged variable is a past observation, i.e. the previous year's value. Used in cases where the previous year's value may be a predictor of future years, or where the impact of a variable may be delayed in having an effect.

Hierarchy of models

This analysis developed a hierarchy of models to address different econometric challenges and work towards a quantification of the impact of CTR on cultural organisations, through statistically significant, robust causal estimates.

Model 1: Testing parallel trends assumption

For DiD models to be valid, the parallel trends assumption must be fulfilled. It assumes that in the absence of treatment, in this case adoption of CTR by an organisation, the difference between the treatment and control group is constant over time. Violation of this assumption will bias causal estimates[41]. In other words, any divergence in outcome between the two groups must only occur after the introduction of CTR.

All variables were subject to a parallel trends assessment using an event study model, establishing that there was no statistically significant pre-treatment effect at one, two and three years before CTR adoption, by statistically establishing that outcome indicators were not significantly different between orgsanisation claiming CTR and the matched control group before CTR adoption.

Model 2: Baseline DiD

Model 2 provides a baseline test of the core hypothesis that CTR has resulted in an increase in the outcome, controlling for external pandemic induced factors. After ensuring that a fixed effects model was most appropriate for the sample using the Haussman test and F-Test, a fixed effects regression was run on the outcome of interest. This baseline model did not include any control variables, lags, or pandemic controls.

The empirical specification for Model 2 can be defined as:

$$Y_{it} = \beta_0 + \beta_1(CTR_i) + \beta_2(Post_CTR_i) + \beta_3(CTR_i \times Post_CTR_i) + (\alpha_i + \delta_t) + \varepsilon_{it}$$

where;

- Y_{it} = *Outcome variable for organisation i in year t*
- CTR_i = *Binary variable = 1 if organisation i ever claims CTR, 0 otherwise*
- $Post_CTR_i$ = *Binary variable = 1 in years where organisation i claims CTR after initial claim*
- $CTR_i \times Post_CTR_i$ = *interaction term*
- B_3 = *average effect of CTR usage*
- α_i = *individual fixed effects*
- δ_t = *time fixed effects*

[41] Difference-in-Difference Estimation, Columbia University Irving Medical Centre

Model 3: DiD with controls and lagged variables

Once a statistically significant relationship between the outcome of interest and CTR was established, the fixed effect model was refined to account for potentially heterogeneous variables by introducing control variables. External factors were also accounted for by introducing binary pandemic controls and temporal persistence was controlled for by lagging the dependent and control variables, under the assumption that outcome metrics are influenced by previous years' performance.

The empirical specification for Model 3 can be defined as:

$$Y_{it} = \beta_0 + \beta_1(CTR_i) + \beta_2(Post_CTR_i) + \beta_3(CTR_i \times Post_CTR_i) + \beta_4(Y_{it} - 1) + \chi_{it} - 1 + \gamma_1(Pandemic) + (\alpha_i + \delta_t) + \varepsilon_{it}$$

where;

- Y_{it} = Outcome variable for organisation *i* in year *t*
- CTR_i = Binary variable = 1 if organisation *i* ever claims CTR, 0 otherwise
- $Post_CTR_i$ = Binary variable = 1 in years where organisation *i* claims CTR after initial claim
- $CTR_i \times Post_CTR_i$ = interaction term
- B_3 = average effect of CTR usage
- $Y_{it} - 1$ = one year lag of the outcome for organisation *i* in year *t*
- $\chi_{it} - 1$ = one year lag of control variables
- Pandemic = Binary variable = 1 for years 2020 – 2022
- αi = individual fixed effects
- δt = time fixed effects
- B_3 = average effect of CTR usage

This model forms the main specification from which causal inferences are determined in the following section, if effects are deemed significant.

Introducing pandemic controls allowed for investigation into any mitigating effect CTR adoption may have had during the pandemic, under the hypothesis that CTR provided organisations with increased resilience in a period that is universally understood to have been disproportionately challenging to the arts and culture sectors.

Model 4: Refined DiD with controls and lagged variables

The next iteration of the model removed non-significant controls to attempt to improve model fit and derive more robust estimations of causal effect. In some cases where the model fit was not improved following refinement of Model 3, causal inference was derived from Model 3.

Model 5: Dynamic effects

A final dynamic effects model was run to determine if CTR had any compounding effect over on the outcome of interest over time.

This model was used to derive further statistical insights into the impact of CTR on outcomes, allowing for investigation into whether organisations were able to leverage CTR more effectively over time for example, or if the actualisation of the benefits of CTR are delayed.

Sector specific impacts

Nordicity categorised each organisation by main discipline, with the aim of running individual analyses on the specific CTRs, for example to isolate the impacts of OTR on orchestras rather than the CTRs as a collective. This would allow for more targeted causal inference to feed into sector specific policy recommendations. However, the Arts Council England NPO survey questions relating to CTR make no distinction between the reliefs. As well as this limitation in the data, there is the added complication that organisations may be eligible for more than one CTR, and as such claim a combination of the three, or a different relief from year to year.

Nevertheless, once a statistically significant causal effect had been established, the models were run on a subset of the data, using this main discipline categorisation as a proxy for the specific CTR claimed, to investigate whether these impacts remained significant or varied by CTR. These results are caveated by the limitations detailed above, and sub-setting the data reduced the sample size significantly, reducing the validity of estimates. Where effects remain significant the results are presented in the following sections under the outcome.

Appendix B: Econometric empirical results

The empirical results of the econometric analysis for each outcome are presented in this appendix, showing model coefficients and statistical tests.

Earned income

Table A - 3: Econometric modelling results for earned income

Variable	Baseline model	Improved model	Dynamic effects model
Interaction term	0.326** (3.044)	0.312* (2.241)	--
1 year post treatment†	--	--	0.198 (1.368)
2 years post treatment†	--	--	0.248• (1.925)
3 years post treatment†	--	--	0.496*** (3.624)
>4 years post treatment†	--	--	0.310** (2.600)
Post CTR	-0.402*** (4.74)	-0.073 (-0.65)	NA
Pandemic control	--	-1.808*** (8.216)	-1.727*** (12.952)
R squared	0.0069	0.1195	0.05799
F-statistic $F(df_n,df_d)$ p-value	F(2, 3390) = 11.93 (<0.001)	F(10, 2906) = 39.47 (<0.001)	F(8, 3861) = 29.71 (<0.001)
p-value	6.8919e-06	< 2.22e-16	< 2.2e-16

Significance codes: *** 100%, ** 99.9, * 99%, • 95%

International earned income

Table A - 4: Econometric modelling results for international earned income

Variable	Baseline model	Improved model	Dynamic effects model
Interaction term†	1.144*** (5.621)	0. 962*** (3.598)	--
1 year post treatment†	--	--	0.779*** (4.193)
2 years post treatment†	--	--	1.803*** (9.104)
3 years post treatment†	--	--	1.963*** (9.344)
>4 years post treatment†	--	--	2.108*** (11.511)
Post CTR	0.598*** (3.705)	0.4596* 2.135	NA
Pandemic control	--	-0.027 *** (-0.053)	-1.030*** (-5.031)
R squared	0.0587	0.128	0.079
f-statistic	F(2, 3390) = 105.77 (<)	F(10, 2906) = 42.83 (<)	F(8,3861) = 41.54 (<)
p-value	< 2.22e-16	< 2.22e-16	< 2.2e-16

Significance codes: *** 100%, ** 99.9, * 99%, ● 95%

Number of performances

Table A - 5: Econometric modelling results for number of performances

Variable	Baseline model	Improved model	Dynamic effects model
Interaction term†	89.693*** (3.311)	109.514*** (3.629)	--
1 year post treatment†	--	--	-21.795 (-0.898)
2 years post treatment†	--	--	-16.444 (-0.636)
3 years post treatment†	--	--	11.083 (0.404)
>4 years post treatment†	--	--	8.403 (0.351)
Post CTR	-103.578*** (-4.818)	-84.936*** -3.491	NA
Pandemic control	--	-102.058* (-2.1462)	-102.951*** (-3.849)
R squared	0.007	0.183	0.0048
f-statistic	F(2,3390) = 11.96 (	F(10,2906) = 64.94 (	F(8,3861) = 2.33 (
p-value	6.6552e-06	< 2.22e-16	0.01717

Significance codes: *** 100%, ** 99.9, * 99%, ● 95%

Concessionary Tickets

Table A - 6: Econometric modelling results for concessionary tickets as a share of total ticket sales

Variable	Baseline model	Improved model	Dynamic effects model
Interaction term†	0.006** (0.390)	0.038• (1.688)	--
1 year post treatment†	--	--	0.053*** (3.681)
2 years post treatment†	--	--	0.060*** (3.955)
3 years post treatment†	--	--	0.057*** (3.547)
>4 years post treatment†	--	--	0.064*** (4.572)
Post CTR	0.043** (3.231)	4.157* (2.268)	NA
Pandemic control	--	--	-0.109*** (-6.959)
R squared	0.010	0.033	0.036
f-statistic	F(2,3390) = 17.00 (	F(10,2906) = 9.86 (	F(8,3861) = 17.83
p-value	4.5266e-08	< 2.22e-16	< 2.2e-16

Significance codes: *** 100%, ** 99.9, * 99%, • 95%

Appendix C: Behavioural benefits (elasticity analysis)

Theatre Tax Relief

Figure A - 2 plots the elasticity of each of the outcome KPIs with respect to five different scenarios for increases in the total level of public financial assistance received by organisations. For example, survey respondents presented with the scenario of a 20% increase in their public financial assistance reported that it would have no impact (i.e. zero elasticity) in their earned income. However, survey respondents presented with the scenarios for 10% and 15% increases in public financial assistance reported that their earned income would increase in such a manner that it would imply an elasticity of just under 1.00 (i.e. the percentage increase in earned would almost match the percentage increased in public financial assistance.

Box 1 What is the economics definition elasticity

Price elasticity of demand is a ratio that measures how sensitivity demand for a good or service is to the price of that good or service. In this report, the price elasticity of demand (or "elasticity") refers to the degree to which the sales of cinema tickets would increase (decrease) in response to decrease (increase) in the ticket price.

The formula for elasticity (e) is:

$$e = \frac{\%\Delta Q}{\%\Delta P}$$

Where: Q is the quantity of good or service sold (e.g. cinema tickets)
P is the price of the good or service (e.g. cinema ticket price)
%ΔQ and per %ΔP are the percentage changes in quantity sold and price

There are three types of elasticity:

1. Relatively elastic demand (e >1): A given decrease in price leads to a greater percentage increase in quantity demanded, and therefore, an increase in total revenue.

2. Unitary elastic demand (e=1): A given decrease in price leads to a equivalent percentage increase in quantity demanded, and therefore, no change in total revenue.

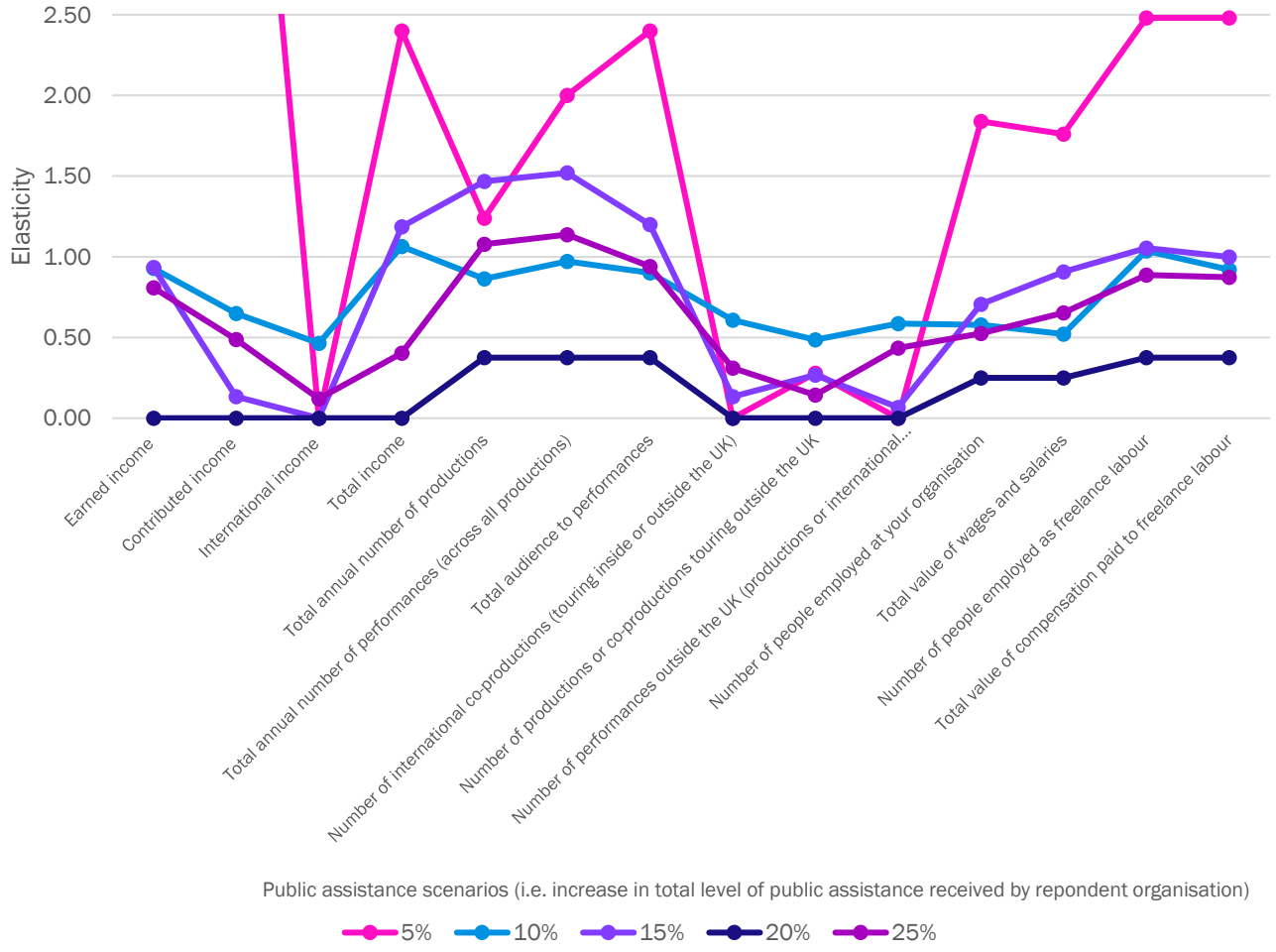
3. Relatively inelastic demand (e<1): A given decrease in price leads to a smaller percentage increase in quantity demanded, and therefore, a decrease in total revenue.

The survey results suggest that the annual number of productions, performances and annual audiences for organisations claiming TTR are particularly 'elastic' to changes or enhancements to the TTR, rather than inelastic or non-responsive to those changes (Figure A - 2). In other words, the percentage change in these cultural output outcomes would exceed the percentage increase in the monetary value of fiscal support (see Box 1).

Conversely, international co-productions, and productions and performances outside the UK appear to be less elastic. The results also indicate that hiring and compensation of freelance labour is more

elastic than permanent employee hiring and wages. Similarly, earned income, and to a lesser extent contributed income, were shown to be more elastic than international income (Figure A - 2).

Figure A - 2: Elasticity across outcomes, TTR, by public assistance scenario*



Source: Nordicity survey of Cultural Tax Relief Impacts, 2025

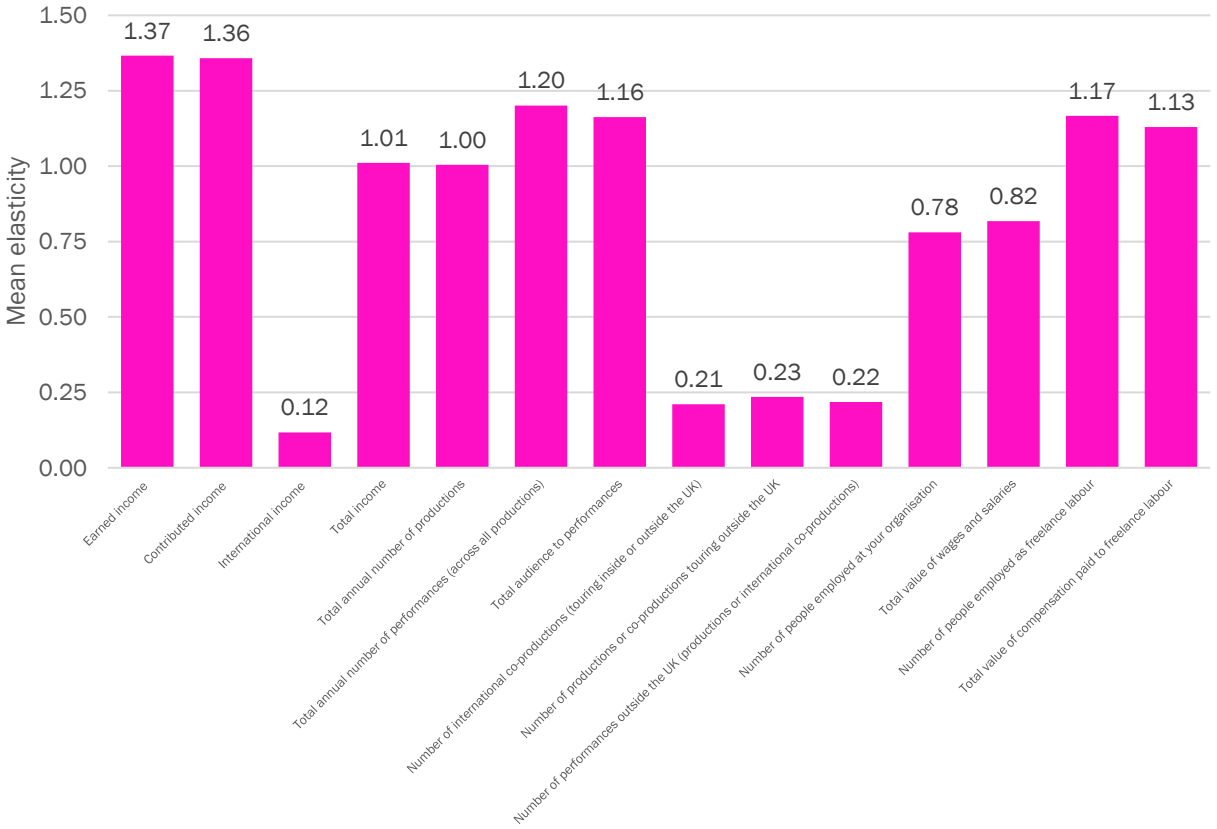
N = 44

* The analysis included five public-assistance scenarios: the monetary value of public assistance received by the organisation increased by 5%, 10%, 15%, 20% or 25%.

When viewed in terms of the mean elasticity across all the public assistance scenarios, Figure A - 3 more clearly shows that earned income and contributed income are relatively elastic (i.e. display an elasticity greater than one). Total income, number of productions, number of performances, total audiences, and freelancer employment and compensation were also relatively elastic.

Staff employment and wages were relatively inelastic (i.e. display an elasticity less than one). International outcomes were relatively inelastic suggesting that increase public assistance in the form of enhanced TTR would have limited effect on outcomes such and international touring and income.

Figure A - 3: Mean elasticity of outcomes, TTR



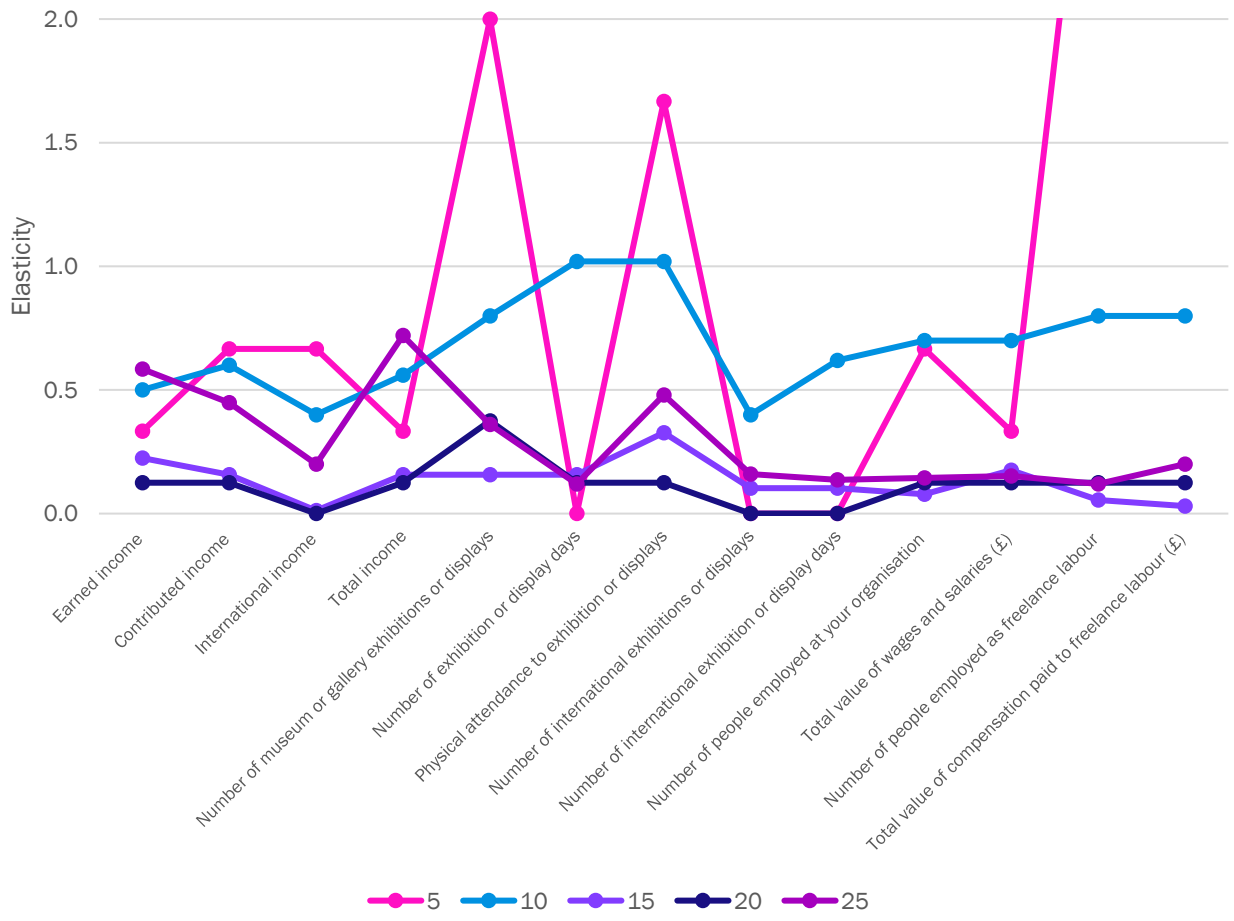
Source: Nordicity analysis based on survey of Cultural Tax Relief Impacts, 2025
N = 44

N = 44

Museum and Galleries Exhibition Tax Relief

With only a few exceptions, most outcomes displayed an inelastic response to an increase in public financial assistance. Earned income, contributed income and international income were projected to increase by about half the rate of the increase in public financial assistance. Most other outcomes displayed very mixed elasticities, depending on the scenario – ranging from a 5% increase in public financial assistance to a 25% increase in public financial assistance.

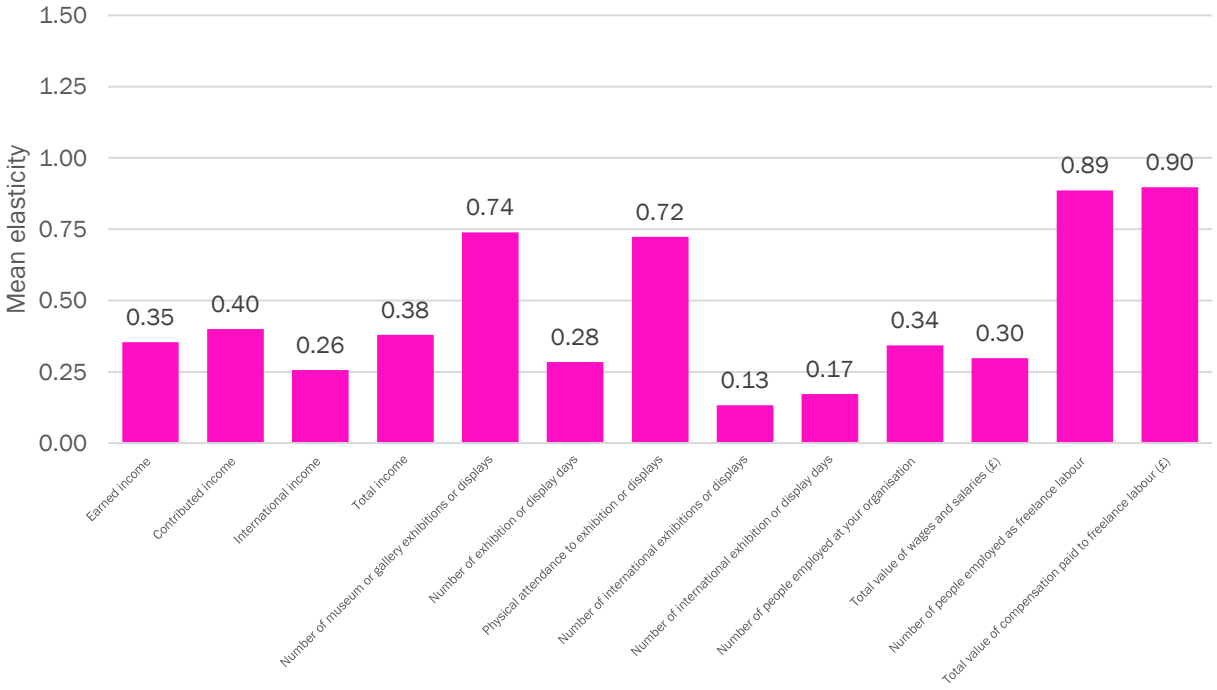
Figure A - 4: Elasticity across outcomes, MGETR



Source: Nordicity survey of Cultural Tax Relief Impacts, 2025
N = 29

The mean elasticities, however, reveal that freelance employment and compensation, the annual number of exhibitions and displays and audiences to exhibitions and displays would be most responsive to any increase in public financial assistance that would accompany the inclusion of running costs in MGETR qualifying costs (Figure A - 5).

Figure A - 5: Mean elasticity of outcomes, MGETR



Source: Nordicity analysis based on survey of Cultural Tax Relief Impacts, 2025
N = 29

Appendix D: Oversight group members

This report was commissioned by Arts Council England, in collaboration with the UK's other national arts agencies and several leading UK arts organisations that together formed an Oversight Group for the duration of this research. Oversight Group members were consulted during the research design phase, engaged to support survey distribution, and review of the final report. The Oversight Group consisted of the organisations listed in Table A - 7.

Table A - 7: Cultural tax reliefs impact review Oversight Group members

Group	Organisation
UK-wide organisations	Art Fund Association of British Orchestras Association of Independent Museums Heritage Fund Museums Association National Museum Directors Council One Dance UK UK Theatre / Society of London Theatre
National arts councils and bodies	Arts Council England Arts Council Northern Ireland Arts Council Wales Contemporary Visual Arts Network (England) Creative Scotland
Other key organisations	Department for Culture Media and Sport HM Revenue & Customs HM Treasury National Theatre and selected large cultural organisations Other sector-specific organisations in the UK nations and devolved-government departments

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