

MUSIC BY NUMBERS



METHODOLOGY

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This analysis is based on the most recent data that is available. The data sources used are a combination of industry surveys conducted by the UK Music members, Annual Business Survey (ABS) and other music industry bodies.

The Music Tourism analysis and methodology was conducted by Oxford Economics.

With this report, we have adopted many aspects of the original methodology used for the production of the Measuring Music Reports 2014 – 2018 and evolved parts of the methodology elsewhere to better reflect the industry.

1 methodology.

This chapter sets out the methodology that has been followed to quantify the economic contribution of the UK music industry. It begins by setting out some points of terminology and the methodological steps in the order in which they have been implemented. It then discusses some methodological challenges. It concludes by providing more detail on how the key indicators – Gross Value Added (GVA), exports and employment – have been determined.

methodological steps

The methodological steps are as follows:

First, define the industry. This task provides the industry's answer to the question: What economic activities make up the core music industry?

More detail on the process followed to generate the industry's answer to this question is provided in the next chapter on definition.

Second, identify and quantify sources of revenues. Having established the economic activities that define the music industry, this task involved working with the industry to identify and quantify the revenue streams relevant to these economic activities.

Third, the export contribution of the music industry was measured by identifying and quantifying those revenue streams that involved transactions between UK businesses or artists and businesses or customers outside the UK.

Fourth, the employment contribution of the music industry was measured by identifying and quantifying the employment concerned with the economic activities that form the music core industry.

Fifth, having quantified the revenues generated by the economic activities of the core music industry, it was necessary to transition from these to an estimate of GVA contribution. There are various methods for making this transition, which we discuss below.

Finally, we present our results by industry segments. This is to say that the GVA, employment and export contribution of UK music is presented in terms of the different elements of our definition of this industry.

terminology

We define Gross Output, Gross Value Added (GVA) and exports in the same way as the Office for National Statistics (ONS) and current accepted economic convention. This means that the following definitions are used:

Gross Output corresponds to the total value of final sales by the company or industry in the relevant accounting period.

GVA¹ is the contribution an institution, company or industry makes to Gross Domestic Product (GDP). GVA is most simply understood as the value of sales minus the cost of bought in goods and services used up in the production process. For a company, this is equivalent to the sum of compensation of employees (including both salaries and payments in-kind), earnings before interest, tax and depreciation (EBITDA), and taxes less subsidies on production.

Exports are the value of final sales to purchasers resident overseas. This is consistent with the Annual Trade in Services Survey run by the ONS.

GVA measures the contribution to the economy of each individual producer, industry or sector and is used in the estimation of Gross Domestic Product (GDP). GDP is a key indicator of the state of the whole economy.

When assessing the economic contribution of sectors or the economic impact of a policy change, it is conventional to refer to the GVA impact. This is, therefore, a more widely recognised and used measure of economic contribution than Gross Output. Department for Digital, Culture, Media & Sport (DCMS), for example,

report on the GVA contribution of the creative sectors but not their Gross Outputs.

In the UK, three theoretical approaches are used to estimate GDP: 'production', 'income' and 'expenditure'. The 'production' approach to estimating GDP looks at the contribution of each economic unit by estimating the value of an output (goods or services) less the value of inputs used in that output's production process. The income approach to estimating GDP measures the incomes earned by individuals (e.g. wages) and corporations (for example, profits) in the production of outputs (goods or services).²

In *Measuring Music*, a production approach is used for all categories of activity except the category encompassing musicians themselves, as these are individuals and therefore, their revenues are treated in the same way as wages would be under an income approach.

¹ <https://www.ons.gov.uk/economy/nationalaccounts/uksectoraccounts/methodologies/glossaryofeconomicterms>

² <http://www.ons.gov.uk/ons/guide-method/method-quality/specific/economy/national-accounts/gva/relationship-gva-and-gdp-gross-value-added-and-gross-domestic-product.html>

methodological challenges

This project has identified and overcome a number of methodological challenges. Our research partners, Oxford Economics, have a strong track record of studies on broadly comparable sectors – for example, film – and assisted this study by drawing upon the intellectual capital of these past studies.

Three kinds of challenge have been confronted:

- Definitional challenges: Have we defined the music industry correctly?
- Data challenges: Have we gathered the most accurate data possible on this definition?
- Technical challenges: Have we used the data appropriately to assess economic contribution?

We provide more detail on the process that has been followed to arrive at our definition in the next chapter.

This process arrives at core and wider definitions of the music industry, which in providing core and wider elements is consistent with the approach used by Oxford Economics in their research on the film industry.

Gathering data has been challenging as the music industry is made up of a large number of small music enterprises (SMEs) and a lot of data is held by these organisations. Therefore, there is significant variation between individual contracts with complex, cross-border revenue flows, as well as plurality of business models and many freelancers.

Due to unprecedented engagement by the music industry, we have significantly increased the number of survey responses and raw data that this analysis is based upon compared with the data collection for Measuring Music in previous years. In particular, the number of surveys completed by Music Creators was 1600. In addition to this the MMF conducted a survey as part of their Generator programme where by we were able to obtain survey data for over 175 Music Managers across the country. Between 2013-2018 this number averaged around 40 responses.

Moreover, our analysis of the live music industry crucially depends upon accessing ticketing data and from 2014, we were able to draw upon ticketing data held by the BBC for live music events (e.g. the BBC Proms). We are grateful to all those who have shared their data with us to enable this analysis. There has, however, been an unprecedented commitment across the music industry to share data with this project. This has resulted in a number of surveys being run as part of the project; many for the first time, which aim to pick up data currently absent from the IDBR.

In terms of how these sources of data are used, the main challenge has been around transitioning from Gross Output to GVA data, which we discuss later.

gva

We have used industry data to quantify the Gross Output of each element of the core music industry. There are transactions within the music industry such that revenues that contribute to output in one part of the industry will in turn contribute to output in another part of the industry (e.g. record company revenue will to some extent be passed on to music creators and in turn from music creators to their managers). That revenue derives from transactions internal to the industry does not alter the Gross Output of various parts of the core industry, which are simply the summed revenues of companies in these parts, irrespective of whether these revenues derive from sales arising from transactions with other members of the industry or economic agents external to the industry.

Three possibilities for transitioning from gross output to GVA data are:

Revenue data can be applied to the input-output table to generate GVA estimates but this would work poorly for music as the industrial sectors in the input-output table do not correspond accurately to music.

Another possibility would be to take a ratio of GVA to Gross Output from the Annual Business Survey (ABS). However, again, this would be imperfect for music due to the way that music maps poorly on to the Standard Industrial Classification (SIC) codes

Given the poor fit that music has with the SIC codes, a more bespoke methodology was required. We developed this through accessing the Virtual Microdata Lab (VML) maintained by the ONS.

This bespoke methodology had three steps:

First, UK Music gathered the company registration numbers and VAT numbers of a large number of companies belonging to our member bodies. These details were supplied to the Inter-Departmental Business Register Team (IDBR) team at the ONS.

The IDBR was able to attach reporting unit numbers to many of these

businesses and these reporting unit numbers were submitted to the VML.

In the VML, UK Music could access these reporting unit numbers without being able to identify which specific firms they related to. We could, however, identify entries in the Annual Business Survey (ABS) corresponding to each of these reporting unit numbers. Each of these entries had a number of data variables attached to it, including Gross Output and GVA. We took a ratio of GVA to Gross Output for those firms that we could match in the ABS to the reporting unit numbers supplied to the VML by the IDBR team.

By taking this ratio, we have a ratio of GVA to Gross Output for firms which we know to be in the music industry. This is, therefore, a ratio much better tailored to our industry than that which appears in the published ABS, where the poor mapping of the SIC codes to the music industry means that the ratios of GVA to Gross Output that might be calculated would take account of industries other than music.

Nonetheless, the ratio averages across firms known to be in the music industry. Typically, averages contain variation among the numbers that form it. This means that it is likely that the ratio of GVA to Gross Output that we apply may vary between the different elements of the core music industry. It is best spoke to the core as a whole, not to the component parts of the core.

Confidentiality procedures meant that in the VML we were only able to identify companies as being UK music companies or not, rather than to the more detailed level of particular parts of the core industry.

In the case of some parts of the core - music creators, collecting societies, trade bodies and some parts of the live sector³ - we were able to accurately estimate GVA by drawing upon different data sources other than the VML. We applied these estimates in these cases and reweighted the GVA to Gross Output ratio applied to the rest of the core in light of this.

³ The GVA contribution of collecting societies and trade bodies is equal to their wage spend, as they are not-for-profit organisations. These wage spends were inputted directly. Music Creators were treated similarly as sole traders - all revenues being treated as wages and therefore, contributing to GVA. However, we deducted payments to managers and music agents. In respect of the live sector, more accurate estimates of the relation between turnover and GVA were applied, consistent with past research for UK Music by Oxford Economics.

employment

We have measured the direct employment contribution corresponding to the economic activities within our definition. We have not measured the employment that is indirectly sustained by these economic activities.

This employment data has been gathered by surveying those undertaking the economic activities that are contained within our definition. When undertaking this surveying, we have been careful to avoid double counting (e.g. someone who works both as a Music Creator and a Manager) and to capture the many freelancers in the industry as accurately as possible.

Where surveys were used, they counted part-time staff and freelance staff as equivalent to half a full-time employee. In some cases, employment data was taken from other sources, e.g. BPI and MPA provided data on employment by record labels and publishing companies.

exports

Exports are revenues from transactions between sellers in the UK and buyers outside the UK. These kinds of revenues have been identified in our surveying of UK Music members and others.

In undertaking this survey, we have attempted to apply the same standards and interpretations that the ONS use when undertaking the Annual Trade in Services Survey.

Given the significant heterogeneity by contract - differences from contract to contract - that we see in the music industry, an important point that we note is that the Annual Trade in Services Survey seeks to gather data at firm level, rather than by contract.

2 definition.

The first step in measuring the contribution the music industry makes to the UK economy is to set the parameters of what “the music industry” includes. This chapter, therefore, establishes how the UK music industry is defined for the purposes of this analysis.

There is no universally agreed definition of the music industry. Different approaches can be taken to define any industrial sector. There is no ‘right’ or ‘wrong’ way. Different approaches do, however, conceptualise the industry in different ways and take different characteristics to capture the essence of the industry.

It is our contention that the industry is founded on certain commercial assets and defined by the relationship to these assets. It is these assets that create the value which enables music to be an industry, rather than a hobby, craft or other non-commercial venture. It is the business-to-consumer and business-to-business transactions and the resulting profits that make this a commercial environment and this environment would not be sustainable without the assets of the industry.

This chapter begins by reviewing the different ways in which music might be defined and then moves on to the process that has been followed to generate the definition presented here. It then explains the approach grounded in commercial assets and the rationale for this approach. It concludes by identifying the different elements contained within the core and wider music industries, according to this approach.

different approaches to defining the music industry

The SIC and Standard Occupational Classification (SOC) codes are used by the ONS. The ONS note that the SIC “was first introduced into the UK in 1948 for use in classifying business establishments and other statistical units by the type of economic activity in which they are

engaged”.⁴

While the SIC has been subject to various revisions since it was first introduced, it is still thought to better capture more traditional parts of the economy, like manufacturing, than parts of the economy that have since become more prominent, like the creative industries. Nonetheless, the SIC is often used to divide the economy into its component industries.

In respect of the SOC the ONS state that it is “a common classification of occupational information for the United Kingdom”⁵. Thus, while the SIC divides the economy into different industries, the SOC divides the workforce into different occupations.

We have reviewed the SIC and SOC codes in detail to assess how different UK Music members ought to be classified with these systems. It is often difficult to map the activities of UK Music members neatly on to the SIC and SOC codes.

Music is also grouped with the visual and performing arts. These are quite different kinds of activity. They have different audiences, workforces and cultural footprints. Yet grouping music with them means that the output of music is not disaggregated from them in the data presented by DCMS and ONS. Demos has also commented upon these problems⁶.

Due to the difficulties of mapping music industry activities on to the SIC and SOC codes and the lack of a distinct coding for music, there are limits to what can be achieved through the current national accounts in terms of accurately describing what is constituted by our sector and what its economic contribution is.

⁴ <https://www.ons.gov.uk/methodology/classificationsandstandards/ukstandardindustrialclassificationofeconomicactivities/uksic2007>

⁵ <https://www.ons.gov.uk/methodology/classificationsandstandards/standardoccupationalclassificationsoc/soc2010>

⁶ Demos, Risky Business, (2011)

process for generating definition

We followed a thorough, robust and transparent process for developing a definition of the core, modern music industry. The process that was followed is illustrated in the diagram below.

DIAGRAM 1: PROCESS FOR ARRIVING AT INDUSTRY DEFINITION

RESEARCH STEERING GROUP	Several structured discussions with research steering group and live music group arrived at definition
UK MUSIC BOARD	This definition was presented to the UK Music Board and it was agreed that we would use it as a basis for proceeding with the project, while taking soundings more broadly
WIDE DISCUSSION	This definition was subsequently discussed in meetings with economists and statisticians in government departments and agencies, and further afield

why the music industry is defined by commercial assets

The process illustrated above has led to the view that the UK music industry consists of a core industry and a wider industry beyond.

The inner core is defined by its relationship to the commercial assets of the UK music industry.

These commercial assets are:

- Commercial asset 1: A musical composition and/or lyrics (the notes on a page)
- Commercial asset 2: A (master) recording of a musical composition⁷
- Commercial asset 3: A live musical performance
- Commercial asset 4: An artist him or herself (as a brand, reputation or image)

There are two kinds of relationship to these commercial assets that justify inclusion in the core of the music industry:

First, economic activities that create these commercial assets. (An example is the creative process of composing, performing or recording music.)

Second, economic activities whose primary focus is upon the steps necessary to bring these assets to a position where they are able to be distributed and transacted with consumers and businesses in one way or another.

The commercial assets relate to one another in a typically sequential form. This is illustrated in the diagram below. Musicians performing in front of live audiences will typically be performing compositions that either they or another artist have recorded, and which they or another composer or songwriter has written. In their exposition of commercial assets 1, 2, and 3, the artist can also develop their own brand i.e. commercial asset 4.

DIAGRAM 2: TYPICAL RELATIONSHIP BETWEEN COMMERCIAL ASSETS



⁷ We note that the use of music in audio-visual productions and or by brands will draw upon these master recordings.

Some artists may have more commercial potential in one or other of the assets. Elton John, for example, has recorded new music relatively infrequently in recent years. However, he can retain tremendous capacity to attract live audiences (commercial asset 3). Equally, Paul McCartney has released a new album (commercial assets 1 and 2) that has been well received but he may not (as of yet) performed these songs live (commercial asset 3).

There are also some artists - for example, those whose professional careers begin with TV shows like the The Voice - who have a personal brand (commercial asset 4) that is disproportionately large as compared with their success to-date in developing commercial assets 1 and 2. This does not, though, exclusively apply to acts coming out of such TV shows.

Many of the most commercially successful artists, however, tend to have their success in commercial assets 1 and 2 build into success in commercial assets 3 and 4, giving them strong commercial potential in respect of all assets. A new album by Little Mix, which would draw upon commercial assets 1 and 2, is now inevitably a major cultural and commercial occasion, as is one of their concerts (commercial asset 3) or the release of one of their fragrances, which would draw upon commercial asset 4.

The potential of artists in respect of these commercial assets is consistently assessed by those investing and working in the industry at all stages of the artist's career. As discussed, artists like Little Mix and Elton John may have differential potential between these commercial assets. But, of course, such major acts more than justify the various investments made which are necessary to bring their products to end customers.

Less well known artists are more marginal cases. The costs of these investments - whether in the form of time spent in recording studios or negotiation with the other kinds of suppliers that must be engaged to bring their products to market or other kinds of investment - have to be assessed by

record companies and music publishers against the likely returns to be generated by these artists in terms of these commercial assets. While the investment costs may vary by artist, what matters in terms of revenue potential is always their capacity relative to the four commercial assets identified.

It is because these commercial assets are fundamental to all revenues generated by the music industry that we see them as integral to how we define the industry.

core music industry

The rationale above defines the UK's core music industry as being formed by:

- Composers, songwriters, lyricists
- Music producers, engineers
- Recording studios and staff
- Music managers
- Record labels
- Recorded rights holders
- Music publishers
- Publishing rights holders
- Collecting societies
- Music trade bodies
- Music accountants
- Music lawyers
- Music festival organisers
- Music promoters
- Music agents
- Music retail (Shops)
- Music retail (digital)
- Retail of Music Instruments
- Manufacture of musical instruments
- Production services for live music
- Ticketing Agents – the proportion of their activities involved with live music
- Concert venues and arenas – the proportion of their activities involved with live music
- Music Distributors – Digital and Physical

We group these different elements of the core into various thematic bundles as illustrated in Table 1.

TABLE 1: THEMATIC GROUPS WITHIN THE CORE MUSIC INDUSTRY

THEMATIC GROUPING ELEMENTS OF THE CORE

Music Creators	<ul style="list-style-type: none">• Artists, Musicians, Singers• Composers, Songwriters, Lyricists• Producers• Engineer
Recorded Music	<ul style="list-style-type: none">• Record labels• Recorded rights holders• Digital music distributors• Recording studios• Physical distribution
Live Music	<ul style="list-style-type: none">• Music festival organisers• Music promoters• Music agents• Production services for live music• Ticketing agents – the proportion of their activities involved with live music• Concert venues and arenas – the proportion of their activities involved with live music
Music Publishers	<ul style="list-style-type: none">• Publishing companies• Publishing rights holders
Music Representatives	<ul style="list-style-type: none">• Collecting societies• Music managers• Music trade bodies• Music accountants• Music lawyers
Music Retail	<ul style="list-style-type: none">• Retail of musical instruments• Manufactrure of musical instruments• Digital music retail• Physical music retail

wider music industry

We are reporting only on the economic contribution of this core, not the wider music industry. While the wider music industry is considered in the chapter on linkages, we have not made an estimate of its economic contribution.

The UK's wider music industry is defined as those economic agents that trade with the core, and so service the core music industry in a variety of ways.

The rationale above defines the wider music industry as being formed by:

- Other music-based digital services for consumers (streaming, subscription, recommendations, social networks)
- Music broadcast: radio and television
- Music video production
- Manufacture of audio equipment, and music software
- Music photography
- Music press (online and print) – including the proportion of music coverage in non music focused publications
- Manufacture, sale, distribution of music merchandise
- Music teachers (education)
- Music teachers (tuition)
- Security, catering and other services for live music performances/ events
- Music contractors/fixers

3 Applying methodology to the core definition.

This chapter works through our thematic groupings to explain the application of our methodology to each element of our core definition.

music creators revenues generated

UK Music worked with BASCA, PRS for Music, PPL, MPG, FAC and the MU, as the representative bodies of these creative workers, and identified that they generate the following revenues:

- Royalties and rights payments from collecting societies (PRS for Music/PPL)
- Royalties from music publishers and publishing rights holders
- Session fees from record companies
- Royalties from record companies and recording rights holders
- Payments in association with a ticketed concert
- Commissions for new works
- Sponsorship/brand endorsements
- Payments for music tuition
- Payments for non-ticketed corporate gigs/pub performances/private parties
- Session or buy-out fees, e.g. for TV bookings, computer games and film companies
- Revenues from online content channels

gva

We surveyed BASCA, PRS for Music, FAC, MPG, PPL and MU members to gather data on the revenue streams above and then used PPL and PRS for Music data to gross up from the survey to an estimate for the UK as a whole. The survey had 1,600 responses, and in addition we had aggregated and anonymised responses from a number of accountants of leading

musicians. These revenues were treated as wages and therefore, as contributors to GVA. However, we substituted from this cost incurred by musicians that we are modelling as revenues to elsewhere within the industry (i.e. payments to managers and music agents). As a result, what we report here as their GVA contribution is net of these costs.

exports

The survey asked them what proportion of their revenues arises from overseas and this proportion was applied to our measure of total revenues of musicians to come to an export measure.

employment

The survey found the average earnings of the respondents given our measure of total revenues, implies that there are 139,352 professional music creators as a full-time equivalent (FTE) base in the UK.

record labels

revenues generated

UK Music worked with AIM and BPI, which represent record labels, to identify the following revenue streams:

- Sales
- Physical formats
- Online and mobile downloads
- Subscriptions
- Ad-supported
- Public performance and broadcast
- Synchronisation
- Film/TV/Advertising
- Games
- Premiums
- Digital exploitation of audio/visual content, e.g. You Tube channel
- Artist Related Income
- Other – including merchandise, live events

gva

BPI runs a survey across all kinds of record labels – both majors and independents – which gather data on the revenue above.

Data is collected on invisible imports and exports, employment, A&R investment and marketing and promotion expenditure. In order to represent the whole recording sector, adjustments are made to the survey returns to account for the remainder of the independent sector. Measurement of the rest of the independent sector was undertaken by Media Research Publishing Ltd (MRP), whose estimates are based on company by company analysis for the leading 30 labels, utilising accounts disclosures, published market share data from the Official Charts Company and knowledge of the relevant businesses.

The total revenue figure reported by the BPI was applied to our ratio of GVA-to-Gross Output to move to GVA.

exports

These were taken from the BPI measure.

employment

Similarly, employment is as reported the BPI.

digital distributors

Digital Distributors are a vital intermediary between those making sound recordings (commercial asset 2) and online retailers. They provide a niche, business-to-business service ensuring the digital file contains all the metadata to enable its commoditisation.

Please note that this does not refer to distributors of digital music direct to consumers (e.g. Spotify).

revenues generated

Digital Distributors generate revenues from the following activities:

- Deliver digital content
- Sales and marketing

gva

Working with the BPI we identified firms offering these services and produced estimates based on company by company analysis for the leading digital distributors, utilising accounts disclosures. We estimate that these companies are responsible for 90% of the activity of online music distributors in the UK.

This is a rapidly evolving area of the industry and what falls within scope was subject to some debate. It was determined that only those operating “pure delivery” models should fall within scope - those whose business model only involves delivering tracks, not taking ownership of rights. This has the effect of excluding firms that others may consider to be within scope. It is, therefore, a very narrow interpretation of scope and a conservative estimate of contribution.

The total revenues estimated were applied to the GVA-to-Gross Output ratio to derive a GVA measure.

exports

Our research found that digital distributors do not contribute directly to exports.

employment

Employment measures were grossed up in line with market share held by the identified firms, as a proportion of the marketshare they were thought to hold.

physical manufacturing and distributors

The design and production of physical product and packaging is necessary to bring sound recordings (commercial asset 2) to a form in which they can be sold to customers. They also tend to develop and reinforce the brand of the artists (commercial asset 4).

revenues generated

The revenues of these businesses that are relevant to this study are those that they derive from:

- Production of CDs and records/vinyl
- Distribution of CDs and records/vinyl

gva

We worked with the BPI to identify businesses providing these services and calculated the average distributor commission. These revenues were then grossed up in line with the proportion of the major and independent albums released in 2018 that could be accounted for by the activities of our sources.

These total revenues were applied to our GVA-to-Gross Output ratio to derive a GVA measure.

exports

Our research found that physical manufacturers and distributors do not contribute directly to exports.

employment

We calculated the ratio of employment to turnover from information.

recording studios

Recording studios play a key role in the transition from a musical composition (commercial asset 1) to a sound recording (commercial asset 2).

revenues generated

Recording studios generate revenues from the following activities:

- Studio hire
- Equipment hire
- Engineering services
- Mastering services

For the first time UK Music ran a survey across the recording studio community to identify these revenues streams. The survey was adopted by many of the leading studios in the country. The top 5 music studios in the country responded to the survey including a sample of medium studios and producer-owned studios. Improving this response rate is something that we will seek to do in future versions of this report. We calculated the revenues based on the average studio hire price in the UK, based on a studio being active for 261 days within the year. We are aware that the majority of studios operate outside of traditional hours and commonly are open at the weekends. Some in fact operate 24 hours to accommodate clients.

gva

The total estimated revenue figure was applied to our ratio of GVA-to-Gross Output to move to GVA.

exports

Survey respondents indicated what proportion of their revenues come from non-UK clients.

employment

Survey respondents provided employment measures, which were grossed up in line with market representation held by respondents and cross referenced with analysis based on companies house data.

live music

Research by Oxford Economics for UK Music on music tourism allowed us to identify:

- Total ticket sales for all kinds of live music events - both festival and non-festival
- Total spend at these live music events by attendees

Using these measures of total ticket sales for live music events and total spend at live music events, we allocated these revenues to each part of the live music sector as we describe below.

music festival organisers revenues generated

We worked with the Association of Independent Festivals to identify the following forms of revenue generation by music festivals:

- Ticket sales
- Food and beverage sales
- Merchandise
- Venue parking
- Camping fees
- GVA

Total ticket sales for festivals and total ancillary spend at festivals were allocated to festivals as revenues, as well as a proportion of the live music sponsorship. These revenues were applied to our GVA-to-Gross Output ratio to derive a GVA measure.

exports

The research by Oxford Economics for UK Music identified what proportion of festival attendees were foreigners. Their spend on tickets and ancillary items was allocated to festivals as their export contribution.

employment

We calculated a ratio of employment to turnover from survey responses from AIF members. We used this ratio to measure total full-time employment for festivals, given our measure of their total turnover for festivals as a whole.

music promoters

gva

Promoters are central to the live music industry, bringing together all the different industry participants needed to put on live music events and tours. While precise arrangements vary from firm to firm, they tend to hire venues, book acts through music agents, put in place ticket agents and commission production services.

Music promoters pay those whom they contract mainly through ticket sales, while aiming to retain a profit from the ticket income for themselves and also gaining revenues through live music sponsorship.

We have worked with the UK Live Music Group to collect data on revenues gathered by music promoters, drawing upon the typical form of contracts that they work to. Major promoters responded to a survey - operators responsible for over 10% of the market replied - that provided data to this picture.

The majority of revenues of promoters derive from ticket sales with the total value of these revenues being applied to our GVA-to-Gross Output ratio to derive GVA.

exports

The export contribution of promoters is taken to be equal to the number of foreigners buying tickets for the live music events that they promote, which is taken from the Oxford Economics research for UK Music.

employment

We calculated a ratio of employment to turnover from survey responses from promoters - leading UK promoters replied to this survey. We used this ratio to measure total full-time employment for promoters, given our measure of their total turnover.

music agents

gva

Music agents earn a percentage of the live fees earned by the live music acts that they have secured bookings for. The average for this percentage was taken from responses to a survey to which leading music agents replied. This average was then applied to our measure of total live music ticket sales to measure the total domestic revenues of music agents. In addition, we added their export revenues - discussed below - to the domestic revenues to come to a measure of total revenues, which was applied to our GVA-to-Gross Output ratio.

exports

Respondents to our survey of music agents quantified the proportion of their revenues that come from bookings for their clients outside the UK. Respondents hold in total a market share of over 15% in the UK music agents market.

employment

We calculated a ratio of employment to turnover from survey responses from agents. We used this ratio to measure total full-time employment for agents, given our measure of their total turnover.

production services for live music

gva

The firms that provide production services for live music sometimes do so in relation to non-music performances as well (e.g. comedy). We have worked with the Production Services Association (PSA) to distinguish revenues gained by their members for music performances from other kinds of performance.

We ran a survey among PSA members and used the PRS for Music data to move from these survey responses to a picture for the UK as a whole. 238 PSA members responded to this survey. The PRS for Music data told us the total number of live music events in the UK in 2016 and our survey of PSA members told us how many of these had been serviced by PSA members, as well as the revenues that they derived from these activities. This gave us a measure of domestic revenues to which we added export revenues - as below - and applied our GVA-to-Gross Output ratio to move to a GVA measure.

exports

PSA members quantified the proportion of their revenues that come from servicing live music events outside the UK.

employment

We calculated a ratio of employment to turnover from survey responses from PSA members. We used this ratio to measure total full-time employment for production services, given our measure of their total turnover.

ticketing agents revenues generated

Ticketing agents generate various kinds of revenue:

Development of the in-house box office system gives them certain rights in terms of numbers of tickets they can access.

Commission they charge is added to the ticket price and within that there will be fees paid back to the venues.

Licensing their box office systems, which comes in the form of an annual fee, versus the number of tickets sold or a nominal per ticket royalty.

gva

We worked with leading ticket agents to understand revenues to ticketing agents, given the contractual arrangements typically in place between agents, promoters, artists and venues. As these arrangements typically correspond to ticket sales, these were also grossed up in line with data on total ticket sales. This gave us a measure of domestic revenues to which we added export revenues - as below - and applied our GVA-to-Gross Output ratio to move to a GVA measure.

exports

The ticket agents that were consulted quantified the proportion of their revenues that come from servicing live music events outside the UK.

employment

We calculated a ratio of employment to turnover from survey responses from the ticket agents consulted. We used this ratio to measure total full-time employment for production services, given our measure of their total turnover.

concert venues and arenas

revenues generated

The revenues that concert venues and arenas gain from hosting these live music events come from:

- Venue hire
- Food and beverage sales
- Merchandise sales
- Venue parking
- GVA

Venues are typically hired for a percentage of ticket sales. An average for this percentage was agreed with representatives from the UK's leading concert venues and arenas and our measure of total ancillary spend at non-festival live music agents was added to their revenues, which were then applied to our GVA-to-Gross Output ratio.

exports

Spending by foreigners at music venues - taken from the Oxford Economics research for UK Music - is taken as the export contribution by concert venues and arenas.

employment

We calculated a ratio of employment to turnover from information provided by the NAA. We used this ratio to measure total full-time employment for venues and arenas, given our measure of their total turnover.

music publishing revenues generated

We worked with the MPA to identify the following revenue streams for music publishers:

a. Payments from collecting societies

- Broadcast (radio, TV etc)
- Online (downloads, streaming etc)
- International
- Public Performance (shops and businesses etc)
- Live
- Recorded Media (CDs, vinyl etc)

b. Direct licensing

- Online (downloads, streaming etc)
- Synchronisation licensing (for the use of a musical work in visual media)
- Grand rights licensing (for the use of a musical work in a dramatic performance)
- Print licensing and permissions
- Production music (the licensing of library music direct to music users)

c. Other receipts

- Affiliates
- Sub-publishers
- Print hire (the hire of scores and parts for performance)
- Printed music sales

gva

The MPA ran their annual music census across their membership, which received a high response rate, including from all majors and the largest independents. This corresponded to a total market share of over 70% of the UK music publishing market.

Members of the MPA operate across multiple publishing business models: Pop publishers, printed music/classical and grand rights licensing.

Total PRS for Music and MCPS payments were kindly provided by these organisations themselves. While PMLL payments we source via analysis of companies house. We grossed up the publisher responses in line with the total PRS for Music and MCPS received by the market.

Once the survey responses from publishers were grossed up in line with these three different methodologies we had Gross Output, export and employment measures. The GVA measure derives from applying our GVA-to-Gross Output ratio.

exports

MPA members quantified the proportion of their revenues that come from outside of the uk.

employment

Survey respondents were asked for their employment contribution and this was grossed up in line with the marketshares of the industry.

music representatives

PRS for music

revenues generated

We worked with *PRS for Music* and identified the following revenue streams into *PRS for Music*:

- Broadcast
- Online
- International
- Public Performance
- Recorded Media

data

PRS for Music was able to provide full data on all revenues into *PRS for Music* and payments out by *PRS for Music*. This was vital to understanding, quantifying and building up a wider picture of the industry from the other data that this project gathered.

gva

This is taken to be equal to the wage spend of *PRS for Music*, as it is a not-for-profit body.

exports

These are the international royalties collected by *PRS for Music*.

employment

This is an employment measure provided by *PRS for Music*.

PPL

revenues generated

PPL collects the following kinds of payment on behalf of its members:

a. PPL (domestic and international)

- Public performance
- Broadcast revenues
- Dubbing

b. VPL (domestic and international)

- Public performance of videos
- Broadcast of videos
- Dubbing rights for videos

data

PPL provided data on payments in and out of the society, which allowed us to understand its work and helped build up a picture of the industry as a whole.

gva

This is taken to be equal to the wage spend of PPL, as it is a not-for-profit body.

exports

These are the international royalties collected by PPL.

employment

This is an employment measure provided by PPL.

music managers

revenues generated

We have established by working with the Music Managers Forum (MMF), which represents managers, that managers are paid either as a percentage of the earnings of artists or sometimes as a fixed salary by the artist.

gva and exports

The revenues of these managers were estimated by combining the results of the survey conducted by the MMF with our results on revenues to music creators. We know that managers are typically paid a certain proportion of their clients' earnings - this proportion being estimated in the MMF survey - and this proportion was multiplied by our estimate of the earnings of music creators as whole. The same method was applied to estimate the export contribution of music managers. Total revenues - both domestic and international - were applied to our ratio of GVA-to-Gross Output.

employment

We worked with the MMF who surveyed their members. This survey covered the number of workers employed by MMF members. The average number of employees per MMF member was multiplied by the number of music managers and organisations advertising in the Music Week Directory 2019 to estimate the total employment contribution of music managers.

music trade bodies

Music trade bodies are financed by fees paid by their members, largely on a not-for-profit basis. All trade body members of the UK Music and the Live Music Group have shared data with this project.

gva

This is taken to be equal to the wage spend of the trade bodies, as they are not-for-profit bodies.

exports

Our research found that trade bodies do not contribute directly to exports.

employment

This is an employment measure provided by the analysis of companies house data.

music accountants

Music accountants play a vital role in managing the finances for various entities in the industry especially for the freelance and self employed such as music creators, music agents and managers.

revenues generated

Accountants revenues are generated from the billings of their services to their clients and can be based on a retainer model or ad hoc basis.

analysis on gva and employment

With the help of the UK Music membership Uk Music was able to identify over 103 accounting companies promoting music accounting services. We carried out an extensive survey and audit across these companies and grouped them into:

- Independent accountants
- music accountants - entire companies that operate in music
- Entertainment accountants - that represent music, TV, film, sport
- Non music accountant firms

Continuing the audit we were able to quantify the number of FTE workers who were either partners, associates or administrative staff at the music accountants who solely operate in the music space. For the entertainment and non music accountants we were able to identify the FTE accountants working specifically on music activities at each company.

We took this final employment figure and converted these to GVA by determining the appropriate sectoral employment to

GVA ratio using secondary data from ABS "accounting, bookkeeping and auditing activities; tax consultancy" under SIC code 69.2*

exports

Our research found that music accountants do not contribute directly to exports.

music lawyers

Music lawyers represent a diverse clientelle from music creators to large organisations when it comes to negotiating terms or representing clients on major legal disputes. Most contracts within the industry do not get signed without being reviewed by a legal representative.

revenues generated

Lawyers revenues are generated from the billings for their services which is common via an hourly rate.

analysis on gva and employment

83 legal entities were identified as firms, sole traders promoting legal services within music. We carried out an extensive survey and audit across these companies and grouped them into:

- Independent solicitors
- music lawfirms - entire companies that operate in music
- Entertainment law firms - that represent music, TV, film, sport
- Non music firms

We were able to quantify the number of FTE workers who were either partners, associates or administrative staff at the music firms who solely operate in the music space. For the entertainment and non music firms we were able to identify the FTE lawyers working specifically on music activities at each company.

We took this final employment figure and converted these to GVA by determining the appropriate sectoral employment to GVA ratio using secondary data from ABS "legal activities" under SIC code 69.1*

exports

Our research found that music lawyers do not contribute directly to exports.

* Annual data on size and growth within the UK non-financial business sectors as measured by the Annual Business Survey, broken down to four-digit Standard Industrial Classification 2007.
<https://www.ons.gov.uk/businessindustryandtrade/business/businessservices/datasets/uknonfinancialbusinesseconomyannualbusinesssurveysectionsas>

music retail

music instrument retail

revenues generated

The sales of musical instruments play a key part in the UK music ecosystem. All instruments for state schools are purchased through instrument shops. Instrument retailers serve the market of music creators, recording studios and live performers. Without the purchase of instruments, the commercial assets 1, 2 and 3 would not exist. UK Music worked with the Music Industries Association (MIA), who are the trade body for the UK music instrument sector to identify the following revenue streams that are received by instrument retailers from the sale of:

- Guitars
- Drums
- Keyboards
- Hi-Tech & Recording
- PA & Lighting
- Band & Orchestral
- Accessories
- Other instruments

The measurements of instrument manufacturing were conducted by research from the MIA through surveying a number of major instrument manufactures in the UK to identify their revenues. This data was combined with additional research and reports provided by IBIS, Signposts to Success and Growth from Knowledge (GFK.)

gva

The total revenue figure reported by the MIA was applied to the ABS GVA-to-Gross Output ratio for SIC 47.43 - Retail sale of audio and video equipment in specialised stores to derive a GVA measure.*

exports

These were taken from the MIA measure. Exports were defined as products sold outside of the UK whereby a critical intervention (assembly of the instrument) has taken place in the UK to the product and the product could not be used otherwise elsewhere. If you are able to use the instrument before it is assembled in the UK then this would not count as an export when sold outside of the UK. E.g an instrument with strings added in the UK and sold outside of the UK can be classed as made in the UK as you cannot play the instrument without the strings.

employment

This is an employment measure provided by the MIA .

* Annual data on size and growth within the UK non-financial business sectors as measured by the Annual Business Survey, broken down to four-digit Standard Industrial Classification 2007.
<https://www.ons.gov.uk/businessindustryandtrade/business/businessservices/datasets/uknonfinancialbusinesseconomyannualbusinesssurveysectionsas>

physical and digital music retail

revenues generated

Music retailers generate revenue from the sale of commercial asset 2 to consumers. Their existence is key to ensuring that a music creators' work can be accessed by the masses. We worked with the ERA (Entertainment Retailers Association) to identify the following revenue streams for physical and digital music retailers.

- Physical singles
- Physical albums
- CD albums
- Vinyl albums
- Digital Tracks
- Digital track bundles
- Digital albums
- Subscription streaming

gva

The total revenue reported by ERA was applied to the Annual Business Survey GVA-to-Gross Output ratio for SIC 47.63 – 'Retail sale of music and video recordings in specialised stores' to derive a GVA measure.*

exports

Our research found that digital music retailers do not contribute directly to exports. For physical retailers this is captured elsewhere in the recorded exports.

employment

This is the employment measure provided by ERA and adjusted in line with the market share music retail has of the wider entertainment retail market.

* Annual data on size and growth within the UK non-financial business sectors as measured by the Annual Business Survey, broken down to four-digit Standard Industrial Classification 2007.
<https://www.ons.gov.uk/businessindustryandtrade/business/businessservices/datasets/uknonfinancialbusinesseconomyannualbusinesssurveysectionsas>

4 music tourism.

This chapter summarises our approach to estimating the economic impact of live music tourism (both foreign and domestic) on the UK economy during 2018. The results build on previous research, commissioned by UK Music, and carried out by the International Centre for Tourism and Hospitality Research at the University of Bournemouth. The scope with which we are able to outline this approach is limited, to some extent, by the confidential nature of some of the data obtained from third party sources e.g. data provided by PRS for Music on the value of royalty payments collected for artists. We also have signed non-disclosure agreements limiting what we can disclose about data sources.

For the purposes of measuring the numbers of music tourists in the UK, their spending and associated economic impact, this study counts music goers as tourists:

- For overseas visitors, if they book their ticket to a music event using a billing address in a country outside the UK.
- For domestic visitors, if they travel at least three times the average commuting distance in the Government Office Region (GOR) in which the event took place in order to attend the event. We also include the following restrictions:
- We have examined attendances at all live music events for which suitable data exists. This includes all concert venues, grassroots venues, and all festivals with capacity over 1,500. This identifies the majority of spending at UK live music events.
- Live music must be the primary attraction at the relevant event. Great care has been taken to exclude cases where music is only part of the offering, such as cultural festivals, arts festivals and musical theatre.

Our methodology involved estimating the attendance at live music events across a range of entertainment venues (festivals, arena concerts, stadium concerts, park

Concerts, grassroots events and concerts at other venues e.g. nightclubs, theatres etc). This breakdown was primarily influenced by the existing format of some of the data that was provided to us (particularly by PRS for Music).

For both concerts and festivals, two main channels of economic impact were measured: first, the box office receipts generated by foreign and domestic tourists; and, second, ancillary spending of domestic and foreign tourists as a result of attending these events. Doing so required us to estimate the number of domestic and foreign tourists at within-scope events. For this, data from a range of ticket distributors were used to estimate the proportion of these attendees that were domestic (as defined in this study) and foreign tourists respectively. In total, this gave a sample size of nearly 30% of the total tickets sold to within-scope events during 2018.

In addition, the economic impact included estimates of the additional expenditure by foreign tourists during the entirety of their stay in the UK. Such an approach was consistent with that used in the previous study and is also consistent with the method used by the Office of National Statistics (ONS) when assessing the economic contribution of event-driven foreign tourism.¹

These expenditure estimates were then transformed into more standard metrics such as Gross Value Added (GVA) and Full Time Equivalent (FTE) employment. The final stage of the analysis was to assess the “multiplier” effects of such an injection of expenditure. Although, many impact studies quantify both the indirect and induced effects of an initial direct stimulus, the analysis in this study is constrained to just the indirect or supply chain effect. Doing so ensures that our estimates are consistent with the official valuation of GDP.

The remainder of this section provides further detail on each of these stages as follows:

- The methodology used to classify local tourists.
- The approach used to estimate the attendance and associated flows of domestic and foreign tourists to live music events.
- The estimation of the various channels of expenditure including box office receipts, associated ancillary spending, and wider trip expenditure by foreign tourists.
- The methodology used to transform these expenditure values (essentially estimates of direct Gross Output (GO)) into an associated contribution to GDP and FTE employment.
- The approach to quantifying the indirect impact of live music tourism spending.

classification of a tourist

Domestic visitors were classified as either “locals” or “tourists” based on distance travelled to the venue rather than on whether their initial location was in a different Government Office Region (GOR). The challenge with using a “distance” criterion was defining an appropriate threshold for distance travelled. To our knowledge, there is no official guidance on this issue, with the ONS instead defining a domestic tourist as someone who has travelled “outside of their natural environment”. Given this phrase, we felt it appropriate to quantify the threshold in terms of the distance of an average “commute” which provides a benchmark of what one might consider a “natural environment”. The decision to multiply this distance by three was, to some extent, arbitrary (multiplying this distance by two would also in our view be entirely defensible) but reflected our aim to retain a relatively conservative approach to estimation.

In order to quantify average commuting distances across the GOR’s we used data from the ONS on commuting patterns of UK residents across Local Authority Districts (LADs) in 2011. For each LAD, a postcode was taken to correspond to the centre of the area. The distance between relevant LADs was then quantified using mapping software which enabled us to produce an estimate of the average commuting distance for each LAD. These figures were then appropriately aggregated to the GOR level.

TABLE 2: ESTIMATED AVERAGE COMMUTING DISTANCE AND ASSOCIATED DISTANCE THRESHOLD FOR CATEGORISATION OF DOMESTIC TOURISM BY GOR

GOR	AVERAGE COMMUTING DISTANCE (MILES)	GOR DOMESTIC TOURISM THRESHOLD (MILES)
East Midlands	12.4	37.2
East of England	13.8	41.5
London	11.5	34.5
North East	13.9	41.6
North West	11.1	33.4
Scotland	15.7	47.2
South East	12.9	38.8
South West	13.3	39.9
Wales	12.2	36.6
West Midlands	12.7	38.1
Yorkshire & the Humber	13.6	40.9
UK	11.8	35.5

estimating attendance and tourism flows

Our method for estimating attendance varied according to the type of event venue and the associated evidence base that was available.

festival attendance

We compiled a database of festivals along with information where possible on capacity and attendance. In order to do so, we used the following decision rules:

- We assume that capacity information for larger festivals (capacity of at least 30,000) will be more readily available and hence assume that all festivals with an unknown capacity are smaller than this.
- It also seems reasonable to assume that festivals with no capacity information are smaller on average. Therefore, we reduce our estimate of the number of unknown festivals that have capacities between 5,000-29,999 and 1,500-4,999 by 25%.
- In addition, it is assumed those festivals for which we have no capacity data but that are thought to have capacities greater than 5,000 have smaller average capacities than festivals in our database, so we reduce the expected capacities of these venues by 33%. A similar assumption is made about festivals with an assumed capacity of between 1,500-4,999.
- Our evidence base for attendance is much smaller but is applied where available. In line with the previous report, we assume that festivals with a capacity of greater than 30,000 sold out with the remainder of in-scope festivals assumed to have been attended by an audience of 90% of the venue's capacity.

- As a final step, we attempted to adjust our estimates for the fact that the preceding analysis formed estimates of the daily capacity/attendance at the various music festivals despite the majority of festivals being multi-day events. In order to adjust for this, data was collected on the length of festivals. Where this information was not available, we assumed a length of 2.94 days, equivalent to the average length of festivals for which this information was available. Multiplying the daily attendance by the number of days would provide an upper bound for the number of unique attendees. However, it is clear that a significant proportion of visitors attend for the entire duration (or at least a period longer than one day) of the festival. Therefore, we assumed that 16% of festival goers were day visitors with the remainder attending the whole of the festival. This was based on ticketing data made available to us about the breakdown of ticket sales for some of the major UK music festivals.

The lack of a single source for festivals means that gathering data for festivals with capacity below 1500 was not feasible. The high impact of large festivals means that the addition of small purely music festivals is unlikely to contribute very much on top of the results presented in this report.

In total, these steps resulted in final estimates for total individual attendance at within-scope music festivals of 4.9 million in 2018. (See table below.)

arena attendance

In comparison to festivals, estimating the attendance at arena concerts was more straightforward. We extrapolated the results from reports by SEC9 on attendance and box office receipts of concerts at covered venues across the entire UK arena population.

For arenas not covered in the SEC report we assumed that the venues held the same number of concerts, were on average filled to the same level of capacity, and charged the same average ticket price. Outliers in data provided by PRS were taken to account in this process. Based on this, we estimate total arena concert attendance in the UK of 7.2 million in 2018.

other concert attendance

These events were classified into four separate categories: stadium concerts; park concerts; grassroots events; and concerts at other venues such as nightclubs, theatres and academies. For each of these categories we used PRS for Music data on concert royalty payments to estimate the total box office sales for concerts at these venues in 2018. Based on this, total attendance at these events was estimated using an assumed average ticket price. The assumed average price was based on the (mean) average price of the various event types according to the sample of ticketing data made available to us by ticketing agents and box offices.

TABLE 3: ESTIMATED UK MUSIC FESTIVAL CAPACITY AND ATTENDANCE IN 2018

	NUMBER OF FESTIVALS	AVERAGE CAPACITY PER DAY	AVERAGE ATTENDANCE PER DAY	TOTAL ATTENDANCE PER DAY	TOTAL INDIVIDUAL ATTENDANCE
Capacity greater than 30K	30	52,200	52,200	1,565,999	2,151,359
Capacity between 5K and 29.9K	120	11,469	10,322	1,238,640	2,280,046
Capacity between 1.5K and 4.99K	38	2,755	2,479	94,209	132,369
Less than 1.5K	39	668	601	23,430	25,908
Unknown Capacity	50	4,100	3,690	184,515	324,937
Imputed between 5K and 29.9K	23	7,684	6,916	157,974	290,793
Imputed between 1.5K and 4.99K	7	1,846	1,661	16,020	22,510
Imputed less than 1.5K	20	668	601	10,521	11,634
Total known Capacity	227	13,537	12,873	2,922,279	4,589,682
Total within scope	218	75,953	73,578	3,072,843	4,877,076

estimating tourism flows

Having generated estimates of total attendance at music festivals and concerts split by the various venue types, we then estimated the respective flows of foreign and domestic tourists to these events using a large sample of ticket data sourced from a variety of agents. Included in the data were details on the number of tickets purchased, the value of the transaction, the first half of the customer postcode and details on the name of the event and venue. Once this dataset had been filtered to exclude events where music was not the sole entertainment offering, we were left with just over 9.1 million ticket sales, equivalent to 30% of total estimated attendance at the various music events.

Based on the available ticket sample, we developed estimates of the proportion of ticket sales that were sold to domestic tourists, foreign tourists and locals in different GORs across the five event types. For each domestic transaction, an estimate was generated for the distance travelled by the purchaser using the relevant postcode data, and then compared to the threshold values for a domestic tourist. In instances where our sample size for the specific GOR/event type combination was less than 5% of estimated total attendance, the relevant tourism penetration flows were estimated based on the average results from other regions.

TABLE 4: ASSUMED VISITOR SHARES BY EVENT TYPE AND GOR

GOR	CONCERTS			FESTIVALS		
	LOCALS	DOMESTIC TOURISTS	FOREIGN TOURISTS	LOCALS	DOMESTIC TOURISTS	FOREIGN TOURISTS
East Midlands	62.0%	34.6%	3.4%	45.6%	52.4%	2.0%
East of England	62.5%	33.7%	3.9%	45.6%	52.4%	2.0%
London	61.5%	35.9%	2.6%	45.6%	52.4%	2.0%
North East	68.2%	29.1%	2.8%	45.6%	52.4%	2.0%
North West	63.8%	33.9%	2.3%	45.6%	52.4%	2.0%
Scotland	61.5%	35.9%	2.6%	45.6%	52.4%	2.0%
South East	64.2%	34.0%	1.8%	45.9%	52.2%	1.9%
South West	62.5%	34.5%	3.1%	45.6%	52.4%	2.0%
Wales	67.2%	31.2%	1.6%	45.6%	52.4%	2.0%
West Midlands	62.7%	35.0%	2.3%	45.6%	52.4%	2.0%
Yorkshire & the Humber	60.4%	35.1%	4.5%	45.6%	52.4%	2.0%
UK	61.3%	36.7%	2.0%	44.9%	53.2%	1.9%

estimating tourism spending box office receipts

For festivals, we applied an assumed average ticket price to our estimate of total unique attendees. The assumed average price was based on the sample of ticketing data for festivals across different regions of the UK.

For arena concerts, we extrapolated the results from the NAA arena survey on box office receipts across other UK-based arenas assuming the same average ticket price of £51.70 in 2018. (See chart below.)

For the remainder of concerts (parks, stadiums, grassroots events and other venues), we used data collected by PRS for Music on royalty payments to

estimate box office receipts at concerts across each GOR. Since royalty payments are set as a fixed proportion of box office receipts (although the tariff does vary depending on the type of events), this method should provide an accurate means of estimating total box office revenue. Although, it would be impossible to produce a “complete” estimate for this question, we are confident that the PRS for Music figures offer the most extensive coverage of any available source. These figures are net of VAT and do not reflect any booking fees or other charges by ticket vendors.

ancillary expenditure

In general our approach to quantifying associated ancillary expenditure involved applying information gathered from survey responses on spending habits to our estimates of the total number of foreign and domestic tourists or festivals we relied upon the AIF survey for 2017. These surveys divide respondents into locals, foreign and domestic tourists which neatly fitted into our approach. Respondents are asked a variety of questions about total on-site and off-site expenditure during their visit to the festival. We categorised this expenditure into five items: accommodation; travel; onsite spending; offsite spending and other. The implied spending patterns are summarised below. We then allocated this expenditure geographically using the following decision rules, consistent with the previous report:

- It was assumed that 50% of the difference between foreign and domestic tourist's travel expenditure will leak abroad, with the remainder located within the UK. For both domestic and foreign tourists, we assumed that 50% of domestic travel expenditure impacts locally. This residual 50% was then split between the GORs based on their share regional total summed to the national estimate.

- In order to avoid double counting of box office revenue (which can include camping costs) we excluded one quarter of the accommodation expenditure by foreign and domestic tourists.

Although it is likely that average ancillary spending at concerts will be lower than at festivals, it is fair to assume that tourists will still need to spend money to travel to the venue and will undertake some offsite spending on accommodation, food and drink etc. Therefore, in line with the previous study we assumed that foreign and domestic tourists would spend the same average amount on travel and offsite spending. However, reflecting the shorter duration of a concert, we scale these figures down to reflect one day's expenditure.

In addition, we were allowed access to an NAA survey of individual members on onsite expenditure at concerts. Due to issues of confidentiality we are not able to share details on the expenditure figures collected in this survey but it does mean that our results include estimates of onsite concert expenditure on merchandise and catering. We assumed that these spending levels applied across the other concert venue types (stadiums, parks, other).

TABLE 5: EXTRAPOLATED ARENA ATTENDANCE AND BOX OFFICE RECEIPTS

UK ARENAS COVERED BY THE SEC REPORT		OTHER UK ARENAS		TOTAL POPULATION	
Aggregate Capacity 000's	213	Aggregate Capacity 000's	22		
Aggregate Attendance 000's	6,890	Aggregate Attendance 000's	334	Total Attendance 000's	7,224
Average Ticket Price (£)	51.70	Average Ticket Price (£)	51.70		
Total Box Office Receipts (£mns)	380	Total Box Office Receipts (£mns)	17	Total Box Office Receipts (£mns)	397

TABLE 6: SUMMARY OF SURVEY RESPONSES ON SURVEY ANCILLARY SPENDING

	AVERAGE EXPENDITURE (£)					
	SAMPLE SIZE	ACCOMMODATION	TRAVEL	ONSITE SPEND	OFFSITE SPEND	OTHER
Local	305	37.14	13.54	209.25	27.25	9.54
Foreign Tourists	48	126.93	349.76	234.14	63.89	16.75
Domestic Tourists	1692	57.14	43,37	251.14	33.63	11.96

wider foreign tourist spending

In addition to the ancillary expenditure by foreign tourists relate to their visit to the music event, we have also estimated the wider trip expenditure by visitors to the UK. In order to do so we used data from the latest International Passenger Surveys (IPS. Compiled by VisitBritain.

According to International Passenger S (2018) the average foreign visitor to the UK spent 7.3 nights in the country on each visit with an average expenditure of £86.4 per night. We used these figures to extrapolate for foreign music tourists for the remainder of their expected stay in the UK. Therefore, for festival-goers in 2018, it was assumed that they spent an additional 4.4 nights (using the assumption that the average festival lasts 2.9 nights) in the UK spending £86.4 per night etc.

This additional expenditure was then broken down sectorally based on the breakdown of tourist expenditure by region classified in the 2011 UK Tourism Satellite Account (TSA) developed by the ONS. This breakdown is summarised in the table below

valuing the contribution to gdp and employment

The next stage of our analysis was to transform the gross expenditure figures (effectively an estimate of gross output (GO)) into metrics of more interest including the direct contribution to GDP and associated employment. In order to do so, our general approach was to apply a relevant ratio of GVA to expenditure (depending on the nature of the spending). FTE employment figures were then derived based on estimates of regional productivity in that sector.

gva

Ratios of sectoral GVA to GO were sourced from the Annual Business Survey (ABS) produced by the ONS. The latest available publication relates to calendar year 2017, so the results from this were assumed to hold in 2018. The table below documents the ratios that were applied for various categories of expenditure including the relevant SIC codes that were used.

The ratios reported below were used for the various categories of ancillary expenditure identified during the analysis. Due to issues of confidentiality, we cannot provide details on the breakdown but the data indicated that the ratio of GVA to GO for box office receipts was around 0.595.

fte employment

The resulting estimates of direct GVA were used to quantify associated FTE employment using relevant estimates

of productivity by sector and region. These were derived based on data and forecasts from Oxford Economics' regional forecasting model which covers GVA and employment across a range of sectors. Since data was not available to the same level of disaggregation as the ABS, wider sectors had to be used to cover expenditure categories (e.g. rather than passenger transport, transport and storage was used as the relevant sector). In order to adjust for part-time employment, we used data from the Business Register Employment Survey (BRES) by the ONS. This documents the number of full-time and part-time employees working across different sectors of the economy. A scaling factor was then developed assuming that a part-time employee on average works for half the number of hours per week as his full-time equivalent. Productivity estimates are summarised overleaf.

TABLE 7: FTE JOBS PER £MILLION OF GVA BY REGION AND SECTOR

GOR	ACCOMMODATION & FOOD SERVICES	ARTS, ENTERTAINMENT & RECREATION	TRANSPORT & STORAGE	WHOLESALE & RETAIL TRADE	WHOLE ECONOMY
Scotland	28.7	24.3	18.3	21.0	15.7
Northern Ireland	33.3	28.3	19.5	17.9	17.8
Wales	33.4	42.8	22.5	22.3	18.5
North East	36.8	24.6	21.8	23.5	18.0
North West	28.7	25.2	23.8	22.3	17.4
East Midlands	36.2	22.9	25.2	20.0	18.4
West Midlands	29.2	23.6	24.4	22.0	18.0
Yorkshire & the Humber	35.6	28.7	22.4	22.1	17.1
East of England	30.4	31.5	20.3	20.4	16.8
South East	28.2	26.2	18.1	15.8	14.4
London	23.8	18.5	13.6	16.3	11.4
South West	36.5	43.0	22.4	23.1	18.0

TABLE 8: TURNOVER AND GVA BY SECTOR

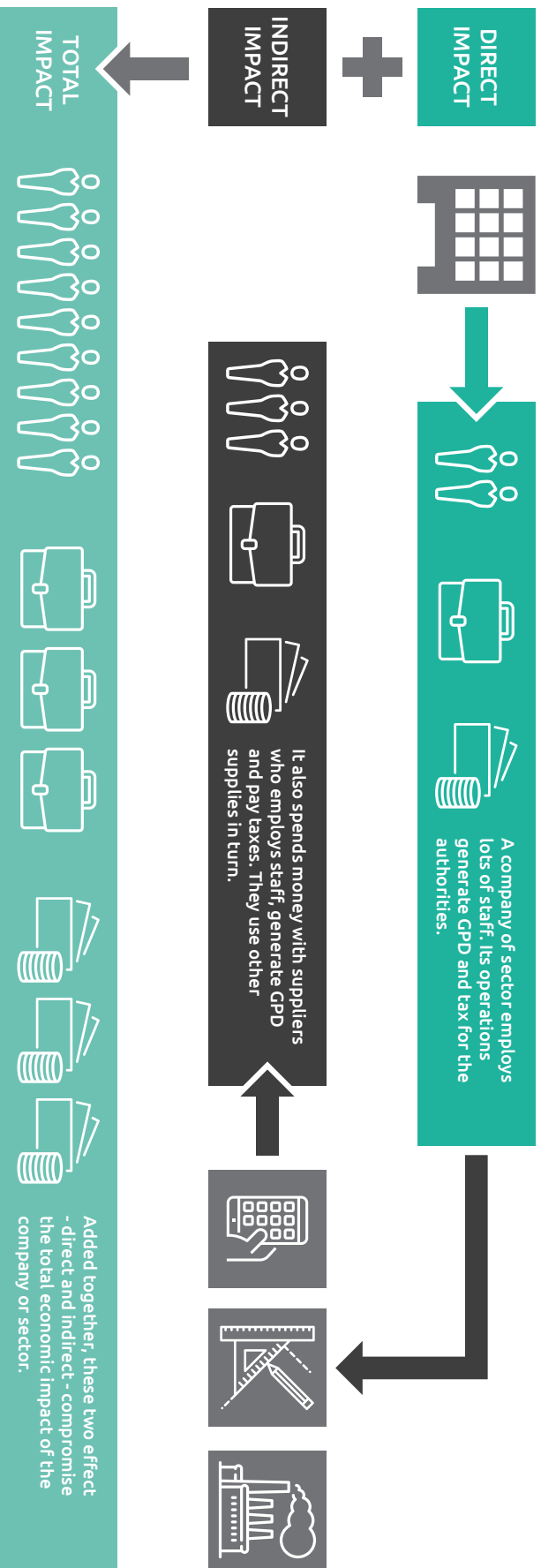
SECTORS	SIC	TURNOVER	GVA	RATIO
Passenger Transport	49.1; 49.3; 50.1; 50.3; 51.1	58,652	25,739	0.44
Food and beverage service activities	56	71,544	36,431	0.51
Accommodation	55	26,460	16,035	0.61
Retail trade, except of motor vehicles and motorcycles	47	408,023	90,031	0.22
UK Business Economy		3,843,648	1,259,934	0.33

quantifying the indirect impact

In order to quantify the indirect impact across the various regions of the UK we used a “input output” model of the UK economy. The model traces the major spending flows from consumer and government spending, business investment and exports to the rest of the world and what each economic sector buys from every other sector. It also estimates how much of that spending stays within the economy, rather than “leaking” out through imports, and the distribution of income between employees and businesses. In essence, an “input output” model is a model that shows who buys what from whom in the economy.

Because the ONS does not disaggregate “input output” tables at the regional level, we used a process from the academic economic literature to estimate a table for each GOR. This set of interdependent regional models were then linked together to reflect the fact that some regional “leakage” arises because of demand created in other parts of the UK. So, for example, an isolated regional model would only pick up demand created for Scottish suppliers by live music tourism activity in Scotland and would exclude demand created for Scottish suppliers by live music tourism activity in other parts of the UK.

It was then possible, using our “input output” model, to estimate the indirect economic contribution of live music tourism activity at the regional level across the UK.



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The project is managed by Natalie Williams, Head of Research at UK Music.

UK MUSIC MEMBERS

- AIM (Association of Independent Music)
- BASCA (British Academy of Songwriters, Composers and Authors)
- BPI
- FAC (Featured Artists Coalition)
- Music Managers Forum (MMF)
- Music Producers Guild (MPG)
- Music Publishers Association (MPA)
- Musicians Union (MU)
- PPL
- PRS for Music

LIVE MUSIC GROUP

- AIF (Association of Independent Festivals)
- AFO (Association of Festival Organisers)
- CPA (Concert Promoters Association)
- AAGB (Agents Association)
- ILMC (International Live Music Conference)
- NAA (National Arenas Association)
- PSA (Production Services Association)
- MVT (Music Venues Trust)

