

# Competition concerns in the music streaming market

Consultation response to the CMA’s Music and streaming market study\*

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## 1 Competition on the streaming platform

We argue that there is a potential risk to competition in recorded music creation arising from the combination of the pro-rata royalty allocation method adopted by the streaming platforms (where royalty is payed based on the ratio of the number of times a song is streamed and the total number of streams on the platform), and the role played by playlists in driving streams, and the way in which these playlists are created. The intuition is as follows: because royalty payments are proportionate to how much a song is streamed, and because inclusion in playlists is one of the most certain ways of increasing streaming numbers, a proportionate representation of music companies on these playlists is a key component of fair competition. Below we list a number of reasons why we believe this is not the case.

### 1.1 The role of playlists

We define as playlists a list of songs, where the composition and the order of the list is constructed by an editor or an algorithm. All music streaming platforms have playlists. Playlists can be invaluable in introducing listeners to new music. However, as has been

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\*This response draws from Antal, D., Fletcher, A., and Ormosi, P. (2021) Music streaming: is it a level playing field? Competition Policy International, <https://www.competitionpolicyinternational.com/music-streaming-is-it-a-level-playing-field/>, and Mariuzzo, F. and Ormosi, P. (2022) Independent v Major Record Labels: Do they have the same streaming power (law)?, [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=3729966](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3729966)

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demonstrated by Aguiar and Waldfogel (2018), they are also an extremely important source of streams on these platforms.<sup>1</sup> They found that being added to Spotify’s ‘Today’s Top Hits’, a list with 18.5 million followers during the sample period, increased streams by almost 20 million.<sup>2</sup> As such, fair access by recordings to playlists is important for ensuring fair competition.

There are three main types of playlists: user-created playlists; proprietary playlists created by the platform itself, which may be editorial or ‘algotorial’ (algorithmically generated editorial); and third-party playlists. It is the latter two types that raise potential competition concerns, in particular in relation to the ability of new or niche recorded music to gain access to playlists and thereby attract streams.

Editorial playlists can be created by the platform itself or by third party editors. Purely algotorial playlists (derived through an algorithm without human discretion) are created by the platform itself. Both types of playlist play important roles. While editorial playlists tend to be the most followed, algotorial playlists are also important. Even if the listener numbers are lower, there are so many of them that they can have a significant impact. Spotify alone has around 4 billion playlists. The vast majority of successful playlists are proprietary. The problem with proprietary playlists of either type is that it is unclear what are the criteria for inclusion, and whether all producers and publishers have equal access to inclusion, or fulfilment of the criteria.

Algotorial playlists, which are created by the streaming platform’s own proprietary algorithms, are designed to predict user preferences and select content tailored to users’ individual data, based on advanced data analytics. They can take various forms, including providing for a high degree of personalisation. We understand that they draw on three primary types of data as ‘signals’: the metadata of the music itself (its musicological or engineering properties), user data about how users have been interacting with the music or the artist (liking, disliking, skipping, playing) and natural language text data provided by the artist (or their representatives) or drawn from the internet.

The algorithms are confidential, and so it is hard to assess what biases they may introduce. However, even though playlists can play a valuable role in introducing followers to music they might not otherwise have heard, and even though the platforms have a competitive incentive to offer appealing playlists as part of their commercial proposition, these algorithms could nevertheless easily be biased. For example, any algorithms which are based on past global performance could result in ‘success breeding success’ and are likely to favour more mainstream, established and international recordings. If music is initially misallocated to the wrong playlists, and receives negative feedback (such as in the form of listener skipping), then the algorithms may make it hard for it re-establish itself with the right audience. Music that doesn’t fit easily within an established genre, or which is not in the English language, is also likely to be competitively disadvantaged.

In general, the largest distributors, owned by the major labels, may be more effective in gaining access to the platform’s proprietary playlists. In the case of editorial playlists (playlists curated by an editor), major labels have enormous bargaining advantage due

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<sup>1</sup>Aguiar, L., and Waldfogel, J. (2018). Platforms, promotion, and product discovery: Evidence from spotify playlists (No. w24713). National Bureau of Economic Research.

<sup>2</sup>Listener numbers for playlists are highly skewed, with a few popular playlists accounting for a very large proportion of listeners.

to the sheer size of the catalogues they represent. As these editors often engage in pitching sessions with the record labels, this gives major labels the opportunity to take advantage of their bargaining position. Spotify’s incentives to playlist songs from the major labels may also be influenced by their contracts with those labels. While these are confidential, Spotify states that they include minimum payment guarantees, which require it to make payments even if that label’s recordings do not hit a specified level of streams.<sup>3</sup> Putting more of that label’s music onto playlists would clearly reduce the risk of triggering such payments.

Regarding algorithmic playlists (playlists created by an algorithm), there is a rich literature studying the biases caused by autonomous recommender systems (such as the ones generating the algorithmic playlists). For example, popularity bias means that the largest and most popular labels/artists are disproportionately recommended to listeners. The main point is that through feedback loops, even the smallest of these biases can enormously tilt the playing field towards major labels. This is not a speculative academic point, streaming platforms are aware of this problem.<sup>4</sup> Finally, major labels often have direct or indirect ownership in the streaming platforms. For example, Sony and Universal have direct ownership in Spotify. Warner and Sony have indirect ownership through Tencent. Whilst these are minority shares, it is not far-fetched to argue that this may distort incentives in creating a balanced/impartial playlist. Finally, some of the playlists owned and curated by the major labels (for example around 7% of the top 1000 Spotify playlists are owned by the major labels).

There are obvious analogies here to other platforms, such as hotel online booking sites, which also allow business users to pay to gain preferential rankings. Concerns have been raised that such conduct effectively exploits the trust that consumers have in ‘natural’ rankings, and the fact that they assume them to be user-orientated, rather than advertising-funded. This has led to calls for sponsored content to be clearly distinguishable from organic content.<sup>5</sup> In the specific case of hotel online booking, the UK CMA has required sites to set out clearly how such commercial factors underpin their rankings. At the very least, it would seem reasonable to require this of streaming services too, and it is arguably required in the EU under the Unfair Commercial Practices Directive 2005.

## 1.2 Implications for playlist access

The overall effect of the above factors is that major label recorded music has a greater share of the most popular playlists, which really drive streams, than they do in the less popular playlists. At the same time independent label artists are likely to be getting far less than their fair share of access to the most popular playlists. This lack of access is likely to have a

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<sup>3</sup>[https://s22.q4cdn.com/540910603/files/doc\\_financials/quarterly/2019/601c445e-1d37-4938-b854-e5344850c3f9.pdf](https://s22.q4cdn.com/540910603/files/doc_financials/quarterly/2019/601c445e-1d37-4938-b854-e5344850c3f9.pdf)

<sup>4</sup>Mehrotra, R., McInerney, J., Bouchard, H., Lalmas, M., and Diaz, F. (2018, October). Towards a fair marketplace: Counterfactual evaluation of the trade-off between relevance, fairness & satisfaction in recommendation systems. In Proceedings of the 27th ACM international conference on information and knowledge management (pp. 2243-2251).

<sup>5</sup>For example, in relation to Google and Facebook, the CMA’s recent market study report into digital advertising proposes regulation that would require platforms to “ensure advertising is presented in a way that is clearly distinguishable from organic content”. See Table 7.3 in <https://www.gov.uk/cma-cases/online-platforms-and-digital-advertising-market-study>.

direct impact on revenues for independent labels and their artists today, and also an indirect impact on the sustainability of this important segment of the market in the future.

Since playlists require less user intervention than listening to single tracks or albums, it is also likely that heavier platform users, who tend to have music playing in the background while they do other things, are particularly likely to use playlists. As such, the impact of playlists on royalty payments is likely to be accentuated under a pro-rata royalty allocation system.

Given the importance of playlists for driving streams, any potential informational advantage to how they are created can provide a huge advantage for suppliers of recorded music. Providing greater transparency as to how each streaming platforms' proprietary playlists are created would therefore seem to be vital for ensuring fair on-platform competition. In this context, we note that Spotify has an unusually open API, which provides artists with more detail on how their music is being represented than do its competitors. However, greater transparency and auditability would be valuable from all streaming services.

Finally, we note that only the streaming platforms themselves are currently able to offer algorithmic playlists, as only they have access to the relevant data about every listeners' streaming choices that is required to train the algorithms. But this situation is not inherent. With greater access to such data, for example through explicit data access requirements or through data portability provisions, there may be more potential for the development of an effective competitive market for third party playlists, even including enhanced algorithmic and personalised playlists. This should be given serious consideration, especially in the context of the wider policy debate on smart data access and portability.

## 2 Competition in music streaming services

There is not an obvious lack of competition between platforms for consumers, at least currently. The largest platform is Spotify, but it faces stiff competition, with Apple Music, Amazon Music, YouTube (Alphabet), Deezer, Pandora (in the US) and Ten Cent (in China) also providing successful streaming services. In addition, while YouTube offers an audio streaming service, its more popular video streaming service is also an effective competitor for listeners, with IFPI estimating that it accounted for more than 45% of all audio listening hours in 2017.<sup>6</sup>

However, the presence of vigorous competition between streaming platforms does not mean that there are no competition concerns. A first competition issue highlighted by many parties, including Spotify and Deezer, relates to the commission fee charged by Alphabet and Apple for subscriptions that are made through Android or iOS devices, and the restrictions that are imposed (by Apple) to inhibit or prevent services from circumventing these fees. This arguably creates a competitive disadvantage for independent third-party services like Spotify and Deezer, relative to the vertically integrated services of these major tech firms. In the EU, the European Commission's proposals for a Digital Market Act appear likely to address this issue, via the proposed obligation at Article 5(c).<sup>7</sup>

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<sup>6</sup>Globally, excluding China. See: <https://www.musicbusinessworldwide.com/more-music-is-played-on-youtube-than-on-spotify-apple-music-and-every-audio-streaming-platform-combine>

<sup>7</sup>Proposal for a Regulation of the European Parliament and of the Council on contestable and fair markets

A second concern that has been highlighted is that the video streaming activity of YouTube effectively competes with specialist music streaming services, but (and in contrast to YouTube's own music streaming service), it does not obtain proper licenses for the recorded music it streams, nor does it pay fees analogous to those paid by other streaming services. Instead it offers content publishers a share of the advertising revenues that it earns from their content. It is not straightforward to compare the resulting payments made by YouTube's video streaming service on a per stream basis, but they appear to be substantially lower than are paid by the specialist audio streaming platforms (including YouTube's own). As such, YouTube video arguably competes unfairly against specialist audio-streaming services, as well as against radio stations and television, and also treats creators unfairly.

Concerns have also been raised about the transparency and lack of auditability of revenues and payments from YouTube's video streaming service. These YouTube-specific concerns are analogous to similar concerns raised about Google's conduct more widely, as discussed in the CMA's market study into Digital Advertising. In the EU, the situation looks set to be improved by Articles 5(g) and 6(1)(g) of the European Commission's proposed Digital Markets Act.

Thirdly, a final area of concern, linked to the YouTube-related concern discussed above, is that streaming platforms are able to compete unfairly against traditional audio or television broadcasters, and increasingly expand directly into these activities. If these platforms can acquire music content at an unfairly low per minute rate relative to radio or television broadcasters, then this gives them an undue competitive advantage against broadcasters that offer higher royalties to creators. Moreover, a royalty system which is based on revenue-sharing could have the effect of subsidising expansion by the streaming platforms into these alternative markets. After all, the more audio content that a platform provides to any given listener in these other formats, the lower the proportion of total streams which recorded music accounts for, and thus the lower the payment that would be made to recorded music (subject to any minimum payment guarantees). This would hold true even if the absolute number of recorded music streams remained unchanged. Any such reduction in payment for recorded music would in turn act a subsidy to such expansion and also put these platforms at a competitive advantage, relative other potential operators of such content which do not have the benefit of the same subsidy.

As well as potentially comprising unfair competition, any substitution by streaming for more traditional media also has the potential to circumvent existing domestic media regulation in several territories. Such regulation is typically designed to guarantee a certain visibility for national, regional, or upcoming artists. The replacement of regulated broadcasting streams with unregulated digital (media) streams can reduce the royalty income of these protected groups.

# Defining the online music streaming market - a few practical points

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## 1 Introduction

It is difficult to understand music streaming outside of the context of the broader music markets and the music industry. Music streaming competes with other uses of music, such as public performances in television and radio broadcasting, or digital downloads. It cannot be analysed in isolation from the volume and price trends of public performance, mechanical licensing, and home copying. This of course creates enormous challenges for market definition for two main reasons: a) on the demand side, the majority of the uses has a zero-price and no accounting trail, and b) on the supply side the sales are global and most music enterprises do not have a sophisticated accounting practice to report their revenues for geographic segments.

In relation to the demand side, what makes understanding music markets so difficult to analyse is the sheer volume of latent transaction, which are difficult to measure and capture

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\*This section draws from Daniel Antal's dynamic [https://music-competition.dataobservatory.eu/The Relevant Market for Music Streaming: Market Definition and Measurement Challenges](https://music-competition.dataobservatory.eu/The%20Relevant%20Market%20for%20Music%20Streaming%3A%20Market%20Definition%20and%20Measurement%20Challenges) document, which is a work-in-progress publication, available from the Zenodo open science repository. It is built upon the actual application of competition law in non-UK jurisdictions, and it is intended for further research and publication.

Please cite the full research as: Daniel Antal. (2022). The Relevant Market for Music Streaming: Market Definition and Measurement Challenges (Version 20220215). Zenodo. <https://zenodo.org/record/6000537#.YgGcfurMLIV10.5281/zenodo.6088844>

Or refer to the Github repo: <https://github.com/dataobservatory-eu/music-competition>

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empirically. In many advanced geographical music markets more than half of the music uses, i.e., the market volumes are not paid for by the user. Radio stations or the popular UUC platforms like YouTube, TikTok or SoundCloud, but even licensed music streaming platforms like Spotify offer zero-price services for the users. When consumers pay a price, both the quantity of the sales and the price is recorded on the invoice, and this information is translated into tax returns and financial statements. Zero price transactions have no invoices, and no accounting trail.

To further complicate this, the supply side is also hugely fragmented, including not only large or small record labels but also a large number of freelancers, micro- or small enterprises. Once again, it is a non-trivial (probably impossible) empirical task to grasp much of this activity. Micro- and small enterprises do not participate in full business statistics surveys, make simplified financial reports, and file simplified tax returns. They usually do not even possess the data processing or accounting possibilities that would allow them to provide information to a competition inquiry with the same level of precision or detail that markets authorities would take for granted in other sectors.

For these reason, any data collection required for the definition of the relevant market is a non trivial task. Market definition is made even more complex, given the multi-sided nature of the streaming market: (1) music creators are competing with each other for the audiences on platforms; (2) platforms are competing for subscribers with each others; and (3) platforms are also competing for advertising revenue with other media platforms, with each other, and ad-supported zero-price offerings are competing with user-paid, subscription or other models.

While online platforms have indeed disrupted the music value chain, many things did not change. Music streaming royalty rates and distribution methods largely follow long-established practices and regulations concerning valuing intellectual property, accounting for royalties, and regulating the administration of music copyrights and neighbouring rights. Figure 1 gives a stylised view of this value chain.

The music business has a particularly complicated value chain, because music is a copyright-based intellectual property with a very complex licensing system. Each music recording is a bundle of copyrights and neighbouring rights, which are often remunerated separately. Furthermore, in terms of the largest volume of use, the user is not paying for it directly. This makes the empirical analysis particularly challenging.

## 2 The product market

The scoping statement claims that “*music streaming services are now the predominant means of music consumption, supplanting traditional physical media such as CDs and vinyl.*” This is a very useful starting hypothesis, but should not be considered without reservations. For example, the CMA might want to include radio and television broadcasting and retransmission as potential substitutes for the use of music streaming services or physical media. We believe that there is sufficient demand- and supply side substitution taking place among licensed streaming, radio broadcasting and retransmission at least that pricing practices of the industry treat these alternative sales channels as market comparators for each other.

Another related point is the relative-role of UUC in the streaming market. While the scoping report states the ambition to investigate the potential ‘value gap’ towards UUC

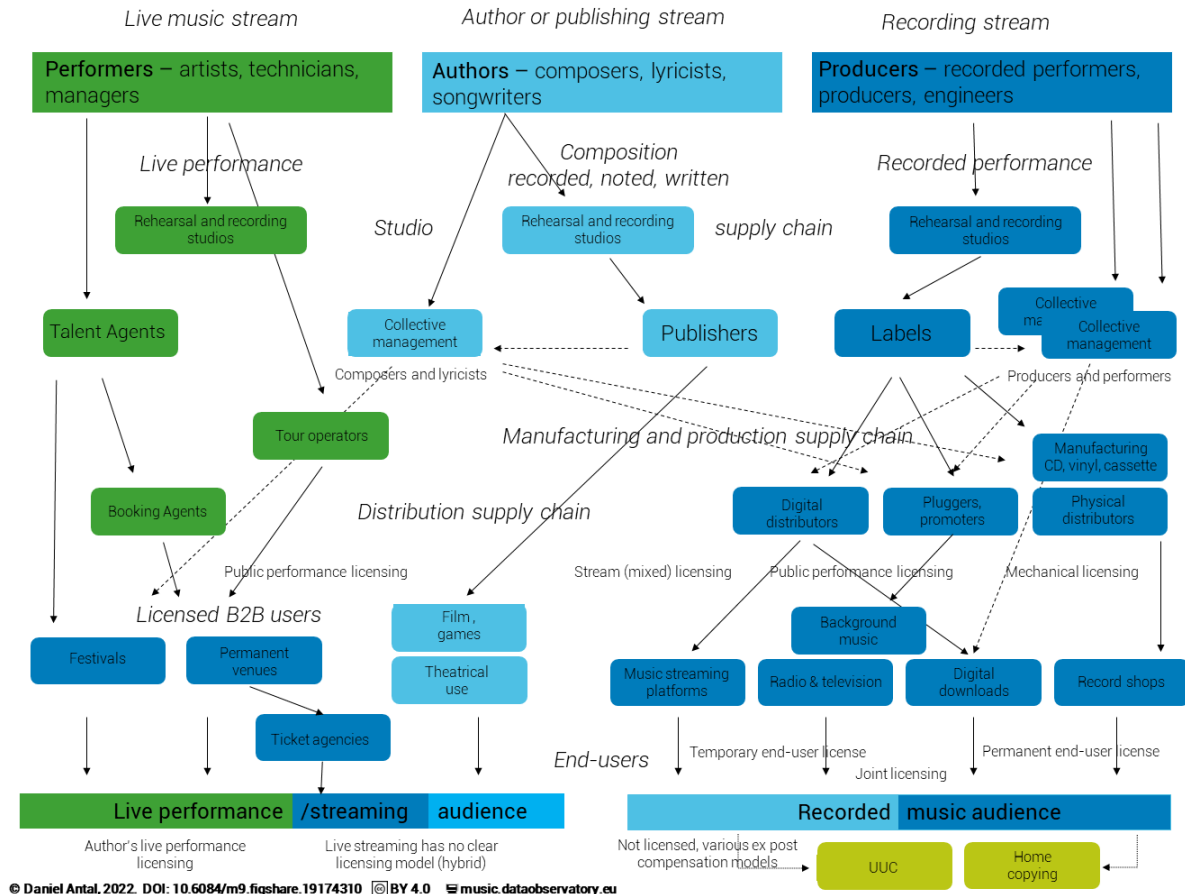


Figure 1: The music value chain - a stylised depiction

platforms and their role in the music market, business practices and empirically observed prices suggest that UUC may be rather dissimilar to licensed “*music services . . . and traditional physical media such as CDs and vinyl.*” As the scoping statement correctly describes, the monetization of UUC is fundamentally different from the other licensing models that are governed by international copyright and neighbouring rights law. UUC service providers, at least, in the United Kingdom, can negotiate with rightsholders after (rather than before) the music is used; opt to take down specific instances of music as an alternative to paying for its use; and do not bear the costs of any unidentified music rights being used.

Representative associations of composers, performers, and producers in Europe have been strongly calling for a change in these practices. A re-regulation of UUC in the European Union is under way with the recent EU copyright directive.<sup>1</sup> At this point we are not aware of any empirical evidence available from these European markets on the impact of this re-regulation (some EU countries have not even adopted the new measures into their copyright law.) However, exactly because of the yet uncertain status of any regulatory mechanism that would bring the UUC segment closer to “normally” licensed streaming, and one could hypothesise

<sup>1</sup>Directive (EU) 2019/790 of the European Parliament and of the Council of 17 April 2019 on copyright and related rights in the Digital Single Market and amending Directives 96/9/EC and 2001/29/EC. Text with EEA relevance.



that radio and retransmission is a closer substitute of music streaming than UUC. More importantly, in our view, any re-visiting of the “value gap” debate in the UK, as foreseen in the scoping report, is a different topic from the rest of the market analysis, or it requires a far broader analysis in all forms of zero-price music use, regardless of their legal basis.

We would also urge for caution about the starting point of the CMA scoping statement that “*music streaming services have helped to restore growth in the sector and made it easier for new artists to share their music.*”, the idea of growth is very difficult to verify empirically, and again, it should be formulated more as a hypothesis than a statement. Ongoing work at Reprex<sup>2</sup> found that growth is located in narrow segments of music - a general devaluation of the music, falling prices may lead to flat or falling revenues even with growing quantities used, and a large part of the music ecosystem may not experience any growth at all. The current heated debate around the re-regulation of music streaming is due to the fact that in large pockets of the relevant market growth has not been present in the last decade.

To conclude this short section, we would like to highlight, that for the analysis of UK music markets a broader view of the music industry might be justified. This is based on the widely accepted value chain of the three income streams model and actual pricing practice in the industry, which are in turn based on more general pricing models of intellectual property. Yet even the application of this comprehensive model is difficult when the ambition of understanding market power is considered. Traditional market definition of the relevant market is difficult at best with two-sided platforms like YouTube or when users are facing zero prices. The SSNIP test can be, theoretically, applied in the cases of YouTube, radio stations, or ad-supported streaming, however, the actual analysis is very difficult, because the implicit price used must be based on the advertisement revenues.

### 3 The geographical market

We assume from the language of the scoping report that the DCSM’s working definition is that of a UK national relevant market. In our experience, this is indeed a defensible approach, but poses its own challenges. As we have shown in our earlier work<sup>3</sup> initiated by the UKIPO, the British music industry is so interwoven with the global music industry, that it is next to impossible to obtain relevant market figures for the UK alone.

The new platforms that make music available for literally billions of people are global: YouTube can be accessed almost anywhere on Earth, and Spotify is selling subscriptions in more than 200 countries and territories. They are competing with radio and music television broadcasting and retransmission which is licensed territorially, and very often to less than national territories—for example, Ofcom licenses commercial radio stations to as small territories as “West Central Scotland”. This geographically unrestricted access makes the empirical observation or estimation of prices (especially where much of this consumption is at zero-price) very challenging.

To make things even more challenging, most undertakings of the music industry, wherever they are located in the value chain, are micro- or small enterprises, and therefore enjoy the benefits of simplified tax returns, exemption from most mandatory statistical filings, and

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<sup>2</sup><https://music-competition.dataobservatory.eu/>

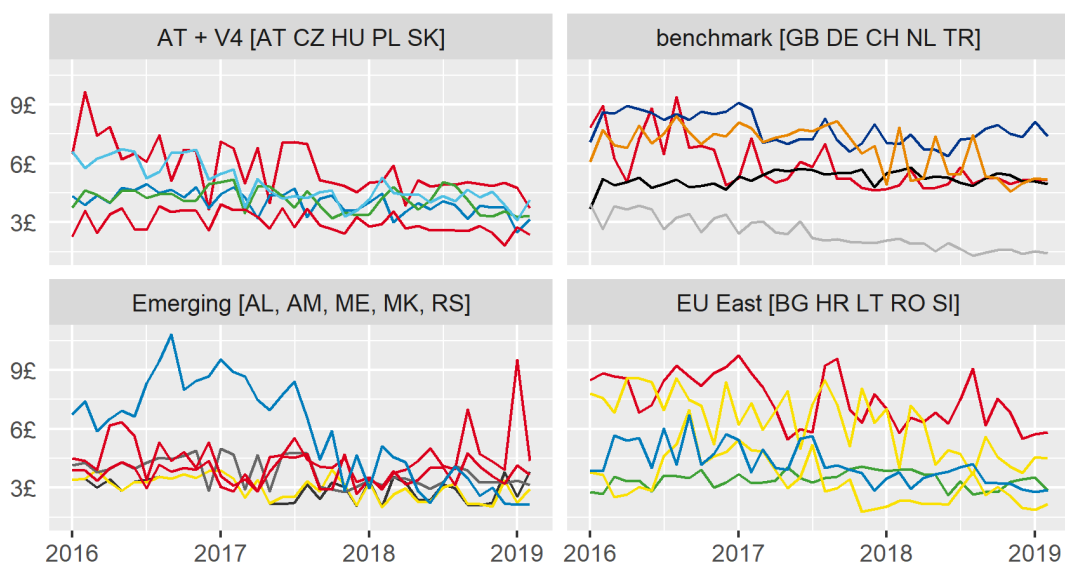
<sup>3</sup><https://www.gov.uk/government/publications/music-creators-earnings-in-the-digital-era/>



those revenues fall below the threshold where such disclosure would be mandatory under its accounting standards.

In our analysis at Reprex and the Digital Music Observatory, we use the ICET model and the so-called cultural access and participation surveys to capture the use of paid and not paid, commercial and non-commercial uses of music in a systematic way.<sup>4</sup> While CAP surveys give a biased measurement of use hours, we do not see evidence that they give a biased estimate of use ratios, which is necessary for our models' weights. With almost no exception, in the music markets we could observe or estimate revenues, but not prices. We always gave a priority to the use of observable market transactions, but these transactions are usually not available in full detail.<sup>5</sup> Our model's understanding of price (which often cannot be directly observed, only calculated from revenues and volumes) has been partly based on the methodological guide in the IFPI 2008 report on digital music,<sup>6</sup> and the various globally applicable WIPO and IFRS standards.

### Average Price on 1000 Streams of Typical (Median) Songs



\*Mean of Apple Music, Deezer, Spotify prices, rolling monthly sums of three month, Breakup of the CEEMID-CI volume and revenue indice from the Central European Music Industry Report, Source: Daniel Antal, Consolidated Independent © 2021

Price observation is directly not possible for most of the uses. However, even the indirect

<sup>4</sup>Bína, Vladimír, Chantepie, Philippe, Deboin, Valérie, Kommel, Kutt, Kotynek, Josef & Robin, Philippe (2012), 'ESSnet-CULTURE, European Statistical System Network on Culture. Final Report.', <http://ec.europa.eu/culture/our-policy-development/documents/ess-net-report-oct2012.pdf>

de Haan, J. & van den Broek, A. (2012), Nowadays Cultural Participation - An update of what to look for and where to look for it, in 'ESSnet-CULTURE, European Statistical System Network on Culture. Final Report.', Luxembourg, pp. 397–417.

<sup>5</sup>Commission Regulation (EC) No 1126/2008 of 3 November 2008 adopting certain international accounting standards in accordance with Regulation (EC) No 1606/2002 of the European Parliament and of the Council (Text with EEA relevance)

<sup>6</sup>[https://www.musikindustrie.de/fileadmin/bvmi/upload/06\\_Publikationen/DMR/ifpi\\_digital-music-report-2008.pdf](https://www.musikindustrie.de/fileadmin/bvmi/upload/06_Publikationen/DMR/ifpi_digital-music-report-2008.pdf)

calculation, after cleaning the exchange rate effects, requires further special royalty accounting know-how. The way royalties are accounted for and earned is different in the various sales formats of music. Mechanical royalties are paid upfront in lump sum, public performance royalties are paid per annum, and streaming royalties are accrued until reaching a threshold. In practice this means that many UK music business reported streaming income very difficult to connect to a consistent timeframe, geographic segment, and a proper weight of exchange rates. We there are many arguments for analysing music streaming within the geographical scope of a national UK market, we demonstrate that such an analysis is easier said than done. In our paper we draw the attention to computer simulations that we made for the Music Creators' Earning report to show various pitfalls, particularly not considering the exchange rate effects of rightsholder income.

## 5 About Reprex and the Digital Music Observatory project

Some of the above problems are solved by the Digital Music Observatory, a working demo of the planned European Music Observatory. It grew out of the Central & Eastern European Music Industry Databases (CEEMID) initiative in 2014, in which rightholders from three countries attempted to solve this problem.<sup>7</sup> By 2019, CEEMID had collected information on 20 European markets, including the United Kingdom, and processed data on far more markets—this data has been used in various competition law-based analysis and modelling outside of the United Kingdom.

The idea of this observatory was brought to the UK policy debate on music streaming by the observatory's only (former) British users, via the *Written evidence submitted by The state51 Music Group* to the *Economics of music streaming review* of the DCMS Committee.<sup>8</sup> The *state51 music group*, through its distribution arm, has been supporting the creation of the largest ever European market report, the Central European Music Industry Report, and supported the creation of the CEEMID-CI indexes, which, for the first time provided a stock-index type of view from an individual rightsholder's perspective on volume and price movements in the UK and in other countries. The state51 music group drew attention to the observatory approach and this work in the *Digital, Culture, Media and Sport Committee* (DCMS) Select Committee of the British House of Commons. The *Music Creator Earnings' Project*, that created the Intellectual Property Office's Music Creator Earnings' in the Digital Era report individually contacted the Digital Music Observatory (successor of CEEMID) and state51, and eventually with the permission of state51, the project commissioned our report that re-uses the CEEMID-CI indexes. The MCE project also committed to share data in the Digital Music Observatory.

This paper grew out of the analysis we have provided for the *Music Creator Earnings'*

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<sup>7</sup>Artisjus, HDS, SOZA & Candole Partners (2014), 'Measuring and Reporting Regional Economic Value Added, National Income and Employment by the Music Industry in a Creative Industries Perspective. Memorandum of Understanding to Create a Regional Music Database to Support Professional National Reporting, Economic Valuation and a Regional Music Study.'

Antal, D. (2017b), *The Growth of the Hungarian Popular Music Repertoire: Who Creates It And How Does It Find An Audience*, in 'Made in Hungary', 1st edn, Studies in Popular Music, Routledge, New York, NY: USA

<sup>8</sup><https://committees.parliament.uk/writtenevidence/15422/html/>

*Project*, that created the Intellectual Property Office’s Music Creator Earnings’ in the Digital Era report.<sup>9</sup> We were tasked with providing longitudinal analysis of earnings development and relating our findings to equitable remuneration. The starting point of our work was centred around a very broadly defined problem: how much money music creators (rightsholders) earn from streaming, how these earnings are distributed, and how the earnings and their distribution have developed during the last decade.<sup>10</sup>

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<sup>9</sup><https://www.gov.uk/government/publications/music-creators-earnings-in-the-digital-era>

<sup>10</sup>The full document is available at: [https://reprex.nl/publication/mce\\_empirical\\_streaming\\_2021/An Empirical Analysis of Music Streaming Revenues and Their Distribution](https://reprex.nl/publication/mce_empirical_streaming_2021/An_Empirical_Analysis_of_Music_Streaming_Revenues_and_Their_Distribution).