Royalties in the Digital Music Report 2020

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Executive summary

Royalties in the Digital Music Report 2020 is the first edition of the series by OPUS Stream Ltd. that combines our market expertise to **analyse the micro- and macroeconomic caveats of royalty payments** in context of the commercial main net launch of the OPUS music streaming platform. With this report prepared by the team of internal business-developers and external consultants, we have a two-fold goal: first to **provide valuable information for OPUS on new avenues for growth**. Second, we want to **serve the wider Blockchain community** by synthesizing and analysing a very important market segment in the entertainment industry that the Blockchain can undoubtedly contribute to.

In the economic side of the analysis, it is found that there exists a **large earning discrepancy between small and large artists**. Especially the **small artists can benefit from the tokenization of royalty payouts** because of inadequate earnings they are currently receiving on conventional streaming platforms. In terms of the geographic dimension of market analysis, the **highest growth opportunities** for royalty-related services exist currently in the regions of Eastern **Europe & Central Asia**, in **South Asia**, as well as in **Latin America** & **Caribbean**. In terms of individual countries, China is the market with the fastest rate of growth in royalty cashflows.

Finally the paper acknowledges growth **opportunities and challenges** for OPUS. Introduction of in-app financial advisory features or such marketing content on the OPUS blog would have a positive impact on both **increasing digital financial literacy among artists** but also serve the wider Blockchain community.

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List of abbreviations

ASCAP – American Society of Composers, Authors and Publishers

BLS – Bureau of Labor Statistics

BMI – Broadcast Music, Inc.

CRB – Copyright Royalty Board

OPT – the Ethereum-powered digital token used on the OPUS platform

PRO – Performing Rights Organization

1. What are royalties? Framework for analysis

Artistic output is a very difficult asset to be valuated. There are **numerous issues related to putting a price tag on clicks, views, and shares**. To name just a few, we can list: the subjectivity in assigning value to songs and compositions, different popularity levels and unequal distribution of music fans across artists and genres, the complexity of cashflow split across various stakeholders: artists, producers, marketing agencies, advertisers. To complicate this picture even more, we should consider additional factor that became very relevant especially for the market of digital music streaming services – that is: the mechanism of royalties distribution. As this market is currently dominated by a few large players, there is a significant room for new platforms to change the way and amount of royalties distributed to individual musicians, podcast producers, and all other artists. In particular, the Blockchain is here to change the status quo.

Firstly, we should **define** what type of payments fall under the category of **royalties**. The legal definition of a royalty is "the **compensation for the use of property, usually copyrighted works**, patented inventions, or natural resources, expressed as a percentage of receipts from using the property or as a payment for each unit produced." [1] Royalties compensate the owners of intellectual property, and hence become relevant in any sector that exchanges value derived from creative output: books, music, visual art, videos, software, technological alliances, and partnerships. However, this analysis will focus exclusively on royalties in context of the digital music streaming services, as this is the core sector of activity for the OPUS music streaming platform.

In context of the digital music streaming platforms, **royalties are the fixed streams of cash paid to an artist on basis of their contractual arrangements with a given music streaming platform**. Royalties are calculated per stream of each song by the artists; the exact algorithm is unique to each platform (e.g. Spotify, Tidal, Apple Music etc. – the more-elaborate discussion of each service provider is given in Section 4). The final value of royalty per stream received by an artist may vary depending on the type of service subscribed by listeners (freemium vs. premium), the time of listening, the type of distribution contracts (independent vs. with an agent/producer), as well as on grounds of individually-negotiated contracts with the platform operators. The later factor is especially relevant for large music studios, agencies, and artists with substantial fan bases – thanks to their influence and the consequent bargaining power.

This report is titled "Royalties in the Digital Music Report 2020" - for a reason. We identify that the **global pandemic of the CoVID-19 disease**, caused by SARS-CoV-2 (the coronavirus), will be the key economic event to change market outlook in the digital music industry. With the conventional royalty payments being more sensitive to shocks than the overall economy, **artists will face their incomes plummeting in the upcoming year**. Whereas this **short-term economic costs are unavoidable**, we identify that the **Blockchain** is a tool whose **long-term implementation** will **increase the royalty streams** paid out to artists.

The purpose of this paper is to **explore the caveats of royalty payments** on digital music streaming platforms, **identify opportunities for growth and innovation** in this market segment, and finally **propose conclusions to be implemented in the design, main net launch, and commercial operation** of the OPUS platform. OPUS is the decentralized music distribution platform that uses the InterPlanetary File Systems (IPFS) on the Blockchain, and the transaction system with its own OPT token that operates the Ethereum protocol. Yet we envision the findings of this report to be applicable and helpful to other Blockchain projects operating in this market segment.

For the sake of this analysis, we can identify four key stakeholders involved in the digital music streaming business. These stakeholders may, individually or jointly, be parties to contractual arrangements whose execution requires royalty payments for streaming songs and podcasts:

Musicians associated at PROs

From survey data, 80% of artists belong to at least one formal music associations (a PRO). Being a member of a PRO is necessary for monetizing artistic activity because of the legal requirement to register and monitor the ownership of copyrights for music. The largest PROs in America are: ASCAP, BMI, SESAC, and SoundExchange. Affiliation with a PRO is the best proxy for the number of musicians. For instance in the UK there are 52,000 musicians, whereas the American ASCAP has over 435,000 composers, songwriters and music publishers. Yet the US federal institution BLS records only the formal employment relations of 25,290 music directors and composers, and 42,530 musicians and singers. Such large discrepancy stems from the fact that majority of musicians are self-employed, and supposedly too small to receive support from larger producers and agents. [2] Detailed outline of musicians' economic profile is given in Section 2.

Managers and agents

Also known as talent agents (or booking agencies), they are only optional to the status and activity of a musician. Key responsibilities of an agent include: logistics of recording and performing, negotiation of contracts on behalf of the musician, promotion in the public, representation of artists in legal and economic matters. Depending on individual arrangements, they charge 10-15% of the artists' fees. Booking agencies usually specialize in a given genre. Individual salaries of artists' personal managers vary depending on the size of an artist; in agencies like the Creative Artists Agency or William Morris Endeavor, managers typically are paid annual salaries from $75,000 to more than $1 million for those with superstar clients. At a smaller agency, salaries range from $40,000 to $225,000. [3]

Labels, producers and distributors

There are three labels that can be referred to as "major labels" (Universal Music Group, Sony Music Entertainment, and Warner Music Group) that made up over two thirds of the global music market in 2016. EMI used to be among the market leaders (The Big Four) but was acquired by Universal Music in 2012 for $1.9 billion. [4] Major labels have market power to not only distribute individual artists but also smaller indie labels that do not have financial resources to promote their musicians. Independent label are not necessarily profitable but perform well revenue-wise; 32% of the market share in revenue for both physical and digital music sales — more than each of the big three in 2017. [5] Good sales figures might be due to the strong sense of community around smaller artists supported financially by their fans. Specifically in context of smaller distribution channels (like OPUS), indie labels can be a good market opportunity to explore.

Digital music streaming platforms

With the CR4 concentration ratio of 77%, there is an oligopolistic market for digital music streaming platforms, concentrated in hands of key players operating their own platforms: Spotify, Apple, Amazon, Google. Usually the monetization scheme of these platform is based on either subscription (premium customers), where the majority (as high as 90%) of revenue comes from, or earning revenue from the sales of advertisements (freemium customers). On the costs side, these platforms pay the most of their expenses in royalties, followed then by the platform technology maintenance, and business operational expenses. [6] A more elaborate discussion of digital music streaming platforms is given in section 4.

2. Microeconomics of music-making

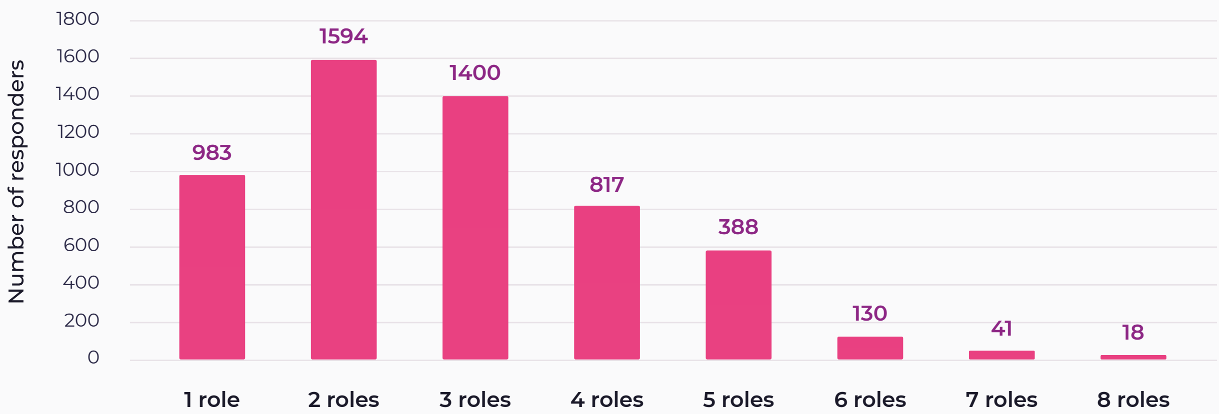
Being an artist is hard, especially at the beginning of musical career. Especially, **smaller musicians have low levels of financial independence.** They find it difficult to reach out to new fans, negotiate contracts, and create music at the same time. For that group of artists in particular, the Blockchain offers a valuable proposition with its premise of decentralization and democratization of the music industry. In this section we examine the aspect of personal finance in small-scale music-making, and explore opportunities arising from the tokenization of royalties to musicians.

In terms of raw figures on musicians' income, one can compare their earnings with the general population. Even though BLS does not record informal and self-employed Based on the survey data from 2014, the BLS stated that there were "approx. 173,300 professional musicians and singers in the United States who, on average, **earn approximately $24.16 per hour for their work.**" That is almost equal to the average hourly earnings for the entire US population, which was $24.57 in December 2014. However, it should be noted that, firstly, the data does not distinguish between part-time and full-time musicians who may also have other income sources.

In statistical terms the official average value is skewed by outliers – professional musicians who sign very well-paid contracts and reach international audiences. It is best reflected by the fact that according to survey data by BLS, "musicians reported earning an estimated average yearly income of $34,456 from music-related activities," whereas the median value was $18,000. [7] **Substantial discrepancy** between the mean and median indicates that incomes in the music industry are very skewed; the most abundant artists are also the most financially vulnerable ones. On top of that, it is reasonable to expect that the personal financial portfolios of small artists are very undiversified, with large proportions of their personal funds remaining in form of cash earned from royalties and other art-related activities (e.g. teaching music). Especially for independent artists, streaming royalties constitute a substantial part of their incomes – up to 30%. [8]

Musicians are vulnerable not only to fluctuations in their own popularity but also to the overall swings of the music market. Today's music industry can be referred to as the '**gig economy**' – an industry where "**temporary, flexible jobs are commonplace** and companies tend **to hire independent contractors** or freelancers instead of full-time employees." [9] In terms of employment relations, musicians' freelance work is most often contracted by self-employment and small fee-for-task contracts. For that reason most artists cannot sustain themselves from only one form of employment, and most often have multiple performances to constitute their total earnings. This is proven by the fact that in the key area of their income-earning artistic activity, more than half of the musicians surveyed for the Artist Revenue Streams survey earn money from performing three roles or more (see Figure 1).

Figure 1 – Survey data on number of roles in which musicians said they are earning some money [10]



Data source: Artist Revenue Streams, 2012. money.futureofmuisc.org

Given the small scale of operations and low financial independence, smaller artists need to have high levels of financial and legal literacy, in order to secure their own financial stability. The key characteristic of the gig economy is its vulnerability to financial crises. During economic meltdown, first contracts to be terminated are those where the value-added margins are low (i.e. when artists are not expected to sell a lot), and assets are intangible – such as in the entertainment industry.

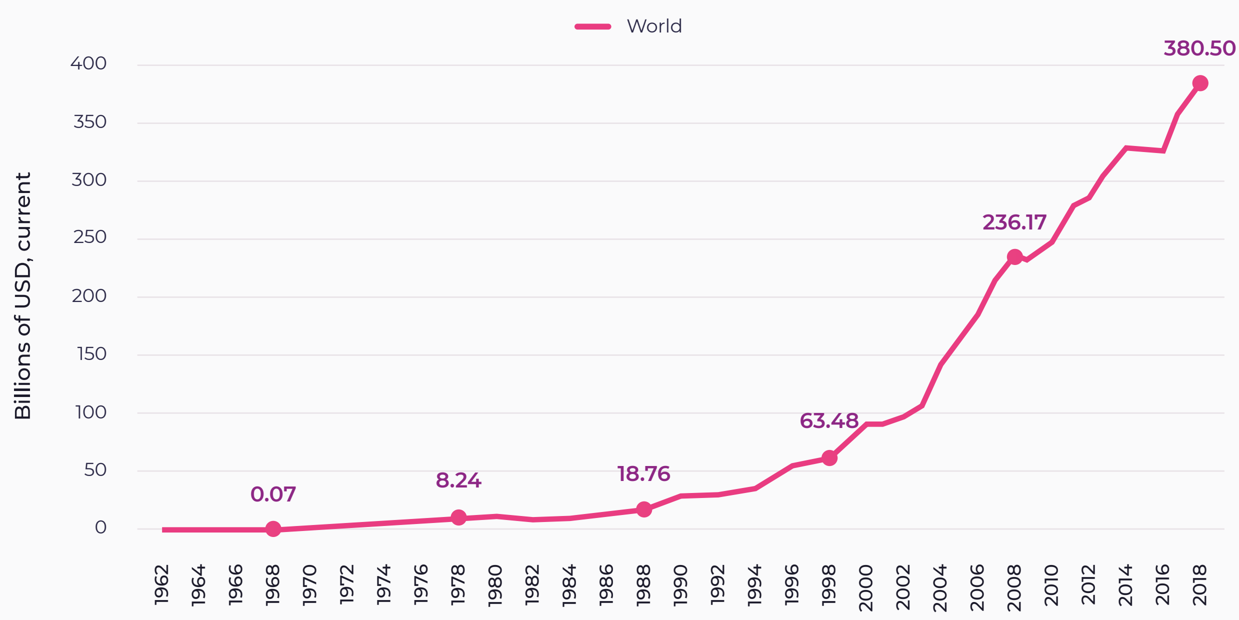
Whereas the macroeconomic trend of exposing the entertainment industry to economic hardships cannot be addressed by the operators of music streaming platforms (especially the smaller ones), the implication of the gig economy condition for OPUS is the following: consistent with its mission to help artists better monetize their musical output, **OPUS shall not only focus on increasing the musicians' final share in the royalties but also educate them on applicable aspects of financial literacy**. For instance Spotify has released a series of videos targeting small-scale musicians on numerous aspects of their contracts, financials, and operations. In context of the Blockchain, a valuable aspect of increasing financial literacy among artists would be to educate them better about the technology and token economics of OPUS, as well as on the ways to diversify their portfolios with digital assets. Such marketing and educational exercise would not only derive benefits to individual artists but to the entire community centred around the OPUS music streaming platform.

3. Macro-trends in the market for royalty-compensated music-making

Global outlook

Recent years have observed a **substantial increase in the cashflows payable on grounds of royalty-related contracts in the entertainment and media industries**. On the global scale, the charges for the use of intellectual property – subject to royalty payments – increased at the annual rate of 8.99% in 2017 and 5.81% in 2018 (see Figure 2 below). The two primary reasons behind such substantial increase in the amount of royalties payments stem from technological, as well as economic aspects. **In 2018 the total payments of royalties equalled 381bn USD** – that figure however includes all types of royalty payments for any product of creative work: books, music, visual art, videos. Yet this total is the most accurate indicator of music royalties paid globally. Given that this paper aims at identifying trends and making inferences for future market strategies of OPUS, the following data provided by the World Bank is analysed:

Figure 2 - Charges for the use of intellectual property



Data source: The World Bank, 2018.

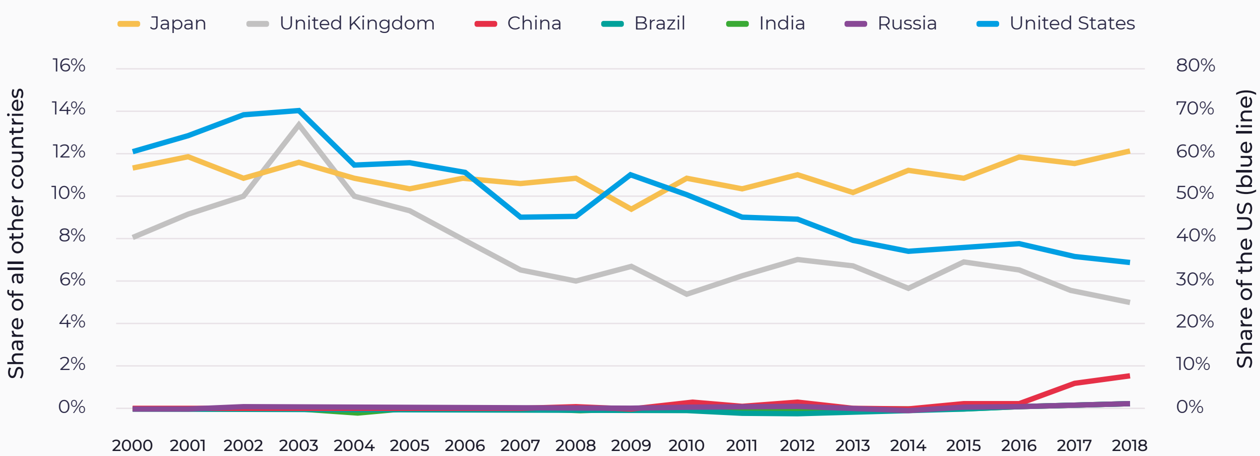
Regional outlook

The technological developments supporting the growth of royalty payments shall be understood as commercial implementations of streaming digital copies of creative content. Depending on the scope of market kick-off by selected music platforms and their respective customer reach (see Figure 3 for details), introduction of new streaming services has a potential to affect the levels of artists' migration to new music streaming platforms. For instance the introduction of Ali Music in China in 2015 must have had the key reason behind the subsequent sharp growth of royalty payment volumes. This is especially more pronounced for technologies that have a local scope for a given country. The supply-driven nature of the market for music streaming platforms is reflected in the fact that once a service like Ali Music is introduced, it can facilitate a new volume of royalty transactions for music streamings which artists before were not compensated for (e.g. when their music was pirated or released on basis of singular sales rather than multiple streamings). Hence the introduction of new distribution channels has an ability to truly empower artists.

One can argue that referring to the case of Ali Music in context of inferring on OPUS is limited because Blockchain-based products (including music streaming platforms) have by definition a decentralized and supranational character. However, it is still important to examine markets of individual countries that may become the key markets for distributing and promoting OPUS – both in terms of acquiring artists and their fans to the platform.
The following table summarizes nominal values of royalties paid to owners of intellectual property in selected countries in 2018, and how much these values contributed to the global royalties payments:

Country	US	UK	Japan	China	Brazil	India	Russia
Royalties paid (billions of USD, 2018)	133.32	19.52	45.52	5.56	0.83	1.11	0.88
Percentage of global royalty payments	35.03%	5.13%	11.96%	1.46%	0.22%	0.29%	0.23%

Figure 3 - Selected countries and their share in global royalty payments

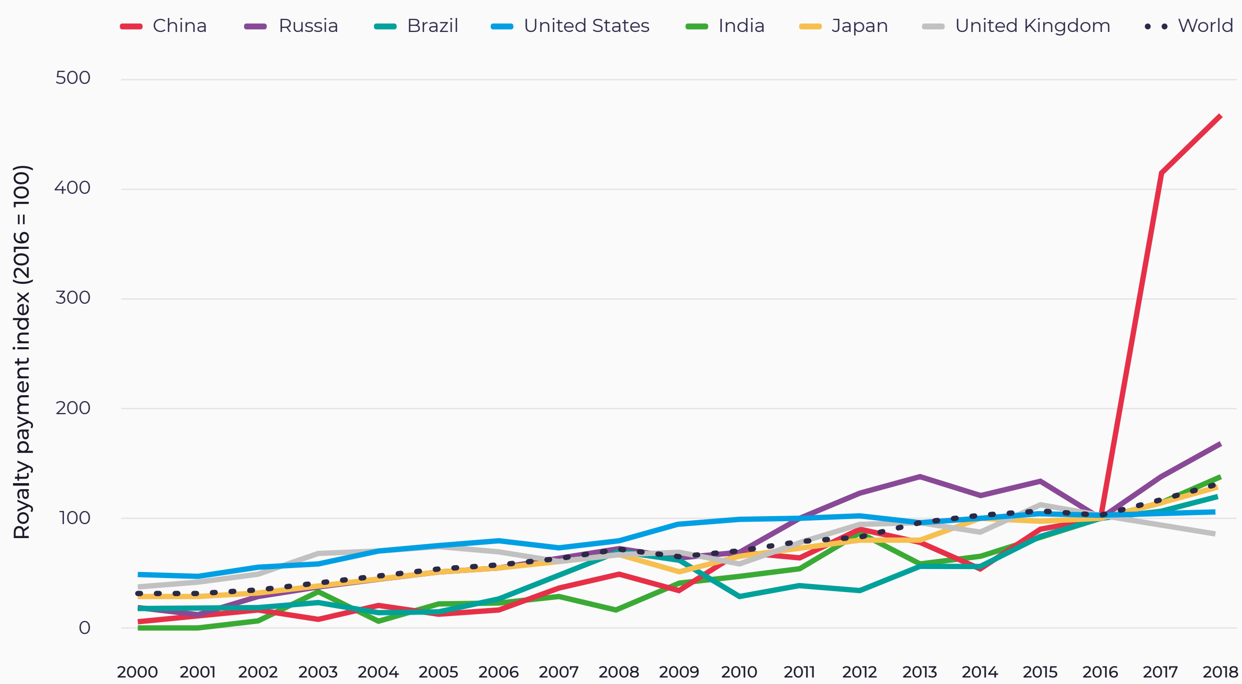


Data source: The World Bank, 2018.

An important observation with respect to the share of selected countries in the global royalty payments is that the **current leaders of the global entertainment industry**, the US and the UK, are also the ones to **observe the most rapid decline in the share of global royalty payments**. Music markets are rapidly growing in emerging economies – such as China, India, Brazil, Russia. These countries have observed rapid economic growth in the last two decades, have quickly-growing middle class that demands easy-access entertainment services, and consumes music for which artists are getting paid royalties. In China, growth opportunities are perhaps even higher, nevertheless that potential is limited by the nuanced intellectual property laws, which Western stakeholders have limited understanding of.

These **emerging markets are valuable for OPUS to explore** and promote its platform there. That is even more relevant in light of enormous growth rates in royalty payments the recent years. Conditional upon the exact launch strategy, the introduction and promotion of the OPUS platform in these markets can exploit some of the presently-existing opportunities to attract artists from emerging markets, offering them more favourable royalty payment terms. This is illustrated in Figure 4, where the year 2016 is taken as a reference point (i.e. the base year for each country's value of royalties equal to 100 for 2016). Another very important factor that can attract new users of a platform like OPUS is the fact that tokenized financial transactions on the platform provide great value especially in emerging economies that do not have advanced financial systems. Where the general population has a limited access to financial services like a credit card to pay for the subscription on conventional music streaming platforms, using tokens like OPT may be not only beneficial from the financial viewpoint, but also because of the greater access and lower barriers to entry.

Figure 4 - Selected countries' dynamics in royalty payments growth

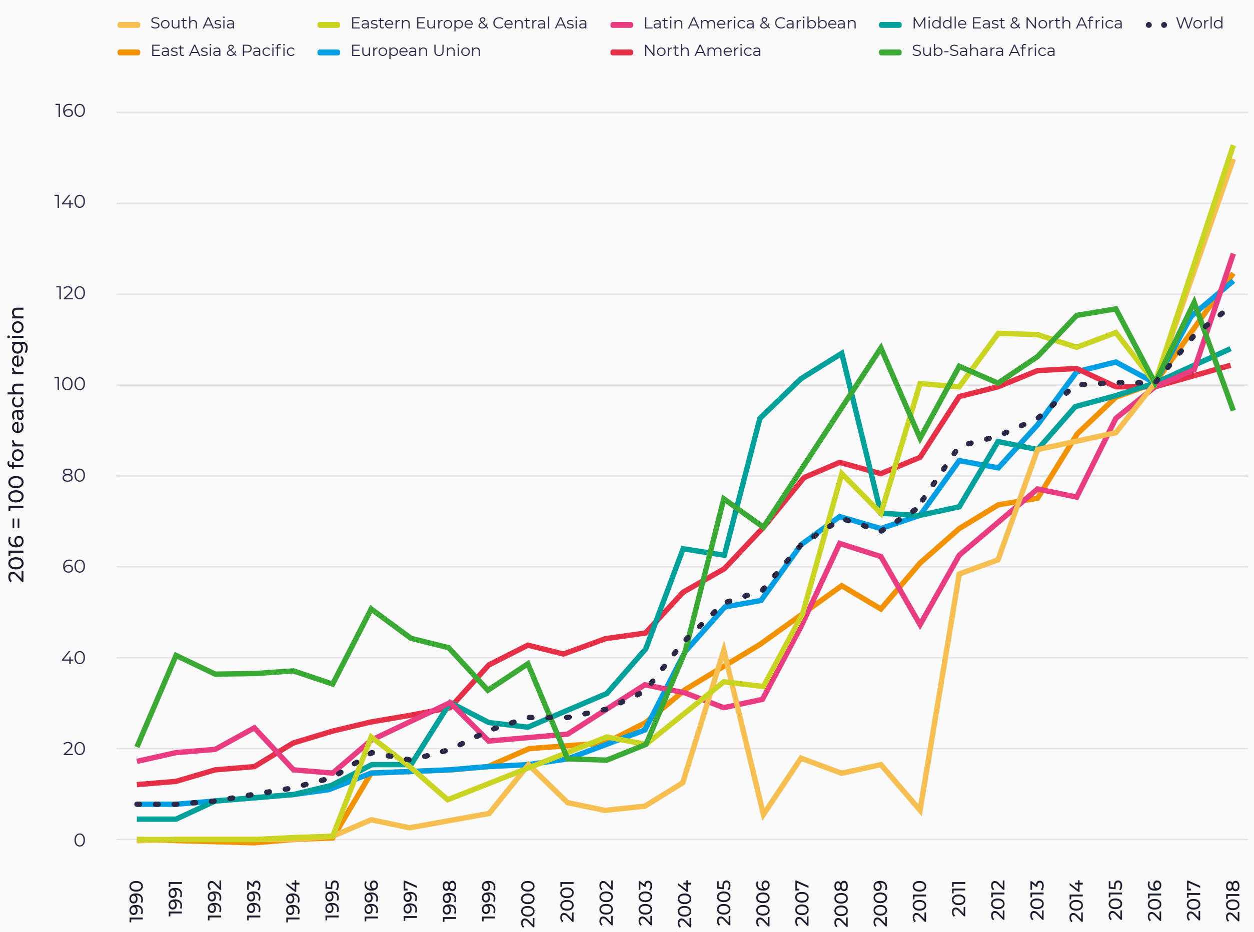


Data source: The World Bank, 2018.

The most substantial growth has occurred in **China**, where **royalty payments more than quadrupled between 2016 and 2017**. Yet it shall be noted that the reliability of that data is limited because of the lack of audit mechanisms. Nonetheless, such substantial year-on-year increase seems plausible given the fact that 2016-2018 was a period of quick growth of the Ali Music in the Chinese market. Ali Music is the platform operated by the Alibaba Group since its launch in 2015. Ali Music currently accounts for 21.9% of the Chinese market for digital music streaming platforms. [11] Also in 2017 the largest Chinese player in the entertainment industry, Tencent, signed an exclusive distribution agreement with the Universal Music Group to stream its music in China. [12]

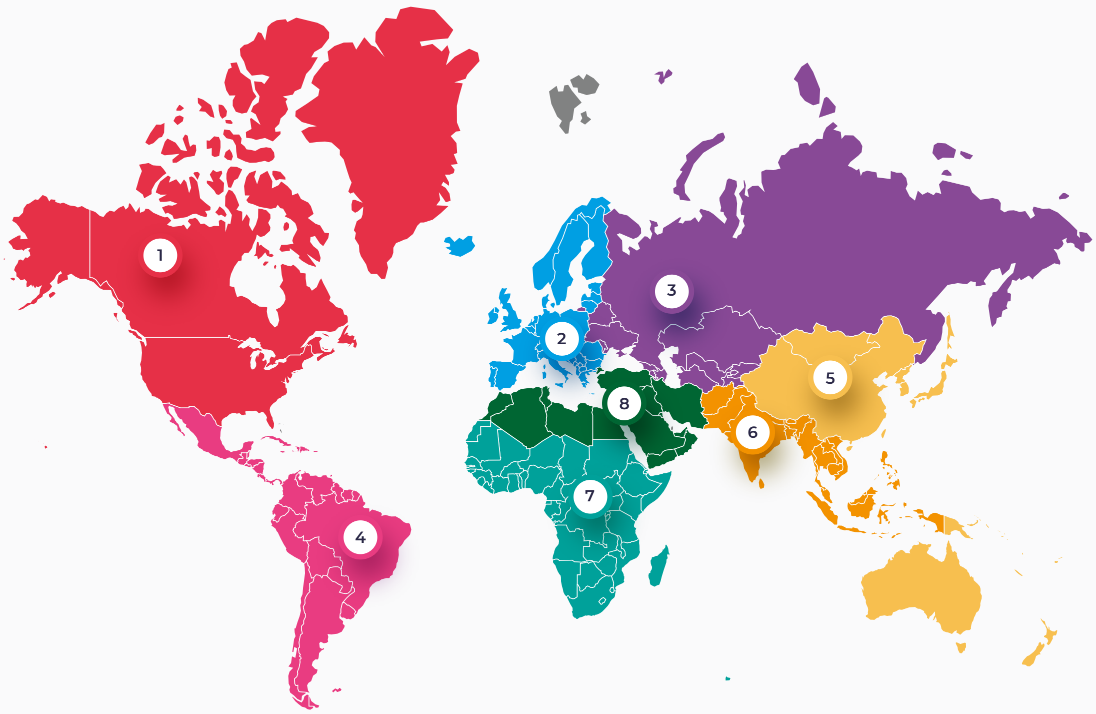
Further on the point of cross-national comparisons of growth of the music industry by the volumes of royalties, the **fastest growing markets for music-making** are currently: **Eastern Europe & Central Asia** (52.43% growth in the period 2016-2018), followed then by **South Asia** (48.03%) and **Latin America & Caribbean** (27.78%). These are also the regions where Blockchain became the most popular, especially in countries like Russia or Venezuela. The least attractive markets from the viewpoint of royalties growth are the European Union, North America, and Sub-Saharan Africa. They suffer either from oversaturation of the digital entertainment industry, or – in other instances – infrastructural challenges.

Figure 5 - Royalty payment index (2016 as the base year)



Data source: The World Bank, 2018.

Figure 6 - World regions and the royalty payments in 2018



North America, nominal **1,336 bn USD**
North America, 2016 indexed **194.04** — 1

European Union & EFTA, nominal **1,458 bn USD**
European Union & EFTA, 2016 indexed **123.29** — 2

Eastern Europe & Central Asia, nominal **2.05E+09**
Eastern Europe & Central Asia, 2016 indexed **152.43** — 3

Latin America & Caribbean nominal **1.41 bn USD**
Latin America & Caribbean, 2016 indexed **127.78** — 4

5 — East Asia & Pacific, nominal **696 bn USD**
East Asia & Pacific, 2016 indexed **122.79**

6 — South Asia, nominal **0.79 bn USD**
South Asia, 2016 indexed **148.03**

7 — Sub-Saharan Africa, nominal **0.20 bn USD**
Sub-Saharan Africa, 2016 **indexed 93.07**

8 — Middle East & North Africa, nominal **2.08 bn USD**
Middle East & North Africa **106.35**

Data source: The World Bank, 2018.

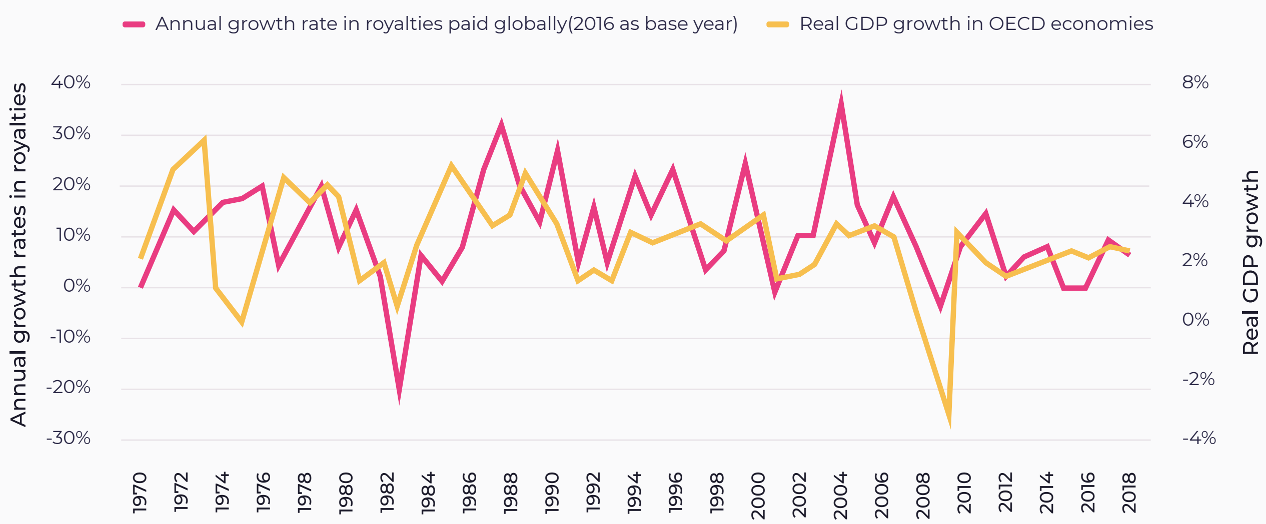
In context of geographical focus, the key takeaways for OPUS is that it can explore better market opportunities in emerging economies, where digital entertainment services are still expanding. Apart from the topic of royalties alone, the **process of tokenization is more promising** and adds greater value **in emerging markets**, given that they often have limited access to financial services (e.g. credit card payments) that are necessary to operate traditional music streaming platforms – such as Spotify, Apple Music, Amazon Music.

In the sphere of macroeconomics, the **rapid economic growth** of the global economy in the recent years has contributed to higher salaries, and thus **higher disposable incomes** that can be spent on the **consumption of digital entertainment services**. It is important to notice that the trend of growth rates in royalties follows the rate of economic growth in developed countries (taken as OECD member states for a proxy).

However, the **dynamics of global royalty payments is subject to fluctuations of bigger amplitudes than the overall economy**. It is hence more sensitive to any macroeconomic shock – positive, as well as a negative one. In the last decade for which the data is available (2008-2018), the growth rates in royalty payments fluctuated in the range from -3.73% (2009) to 14.28% (2011), whereas the real GDP growth in OECD countries was kept in the range -3.47% (2009) to 2.92% (2010). In context of an economic boom, this gives very promising outlooks for royalty payments; one can then expect both a greater volume of royalty-based transactions, as well as the values of each royalty payments received by artists globally. Yet in light of any recession – as it is expected for the years 2020-2021 due to the SARS-CoV-2 (coronavirus) outbreak – a major economic downturn may cause royalty payments to plummet.

The **sensitivity of royalty payments to overall macroeconomic conditions seems to beunavoidable** using conventional theories of economics and finance. A possible response to the issue of fluctuations in growth rates and nominal values of royalties may be addressed by the tokenization of royalties. For that, however, the pricing mechanism of digital tokens (e.g. OPT) would have to respond contrary to a macroeconomic shock. For instance, in the expectation of economic crisis, investors would need to transfer funds from conventional to digital assets, and hence increase the demand for digital tokens exchanged on Blockchain-based platforms for entertainment and cultural services. This however requires a more wide-spread adoption of decentralized services among the general population. When would that happen is difficult to be predicted, yet the economic arguments of royalties tokenization remains as a potential argument for exploring new financial arrangements of royalty payments that would secure the vulnerable personal finances of smaller artists.

Figure 7 - Growth rates in royalties vs. OECD economies



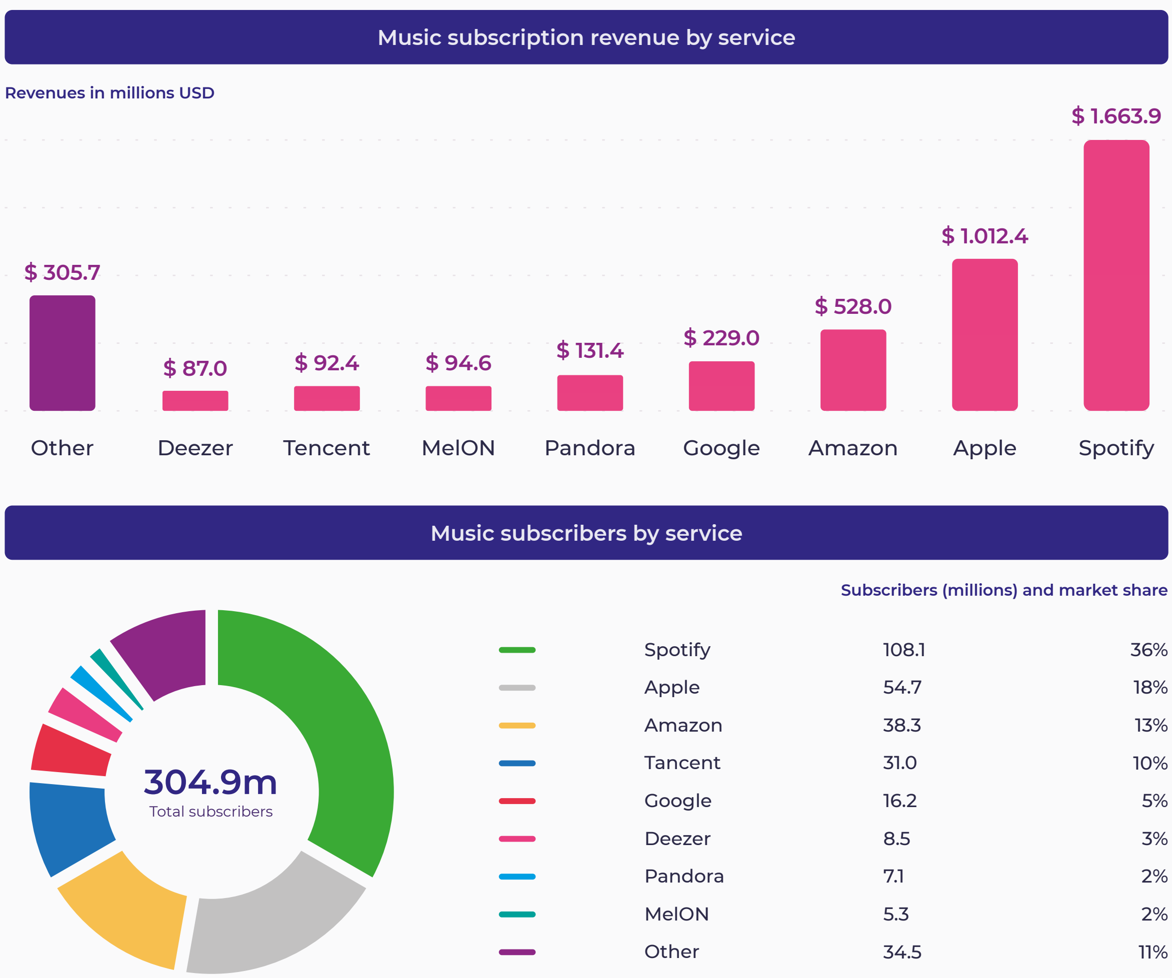
Data source: The World Bank, 2018.

4. How much do OPUS' competitors pay in royalties?

Market structure

To better understand the issue of royalty payments on the currently-operating music platforms, we should describe the market structure of digital music streaming services. Based on the most recent available data on the market for subscription-based music streaming platforms (H1 2019), it can be concluded that it is an **oligopolistic competition**; the CR4 concentration ratio for the **TOP4 platforms is 77%**. Based on the revenues, the market is currently dominated by **four key players: Spotify, Apple, Amazon, Google** (operating YouTube and Google Play). The exact Key Performance Indicators for the leading market players are given in Figure 8:

Figure 8 – Global Streaming Music Subscription Market, H1 2019 [13]



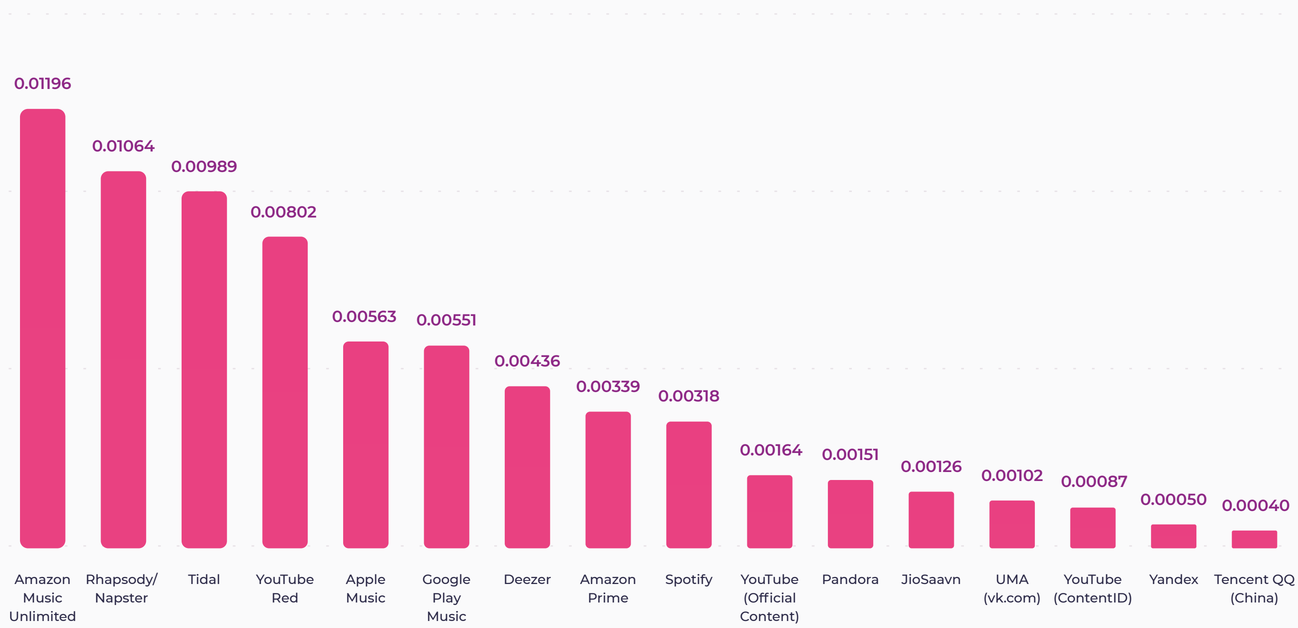
Data source: MIDiA Research Music Subscriber Market Share Model 11/19, 2019.

Per-stream royalties by the platform

By their size, **royalties are the largest liabilities** that music streaming platforms need to pay to artists, based on individual contracts they have with either independent artists or their distributor. For instance Spotify pays on average 52% of its revenue into royalties.[14]

The final value of royalties depends on multiple factors: size of the artist, popularity of the genre, type of subscription on the account of a listener (freemium vs. premium), as well as on individual contractual arrangements. **The lower end** of the payout breakdown is occupied by the **local digital services in the developing streaming markets:** Indian JioSaavn, Russian UMA and Yandex, and Tencent's QQ in China. [15] However, the data on country breakdown of the sources of accounts

Figure 8 – Weighted Per-Stream Payout Rate in 2019, by Source and Platform, USD [15]



Data source: Digital Music News, The Trichordist, Soundcharts, 2019.

5. Takeaways and challenges

This consulting paper addressed **micro- and macroeconomic caveats of royalty payments** in the business of digital music streaming services, in which OPUS operates. It is expected that the transition of royalty payments into the Blockchain should empower artists by increasing their bargaining power for asking higher payouts. This is thanks to the transparent and community-oriented aspect of the Blockchain technology and the Ethereum-powered smart contract.

Given the novelty of introducing Blockchain to the digital music streaming services market, there is a **great potential for growth**. Artists may be attracted to the decentralized platform like OPUS because of the potential for **relatively higher earnings, compared to conventional platforms.** An additional positive effect of migration to tokenized royalties would be the diversification of personal financial portfolios of artists; especially the smaller ones maintain large portions of their savings in cash, earned from conventional cash royalties. For OPUS, there is a new potential for disruption by integrating financial services for artists with personalised digital financial advisory (especially in context of tokenization and the Blockchain). The goal of integrating tips and advices into the artist-side of the platform or publishing target posts on the OPUS blog would help to protect artists' legal and financial rights, increase trust, and strengthen the community of the OPUS platform.

Yet despite challenges and in light of fantastic technological and business opportunities, we can be hopeful about the future of fairer and easier transactions to pay out royalties to artists. Maybe in the digital economy of tomorrow we will all become fans of new arising stars who will no longer need to worry about their personal finances. Instead, they will compose great songs that will stay with us for the years to come.

Sources

[1] Farlex, Inc., “West's Encyclopedia of American Law, edition 2.,” 2008. [Online]. Available: https://legal-dictionary.thefreedictionary.com/Royalty.

[2] K. Thomson, “How Many Musicians Are There?,” The Future of Music, 15 June 2012. [Online]. Available: http://money.futureofmusic.org/how-many-musicians-are-there/.

[3] The Billboard Staff, “How Much Do the Booking Agents Who Send Artists on Tour Make?,” The Billboard, 23 June 2016. [Online]. Available: https://www.billboard.com/articles/business/6605760/how-much--do-the-booking-agents-who-send-artists-on-tour-make.

[4] H. McDonald, “How the Big Four Record Labels Became the Big Three,” The Balance Careers, 29 July 2019. [Online]. Available: https://www.thebalancecareers.com/big-three-record-labels-2460743.

[5] H. McDonald, “How Indie Record Labels Work,” The Balance Careers, 27 January 2019. [Online]. Available: https://www.thebalancecareers.com/signing-with-an-indie-label-2460744.

[6] M. Johnston, “How Spotify Makes Money,” Investopedia, 3 February 2020. [Online]. Available: https://www.investopedia.com/articles/investing/120314/spotify-makes-internet-music-make-money.asp.

[7] G. Davies, “When Copyright is Not Enough: Deconstructing Why, as the Modern Music Industry Takes, Musicians Continue to Make,” Chicago-Kent Journal of Intellectual Property, vol. 16, no. 2, pp. 372-407, 2017.

[8] M. Mulligan, “Inependent Artists | The Age of Empowerment,” Midia Research, 9 July 2019. [Online]. Available: <https://www.midiaresearch.com/downloads/independent-artists-age-empowerment/>.

[9] B. Milam, “Exploring Financial Literacy of Independent Musicians in the Gig Economy,” The Aquila Digital Community, Hattiesburg, Mississippi, 2019.

[10] K. Thomson, “Are Musicians Making More or Less Money?,” The Future Of Music Coallition, 2 July 2012. [Online]. Available: http://money.futureofmusic.org/are-musicians-making-more-or-less-money/.

[11] AliMusic, “Baike Baidu,” 2019. [Online]. Available: https://baike.baidu.com/item/%E9%98%BF%E9%87%8C%E9%9F%B3%E4%B9%90/16947952?fr=aladdin#reference-%5b1%5d-16949307-wrap.

[12] Y. Yang, “Tencent's mobile gaming dominance helps profits soar,” Financial Times, p. 15, 18 May 2017.

[13] M. Mulligan, “Music Subscriber Market Shares H1 2019,” MIDiA Research, London, UK, 2019.

[14] T. Ingham, Music Business Worldwide, 23 September 2018. [Online]. Available: https://www.musicbusinessworldwide.com/spotifys-direct-distribution-deals-what-do-the-artists-get/.

[15] The Soundcharts Blog, “What Music Streaming Services Pay Per Stream (And Why It Actually Doesn’t Matter),” 27 June 2019. [Online]. Available: https://soundcharts.com/blog/music-streaming-rates-payouts#1--freemium-vs-subscription-only-the-payout-dilution.

[16] The World Bank, “World Development Indicators,” The World Bank Group, Washington, D.C., 2019.

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