

The Investment Case for the Global Music Industry

Executive Summary

Since the invention of the phonograph in 1877, humans have had an insatiable desire to listen to and share recorded music. Further accelerated by the digital age of music, the global music industry continues to boom. Goldman Sachs predicts revenue in the global music industry will grow at compound annual rate (CAGR) of 12% to \$53.2 billion by 2030.¹

In 2022, the success of artists like Taylor Swift and Korean Pop (K-Pop) sensation BTS helped global music revenues rise to \$26.6 billion, to new record levels with its eighth consecutive year of growth. Much of that growth was driven by streaming, which now accounts for 67% of the industry's earnings.² While the traditional on-demand subscription model dominates much of the growth in the music industry today, advancements in technology and further digitization of industries will further increase the pervasiveness of music, creating even more opportunity for growth and monetization in the future.³



Taylor Swift at her Reputation Tour

Music video streaming services such as YouTube and TikTok have also helped transform the industry, giving creators another platform to reach and engage audiences with digital music content. YouTube Music has now surpassed 80 million paid subscribers globally, contributing \$6 billion in revenue to the music industry in 2022, 30% from user-generated content.⁴ Regulatory concerns aside, TikTok is still a hub for labels promoting new releases and unreleased or back catalog tracks. Music-analytics company MRC Data found that 67% of the app's users are more likely to seek out songs on music-streaming services after hearing them on TikTok.⁵

¹ Yang, Lisa, et al, *Music in the Air*, Goldman Sachs Equity Research, June 13, 2022.

² Savage, Mark. *Music industry makes \$26bn but wants streaming prices to rise*, BBC News, March 21, 2023.

³ Yang, Lisa, et al, *Music in the Air*, Goldman Sachs Equity Research, June 13, 2022.

⁴ Forristal, Lauren. *YouTube Music and Premium top 80 million paid subscribers*, TechCrunch, November 9, 2022, <https://techcrunch.com/2022/11/09/youtube-music-and-premium-top-80-million-paid-subscribers/>

⁵ Blackman, Brittany. *TikTok has Changed the Music Industry*, Sumoheavy.com, July 6, 2022, <https://www.sumoheavy.com/post/tiktok-has-changed-the-music-industry>

Further adding to music industry growth has been the post-pandemic revival of live music events. Global music ticket sales have rebounded to pre-pandemic levels and the desire to attend live concerts remains high.⁶

Another important new trend for music artists is the monetization of song catalogs which also represents a growing opportunity for investors in the space.

It is no wonder that J.P. Morgan believes that music represents “the best content story in the history of media”.⁷ They expect a decade of double-digit growth driven by increased subscriber penetration, ongoing price increases, better monetization in developed markets and first-time monetization in emerging markets, and licensing income from a growing number of tangential sources such as health, fitness, and social media.

In this paper, we aim to explore:

- The History of the Music Industry
- Global Music Industry Trends Over Time
- The State of the Music Industry Today
- The Investment Case for Music
- The Growth Potential of the Global Music Market
- MUSQIX: An Index Providing Exposure to Every Aspect of the Music Industry

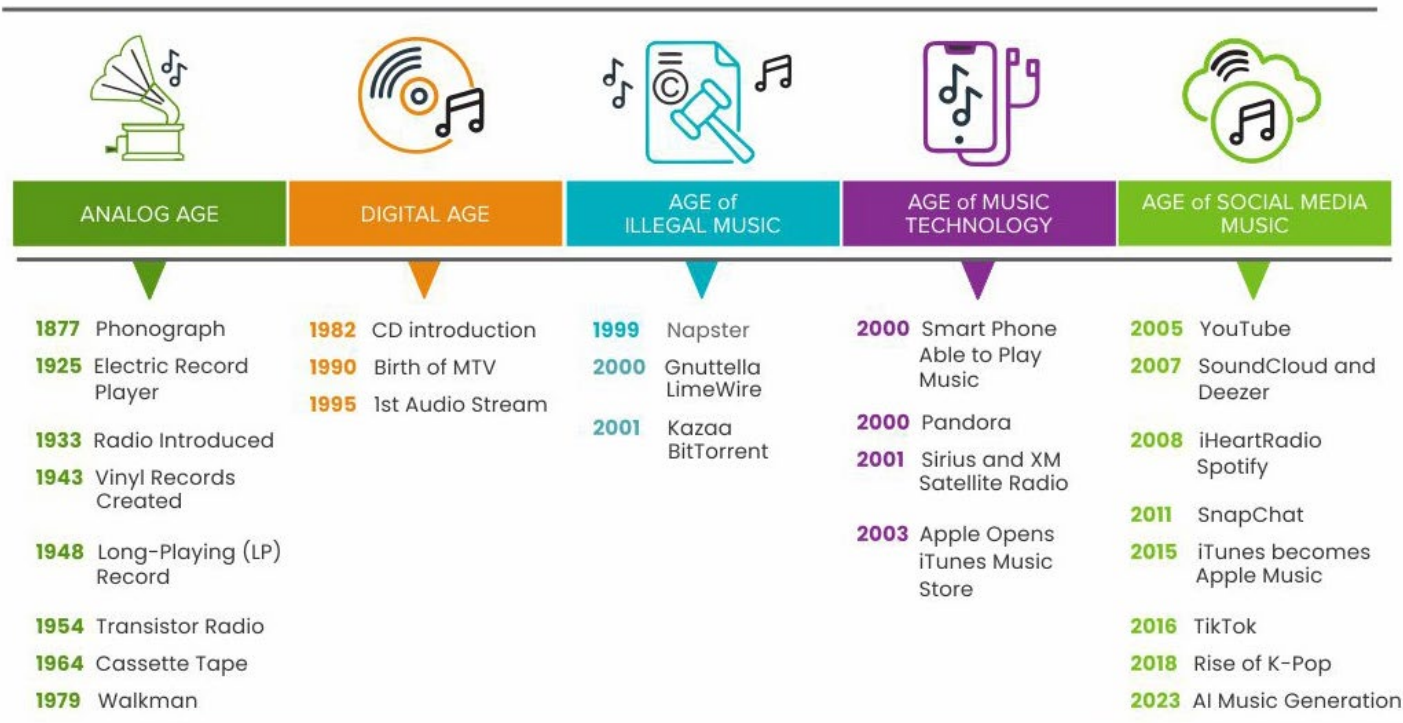
⁶ Dalugdug, Mandy, *Live Concert Interest in the U.S. Nearing Pre-Covid Levels, New Study Shows*, Music Business Worldwide, September 7, 2022.

⁷ Kerven, Daniel. *Music Outlook 2023, Fundamental view, themes for 2023 and a modest UMG upgrade to start the year*, J.P. Morgan Equity Research, January 18, 2023.

History of Music Industry⁸

MAKING MUSIC

In a constantly changing musical landscape, the way music is created and distributed has varied dramatically over time. The rise of the internet has played a transformative role in how music is consumed globally, impacting all aspects of the industry, technology, licensing and how musicians and artist are compensated and paid.



Source: EQM Indexes

Global Music Industry Trends Over Time

The following timeline covers trends in the global music industry, especially the business of music promotion and distribution.

1960s-2000:



From the 1960s to 2000, major record labels were responsible for music promotion. Artists were discovered by labels and recording companies had access to media – specifically large, uniform radio and television audiences – that determined the

⁸ TheMediaShaker.com, Ekimetrics.

success of those artists. By 2000, that began to change. The MP3 format reduced the size of digital music files, leading to a boom in digital music distribution in the early years of the internet. Companies like Napster made digital downloads (and piracy) widely available, and the profitability of the music industry appeared to be in a freefall.

2000-2009:

In 2001, Apple launched iTunes, but its fee-based format (typically 99 cents per song, \$12-\$15 per album) couldn't compete with the allure of unlimited free music. By 2008, according to IFPI estimates, 95% of digital music was downloaded illegally. At the same time, the media landscape was changing dramatically with social media platforms like MySpace (2003), Facebook (2004), and YouTube (2005) ushering in new ways for fans to discover music. The music industry started measuring "likes" and play counts, and social media provided artists with a virtual platform to build relationships directly with fans. New promotional techniques were emerging for artists via social media, even as music industry revenues declined.



2010-2015:

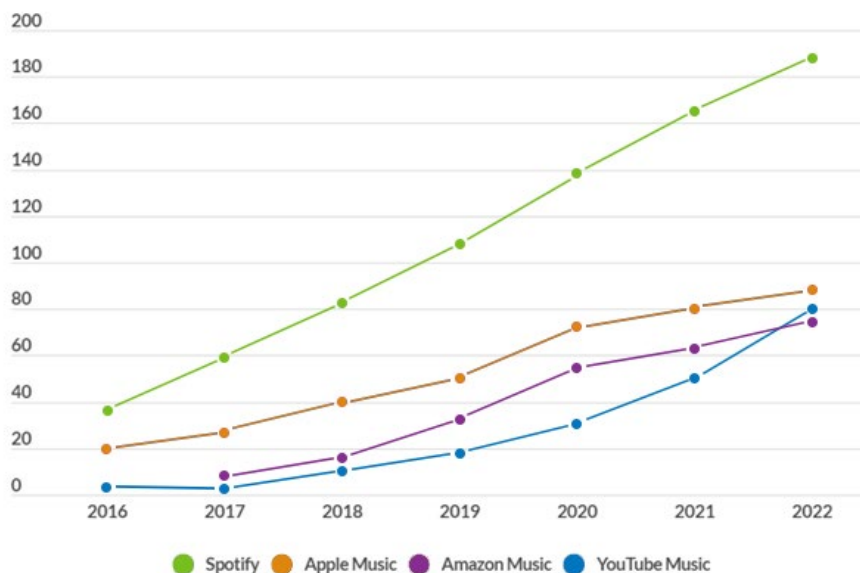
During this time, the global music industry market was at an all-time low, but music streaming platforms began to emerge as an answer to music piracy. Spotify launched in 2008 and became available in the United States in 2011, and Apple and Amazon began to offer competing subscription-based music streaming services soon after – giving global listeners access to over 90 million songs for a monthly or annual fee. By 2010, most record labels had created a digital department, and marketing campaigns for tours and releases began to look largely as they appear today.



2015–Today

According to the Recording Industry of America (RIAA), from 2010–2020, streaming revenue as of percentage of music industry revenue in the U.S. increased from 7% to 83%. Spotify users have increased from less than 40 million to over 180 million from 2016–2022, a 450%+ increase, and other major streaming services (Apple, Amazon, and YouTube) now have between 40 million and 80 million users each.⁹

Apple Music vs Spotify: users



Source: Company data, Edison Trends

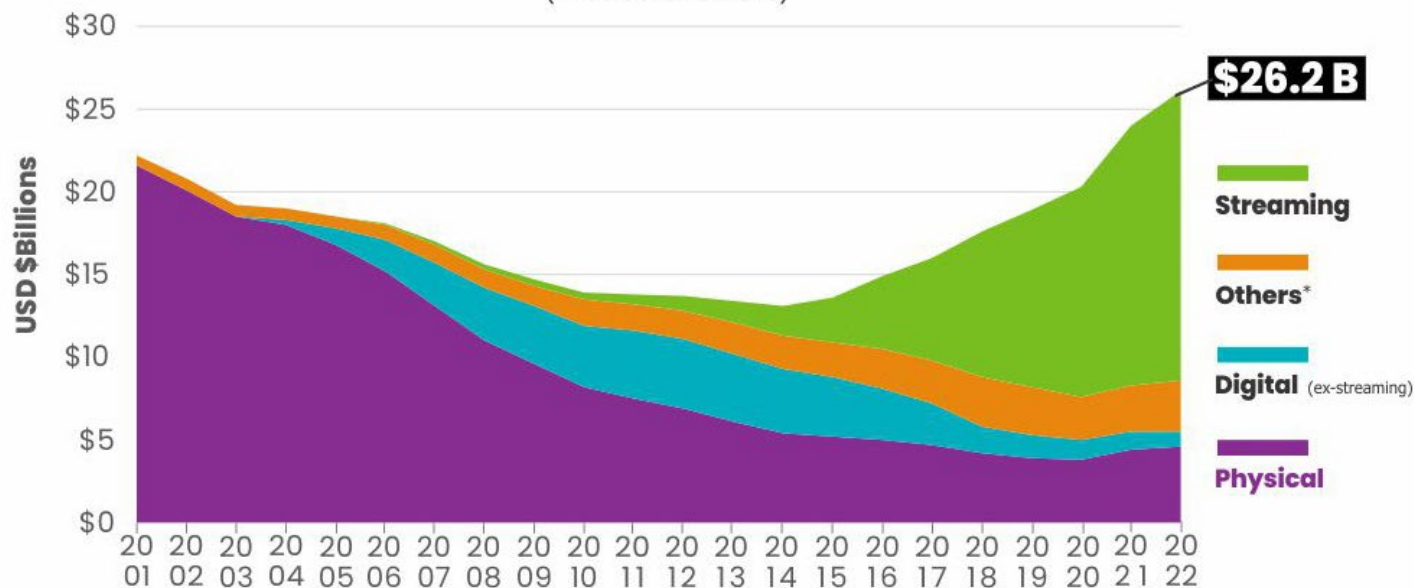
However, while the digital music industry has certainly matured, it is still very intertwined with the physical world. Artists now livestream their concerts at the same time they announce a new album via social media.

⁹ Curry, David. *Apple Music Revenue and Usage Statistics (2023)*, Business of Apps, February 1, 2023.

Streaming Drives Global Music Industry Growth

The Rise of Digital Distribution. Paid streaming now accounts for 67% of global music industry revenues. According to IFPI, 589 million people today have a paid music streaming subscription, and streaming revenues now far surpass digital downloads.

Global Recorded Music Industry Revenues
(in US dollar billions)



*Includes Performance Rights and Synchronization
Source: The Global Music Report, IFPI; 2022, Statista

State of the Global Music Industry

The global music industry continues to grow, and fan and artist interaction is increasingly facilitated by technological innovation ranging from creating immersive music experiences to enhancing health and fitness activities, to reimagining music using other forms of media such as video, film, TV, and brand partnerships. The story of the global music industry is one of innovation and growth, making it a compelling investment opportunity.

According to IFPI’s 2023 Global Music State of the Industry Report¹⁰, the global music industry recorded revenues of \$26.2 billion USD in 2022, representing an increase of 9% on

¹⁰ IFPI Global Music Report 2023, State of the Industry, https://cms.globalmusicreport.ifpi.org/uploads/GMR_2023_SOTI_V11_b99dcd3a6.pdf

a year-over-year basis. Revenue increased in each of the world’s top markets and regions, marking the eighth consecutive period of growth for the industry.

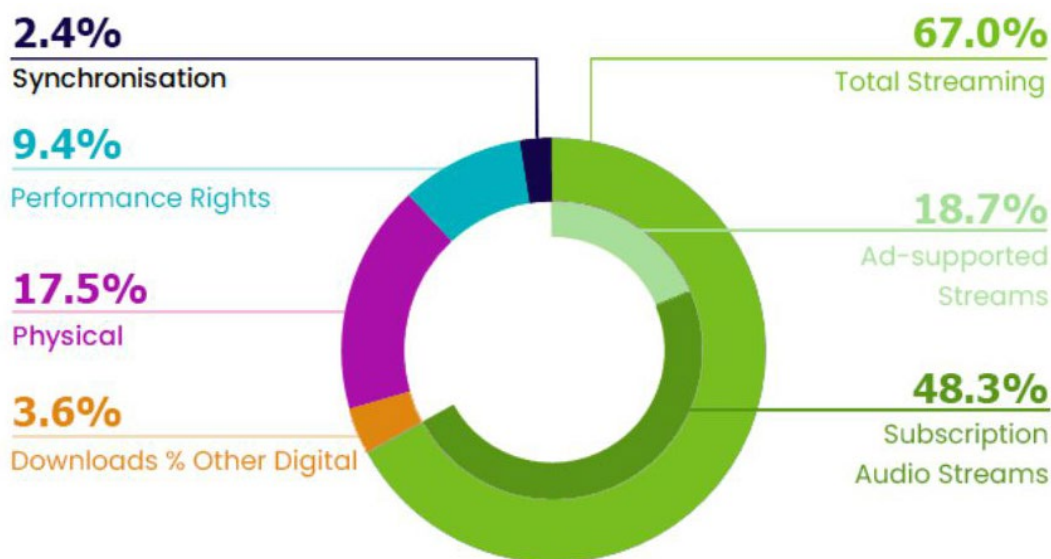
Streaming revenues increased 11.5%, from a share of 65.5% in 2021 to 67% of overall global music revenues in 2022. Subscription streaming was the leading driver of growth (+10.3% to \$12.7 billion). Physical format revenues, including CDs, vinyl, and other physical formats, increased for a second year in a row, up 4%, with physical formats seeing their strongest growth in Asia, which accounted for almost half of physical music’s revenue.

Downloads and other digital, non-streaming formats were the only formats to experience a decline in 2022, as streaming continues to gain share as the dominant digital format. Permanent downloads fell by 19.6%, but other non-streaming digital formats, including mobile personalization, actually grew by 12.2%.

Performance rights and the use of recorded music by broadcasters and public venues grew by 8.6% in 2022, surpassing pre-pandemic levels.

And synchronization was up an impressive 22.3% in 2022, now accounting for 2.4% of global market share. Synchronization includes revenues from the use of recorded music in advertising, film, games, and television, and it remains one of the fastest growing music categories as musical engagement is further permeating all forms of media.

Global Recorded Music Revenue by Segment 2022



Source: IFPI

The Increasing Importance of the International Music Industry

The global music industry is just that, global, and while the United States remains the top global market in terms of revenue, the music business is growing around the world. The top 10 music markets in 2022 are depicted below in order of revenue.

The recorded music industry recorded gains in every region across the globe, with four regions, Latin America (+25.9%), Sub Saharan Africa (+34.7%), Middle East & North Africa (+23.8%), and Asia (15.4%), experiencing double-digit growth.

In 2022, music revenues climbed 9% to \$26.2 billion.



In Latin America, both Brazil (+15.4%) and Mexico (up steeply by 24.3%) experienced strong growth. Once again, streaming revenues dominated, accounting for 85.2% of the Latin American market.

Sub Saharan Africa's growth was boosted by growth in its largest market, South Africa, up 31.4% versus only 2.4% modest growth the prior year. This region was the fastest growing region in 2022.

In the Middle East & North Africa, streaming represented the vast majority of revenues, accounting for a 95.5% share. Anghami is the "Spotify" of the Middle East, launched in Lebanon, now based in Abu Dhabi, and Anghami is growing its streaming footprint after amassing nearly 20 million active users.¹¹

¹¹ Hosseini, Bijan. *Anghami became the 'Spotify of the Middle East.' Now it's moving into live events*, CNN Business, December 13, 2022.

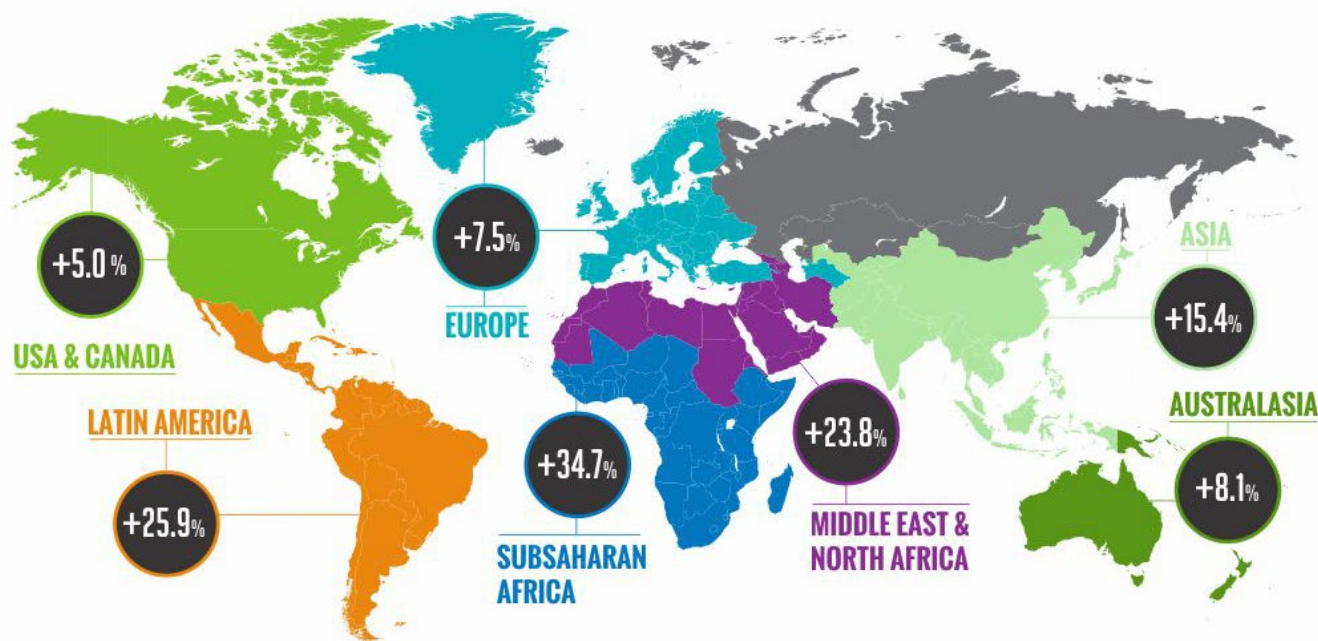
Asia experienced double-digit growth for the third-consecutive year, outpacing the overall global rate of growth of 9%. While Japan is the region's largest market, China saw the biggest increase in growth, up 28.4% and pushing into the top five markets globally for the first time and making it the fastest growing country in the world.

What are some of the drivers of rapid development in China? Local streaming platforms are on the rise—most notably, Tencent's app ecosystem of KuGou, KuWo, QQ Music, and NetEase Cloud Music, and the Chinese recorded music market has tripled its revenues in the last few years.

Tencent Music, the biggest play on China's local streaming market, had 88.5 million paid subscribers at the end of 2022, an increase of 16.1% YOY. It operates the music services QQ Music, KuGou, and KuWo.¹²

RECORD GROWTH

The recorded music market has seen growth in every region across the globe, averaging +9% global growth.



Source: EQM Indexes

¹² Stassen, Murray. *Tencent Music Entertainment had 88.5 million paying users at the end of 2022, up 16.1% YOY*, Music Business Worldwide, March 21, 2023.

Global Music Industry Trend Alerts

K-Pop

Many of last year's most popular global artists like BTS, boy bands Seventeen and the Stray Kids, hail from Korea as part of the K-Pop movement. Originating in South Korea in the 1990s, K-Pop became successful worldwide in the 2000s and today has a huge, growing number of loyal global followers. It is distinguished by its Korean lyrics, in-sync dancing, and pop sound mixed with elements of rap and hip-hop.

In 2019, bands like BTS and Blackpink were performing to sold-out venues around the globe. BTS was second only to U.S. hip hop star Drake in international music sales, and Blackpink was the first female K-pop group to play at the Coachella music festival in the U.S.¹³ In February 2022, a key plot element of Disney Pixar's movie "Turning Red," a turning-of-age story of a Chinese-Canadian girl named Meilin, centered on her desire to attend a K-Pop-style concert without her mother's permission.



BTS Awarded Artist of the Year at the 2016 M Net Asian Music Awards

While a large element of K-Pop's success has been its clever design and marketing, the genre is largely an expression of Asian youth culture. As a reminder, in 2022, South Korea's population was 51.9 million, Japan's was 124.0 million, and China's stood at 1.4 billion, while the youth population of all of Asia (under the age of 15) is 24%.¹⁴

¹³ *How did K-Pop conquer the world?*, BBC.com, May 29, 2019.

¹⁴ Macrotrends.com, Statista.com

Whether or not the K-Pop trend will continue its pre-pandemic success is yet to be seen. Recently, Bang Si-Hyuk, the chairman of HYBE, a South Korean multinational entertainment company, said, “We are living in an era where everything we do in the content industry resonates beyond geographical boundaries.”¹⁵

Besides HYBE, other companies benefiting economically from the K-pop music trend include SM Entertainment, YG Entertainment and YGPlus, Cube Entertainment, Genie Music, and RBW.

Bollywood

In March 2023, the song, “Naatu Naatu” from the Bollywood movie RRR (Rise Roar Revolt) won the Oscar for Best Original Song in a field that included such heavy hitting artists as Rihanna and Lady Gaga. It was the first Oscar for the country of India and its 2022 population of 1.4 billion. After the win, searches for the song and its energetic live performance at the Oscar ceremony spiked on streaming services.



“We are living in an era where everything we do in the content industry resonates beyond geographical boundaries.”
–Bang Si-Hyuk, Chairman of HYBE

¹⁵ Peoples, Glenn. *With K-Pop ‘in Crisis,’ HYBE Is Focused on Global Expansion Beyond the Genre*, Billboard.com, March 16, 2023.

The Oscar win is currently giving credence to the dreams of India’s musicians and could be a potential platform for artists from low-income communities to enter the world of show business.¹⁶

The music business is indeed trending increasingly global, beyond K-Pop and Bollywood. Some of 2022’s most popular artists also include Brits Harry Styles and Ed Sheeran, Puerto Rico’s Bad Bunny, and Taiwan’s Jay Chou.

The Investment Case for Music

Have you ever heard someone say, “I don’t like music?” Now, try to imagine a world without music. Music is an indispensable item for all humans to consume – like food and water, and it is our belief that it will continue to expand worldwide as an investment opportunity.

Besides the growing global opportunity of streaming, there are several other important global music industry trends to capture in a global music industry investment product.

Resurgence of Live Music Events

Consumers around the world continue to prioritize spending toward attending live events, especially music concerts. In 2022, according to Live Nation Entertainment, whose subsidiaries include Ticketmaster and the House of Blues, 121 million fans attended concerts across 45 countries, with the majority of growth coming from international markets. Attendance grew by 24% versus 2019 levels to currently record-high levels.

Live music, having been previously one of the most resilient parts of the music industry over the past two decades, was obviously the segment most severely impacted by the pandemic due to the cancellation of almost all live events around the world. But the industry has rebounded quickly with industry players like Live Nation and Europe’s CTS Eventim exceeding prior expectations.

¹⁶ The Oscar for 'Naatu Naatu' fans the impossible dreams of India's musicians. IMDB.com, NPR.com, March 13, 2023.

Live Music Revenue to Surpass Pre-Pandemic Levels

Recently, Live Nation announced it is acquiring a majority interest in Hong-Kong based concert and festival organizer, Clockenflap, to further bolster its presence in Asia's quick-expanding live music markets. The parent of Ticketmaster also recently established a Philippines division, acquired the concerts and entertainment unit of Thailand's TERO, and, through Fabled Records, finalized a Capitol Records licensing pact in China.¹⁷

Mobile Devices Have Revolutionized the Ticket Buying Experience

While Ticketmaster has been a controversial service provider from a regulatory standpoint, especially since its 2010 merger with Live Nation, no one can argue that there

The Ticketmaster logo, featuring the word "ticketmaster" in a blue, lowercase, sans-serif font with a yellow underline.

is huge pent-up demand for ticket sales post-pandemic, and many consumers have been unable to buy tickets the day they go on sale.

Ticketmaster has been taking flak from concertgoers and artists alike this year, with issues involving Bruce Springsteen, Taylor Swift, and Bad Bunny's tours all directing fresh ire toward the world's biggest concert-ticket seller. The Department of Justice has opened an antitrust investigation into Live Nation Entertainment, and a U.S. Senate panel recently held a hearing on Ticketmaster's chaotic rollout for Swift's 2023 Eras Tour.¹⁸



Further exacerbating the ticket sales controversy is the lack of public inventory. In order to purchase tickets, fans can participate in pre-sales for concerts through the venue, the artist's fan club, their cell phone provider and/or their credit card company. Once these pre-sales are done, the event is then opened up for a public on-sale with very few tickets remaining. For years, rising service fees have also been the subject of criticism and regulatory scrutiny.

But where do those service fees and concert dollars actually go? According to Billboard, the base ticket price goes to pay for the rising expenses of doing the show – such as

¹⁷ Smith, Dylan. *Live Nation Acquires Hong Kong's Clockenflap, Plans to 'Deliver New and Exciting Live Opportunities to the Region'*, Digital Music News, March 22, 2023.

¹⁸ Hogan, Mark. *6 Ways to Fix the Broken Concert Ticketing System*, Pitchfork, March 6, 2023.

staff, gas, and trucks – which are all experiencing the same inflationary pressures and shortages as the rest of the economy. Profits have traditionally been split 85% to artists and 15% to promoters, but artists have raised concert ticket prices and are now taking a higher percentage of the profit. So how does the promoter make money? By charging service fees, order processing fees, and facility fees.¹⁹

According to Comscore, event tickets are the top growing digital commerce category in the post-pandemic recovery, up 75% YOY. In Q4 2022, 88% of event tickets were sold on mobile devices.²⁰ Many venues are now entirely cashless and paperless, which may exclude non-savvy smartphone users, but has helped increase margins. The global mobile ticketing market is forecasted to experience rapid growth with an anticipated compound annual growth rate (CAGR) of 19.7% by 2032.²¹

In Q4 2022, 88% of event tickets were sold on mobile devices. – Comscore

Catalog Sales

According to Luminate, catalog share (music that is 18 months and older and has fallen below number 100 on Billboard charts with no current single on the album) to total album consumption rose to 72.2% in 2022, from 69.8% the year before.²²

One of the biggest trends in the global music industry is music artists selling their catalogs for massive paydays. In 2022, some of the biggest names in rock and classic rock/pop cashed in on selling their catalogs, music rights, publishing rights, and more. With these sales, the artist gets a huge infusion of cash upfront which provides them financial security for the rest of their lives. They also enjoy certain (and potentially enormous) tax advantages, too, thanks to certain capital gains laws.²³

¹⁹ Mims, Taylor. Billboard Explains: Why Concert Tickets Are So Expensive, Billboard, July 15, 2022.

²⁰ State of Digital Commerce, Comscore, January 30, 2023, <https://www.comscore.com/Insights/Presentations-and-Whitepapers/2023/State-of-Digital-Commerce>

²¹ Prudour Private Limited, Mobile Ticketing Market Report Offers In-Depth Analysis + Growth Rate 19.7% by 2032, Enterprise App Today, March 21, 2023.

²² Luminate, U.S– 2022 Year-End Music Report, 2023, <https://luminatedata.com/reports/luminate-2022-u-s-year-end-report/>

²³ Cross, Alan. "Here's a running list of artists who have sold some or all of their song catalogues to a new breed of company. (Updated as required)," A Journal of Musical Things, March 3, 2023.

Music royalty trusts like Round Hill Music, Hipgnosis, and Primary Wave (non-public) have spent billions over the last few years acquiring song catalogs to help artists monetize their intellectual property, buying artist music catalogs for as much as 30 times their average annual royalties. Wall Street started paying attention and began considering music as an asset class they would invest in, along with real estate and everything else in their portfolio. Music also seems to weather economic storms better as an asset class, making it attractive.²⁴ Recently GTS Securities and Jukebox announced a partnership to create a registered app with over \$4 billion in music royalties, which would be accessible to the general public. It is scheduled to go live at the end of 2023.²⁵

Record high-profile artist catalog sales include:²⁶

- **David Bowie** (David Bowie laid the groundwork for catalog sales from 1997–2007, when he struck a \$55 million deal with Prudential Insurance Company of America for so-called "Bowie Bonds" based on royalties from 25 albums and 287 songs. He later sold his entire catalog to Warner-Chappell), US\$250 million.
- **Bob Dylan** (100% of his publishing catalog to Universal Music Publishing), estimated at US\$300–\$400 million. On January 24, 2022, Sony acquired Dylan's master recordings worth another US\$200 million.
- **Bruce Springsteen** (300 songs, 20 studio albums, 23 live albums and more to Sony), estimated at US\$500 million.
- **Neil Young** (50% of his career catalog to Hipgnosis), estimated at US\$150 million.
- **Neil Diamond** (Universal Music buys complete song catalog and all master recordings), amount undisclosed, but probably US\$300 million+.
- **Stevie Nicks** (a majority stake in her songs to Primary Wave), US\$100 million.
- **Imagine Dragon** (everything they've done up until now), US\$100 million.

²⁴ Graff, Gary. "Why Musical Artists are Selling Their Catalog Rights," Loudwire, December 7, 2022, <https://loudwire.com/why-music-artists-selling-catalog-rights/>

²⁵ Doherty, Katherine. "Music Lovers to Become Royalty Investors in New Trading Platform," Bloomberg, February 3, 2023.

²⁶ Cross, Alan. "Here's a running list of artists who have sold some or all of their song catalogues to a new breed of company. (Updated as required)," A Journal of Musical Things, March 3, 2023.

- **Red Hot Chili Peppers** (all pre-2020 material to Hipgnosis), US\$140-\$150 million.
- **Genesis** (members Tony Banks, Phil Collins, and Mike Rutherford sold their works to Concord), \$300 million.
- **Justin Timberlake** (everything to Hipgnosis), price undisclosed, although the rumor is US\$100 million.
- **Justin Bieber** (interests in his publishing and recorded music catalog to Hipgnosis), a reported US\$200 million.
- **Dr. Dre** (catalog assets to Universal Music and Shamrock holdings) estimated US\$200 million.
- **Sting** (sold catalog for his work as solo artist and his time with the Police to Universal Music) \$250 million.
- **Paul Simon** (sold song catalog to Sony Music Publishing), while Sony didn't disclose the price of the deal, it was likely upwards of \$200 million.
- **Aerosmith** (ahead of the band's 50th anniversary, the band sold their back catalog to Universal Music) undisclosed sum.
- **Taylor Swift** (in a very public battle between the world's biggest pop star and label executive Scooter Braun, Taylor Swift's original masters were sold to Big Machine Label Group), US\$350 million. Swift's catalog alone was later sold to Shamrock Holdings, a private equity firm, for \$300 million. In a revenge plan of sorts, Swift is still re-recording songs that she lost the rights to in the deal, including "Love Story," to regain control over her life's work.

There are still some big artist holdouts, including Pink Floyd, who is rumored to be on the verge of selling its catalog for US\$500 million.

Satellite Radio Broadcasting

In February 2019, Sirius XM acquired Pandora Media, a merger that was predominantly driven by advertising revenue. But even with its attempt to diversify away from the auto business, satellite radio and radio broadcasting in general is tied inexorably to vehicle



sales and car vehicle usage. Coming off pandemic peak sales, auto vehicle purchases have cooled recently. Sirius XM relies heavily on converting promotional subscriptions tied to new auto sales. But as the sole operator in satellite radio, it holds significant pricing power, and it has a predictable cost structure, tied to satellite transmission costs.

Based on the company's 2022 results, just 20% of Sirius XM's revenue came from advertising – and nearly all of it is from Pandora Media. So, while there is some possible revenue downside for Pandora if a recession were to arise, the 77% of sales Sirius XM derives from subscriptions is far stickier. Despite a challenging year for the U.S. economy, self-pay subscribers for Sirius XM hit an all-time high of 32.4 million in 2022. In short, with less advertising exposure, Sirius XM is probably better positioned than its radio broadcasting peers, such as Audacy, Cumulus, and iHeart Media, to weather a possible economic downturn.



Music Equipment and Technology

Technology has revolutionized the music industry by enabling musicians to record, write, and produce high-quality content. Digital technology has changed the music industry and music creation has never been easier or better quality. With the rapid development of high-speed transfer and the internet, music is now more accessible and collaborative than ever before. And platforms like SoundCloud, YouTube, TikTok and other file-sharing sites have also made self-promotion for artists much easier.

When it comes to creating music, digital software has also had a significant impact, revolutionizing the music industry for producers and musicians alike. The music industry has also significantly benefited from the widespread use of virtual studio technologies, which can be used to add software synthesizers and effects units to digital audio workstations.

Independent record labels and other smaller music organizations have benefited from the digital music revolution, as it has helped level the playing field. Musicians can now record at a minimal cost and distribution methods, formerly controlled by the music business, can be circumvented by artists and small labels using digital distribution platforms like Apple Music and Spotify. Musicians no longer have to spend money on public relations and/or marketing campaigns and can communicate directly with their fans through social media and video streaming platforms. The digital age has opened the music industry to a broader range of artists and experts, benefiting everyone involved.

Artificial intelligence (AI) applications used to enhance human creativity are also transforming the production of musical content. Music generators can use machine learning algorithms to analyze music data to produce music in different musical genres, including jazz, rock, hip-hop, and electronic dance music. AI music generators are a versatile tool for music producers and artists, who can use them to create new and unique musical styles not possible using traditional music production methods.

Examples of publicly traded music equipment and technology stocks include Dolby Labs, Sonos, Voxx International, Roland, Bank & Olufsen, Yamaha, and Avid Technology.

The Growth Potential of the Global Music Market

The global music market is expected to grow by US\$50.46 billion from 2022–2026, accelerating at CAGR of 11.8%. The year 2022 marked a strong rebound for global music revenues, up 24% YOY driven by the recovery of live events (+85%) and healthy growth in streaming.²⁷

Global Paid Streaming Penetration Is Expected to Double in 2030 from Current Levels

In a January 2023 report, J.P. Morgan declared they believed that music represents “the best content story in the history of media.”²⁸

Music represents “the best content story in the history of media.” – J.P. Morgan

²⁷ Source: ReportLinker/Goldman Sachs

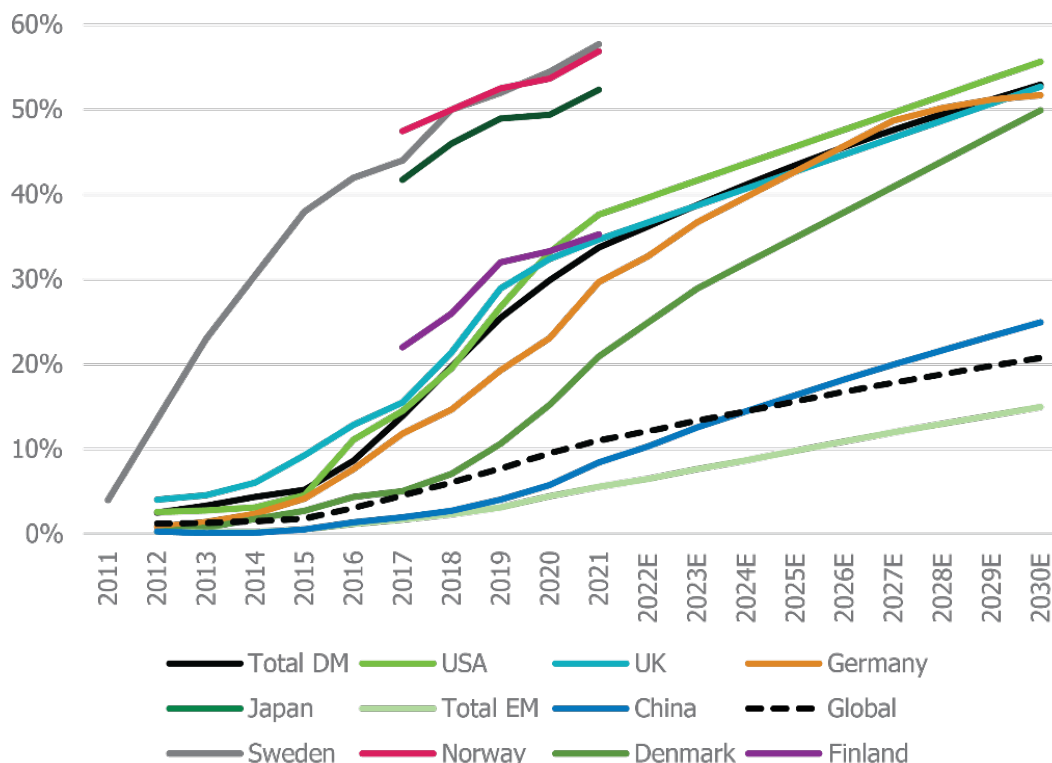
²⁸ J.P. Morgan Report, January 18, 2023.

Given that streaming and subscriptions give users access to practically every song that has ever been written, there is a strong chance we will see a decade of double-digit growth driven by increased subscriber penetration and ongoing price increases to a captive audience accustomed to unlimited access. We are also likely to see better forms of monetization in developed markets as well as first-time monetization in emerging markets, and licensing income from new applications such as health, fitness, and social media.

Global Recorded Music Market to Grow 7-8% in 2023, and at 9% CAGR from 2023-2030

How does global music continue to grow at a double-digit rate?

1. Global Paid Streaming Penetration Is Expected to Double in 2030 from Current Levels



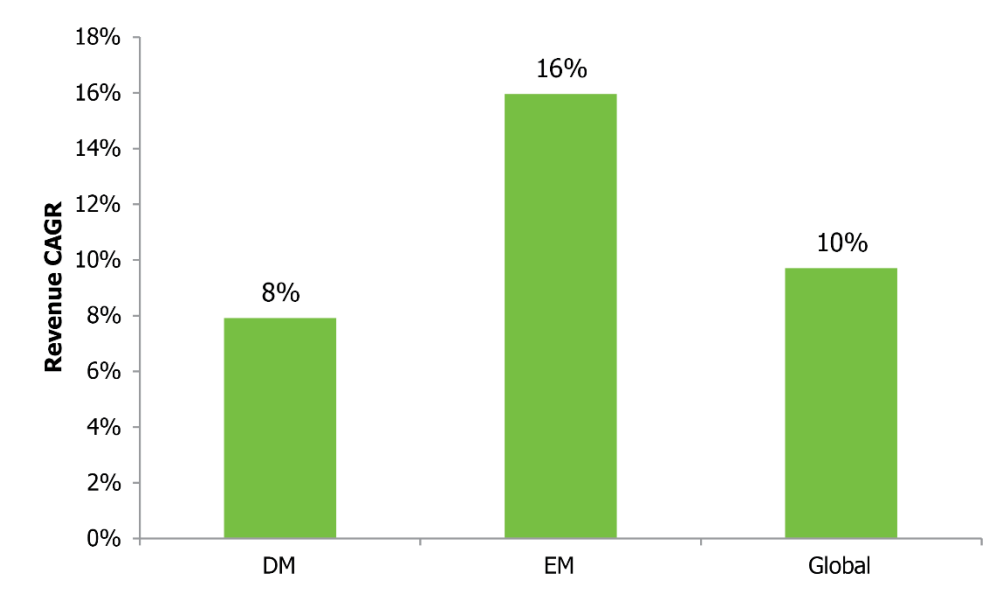
Source: IFPI Global Music Report 2022, Goldman Sachs Global Investment Research

Given that streaming and subscriptions give users access to practically every song that has ever been written, there is a strong chance we will see a decade of double-digit growth driven by increased subscriber penetration and ongoing price increases to a

captive audience accustomed to unlimited access. Streaming shows no sign of saturation and pricing growth has led to a stabilization of global streaming ARPU, the average revenue per user, based on annual average price increases of 2-3% over the next few years.

We are also likely to see better forms of monetization in developed markets as well as first-time monetization in Emerging Markets. Developed Market paid streaming penetration is expected to rise to 53% in 2030 and Emerging Market penetration is expected to increase to 14% by 2030. Paid streaming revenue is expected to grow at a 10% CAGR globally, with 16% growth in Emerging Markets and 8% growth in Developed Markets.

Paid streaming revenue to grow at 10% CAGR across 2022-30E, with 16% in EM and 8% in DM



Source: IFPF Global Music Report 2022, Goldman Sachs Global Investment Research

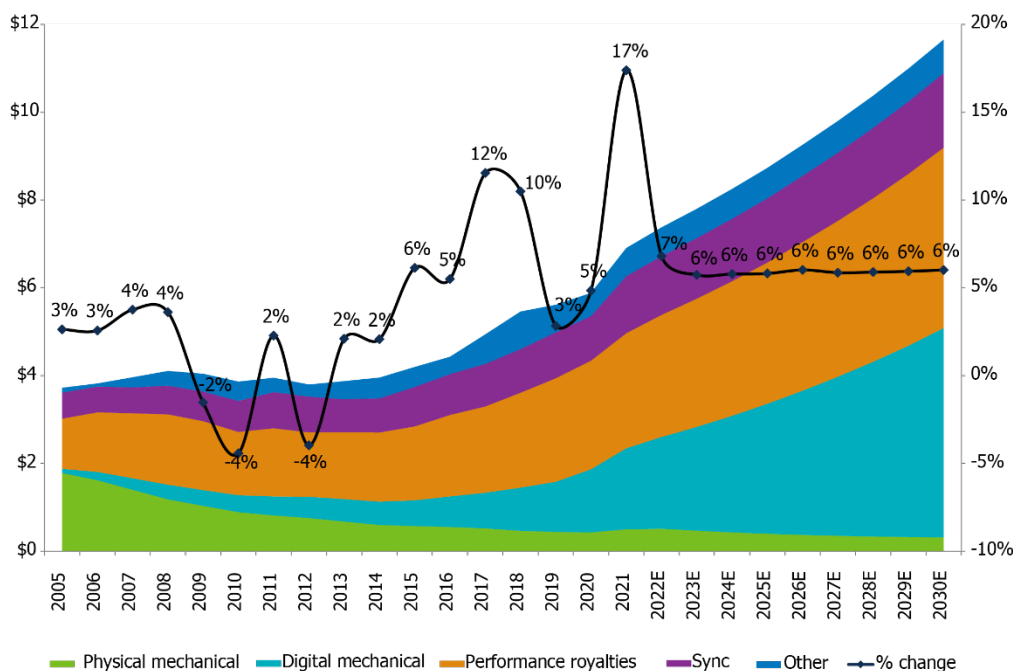
Globally, ad-funded streaming is also expected to increase substantially, increasing by 32% in 2030.

2. Music Publishing Expected to Grow at a 6% CAGR to reach \$11.7 Billion by 2030²⁹

Music publishing experienced strong growth in 2021 and 2022. As streaming services increase prices, royalties to artists are expected to increase as well. The Copyright Royalty Board recently approved new rates that will see songwriters get paid more streaming royalty rates in the U.S. over the next five years.³⁰

- In 2023 (starting January 1), songwriters and music publishers will be paid a headline rate of 15.1% of a U.S. service's revenue.
- In 2024, this will increase to 15.2%.
- In 2025, it will increase to 15.25%.
- In 2026 it will increase to 15.3%.
- In 2027 it will reach 15.35%.

Global Music Publishing Market Revenues (US\$bn) and % Growth



Source: Music & Copyright, OMDIA, Company data, Goldman Sachs Global Investment Research

²⁹ Yang, Lisa, et al. "Music in the Air." Goldman Sachs Equity Research, June 13, 2022.

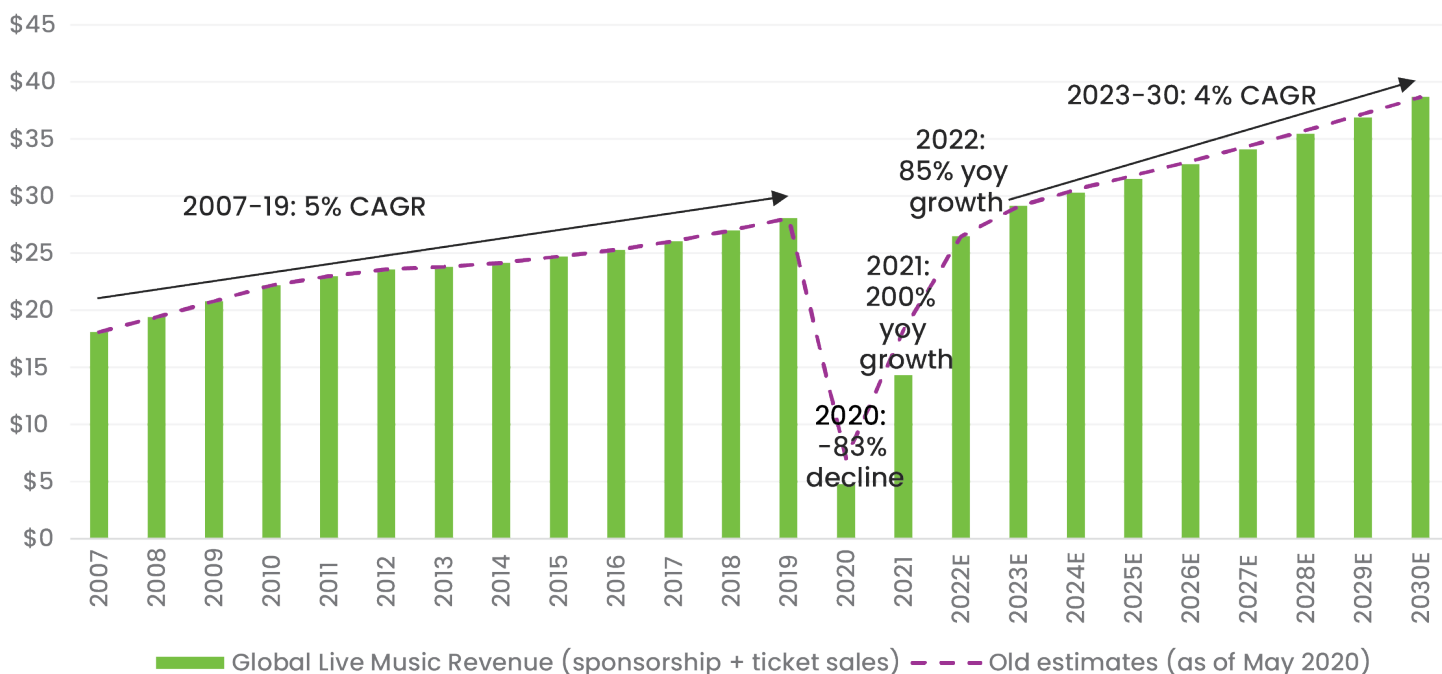
³⁰ Ingham, Tim. "Copyright Royalty Board Officially Accepts New Rates That Will See Songwriters Paid More in the US Over the Next Five Years," Music Business Worldwide, December 30, 2022, <https://www.musicbusinessworldwide.com/crb-officially-accepts-settlement-that-will-see-songwriters-paid-more-in-the-us-over-the-next-5-years/>

3. Live Music Recovery and Long-Term Growth³¹

Global live music rebounded 85% YOY in 2022, and that rebound is expected to continue with players such as Live Nation and CTS Eventim experiencing growth in excess of 2019 pre-pandemic levels. Live music should continue to experience steady growth into 2030, and it is a segment that is typically economically resilient, even in times of recession.

Live Music Revenue to Surpass Pre-Pandemic Levels

Global Live Music Market (US\$bn)



Source: PWC, Goldman Sachs Global Investment Research

While Goldman Sachs projects only a CAGR of 4% for the Global Live Music Market, according to Allied Market Research, the Music Event Market is expected to reach \$481.4 billion globally by 2031, at a CAGR of 9.7%. By their estimates, the rise in music tourism activities across the globe, the increase in popularity of musicians and artists worldwide, and a surge in the numbers of international fans is expected to drive the growth of the global music events market.

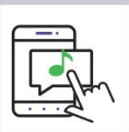
³¹ Yang, Lisa, et al, "Music in the Air," Goldman Sachs Equity Research, June 13, 2022.

MUSQIX: Provides Exposure to Every Aspect of the Music Industry

The MUSQIX Index is a convenient way for investors to get exposure to the entire music industry ecosystem, investing in companies on a global scale. These include companies in the U.S., and companies in the rest of the world, including Europe, Japan, China, and Korea.

The investments listed within the MUSQIX Index are global public companies traded on a major exchange deriving at least 50% of revenues or \$1 billion USD in annual sales from the global music industry, including the following categories:

Music Categories



STREAMING PLATFORM

Spotify, Apple, Amazon, Tencent Music, Kakao Melon, YouTube



CONTENT DISTRIBUTION

Universal Music Group, Warner Music Group, Sony, Hipgnosis, Believe, HYBE



LIVE MUSIC TICKETING

Live Nation, Madison Square Garden, CTSEventim, Amuse, Cube Entertainment



SATELLITE BROADCAST RADIO

Sirius XM, iHeart, Cumulus Media



EQUIPMENT TECHNOLOGY

Sonos, Yamaha, Roland

The MUSQIX Index Approach

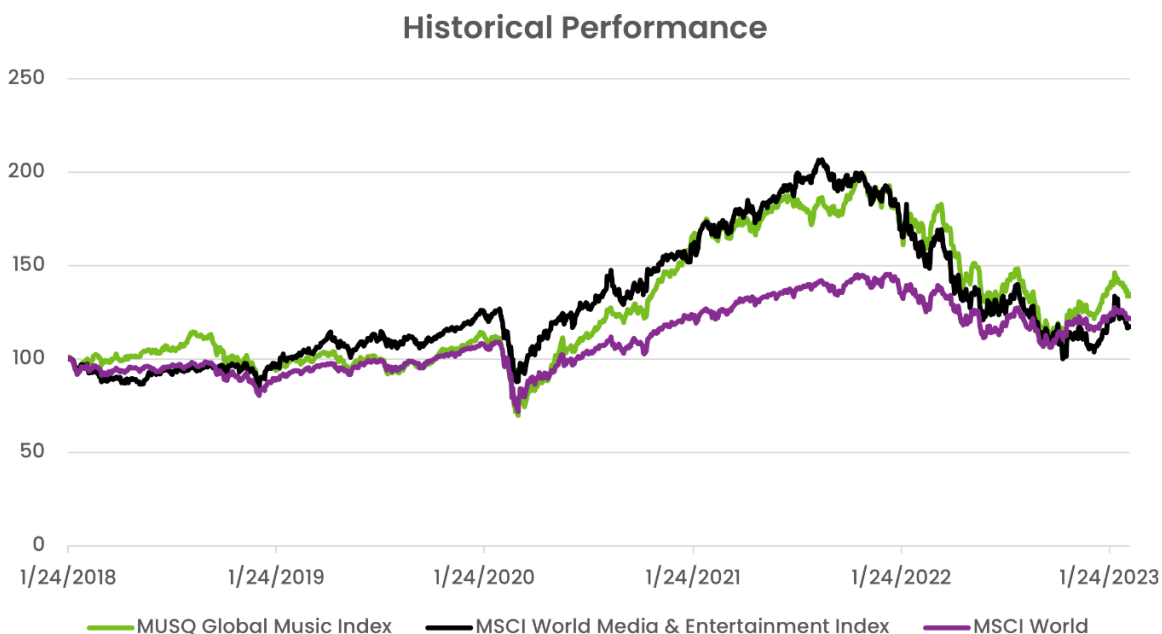
The MUSQIX Index starts with a universe of global public companies, music closed end funds, and music royalty trusts, that are traded on a major exchange. Companies must derive at least 50% of their revenues or US\$1 billion in annual sales from the global music industry, including music streaming, music content/distribution, live music/events, satellite & broadcasting radio, and music equipment and technology.

The Index rules require:

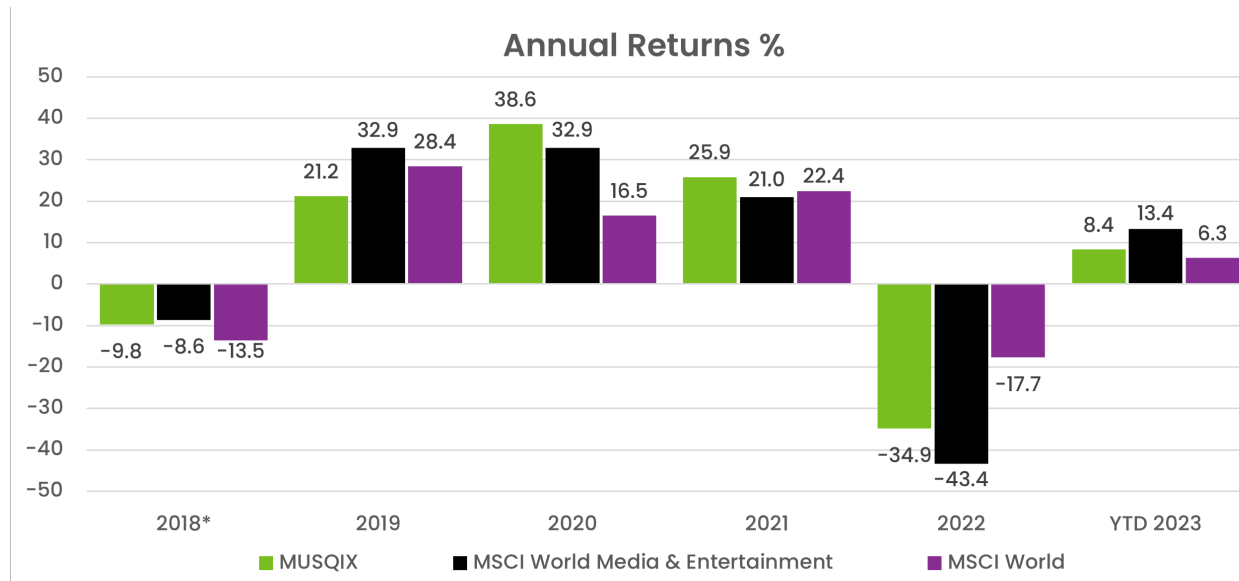
- Minimum market capitalization of at least US\$100 million.
- Minimum 6-month average daily traded value (ADTV) of at least US\$200,000.
- Companies above US\$500,000 ADTV over the last 6 months are market capitalization weighted up to a 7% maximum and 20 bps minimum position size, with companies between US\$200,000 and US\$500,000 receiving a half market capitalization weight.
- The Index is rebalanced quarterly, with fast-tracking of initial public offerings (IPOs) and special purpose acquisition companies (SPACs) intra-rebalance, assuming the company meets all other rules criteria.

The MUSQIX Index Performance Results

In its backtested performance period from 1/24/18 to 2/28/23, the MUSQIX Index outpaced the MSCI World Media & Entertainment Index and MSCI World Index through 2/28/23 (source EQM Indexes).

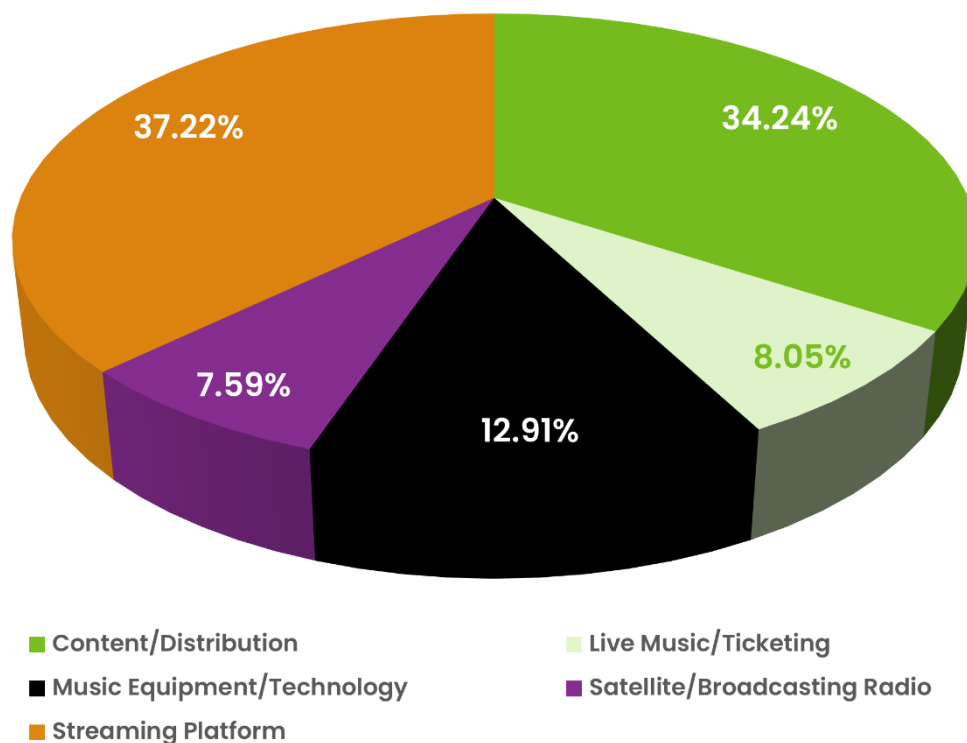


Source: EQM Indexes



Source: EQM Indexes

The music segment weights as of 2/28/23 were as follows:



Source: EQM Indexes

Summary of the Global Music Industry as an Investment Opportunity

The music industry is entering a new golden age with technology disrupting how listeners consume music, from concerts in virtual reality to unfettered access enabling consumers to hear any song at any time. As a result, analysts predict that the value of music royalties, licenses, and other related assets will likely rise with increased competition. This trend may present significant opportunities for artists, music labels, listeners, and investors alike.³²

Looking at the competitive ETF landscape, despite its compelling growth characteristics, there are currently no index products that offer pure-play thematic exposure to the global music industry.

³² Moreano, Giovanni. *How to invest in the music industry*, Bankrate.com.

Conclusion

The demand for music remains universal. Throughout history, humans have had a deep and enduring connection to the music they make, record, and experience. The global music industry, despite faltering at times with digital disruption threats, continues to boom.

Subscriptions to music streaming platforms are increasing at an exponential rate. Artists who are most likely to be successful over the several next decades are those who can provide their fans with a variety of ways to engage with their music, via access to recordings – whether digital or physical, live in-person and/or streaming events – and possible marketing collaborations with popular celebrities and brands.

Key Takeaways

- As recording formats, music genres, and audiences have continued to change over time, the global music industry has and will evolve to meet the needs of consumers. There will continue to be demand for ways to access music (streaming, recorded music, and live events), and create it.
- New technologies, from radio and television in the early-mid 1900s to the internet in the 1990s, and now social media and streaming platforms, have increased the availability of music, while providing artists new ways to connect and engage their audiences.
- Goldman Sachs predicts revenue in the global music industry will grow at compound annual rate (CAGR) of 12% to \$53.2 billion by 2030.³³
- The MUSQIX Index is the only investment vehicle providing investors pure-play access to every aspect of the growing global music industry theme.

³³ Yang, Lisa, et al, Music in the Air, Goldman Sachs Equity Research, June 13, 2022.

ABOUT US

EQM INDEXES LLC

EQM Indexes LLC is a woman-owned firm dedicated to creating and supporting innovative indexes that track growth industries and emerging investment themes. Co-founded by Jane Edmondson, a former Institutional Portfolio Manager with more than 30 years in the investment industry, our index design expertise spans a wide range of asset classes and financial instruments.

We partner with issuers and work jointly with other index firms to provide benchmarks for Exchange Traded Products (ETPs) such as Exchange Traded Funds (ETFs), Exchange Traded Notes (ETNs), and other similar products. EQM Indexes LLC also assists firms on a fee basis to design and implement their index ideas.

EQM Indexes does not offer investment advice, nor offer the sale of securities.

ABOUT US

MUSQ LLC

David Schulhof is the Founder & CEO of MUSQ LLC. He is an experienced music investor and operator with 25 years of investing and operating public and private companies in the music and entertainment industry. He has previously served in the following company roles:

- President, Music Publishing at LiveOne (LVO), a public global digital media company for live stream and on-demand audio, video, and podcast content.
- President, Music at AGC Film Studios
- President, Music at IM Global Film Studios
- Co-Founder/CEO Evergreen Copyright Acquisitions, which pursued a global acquisition strategy of music publishing acquisitions and was sold to KKR / BMG Rights Management.
- He has served as a Sponsor and Board Member in two successful SPAC transactions.
- Board Member MI Acquisitions, which acquired Priority Technology Holdings (PRTH).
- Board Member Andina Acquisition Corp III, which acquired Stryve Foods (SNAX).

David has a B.A. from Georgetown University and a J.D. from the New York University School of Law. He is also a Member of the New York State Bar.

IMPORTANT DISCLOSURES

EQM Indexes, LLC (“EQM Indexes”) is a woman-owned firm dedicated to creating and supporting indexes that track growth industries and emerging investment themes. Co-founded by Jane Edmondson, a former Institutional Portfolio Manager with more than 30 years of investment industry experience, EQM Indexes’ index designs span a wide range of asset classes and financial instruments. EQM Indexes does not provide investment advice, nor offer the sale of securities, but does partner and receive compensation in connection with licensing its indices to third parties to serve as benchmarks for Exchange Traded Products (“ETPs”) such as Exchange Traded Funds (“ETFs”), Exchange Traded Notes (“ETNs”), and other similar products. All information provided by EQM Indexes is impersonal and not tailored to the needs of any person, entity, or group of persons.

The MUSQ Global Music Industry Index (MUSQIX) is an index owned by MUSQ LLC, administered by EQM Indexes, and calculated and published by Refinitiv/LSEG. The index seeks to provide exposure to global companies with a core business interest in the global music industry, including music streaming, music content and distribution, live music events and ticketing, satellite and broadcast radio, and music equipment and technology.

DEFINITIONS³⁴

Compound Annual Growth Rate (CAGR) – The compound annual growth rate (CAGR) is the annualized average rate of revenue growth between two given years, assuming growth takes place at an exponentially compounded rate.

Music Royalty Fund – Operates as an investment company and offers investors exposure to songs and associated musical intellectual property rights. The funds typically own a diversified portfolio of music catalogue royalty rights.

Streaming Music – Streaming music, or more accurately, streaming audio, is a method of feeding audio content to your device directly, without requiring you to download files from the internet. Music services such as Spotify, Pandora, and Apple Music use this method to deliver songs you can enjoy on all types of devices.

Satellite Radio – a broadcasting-satellite service that is defined by the International Telecommunication Union (ITU)'s ITU Radio Regulations (RR). The satellite's signals are broadcast nationwide, across a much wider geographical area than terrestrial radio stations, and the service is primarily intended for the occupants of motor vehicles. It is available by subscription, mostly commercial free, and offers subscribers more stations and a wider variety of programming options than terrestrial radio.

Synchronization License – Sync (or synchronization) is a process where songs are combined with moving images – film, television series, advertisements, video games, trailers, etc. A synchronization license is a license granting permission to synchronize a song with moving images on a screen – generally in television, film, or advertisements. Sync licenses are required from both the recording owner and the composition owner when a song is used, and they are most often paid as a one-time up-front fee.

³⁴ Investopedia, Bloomberg, Livewire, Wikipedia, Anara Publishing.