

## Music in the Air

### Music still sounds good in a macro downturn; raising global industry forecasts

We raise our global music industry revenue forecasts following the publication of the 2021 recorded music market figures from IFPI to reflect a more positive view on pricing and revenue from emerging platforms that more than offsets the near-term potential impact of the weaker macro environment. In this report, we also address the most recent commonly asked questions: (i) has music streaming penetration peaked? (ii) how is music spend affected by a macro downturn? (iii) how to size the monetisation opportunity from emerging platforms? and (iv) what is the outlook for catalogue spend?

#### Key highlights:

- **We raise our 2022/2023 global music forecasts by 7%/5% respectively, and 2030 forecasts by 10%**, mainly driven by higher streaming ARPU, revenues from emerging platforms and physical sales. We forecast **+24%/+8% growth in 2022/23**, which is 3ppt lower than previously owing to the impact of a weaker macro and Russia, while our forecast 2022-30 CAGR is unchanged at +9%.
- For streaming, we forecast **+12% CAGR 2021-30** (vs. +11% prior), **driven by volume, price and emerging platforms**. We believe music streaming will be resilient in an economic downturn (and more so than SVOD).
- The **digital distribution landscape remains competitive with 'no winner takes all' characteristics**. Spotify is the clear leader but continues to lose share, with YouTube Music and Tencent Music the major share gainers.
- The **3 major record companies took share in 2021** reinforcing our view that scale is ever more important in a digital world, although modest dilution can be expected in the future given the rise of the long tail of artists and the revenue mix shift towards EM.
- We expect **catalogue acquisition spend to slow down** in a rising rate environment, and believe that the majors have a significant competitive advantage in monetising their catalogues, as highlighted by the recent example of Queen.

**Lisa Yang**  
+44 20 7552-3713  
lisa.yang@gs.com  
Goldman Sachs International

**Eric Sheridan**  
+1 917 343-8683  
eric.sheridan@gs.com  
Goldman Sachs & Co. LLC

**Rod Hall, CFA**  
+1 415 249-7437  
rod.hall@gs.com  
Goldman Sachs & Co. LLC

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**The Goldman Sachs Group, Inc.**

*Full list of authors inside*

## Contributing Authors



### **Lisa Yang**

+44 20 7552-3713

[lisa.yang@gs.com](mailto:lisa.yang@gs.com)

Goldman Sachs International

### **Eric Sheridan**

+1 917 343-8683

[eric.sheridan@gs.com](mailto:eric.sheridan@gs.com)

Goldman Sachs & Co. LLC

### **Rod Hall, CFA**

+1 415 249-7437

[rod.hall@gs.com](mailto:rod.hall@gs.com)

Goldman Sachs & Co. LLC

### **Stephen Laszczyk**

+1 212 357-9225

[stephen.laszczyk@gs.com](mailto:stephen.laszczyk@gs.com)

Goldman Sachs & Co. LLC

### **Ronald Keung, CFA**

+852 2978-0856

[ronald.keung@gs.com](mailto:ronald.keung@gs.com)

Goldman Sachs (Asia) L.L.C.

### **Lincoln Kong, CFA**

+852 2978-6603

[lincoln.kong@gs.com](mailto:lincoln.kong@gs.com)

Goldman Sachs (Asia) L.L.C.

### **Brett Feldman**

+1 212 902-8156

[brett.feldman@gs.com](mailto:brett.feldman@gs.com)

Goldman Sachs & Co. LLC

### **James Tate**

+44 20 7774-3705

[james.tate@gs.com](mailto:james.tate@gs.com)

Goldman Sachs International

### **Manish Adukia, CFA**

+91 22 6616-9049

[manish.adukia@gs.com](mailto:manish.adukia@gs.com)

Goldman Sachs India SPL

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## PM Summary

We raise our global music industry revenue forecasts following the publication of the 2021 recorded music market figures from IFPI to reflect a more positive view on pricing and revenue from emerging platforms that more than offsets the near-term potential impact of increased inflation, weaker macro and the war in Ukraine. In this report, we also address the most recent commonly asked questions: **(i)** has music streaming penetration peaked?, **(ii)** how is music impacted by a weaker macro?, **(iii)** how to size the monetisation opportunity from emerging platforms? and **(iv)** what is the outlook for future catalogue spend?

**Global music forecasts raised further** - We raise our 2022/2023 global music forecasts by 7%/5% respectively, and 2030 forecasts by 10%, mainly on the back of a stronger 2021 base where revenues came 11% ahead of our expectations. Our 2022/2023 growth assumptions are 3ppt lower than previously, at +24%/+8% respectively, as we reflect the impact of the weakening macro environment and lower revenues in Russia. For **recorded music**, we raise our forecasts by 10%/8% in 2022/23, and by 16% in 2030, mainly driven by higher paid streaming ARPU and ad-funded streaming assumptions as well as lower declines in physical sales. Our **music publishing** forecasts increase by c.9% over 2022-30 on higher streaming, physical and performance revenues. We increase our **live music** forecasts by c.5% in 2022 to reflect the faster-than-expected recovery from the pandemic, while our forecasts beyond 2023 are unchanged.

**Streaming shows no sign of saturation** - We forecast 2021-2030E streaming revenue CAGR of +12% (from +11% prior), with volumes remaining the primary driver (we forecast global subscriber penetration as a % of smartphone owners to reach 20% in 2030E from 11% in 2021). We take an incrementally positive view on pricing growth, supported by the successful pricing initiatives taken in 2021 which had led to a stabilisation of global streaming ARPU (vs. -11% annual declines over 2017-2020) as well as increased differentiation amongst the major streaming services. We also introduce detailed estimates on emerging platform revenues which we expect to contribute c.160bps of growth to global recorded music revenues over 2022-2030E. In 2022/2023, we forecast +15%/+13% streaming revenue growth (from +18%/+15% previously) as we incorporate the impact of a weaker macro and lower revenues from Russia.

**Music still sound in a macro downturn** - We expect consumer spend on music to remain resilient in a higher inflation/ weaker macro environment. Our analysis shows that music remains one of the most undermonetised forms of entertainment, with spending still 40% below its historical peak, while consumption continues to grow year after year. We compare music streaming vs. SVOD streaming in terms of pricing, penetration, churn and usage, and overall believe that music streaming should perform better than SVOD in a weaker macro environment, or potential recession (not our economists' base case).

**Competition intensifies amongst major DSPs** - Spotify lost 130bps of share in 2021, although remains the clear leader with 34.4% market share globally. Amongst other

global DSPs, YouTube Premium gained a remarkable 3ppts of market share in the last 2 years (including 60bps in 2021), while Apple Music and Amazon Music were broadly stable in 2021. Meanwhile, Chinese players gained significant momentum in 2021 with Tencent Music and NetEase's market shares up 170bps/180bps respectively.

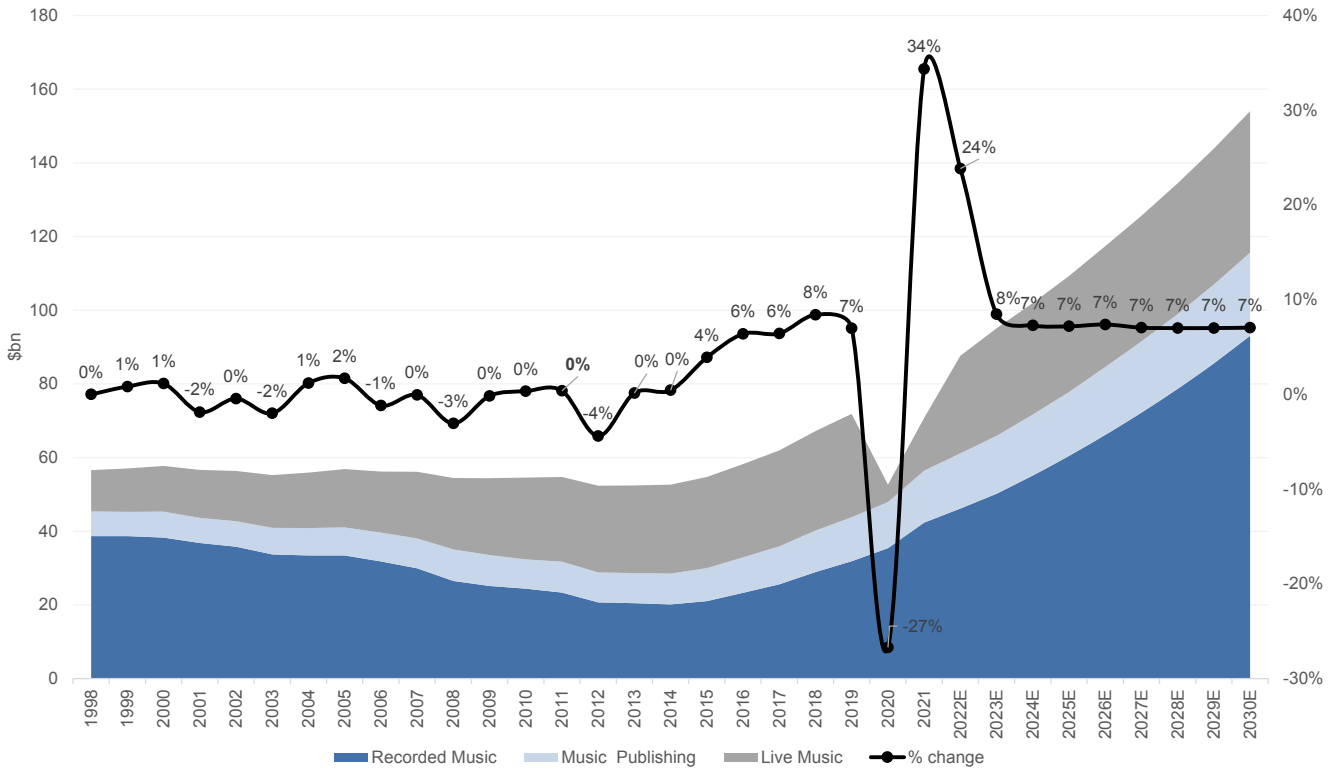
**The 3 major record companies took share in 2021** (+280bps altogether), **mainly led by Sony Music** (+210bps), reinforcing our view that scale is ever more important in a digital world. However, we expect modest dilution over time given the rise of the long tail of artists and the revenue mix shift towards EM.

**Catalogue spend in focus** - Recent surge in catalogue acquisition spend by the 3 majors has marked a major shift in the industry. Although strategic buyers such as UMG argue that expected returns are well in excess of their cost of capital, catalogue investments will likely remain a major debate until we get greater disclosure and clarity on actual returns, or until actual spend comes down. We expect **catalogue acquisition spend to slow down** in a rising rate environment, and while returns will continue to be questioned, we believe that the majors have a significant competitive advantage in sourcing and monetising their catalogues, as highlighted by the recent examples of Queen and Elton John.

# Our thesis in charts

## Exhibit 1: We expect the global music industry to continue its strong rebound in 2022 (+24% yoy), driven by the recovery of live events and healthy growth in streaming, and return to a more normalised growth rate of 7%-8% in 2023-2030

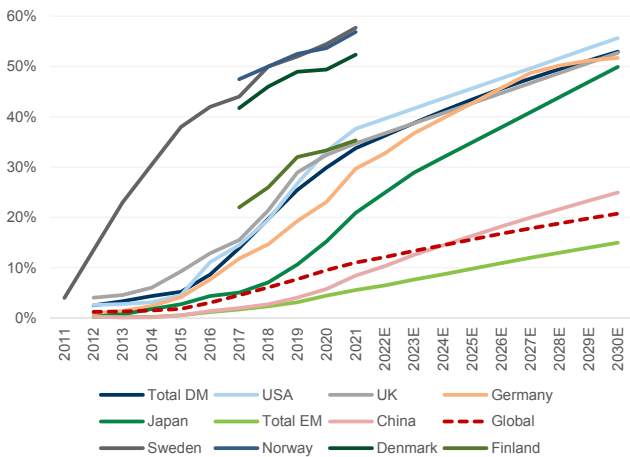
Global music market (recorded, publishing, live) breakdown (US\$bn, LHS), % growth (RHS)



Source: IFPI Global Music Report 2022, Music and Copyright, Company data, Goldman Sachs Global Investment Research

## Exhibit 2: We forecast global paid streaming penetration to rise to 20% in 2030 from 11% in 2021

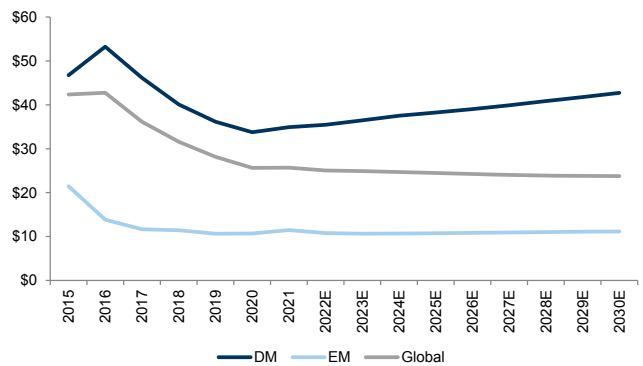
Streaming penetration by market (as % of smartphone users), 2011-30E



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

## Exhibit 3: ARPU stabilised in 2021 for the first time in 5 years; expect 1% decline pa going forward as improved pricing is offset by dilution from EM

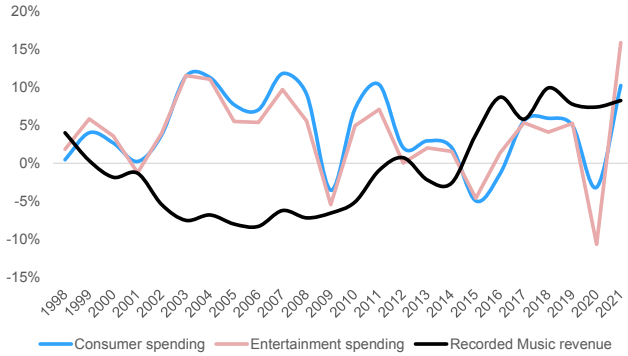
Paid streaming ARPU - Global, DM and EM



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

**Exhibit 4: Recorded music revenues have not been correlated to consumer spending historically...**

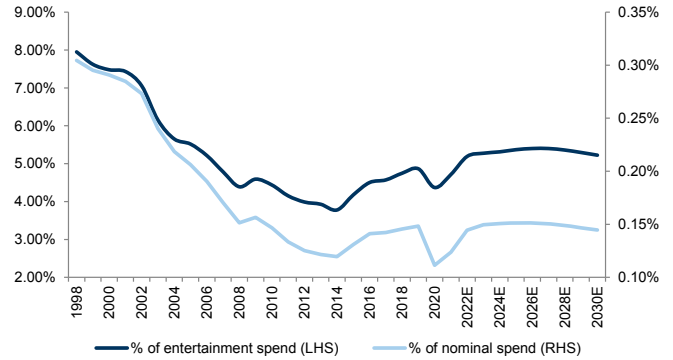
Global Recorded Music revenues, consumer spending and entertainment spending, 1998-2021



Source: Goldman Sachs Global Investment Research, Euromonitor

**Exhibit 5: ...and spend on music (as % of entertainment spend) is still 40% below historical peak**

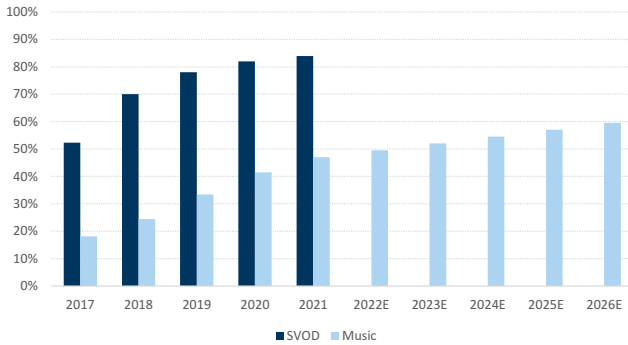
Music revenue as a % of entertainment spend (LHS) and % of nominal spend (RHS)



Source: Euromonitor, Goldman Sachs Global Investment Research

**Exhibit 6: Paid music penetration has further room to grow in DM, especially when compared to SVOD**

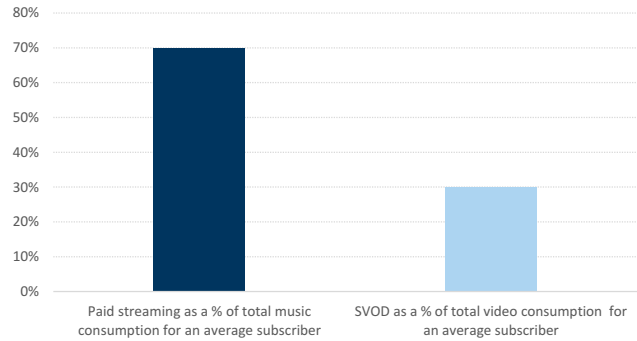
SVOD and music streaming penetration as % of addressable markets, US



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

**Exhibit 7: Paid music streaming accounts for c.70% of music listening time, compared to <30% for SVOD**

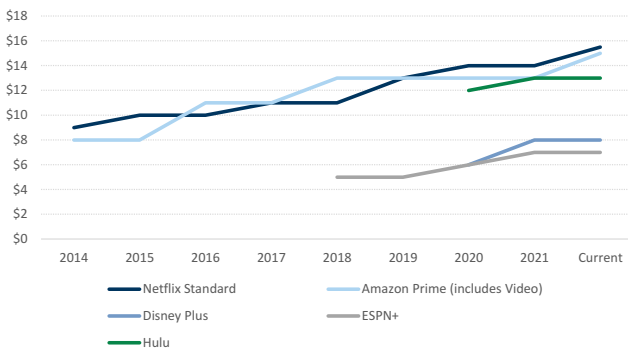
For an average subscriber, paid music/SVOD streaming as a share of total music/video consumption



Source: IFPI 'Music Consumer Study' 2021, BPI, Goldman Sachs Global Investment Research

**Exhibit 8: In the US, SVOD prices have been rising...**

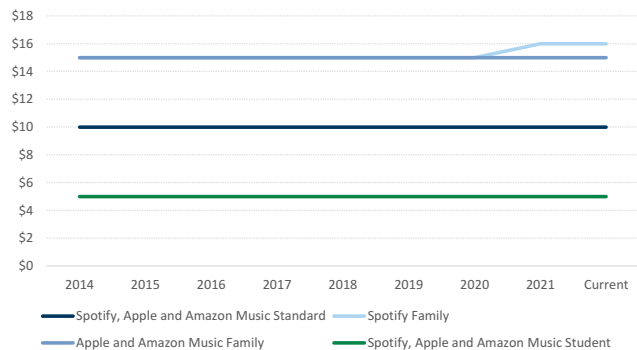
SVOD monthly subscription prices (\$), US



Source: Company data, Data compiled by Goldman Sachs Global Investment Research

**Exhibit 9: ... whilst music streaming prices have remained flat; only Spotify Family Plan was raised in 2021**

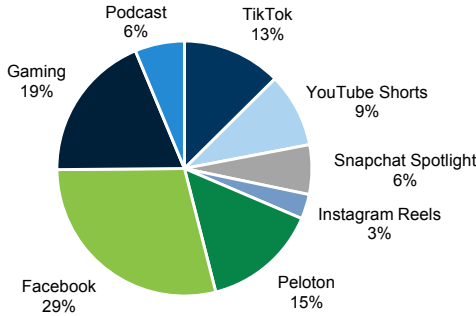
Music monthly subscription prices (\$), US



Source: Company data, Data compiled by Goldman Sachs Global Investment Research

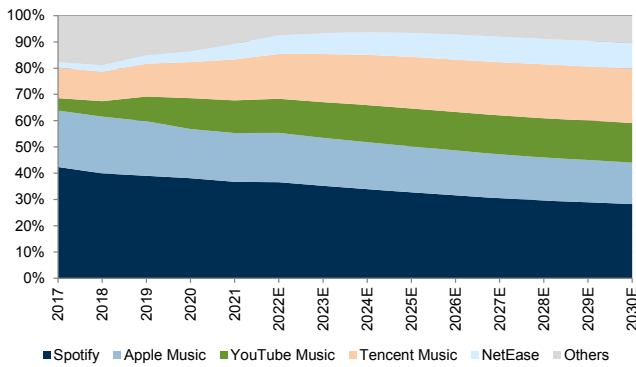
**Exhibit 10: We estimate social media/ short form video contributes c.60% of emerging platform revenue**

Estimated breakdown of music industry emerging platform revenue by company/type, 2021 (G\$e)



Source: Company data, Goldman Sachs Global Investment Research

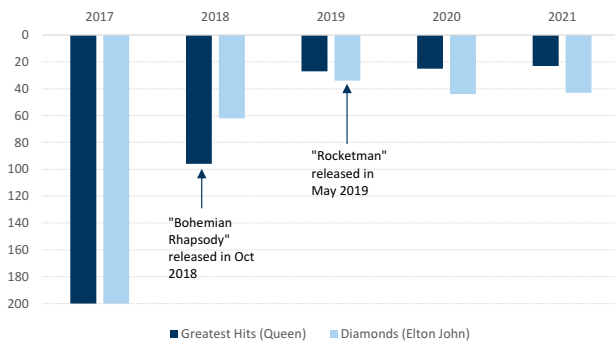
**Exhibit 12: We expect further fragmentation amongst the top DSPs**  
Streaming subscriber market share by platform, %



Source: Company data, Goldman Sachs Global Investment Research

**Exhibit 14: Queen’s “Greatest Hits” and Elton John’s “Diamonds” saw a major boost in consumption/ revenue following the release of their biopics...**

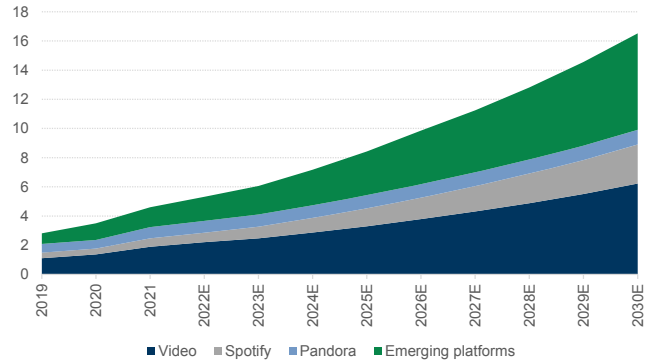
Year-end chart: Billboard Top 200 Albums



Source: Billboard, Data compiled by Goldman Sachs Global Investment Research

**Exhibit 11: We expect emerging platform revenues will represent 40% of ad-funded streaming revenues by 2030**

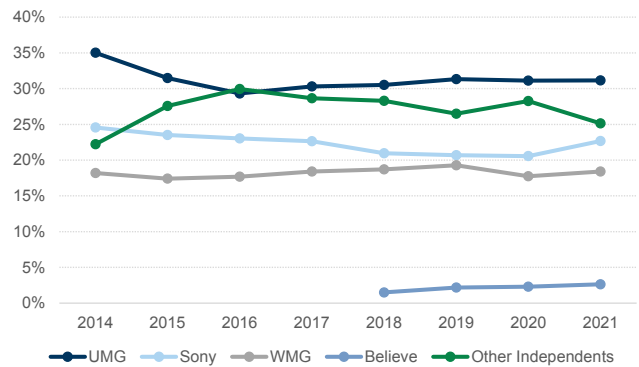
Breakdown of global ad-funded streaming by type, US\$bn



Source: Company data, Goldman Sachs Global Investment Research

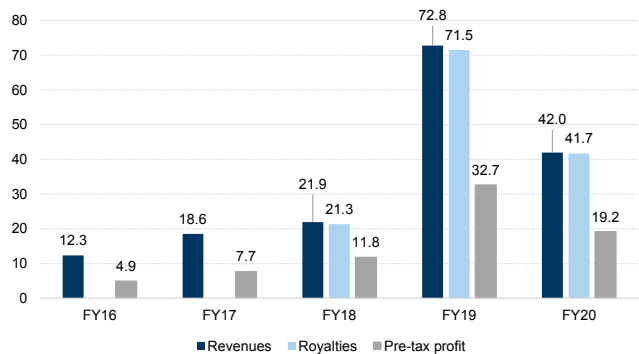
**Exhibit 13: The top 3 labels gained a combined 280bps of market share in 2021**

Global recorded music market share



Source: Company data, IFPI Global Music Report 2022

**Exhibit 15: ...with royalties more than tripling for Queen Ltd following the film release and remaining elevated the year after**  
Queen Productions Ltd revenues, royalties and pre-tax profit, £mn



Source: Company data, Goldman Sachs Global Investment Research



## Global music forecasts: reflecting continued shift to streaming and return of live music

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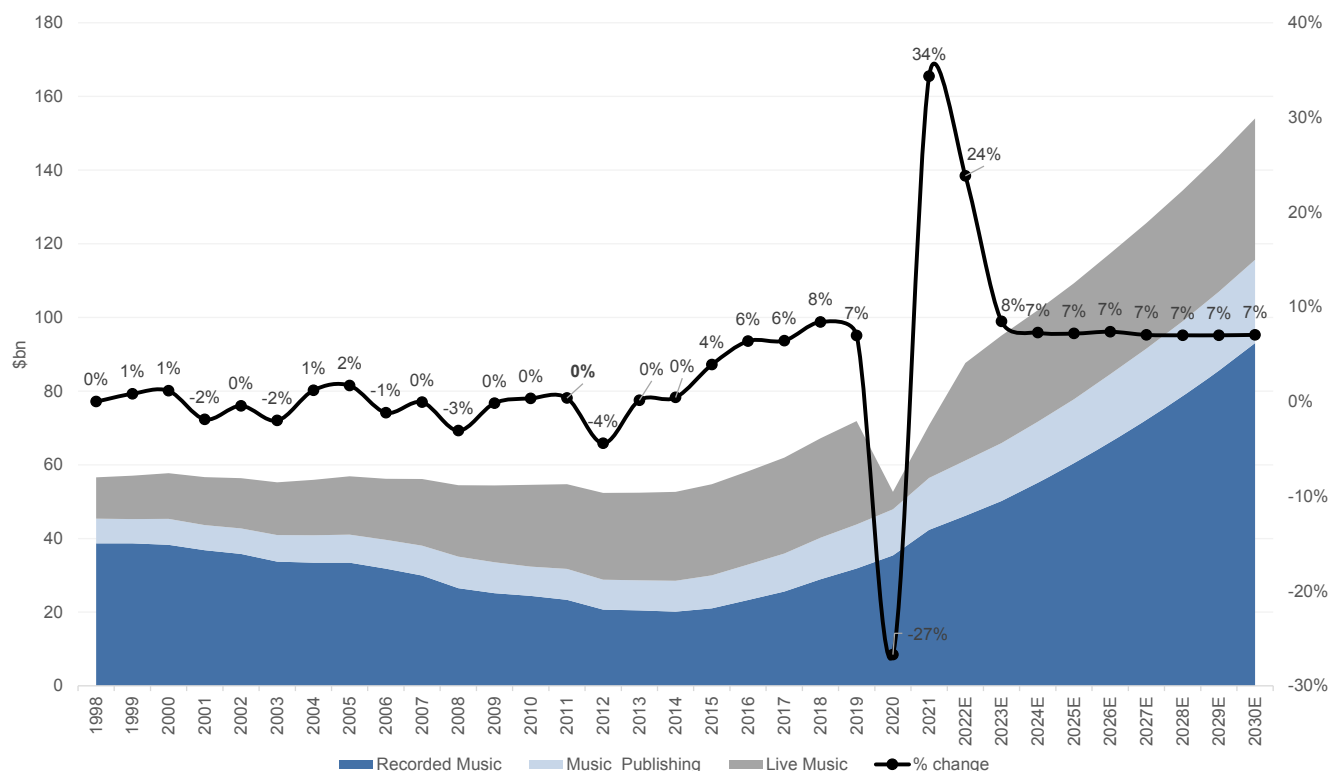
We revisit our global music industry model following the publication of the 2021 recorded music market figures from IFPI, reflecting latest trends and datapoints and incorporating the near-term potential impact of increased inflation, weaker macro and the war in Ukraine.

**The global music market (recorded, publishing and live) rebounded strongly in 2021, up 34% yoy on our estimates**, driven by a strong return of live events (+200% yoy or back to 50% of 2019 levels), the accelerated adoption of streaming (+24% yoy) and the resurgence of physical sales (+16% yoy). As a result, recorded music and music publishing both grew at the fastest rate since our records began, up 18.5%/17% yoy, respectively, beating our prior expectations by 11%/12% respectively.

**We forecast global music industry revenues to grow at +24% in 2022**, largely driven by the recovery in live music (+85% yoy or back to 94% of 2019 levels), with a return to a more normalised growth rate of **+8% in 2023** and **+7% CAGR 2023-2030E**. Relative to our prior forecasts published in April 2021, we raise our 2022/2023 global music forecasts by 7%/5%, respectively, and 2030 forecasts by 10%, mainly on the back of a stronger 2021 base where revenues came 11% ahead of our expectations. Our 2022/2023 growth assumptions are however 3ppt lower than previously, at +24%/+8% respectively, as we reflect the impact of the weakening macro environment (c.2ppt) and lower revenues in Russia (c.1ppt). For **recorded music**, we raise our forecasts by 10%/8% in 2022/23, and by 16% in 2030 on higher paid streaming ARPU and ad-funded streaming assumptions as well as lower declines in physical sales. Our **music publishing** forecasts increase by c.9% over 2022-30 on higher streaming, physical and performance revenues. We increase our **live music** forecasts by c.5% in 2022 to reflect the faster-than-expected recovery from the pandemic, while our forecasts beyond 2023 are unchanged. We discuss these forecasts in greater detail below.

**Exhibit 16: We expect the global music industry to continue its strong rebound in 2022 (+24% yoy), driven by the recovery of live events and healthy growth in streaming, and return to a more normalised growth rate of 7%-8% in 2023-2030**

Global music market (recorded, publishing, live) breakdown (US\$b, LHS), % growth (RHS)



Source: IFPI Global Music Report 2022, Music and Copyright, Company data, Goldman Sachs Global Investment Research

**Exhibit 17: We raise our global music market forecasts by 7%/5% in 2022/23 on the back of a stronger 2021 base, while our 2030 forecasts increase by 10%**

New vs. old forecasts

	2021		2022E		2023E		2030E		% change			
	New	Old	New	Old	New	Old	New	Old	2021	2022E	2023E	2030E
<b>Global Music Market (\$bn)**</b>	<b>\$70.8</b>	<b>\$64.0</b>	<b>\$87.6</b>	<b>\$81.6</b>	<b>\$94.9</b>	<b>\$90.7</b>	<b>\$153.0</b>	<b>\$139.7</b>	<b>11%</b>	<b>7%</b>	<b>5%</b>	<b>10%</b>
<b>Global Music Market (\$bn)*</b>	<b>\$47.1</b>	<b>\$42.2</b>	<b>\$61.8</b>	<b>\$57.4</b>	<b>\$66.9</b>	<b>\$64.0</b>	<b>\$103.1</b>	<b>\$95.0</b>	<b>12%</b>	<b>8%</b>	<b>5%</b>	<b>9%</b>
Recorded Music Market (\$bn)*	\$25.9	\$23.4	\$27.9	\$25.4	\$30.0	\$27.7	\$53.2	\$45.7	11%	10%	8%	16%
Music Publishing Market (\$bn)*	\$6.9	\$6.2	\$7.4	\$6.7	\$7.8	\$7.2	\$11.6	\$10.6	12%	10%	8%	9%
Live Music Market (\$bn)*	\$14.3	\$12.7	\$26.5	\$25.3	\$29.1	\$29.1	\$38.3	\$38.3	13%	5%	0%	0%
<b>Streaming</b>												
Streaming Market (\$bn)**	\$33.0	\$30.1	\$37.8	\$35.4	\$42.7	\$40.7	\$89.3	\$78.4	10%	7%	5%	14%
Paid Streaming Market (\$bn)**	\$23.2	\$21.1	\$26.5	\$24.8	\$29.8	\$28.2	\$55.6	\$52.8	10%	7%	6%	5%
Ad funded Streaming Market (\$bn)**	\$9.8	\$8.9	\$11.3	\$10.6	\$12.9	\$12.5	\$33.7	\$25.6	9%	7%	3%	32%
Paid Subscribers (mn)	523	527	586	609	664	696	1,260	1,277	-1%	-4%	-5%	-1%
Developed Market (mn)	311	313	334	340	359	367	502	456	-1%	-2%	-2%	10%
Emerging Market (mn)	212	214	252	270	304	330	758	822	-1%	-7%	-8%	-8%
Annual ARPU (\$)**	\$48.5	\$43.5	\$47.8	\$43.7	\$47.7	\$43.2	\$45.8	\$42.8	11%	9%	11%	7%

\* Net revenues (i.e. record label or publisher share; total revenues from ticket sales and sponsorship for Live Music); \*\* Gross revenues

Source: IFPI Global Music Report 2021, Music & Copyright, Company data, Goldman Sachs Global Investment Research

## Recorded Music: raising 2030 forecasts by 16% on improved pricing and increased monetisation from emerging platforms

### 2021 global recorded music figures came in 11% ahead of our expectations

IFPI released its 2022 Global Music Report earlier this year, reporting a record year of growth for the global recorded music market, up by 18.5% yoy to US\$25.9bn in 2021, which was 11% ahead of our prior expectations. The beat was mainly driven by the stronger-than-expected paid streaming ARPU (0% yoy in 2021 vs. GSe -6% prior) and ad-funded streaming (+26% yoy vs. GSe +12% prior), whilst physical sales grew for the first time in >16 years (+16% yoy vs. GSe -13% prior), helped by strong growth in vinyl sales (+58% yoy). Paid streaming users came in marginally lower than expected (523mn vs. GSe 527mn prior), implying net adds of +89mn in 2021 vs. +93mn in 2020 and +86mn in 2019. Overall, streaming revenue was up 24% yoy in 2021, which was 10% ahead of our expectations and an acceleration vs. +21% in 2020. According to IFPI, revenues from emerging platforms such as TikTok and Instagram Reels grew +41.3% yoy in 2021. We note however that both Spotify and YouTube outperformed the broader ad funded streaming revenue (+26%), with advertising revenue up 62%/46%.

Elsewhere, Performance Rights grew by 4% yoy (vs. GSe +7% prior) as the segment was still impacted by the pandemic and sync grew by 13% yoy (vs. GSe +6% prior) helped by the resumption of film/TV productions and the strong rebound in the global advertising market. Downloads & Other Digital continued its steady double-digit decline, falling 12% yoy, although this was better than our forecast of -20%.

### Raise Recorded Music market forecasts by c.12% over 2022-30

**For 2022/23, we increase our recorded music forecasts by 10%/8% to US\$27.9bn/US\$30.0bn and now expect the market to grow 8%/7% yoy respectively (vs. 9% in both years prior).** We believe the music industry will be resilient in an economic downturn, with the slight reduction in our underlying growth forecast incorporating the potential negative impact from the weaker macro and a drop in revenue from Russia. Within this, we **increase our streaming revenue (record label share) forecasts by 7%/5% to US\$19.4bn/US\$21.9bn in 2022/2023, implying a deceleration to +15%/+13% growth yoy** (vs. +16% /+15% prior). We assume some slowdown in both years compared with 2021 across both paid streaming +14%/+13% (vs. +15%/+14% prior, compared with +24% in 2021) given potentially higher churn and/or lower gross additions and ad-funded streaming at +15%/+14% (vs. +18%/+18% prior, compared with +26% in 2021).

**Our 2030 recorded music forecasts increase by 16%, implying 2021-2030E CAGR of 8%** (unchanged vs prior forecasts).

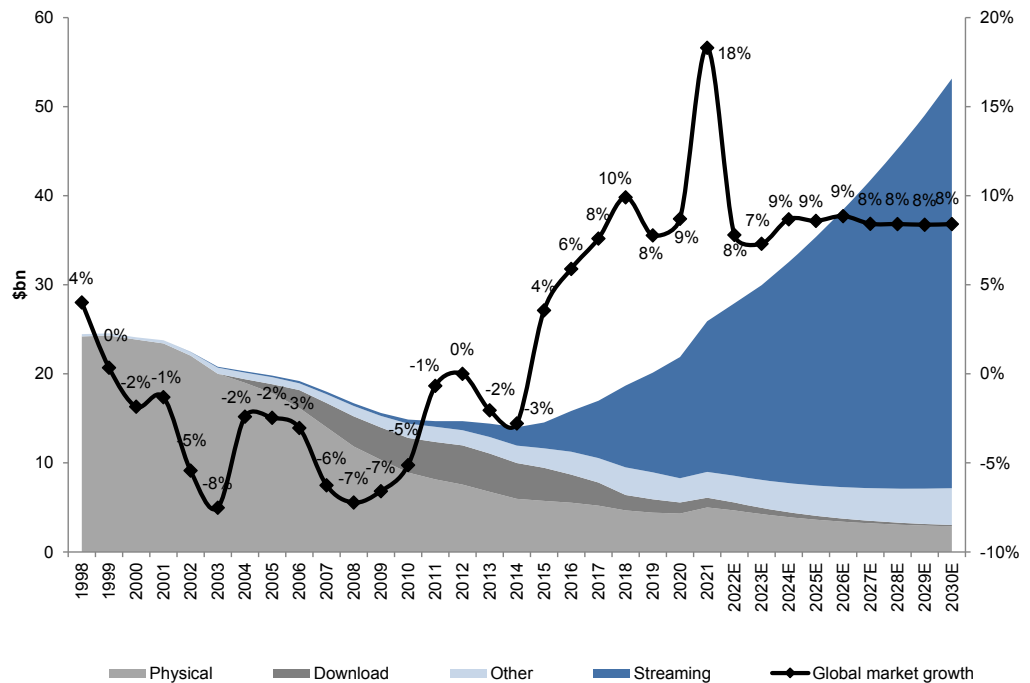
- **Paid streaming:** Our **paid subscriber forecasts are broadly unchanged** at 1.260bn in 2030 (1.277bn prior) compared to 523mn in 2021. This is based on **paid streaming penetration** (as % of smartphone population) rising to **20% in 2030** (22% prior) from 11% in 2021, with **DM penetration rising to 53% in 2030** (47% prior) from 34% in 2021, and **EM penetration rising to 14% in 2030** (17% prior) from 6% in 2021. We take an incrementally positive view on pricing growth,

supported by the successful pricing initiatives taken in 2021 which had led to a stabilisation of global streaming ARPU (vs. -11% annual declines over 2017-2020) as well as increased differentiation amongst the major streaming services. We now forecast US\$45.8 in 2030 vs. US\$42.8 previously on a gross basis, and US\$24.3 vs. US\$22.3 previously on a net basis (i.e. record label share), **based on annual average price increases of 2-3% on a like-for-like basis in the next few years.** Overall, our **paid streaming market forecasts increase by 5%** in 2030 to reach US\$55.6bn/US\$29.5bn (gross/net), implying 10% CAGR 2021-30 (vs. 11% prior).

- **Ad-funded streaming:** We raise our ad-funded streaming forecasts more substantially by 32% in 2030 to reach US\$33.7bn/US\$16.5bn (gross/net), following stronger-than-expected growth in 2021 and as we introduce detailed estimates on emerging revenue streams from platforms such as TikTok, YouTube Shorts and Instagram Reels. We expect emerging platforms to account for 40% of ad-funded revenues by 2030 (from 30% in 2021) and 12% of global recorded music revenue (from 5% in 2021), overall contributing 160bps of growth to global recorded music revenues over 2022-2030E.
- **Physical:** We turn more positive on the outlook for physical record sales given the strong outperformance in 2021 and improving mix shift towards vinyls which has now recorded 15 years of consecutive growth. We expect revenues to decline 7% yoy in 2022 (-13% prior) and raise our forecasts to mid single-digit decline from low double-digit decline per annum over the next few years.

**Exhibit 18: We forecast the global recorded music market to grow 8%/7% in 2022/2023 and at a 9% CAGR 2023-2030E, led by streaming**

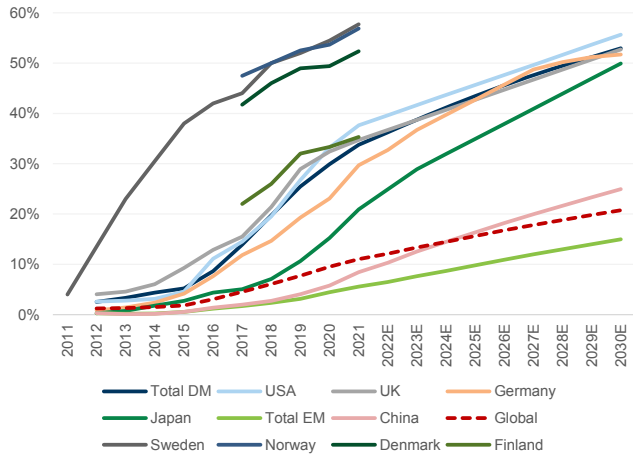
Global Recorded Music market revenues (US\$bn, LHS), % growth (RHS)



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

**Exhibit 19: We forecast global paid streaming penetration to increase to 20% in 2030 (53% in developed markets and 14% in emerging markets)**

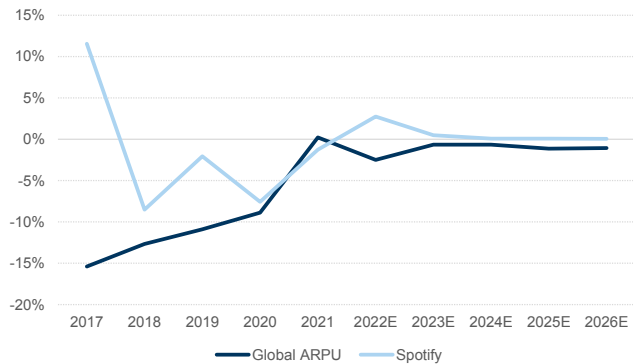
Streaming penetration by market (as % of smartphone users), 2012-30E



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

**Exhibit 21: ... which broadly tracks our Spotify Premium ARPU forecasts in the next few years**

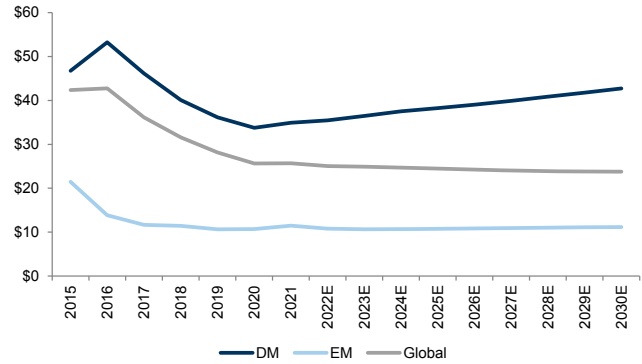
ARPU growth yoy- Spotify & Global



Source: IFPI Global Music Report 2022, Company data, Data compiled by Goldman Sachs Global Investment Research

**Exhibit 20: ARPU stabilised in 2021 for the first time in 5 years; expect 1% decline pa going forward as improved pricing is offset by the dilution from EM...**

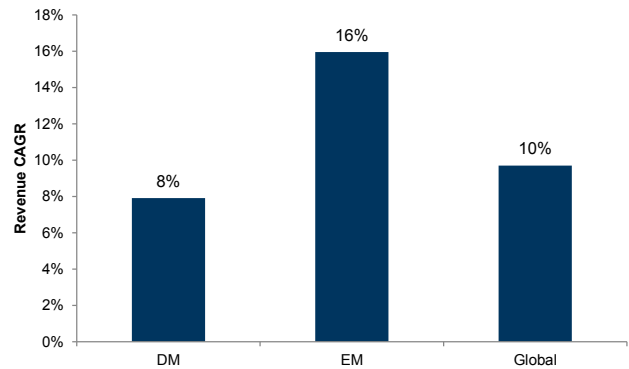
Paid streaming ARPU - Global, DM and EM



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

**Exhibit 22: We expect paid streaming revenue to grow at 10% CAGR across 2021-30E, with 16% in EM and 8% in DM...**

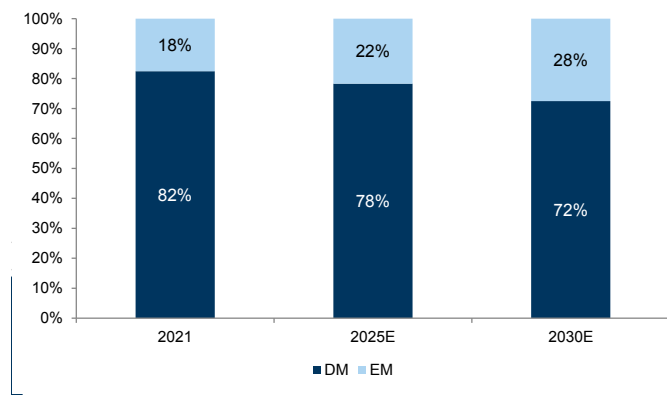
Paid streaming revenue growth by market (DM, EM and Global), 2021-30E



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

### Exhibit 23: ... with EM to account for 28% of paid streaming revenue by 2030E from 18% in 2021

Share of global paid streaming revenue - EM vs DM

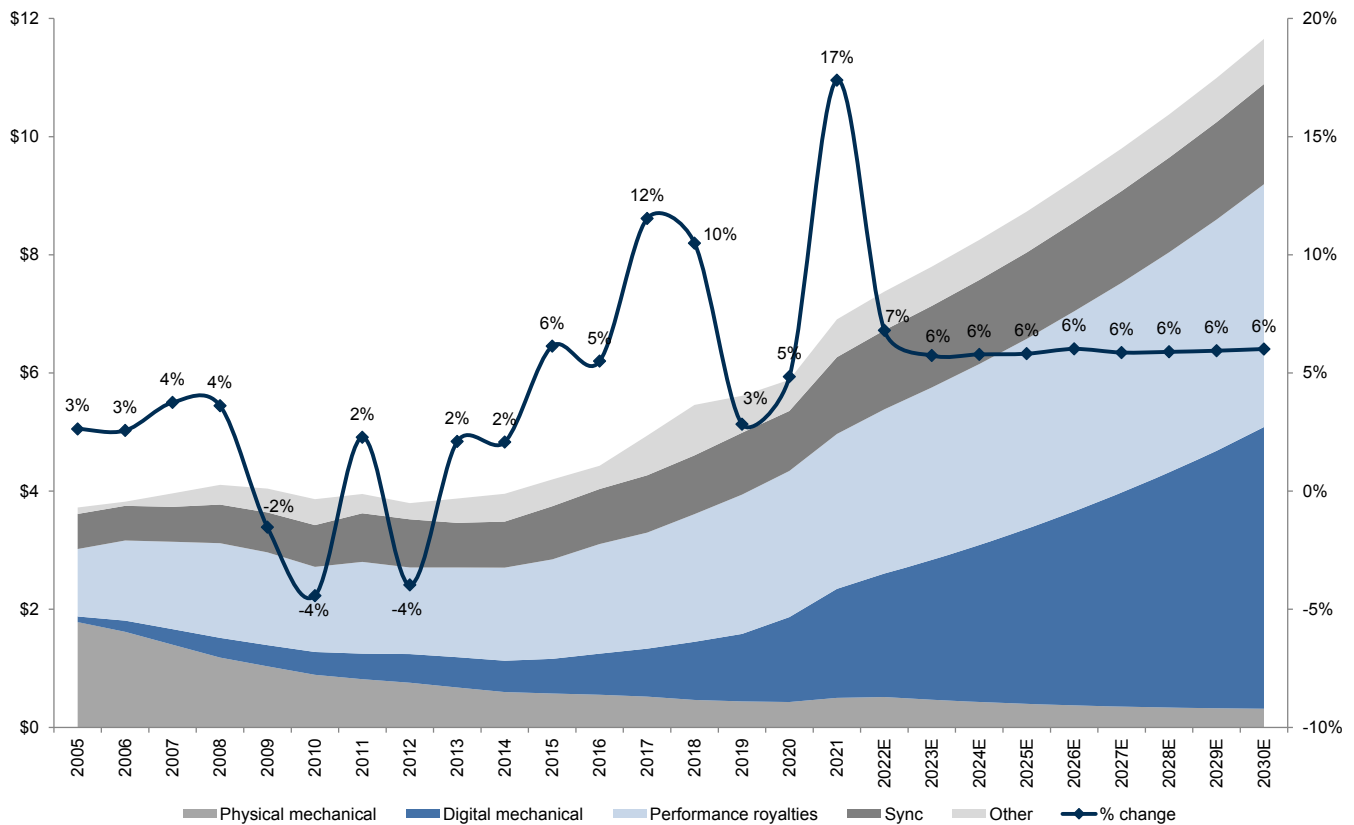


Source: IFPI Global Music Report 2022, Goldman Sachs Global Investment Research

### Music Publishing: raise forecasts by c.9% over 2022-30

Similar to Recorded Music, the Music Publishing market enjoyed a record growth of 17% yoy in 2021. We raise our forecasts by c.9% over 2022-30, implying 6% CAGR 2022-30 (unchanged) to reach US\$11.7bn in 2030. The changes made to our music publishing model broadly echo those made to our recorded music forecasts given similar growth drivers (e.g. streaming, physical sales), with publishing expected to continue to grow at a slower rate than recorded music given the differences in revenue mix (music publishing derives a greater share of its revenue from performance and sync revenue). We also factor in the **recent increase in US physical mechanical royalty rates to 12 cent per track from 9.1**, and note that there could be further upside from regulatory changes, notably the upcoming **Copyright Royalty Board ruling on mechanical streaming rates**. The CRB songwriting streaming royalty rates for 2023-27 are currently being negotiated in the US, with an agreement yet to be reached between digital music services and the NMPA. In October 2021, the NMPA, which is acting on behalf of music publishers and their songwriters, **proposed that the headline rate increases to 20% from 15.1%**, whilst several digital music services including Spotify and Amazon Music proposed that the rate reverts to the 2017 rate of 10.5%. We note that the previous CRB rulings have been positive for content owners: in 2017, the rates paid by SiriusXM to artists and labels were increased by c.40% and in 2018 the headline songwriting royalty rates for 2018-2022 were increased from 10.5% to 15.1%, although the latter decision is still being appealed by major digital music services. Any further improvement would be positive given music publishers currently receive on average a royalty rate of 12% on our estimates under their direct deals with the major DSPs.

**Exhibit 24: We estimate the Music Publishing market to grow by 7%/6% in 2022/2023 after +17% last year**  
 Global Music Publishing market revenues (US\$bn) and % growth



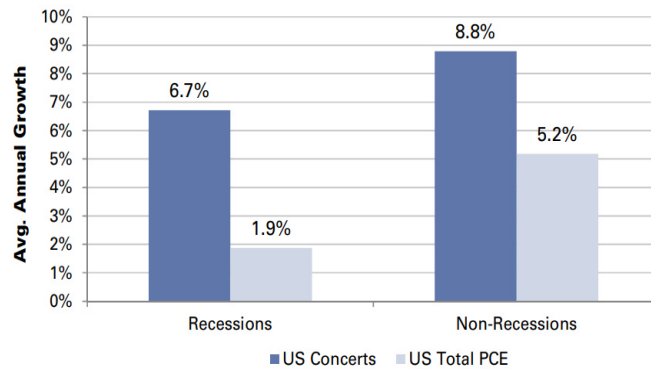
Source: Music & Copyright, OMDIA, Company data, Goldman Sachs Global Investment Research

### Live Music: faster-than-expected recovery and long-term outlook remains intact

Live music, having been one of the most resilient parts of the music industry in the past two decades, was by far the most severely impacted segment during the COVID-19 pandemic due to the cancellation of almost all live events in most geographies. The industry has rebounded quickly, with estimated revenues of US\$14.3bn in 2021 based on the trends reported by various industry players such as Live Nation and CTS Eventim, 13% ahead of our prior expectations and representing 200% yoy growth - reaching 50% of 2019 levels. In 2022, we expect the strong rebound to continue (+85% yoy) as we believe consumers will be eager to get back to concerts and festivals and now believe revenues will reach 94% of 2019 levels (vs. 90% previously). We expect Live music to remain an attractive market with a steady growth outlook (GSe +4% 2023-30 CAGR), noting that the segment has also been relatively resilient during times of recession.

**Exhibit 25: US concert spending growth outpaced PCE growth by 3.6x during recessions and by 1.7x in non-recessions**

US consumer spending growth during recessions vs. non-recessions, 2000-16



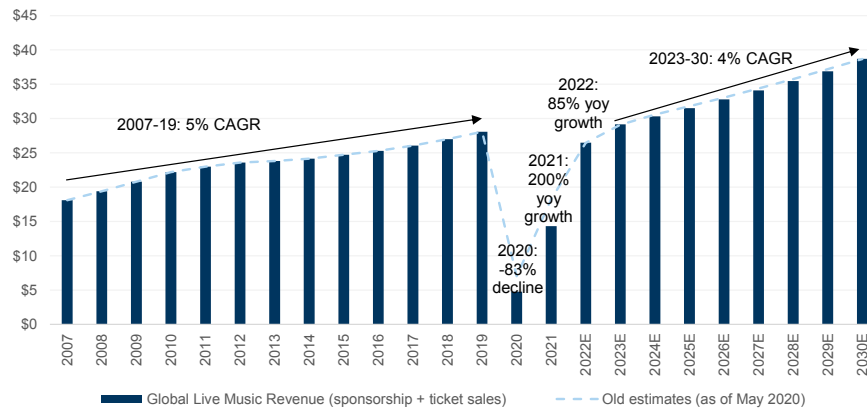
PCE: Personal Consumption Expenditure Price Index

Source: US Bureau of Economic Analysis, Goldman Sachs Global Investment Research

The major labels have a relatively low exposure to live music and mainly through their merchandising division and through live performance royalties. Similarly, we forecast UMG’s merchandising revenue (we estimate around half is related to touring) to grow strongly by 50% in 2022 following +27.4% in 2021, exceeding its 2019 levels by the end of this year. This will likely have a dilutive impact on gross margins this year, with UMG management disclosing 8-10% gross margin for touring compared to c.25% for DTC and 15-18% for retail.

**Exhibit 26: We expect live music revenues to reach close to 2019 levels in 2022**

Global Live Music market (US\$bn)

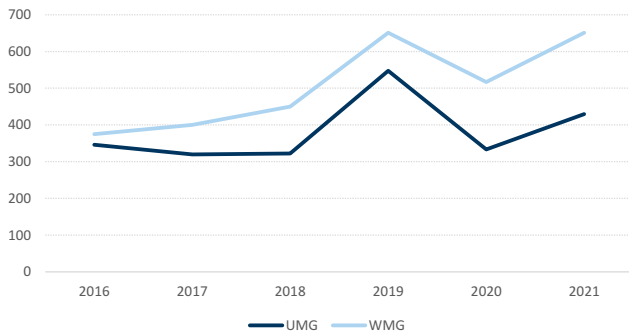


Source: PWC, Goldman Sachs Global Investment Research



**Exhibit 27: Live music-related revenue fell sharply for both UMG and WMG in 2020 before recovering strongly in 2021**

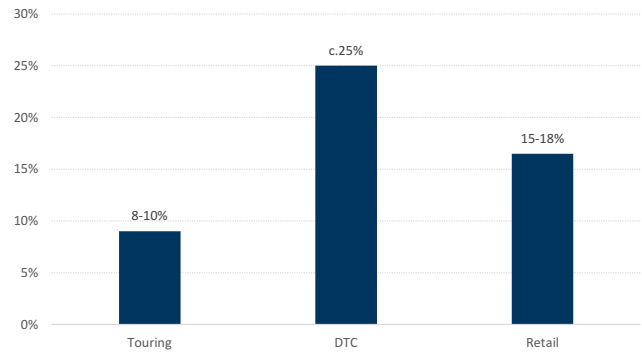
Live music-related revenue for UMG and WMG, US\$m



Source: Company data, Goldman Sachs Global Investment Research

**Exhibit 28: Touring-related activity is the lowest-margin business within UMG's merchandising business**

UMG merchandising gross margin, 2021



Source: Company data, Goldman Sachs Global Investment Research

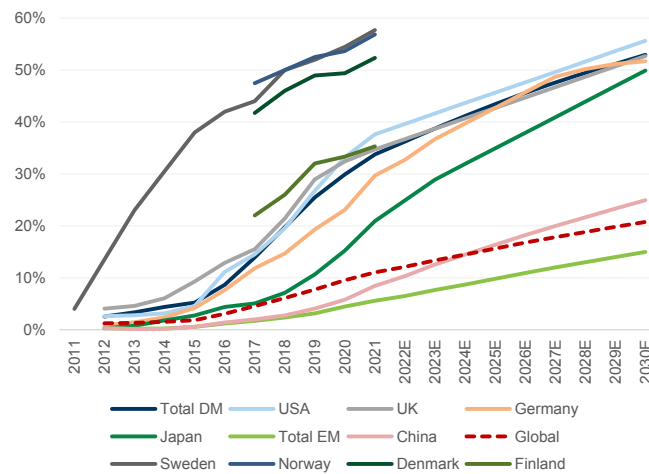
*Data from the IFPI Global Music Report 2022 was used to create material in this report. All statements using IFPI data represent Goldman Sachs' interpretation of data, research opinion or viewpoints published as part of the IFPI Global Music Report 2022, and have not been reviewed by IFPI. Each IFPI publication speaks as of its original publication date (and not as of the date of this report.)*

*We would like to thank Stefani Spasenoska and Leonardo Faleri for their contribution to this report.*

# Music streaming in the S curve: significant growth opportunity in both DM and EM, as well as older demographics

Paid streaming has grown into a c.US\$12bn market (record label share) from just US\$2bn in 2015 (as per IFPI), accounting for 47% of global recorded music revenue in 2021. The surge in paid streaming revenue has been mostly driven by volumes so far, with the number of subscribers reaching 523mn in 2021, implying 11% penetration as % of smartphone users. We note however a wide range of penetration rates globally, with Scandi the most penetrated market at 56% on our estimates, US at 38%, UK at 35%, Germany at 30%, France at 25% and Japan at 21%. Within EM, we estimate paid streaming penetration in China was 8%, Brazil 12% although India was still only 1%. We assume that penetration in DM and EM will catch up with the most mature markets within DM and EM respectively by 2030, with DM rising to 53% in 2030 from 34% in 2021 and EM rising to 14% in 2030 from 6% in 2021, resulting in global penetration rate of 20% in 2030E from 11% in 2021.

**Exhibit 29: Our 20% global paid streaming penetration estimate in 2030 is based on 53% penetration in developed markets and 14% penetration in emerging markets**  
 Streaming penetration by market (as % of smartphone users), 2011-30E

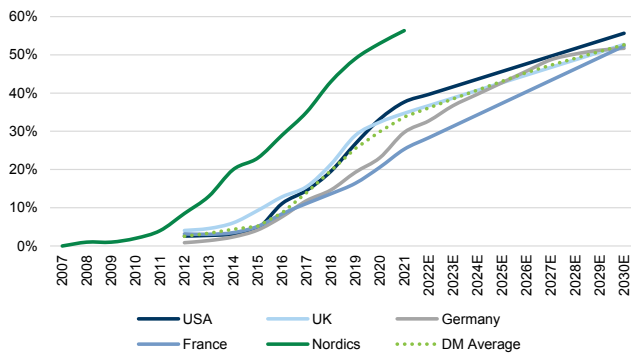


Source: IFPI Global Music Report 2022, Goldman Sachs Global Investment Research

We believe **developed markets are yet to reach the plateau on the S-curve**. We estimate DM average penetration reached 34% in 2021, still way below our estimate of 56% for Scandinavia (Sweden, Norway, Denmark) which is the earliest adopter of paid music streaming services and the most mature market globally. That said, we do find a meaningful inverse relationship between streaming revenue growth and the absolute level of penetration across various developed music markets. Taking the example of Sweden, where Spotify launched at the end of 2006, the paid streaming market saw its growth rates decelerate sharply from +55%/+30% in 2012/2013 to +11% in 2014/15 as paid penetration reached nearly 40% by 2015. It then grew consistently in the mid single digit percentage rate per annum between 2016-2020, and accelerated to +10% in 2021 helped by price increases that year, implying that paid penetration continued to rise

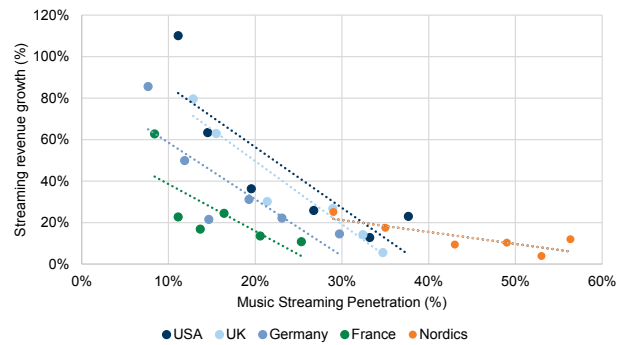
gradually to reach 58% in 2021. According to IFPI, across the whole Nordic region, the number of subscribers continued to grow in 2021 by 6% yoy, while paid streaming revenue increased 11% yoy. While we assume DM streaming revenue growth will gradually decelerate in the coming years, we believe that absolute penetration in DM will catch up with that of the Nordics over time and reach 53% in 2030. We expect 63% of the paid streaming revenue growth by 2026E to come from developed markets, in line with comments by UMG that they expect 60% of the growth opportunity in subscription streaming to come from the top 12 developed markets.

**Exhibit 30: We believe that developed markets are yet to reach the plateau on the S curve and will catch up with the Nordics by 2030**  
Streaming penetration by developed markets (as % of smartphone users), 2007-30E



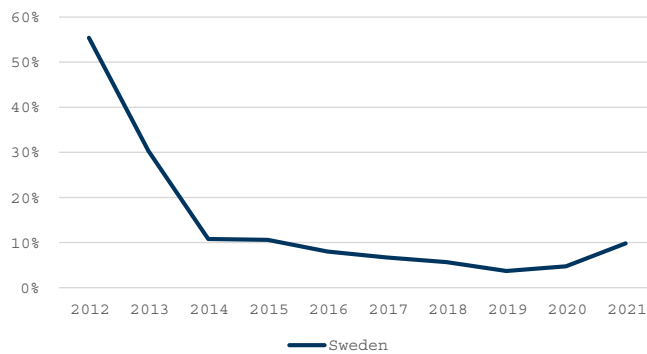
Source: IFPI Global Music Report 2022, YouGov, Data compiled by Goldman Sachs Global Investment Research

**Exhibit 31: There is an inverse relationship between streaming revenue growth and level of streaming penetration across different developed markets**  
Music streaming penetration vs streaming revenue growth yoy, 2016-21



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

**Exhibit 32: The Swedish paid streaming market was consistently growing by mid single digit pa over 2016-2020 with growth accelerating to +10% in 2021 helped by price rises that year**  
Paid streaming market growth in Sweden (% yoy)



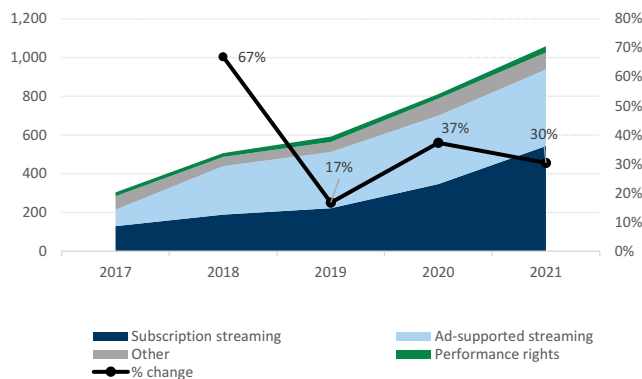
Source: IFPI

We believe **emerging markets are still in the early growth stage of the S-curve** and present a significant growth opportunity for paid music subscriptions. We forecast penetration to rise to 14% in 2030 from 6% in 2021, as device penetration improves and free users are converted to paid subscription. We were particularly encouraged by the accelerated momentum seen in a market like China which became the 6th largest music market in 2021, up from 12th in 2016. Tencent Music and NetEase in China

posted a combined net adds of +33mn in 2021, up from +23mn in 2020 and +17mn in 2019, leading to an increase in paid penetration as % of smartphone users to 8% in 2021 from 4% in 2019 and <1% in 2016 (11% of internet users in 2021 from 6% in 2019). We see a huge opportunity in India in the long run, a market that has attracted a number of competing music streaming services (JioSaavn, Gaana, Airtel Wynk, Spotify, Amazon Music, Youtube Music etc.) and that counts 200mn MAUs (Monthly Active Users) but with only a paid penetration of 1% on our estimates in 2021. However, we note that telecom operators in India provide free music streaming services (through their captive apps; in most cases ad-free) to a large proportion of their subscriber base as a retention strategy, resulting in high competitive intensity for independent paid music streaming platforms. The Middle East and North Africa (MENA) was the fastest-growing region in 2021, up 35% yoy, with the market doubling in size in just two years to US\$85.3mn. In particular, we believe that Africa presents a significant opportunity over time as device penetration and broadband infrastructure improve, and the middle class expands. Boomplay, Africa’s leading music streaming service, counts >60mn active users and has been expanding its catalogue rapidly.

**Exhibit 33: China continued to grow strongly in 2021, driven by paid streaming**

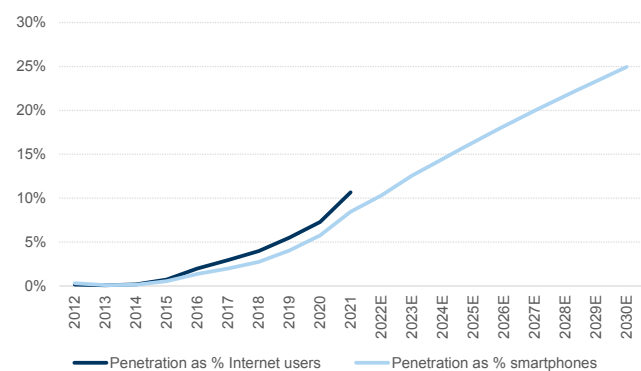
China recorded music revenue (US\$m, LHS), % growth (RHS)



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

**Exhibit 34: Paid penetration in China has accelerated in recent years**

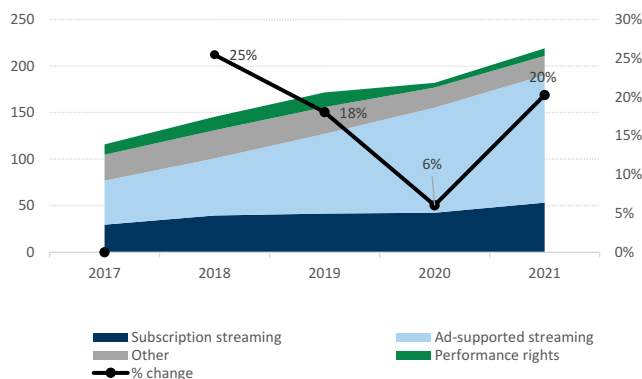
Paid music penetration, China



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

**Exhibit 35: India is still largely dominated by ad-funded streaming and growth reaccelerated in 2021**

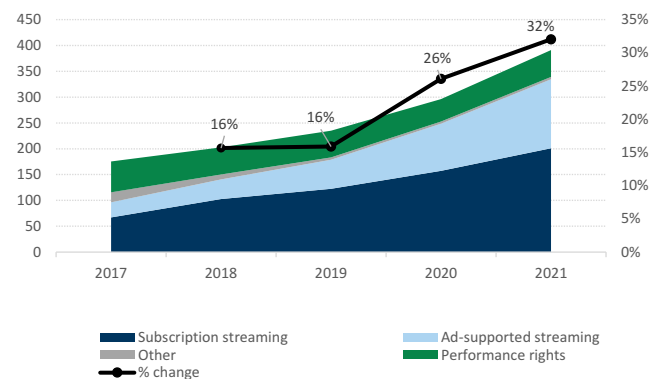
India recorded music revenue (US\$m, LHS), % growth (RHS)



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

**Exhibit 36: Brazil's recorded music revenue growth has been accelerating over the past few years**

Brazil recorded music revenue (US\$m, LHS), % growth (RHS)



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

**Exhibit 37: Emerging markets accounted for 10% of total revenues in the top 20 markets in 2021, up from 5% in 2016**

Top 20 recorded music markets in 2016 and 2021, \$mn

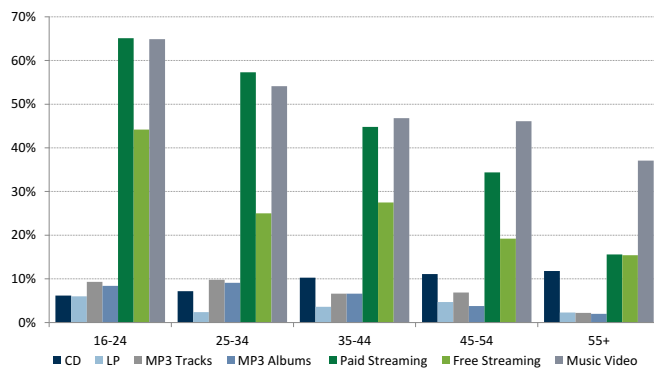
Ranking	2016		2021	
	Country	Revenue	Country	Revenue
1	USA	5247	USA	9835
2	Japan	2811	Japan	3117
3	Germany	1343	UK	1810
4	UK	1200	Germany	1596
5	France	910	France	1132
6	Canada	384	China	1059
7	Australia	364	South Korea	808
8	South Korea	339	Canada	584
9	Italy	261	Australia	474
10	Brazil	251	Italy	393
11	Netherlands	247	Brazil	391
12	China	216	Netherlands	369
13	Spain	194	Russia	328
14	Sweden	194	Spain	306
15	Norway	134	Mexico	285
16	Mexico	127	Sweden	242
17	Switzerland	125	India	219
18	Belgium	123	Switzerland	200
19	India	115	Norway	169
20	Denmark	111	Belgium	167

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

**Looking at streaming adoption by age cohorts, we see significant opportunity to increase penetration amongst older demographics.** Adoption of music streaming services, and even paid streaming services, is highest for the younger age groups, with over 65% of 16-24 years olds in the UK using paid streaming services, compared to 45% of 35-44 year olds and less than 35% for 45-54 year olds. The conversion of free to paid users is the highest amongst 25-34 at 2.29x, dropping to 1.63x and 1.79x for 35-44 and 45-54 year olds, respectively. We see an opportunity for increased adoption and improved conversion from free to paid amongst older age groups, especially as younger age cohorts who are heavy users of paid streaming services grow older, and as DSPs adapt their marketing strategies to target older demographics.

**Exhibit 38: Over 65% of 16-24 years olds use paid streaming, compared to 45% amongst 35-44 year olds and less than 35% for 45-54 year olds...**

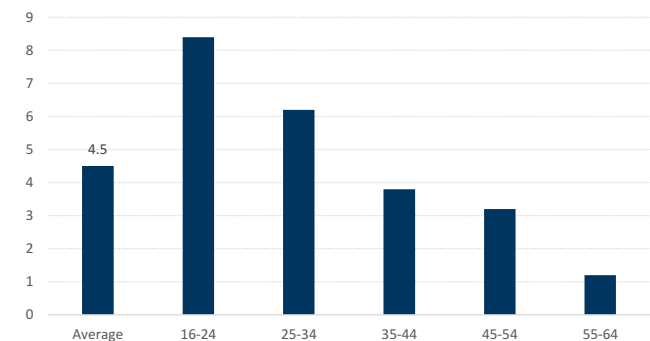
Music penetration by age group in 2021, UK



Source: ERA, BPI

**Exhibit 39: ... and 16-24 year olds spend nearly 2x as much time streaming music as the average population**

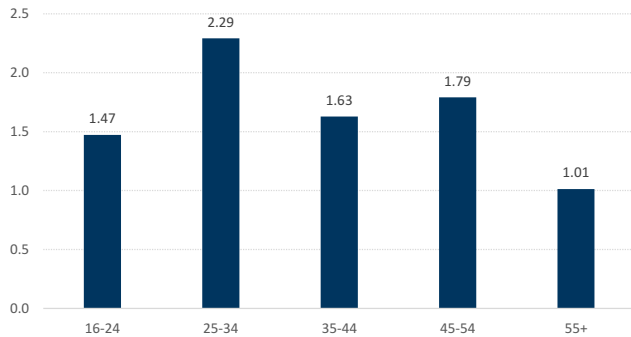
Average music listening time on paid streaming services by age group (hours per week), UK



Source: IFPI 'Music Consumer Study' 2021, BPI

**Exhibit 40: The conversion of free to paid music streaming services is highest amongst 25-34 year olds**

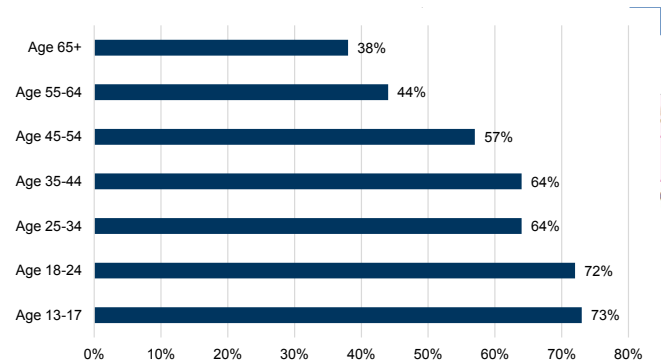
Ratio of paid to free subscribers by age group in 2021, UK



Source: ERA, BPI

**Exhibit 41: Similarly in the US, paid streaming consumption is skewed towards younger age groups and we see an opportunity for increased adoption amongst older demographics**

Breakdown of music listeners who use paid streaming services by age, US



Source: Luminate

**Exhibit 42: We see an opportunity for older age group streaming consumption to increase in Japan, France, Germany and UK**

Global music listeners who use a streaming service to listen to music in a typical week by generation

	Gen Z (Ages 13-23)	Millennials (Ages 24-39)	Gen X (Ages 40-55)	Boomers (Ages 56-74)
US	99%	98%	96%	89%
UK	77%	79%	67%	41%
Germany	83%	78%	59%	37%
France	84%	68%	53%	37%
Italy	77%	76%	59%	40%
Japan	89%	70%	51%	34%
Spain	82%	78%	74%	57%
Brazil	87%	89%	73%	63%
Mexico	83%	87%	81%	75%
Colombia	84%	88%	76%	69%
Chile	91%	92%	78%	72%
Argentina	87%	89%	77%	58%

Gen Z: born 1998-2008; Millennials: born 1982-1997; Gen X: born 1966-1981; Boomers: born 1947-1965

Source: Luminate

## Music streaming vs SVOD comparison

### **We see limited read across from recent weaker SVOD data**

Netflix, the world's largest SVOD service, reported earlier this year a decline in paid subscribers (-200k vs. consensus +2.5mn) in 1Q22 for the first time in a decade and guided to a continued decline of -2.0mn in 2Q22 (vs. consensus +2.4mn). The company highlighted the higher levels of market penetration and heightened competition as the main headwinds. Recent data from Kantar also showed that 1.5mn consumers in the UK cancelled their SVOD subscription in the first 3 months of 2022, with a third of those citing money saving as the reason for cancelling. This has sparked a wave of concerns over the saturation risk and the impact of the macro economic environment on music streaming services.

Overall, we believe that the SVOD and music streaming markets are fundamentally different, limiting the potential read across from the recent weaker SVOD data for music. For example, Spotify has reported premium subscribers and revenues broadly in line with market expectations so far this year, with 5mn of net adds targeted for 2Q22. At its 2022 Investor day, Spotify outlined its target to achieve 20%+ revenue growth over the long term driven by continued subscriber growth (with further penetration in developed and developing markets) aided by new ARPU initiatives as well as advertising growth (with new product offerings).

### **1) Music subscriptions offer a more compelling value proposition than SVOD in our view**

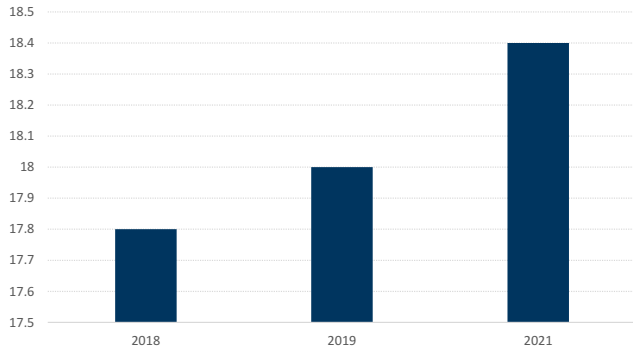
**More repeat listening of songs and playlists...** We believe music streaming services offer a compelling value proposition for customers given (i) the entire global content library can be accessed easily on just one platform and (ii) the depth of the catalogue, where favourite songs can be downloaded and playlists curated for repeat listening. This contrasts with video streaming, where the content offering is fragmented and consumers tend to flip in search for fresh content.

**Music streaming account for a greater % of time spent listening to music ...** Paid music streaming represents 25% of total music consumption currently in the UK, whilst SVOD accounts for 19% of total video consumption, with the average user typically subscribing to multiple SVOD services. Adjusted for penetration, however, i.e. for an average subscriber in the UK, paid music streaming would account for around 70% of music listening time, compared to less than 30% for SVOD.

**As such, music streaming services tends to be stickier than SVOD services,** with UMG noting that leading music streaming services only experience low single-digit monthly churn compared to 45% semiannual churn for SVOD services, over half of which is related to programming variance.

**Exhibit 43: Globally, average music listening time has increased steadily since 2018 to 18.4 hours per week in 2021...**

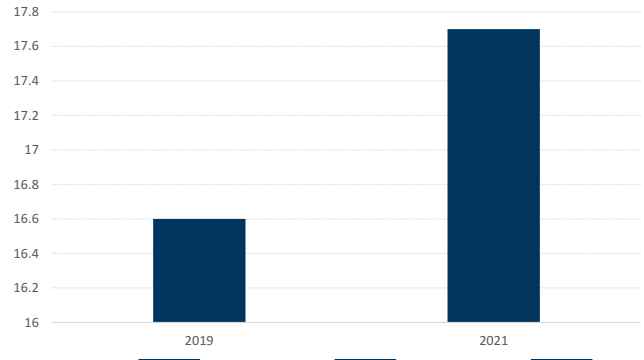
Average music listening time (hours per week), global



Source: IFPI 'Music Consumer Study' 2021

**Exhibit 44: ... with a similar increase in music listening time seen in the UK**

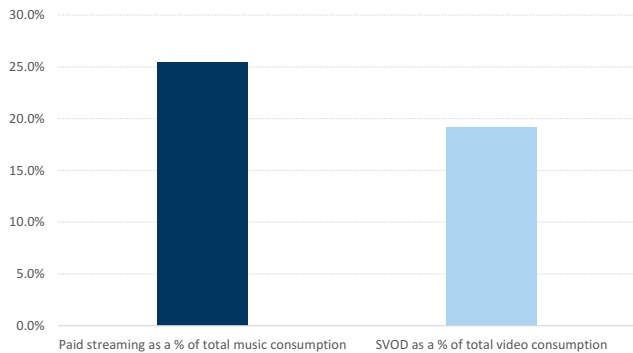
Average music listening time (hours per week), UK



Source: IFPI 'Music Consumer Study' 2021, BPI

**Exhibit 45: Paid streaming represents a larger share of total music consumption, compared to SVOD's share of total video consumption...**

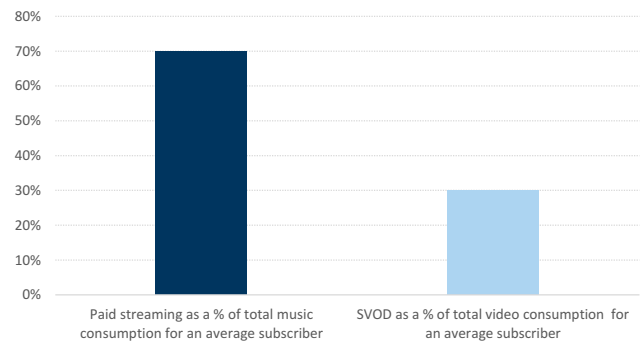
Paid music streaming as a share of total music consumption vs. SVOD as a share of total video consumption, UK



Source: IFPI 'Music Consumer Study' 2021, BPI, Ofcom

**Exhibit 46: ...and when adjusted for penetration, paid music streaming accounts for c.70% of music listening time, compared to less than 30% for SVOD**

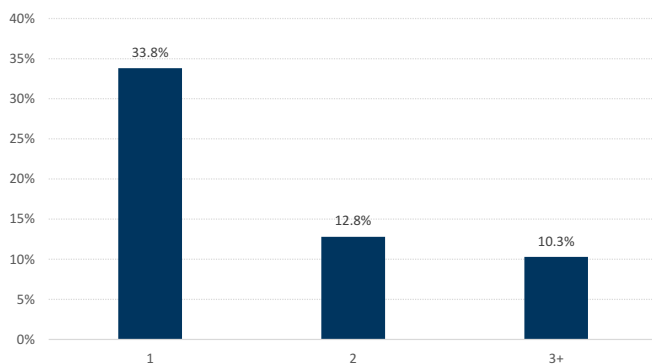
For an average subscriber, paid music streaming as a share of total music consumption vs. SVOD as a share of total video consumption, UK



Source: IFPI 'Music Consumer Study' 2021, BPI, Ofcom

**Exhibit 47: Almost 40% of SVOD users are subscribed to 2 or more SVOD platforms**

The % of population with 1, 2 or 3+ SVOD subscriptions, UK



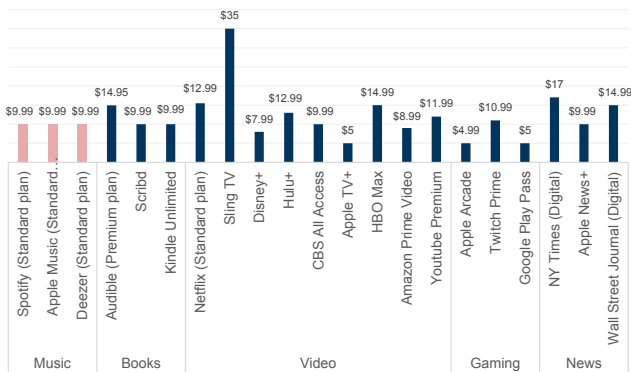
Source: BPI, AudienceNet/Audiomonitor



**Music subscriptions are priced attractively relative to other entertainment subscriptions, while the standard plan price has been the same for over a decade.**

In real terms, prices have actually decreased (e.g. the £9.99 individual Premium price in the UK today is worth the equivalent of £7.60 back in 2008). By contrast, Netflix has increased its standard Premium price by 67%/78% in the US/UK since 2014.

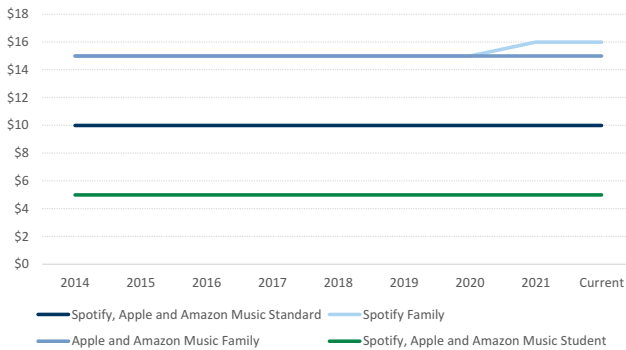
**Exhibit 48: The price of a standard music streaming subscription in the US is lower than many other entertainment subscriptions**  
Monthly price of various entertainment subscription offerings in the US



Standard subscription i.e. excluding promotional periods, as of May 2022

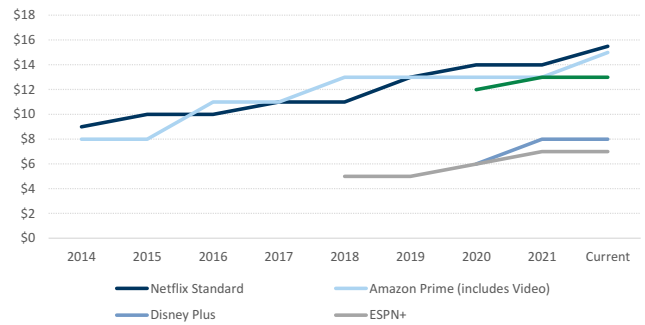
Source: Company data, Data compiled by Goldman Sachs Global Investment Research

**Exhibit 50: ... whilst the only price increase by a major music streaming service was for the Spotify Family plan in 2021**  
Music monthly subscription prices (\$), US



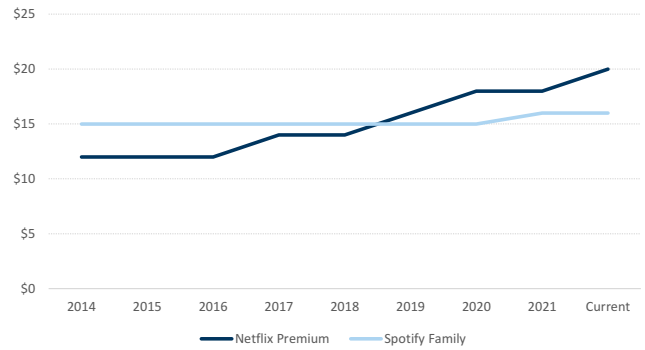
Source: Company data, Data compiled by Goldman Sachs Global Investment Research

**Exhibit 49: In the US, the monthly subscription price for SVOD services has been rising...**  
SVOD monthly subscription prices (\$), US



Source: Company data, Data compiled by Goldman Sachs Global Investment Research

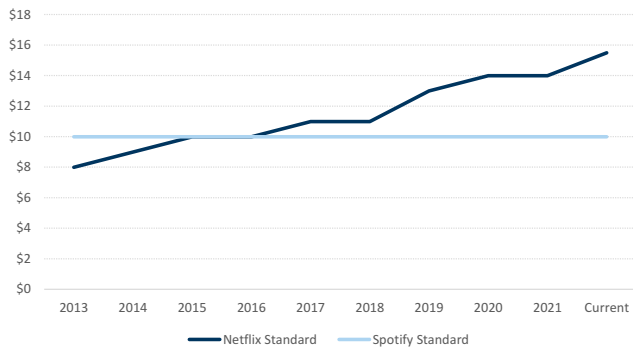
**Exhibit 51: In the US, Spotify's Family subscription price was raised for the first time in 2021, while Netflix has increased its Premium plan price by 67% since 2014...**  
Spotify Family vs. Netflix Premium price (\$), US



Source: Company data, Data compiled by Goldman Sachs Global Investment Research

**Exhibit 52: Spotify's standard subscription is 55% cheaper than Netflix in the US**

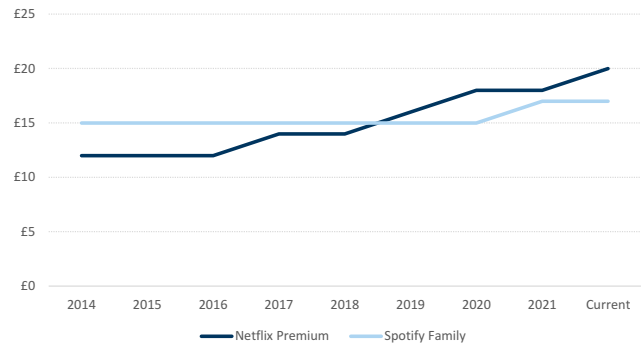
US standard plan price (\$) - Netflix, Spotify



Source: Company data, Data compiled by Goldman Sachs Global Investment Research

**Exhibit 53: Similarly Spotify raised its Family subscription price for the first time in the UK in 2021, while Netflix has increased its Premium plan price by 78% since 2014**

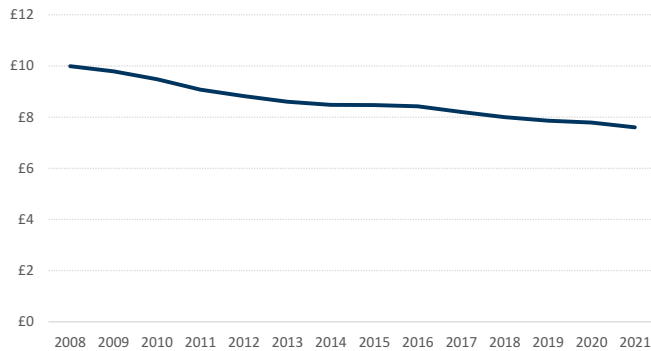
Spotify Family vs. Netflix Premium price (£), UK



Source: Company data, Data compiled by Goldman Sachs Global Investment Research

**Exhibit 54: The real value of the £9.99 monthly subscription has gone down to £7.60 in 2008 prices in the UK**

Spotify Standard price in real terms since 2008 (£), UK



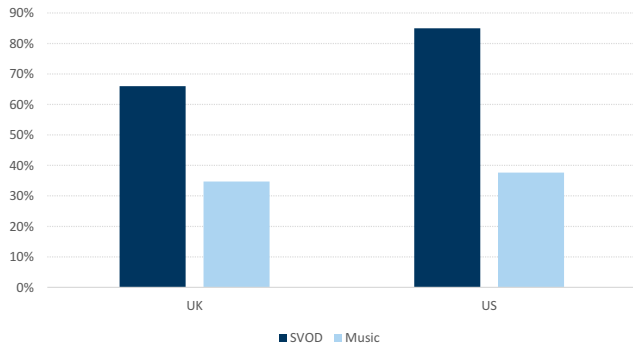
Source: Company data, Data compiled by Goldman Sachs Global Investment Research, Bank of England

**2) Paid music streaming penetration is lower than SVOD penetration**

As shown in [Exhibit 55](#), paid music penetration in the US and UK was almost half that of SVOD in 2021. We note that the denominator being used is % of smartphone owners for music subscriptions, and % of households for SVOD. Even adjusted for the family plans (around 20% of total subscriptions), music penetration would still be much lower than SVOD. Furthermore, if we were to compare music vs SVOD penetration as % of addressable markets (i.e. adjusted for family plans), we note that in the US last year, penetration of paid music would be 47% compared to 84% for SVOD. Based on our subscriber forecasts, we believe music penetration as % of addressable markets will reach 60% by 2030 in the US, still well below current SVOD levels.

**Exhibit 55: Music streaming penetration still has significant room to grow when compared to SVOD...**

Music vs SVOD penetration, 2021

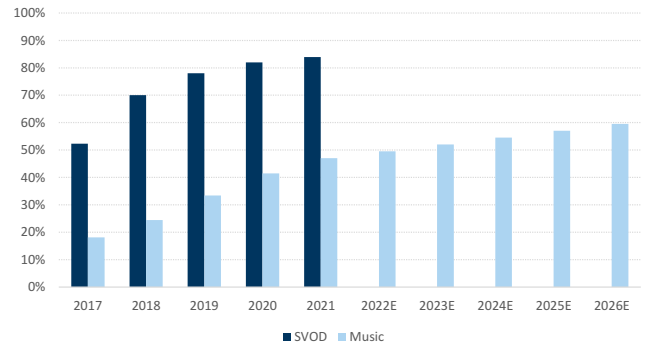


Music streaming penetration as % of smartphones; SVOD penetration as % of households with at least one subscription

Source: IFPI Global Music Report 2022, BARB

**Exhibit 56: ... even when looking at music streaming penetration as % of addressable markets**

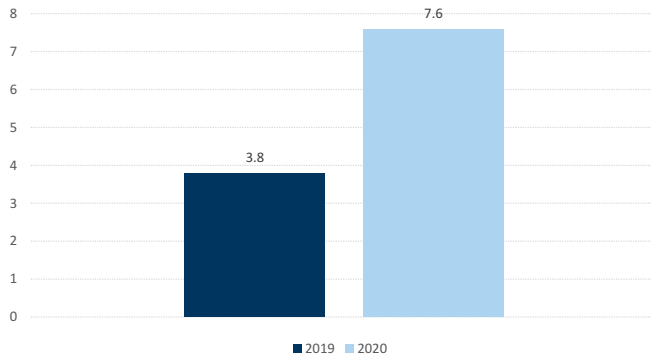
SVOD and music streaming penetration as % of addressable markets, US



Source: IFPI Global Music Report 2022, SNL Kagan, Company data, Goldman Sachs Global Investment Research

**Exhibit 57: The average time spent watching SVOD per week in the UK almost doubled in 2020, driven by mobility restrictions during COVID-19, while we believe music listening time benefitted less from the pandemic**

Average time spent on SVOD services (hours per week), UK



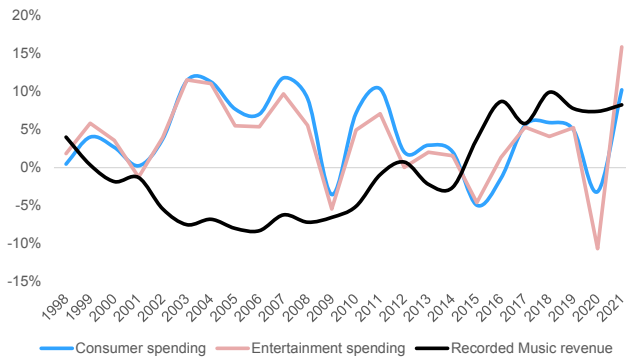
Source: Ofcom

**3) Consumers spend 40% less on music (as % of their entertainment spend) today than in 1998**

Recorded music revenues have shown a low correlation with GDP in the past, as most recently highlighted by the COVID crisis where paid subscription revenues grew by over 18% yoy globally in 2020 (despite time spent listening to music initially falling due to the drop in in-car/commute listening). Meanwhile, we note that recorded music spend as % of total entertainment spend and as % of GDP remains over 40% below the peak levels in 1998, despite the strong recovery seen in recent years. This supports our belief that any price increases can be passed onto consumers with minimal churn.

**Exhibit 58: Global recorded music revenues have not had a meaningful relationship with consumer spending over the past 2 decades**

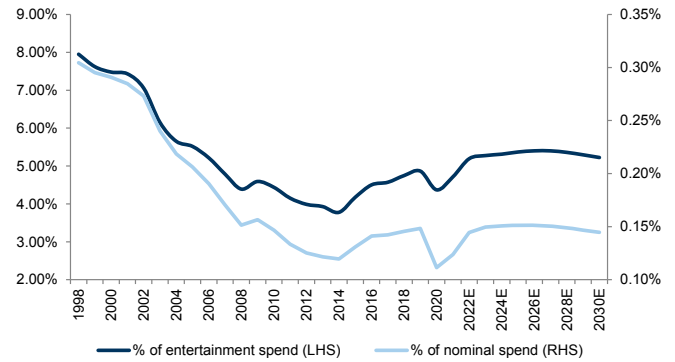
Global Recorded Music revenues, consumer spending and entertainment spending, 1998-2021



Source: Goldman Sachs Global Investment Research, Euromonitor

**Exhibit 59: Music revenue as a % of entertainment spend remains well below the 1998 peak**

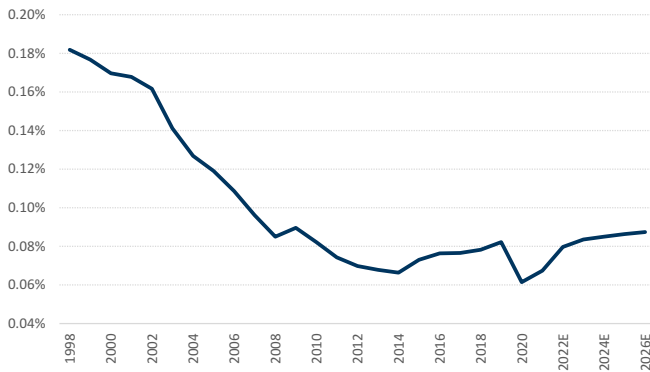
Entertainment includes: Recreational and Cultural Services, Newspapers, Magazines, Books and Stationery



Source: Euromonitor, Goldman Sachs Global Investment Research

**Exhibit 60: Our forecasts imply that recorded music revenue as % of GDP will remain >50% below its historical peak**

Global music revenues as % of global nominal GDP

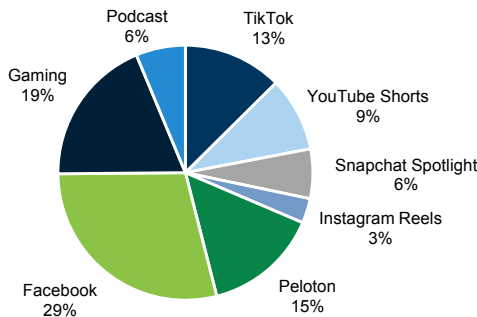


Source: IMF, Goldman Sachs Global Investment Research

## Significant opportunity from ad funded/emerging platforms

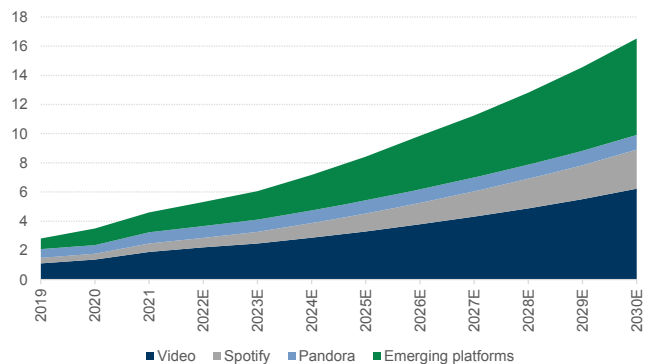
While the traditional on-demand subscription model continues to dominate much of the growth in the music industry, we believe advancements in technology and the further digitisation of industries will further increase the pervasiveness of music and create new monetisation opportunities. New licensing revenues from short-form videos, connected fitness, gaming and podcasts have increased significantly in recent years and already contributed 5% of global recorded music revenues in 2021 on our estimates. As shown in Exhibit 61, we introduce detailed estimates on these new revenue streams within our ad-funded streaming forecasts (excluding Peloton which is part of subscription streaming). Overall, we expect emerging platforms to account for 40% of ad-funded revenues by 2030 (from 30% in 2021) and 12% of global recorded music revenue (from 5% in 2021), overall contributing c.160bps of growth to global recorded music revenues over 2022-2030E. Within this, we estimate c.60% of emerging platform revenues in the music industry last year came from short-form video and/or social media, which includes TikTok, YouTube Shorts, Instagram Reels and Snapchat Spotlight. Furthermore, these new platforms are also becoming important avenues to amplify artists and set cultural trends, contributing to increase the efficiency of A&R and marketing spend for the record labels.

**Exhibit 61: We estimate c.60% of emerging platform revenue in the music industry in 2021 came from short form video/social media...**  
 Estimated breakdown of music industry emerging platform revenue by company/type, 2021 (GSe)



Source: Company data, Goldman Sachs Global Investment Research

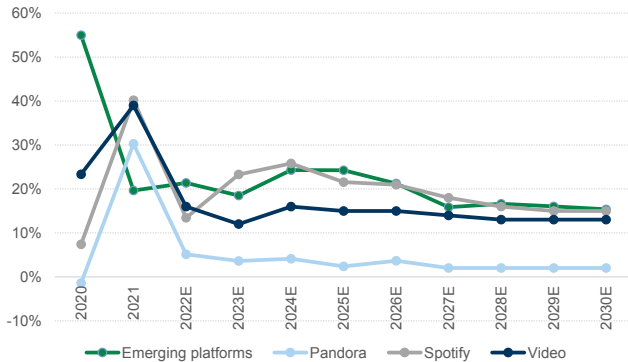
**Exhibit 62: ... and that emerging platform revenues will represent almost 40% of ad-funded streaming revenues by 2030...**  
 Breakdown of global ad-funded streaming by type, US\$bn



Source: Company data, Goldman Sachs Global Investment Research

**Exhibit 63: ...as emerging platform revenues grow faster than other types of ad-funded streaming revenues**

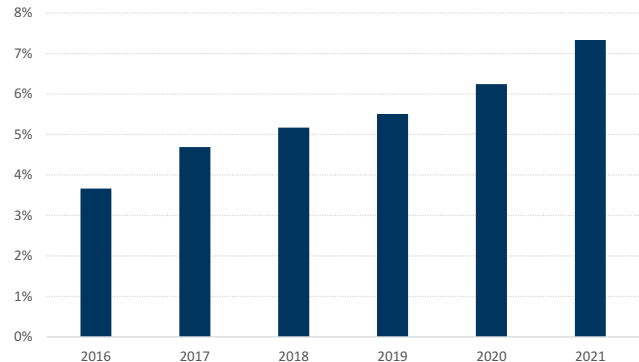
Growth rates on ad-funded streaming revenues, %



Source: Company data, Goldman Sachs Global Investment Research

**Exhibit 64: Meanwhile, music video streaming (mainly YouTube) has doubled to 7% of global recorded music revenues in 2021, from c.3.5% in 2016**

Music video streaming as % of global recorded music revenues, 2016-21

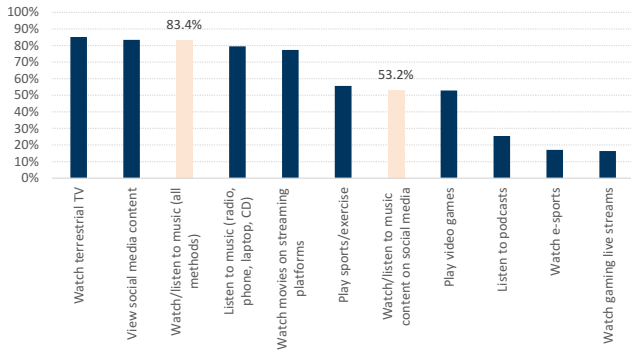


Source: IFPI Global Music Report 2022, Goldman Sachs Global Investment Research

**Short-form video**

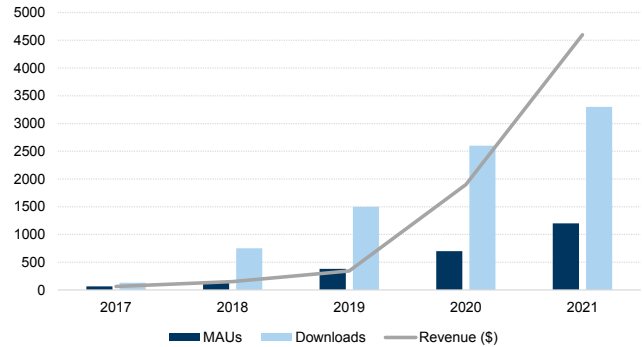
Music is a core component of short-form video platforms like TikTok or Triller (an American short-form video app launched in 2015). Since its launch in 2017, TikTok has reportedly been downloaded more than 3.6bn times (source: SensorTower as of May 2022), and has acquired a global reach of more than 1.2bn monthly active users at the start of this year (source: Business of Apps). Monthly downloads peaked at 120mn in March 2020 and have remained constant at around 60mn per month since July 2020. In the UK, in spite of a highly competitive social media market, TikTok is the leading app in terms of popularity, with 5.6 hours per week spent on the platform on average. Music plays an important role on TikTok, where on average music is central to 3.9 hours of the 5.6 hours per week of videos watched on the platform, according to the IFPI Music Consumer Study 2021. Moreover, last year TikTok consolidated its status as a significant source of music discovery for fans, as a 2021 AudienceNet/Audiomonitor survey highlighted that more than a third of respondents that finds out a song on TikTok then goes to listen to that specific track on a streaming service.

**Exhibit 65: 83.4% of respondents reported they listen to music weekly, with over half doing so via social media**  
AudienceNet/Audiomonitor 2021 survey: responses to doing activity weekly



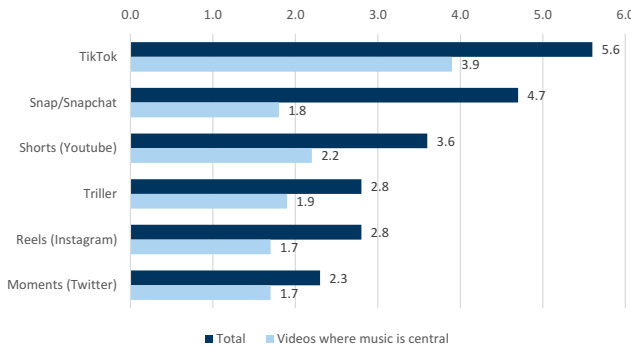
Source: AudienceNet/Audiomonitor, BPI

**Exhibit 66: TikTok has experienced exponential increases in MAUs, downloads and revenues over the past few years, representing a significant revenue opportunity for labels**  
TikTok MAUs, downloads and revenues (mn)



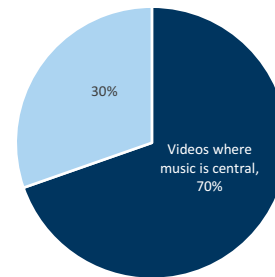
Source: Business of Apps, Sensor Tower, Data compiled by Goldman Sachs Global Investment Research

**Exhibit 67: TikTok is the most popular short form video platform, although the market has a growing number of competitors...**  
Time spent on platform (hours per week)



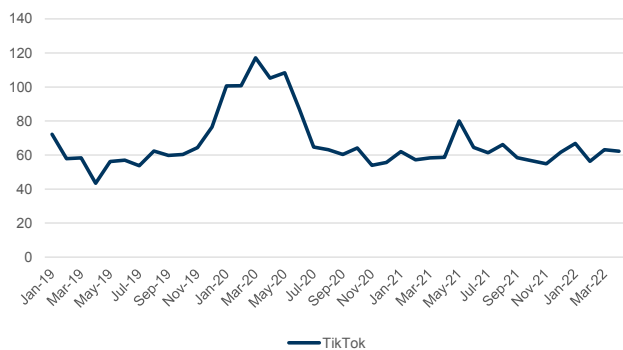
Source: IFPI 'Music Consumer Study' 2021

**Exhibit 68: ...and music is central to 70% of videos on TikTok**  
Videos where music is central on TikTok, %



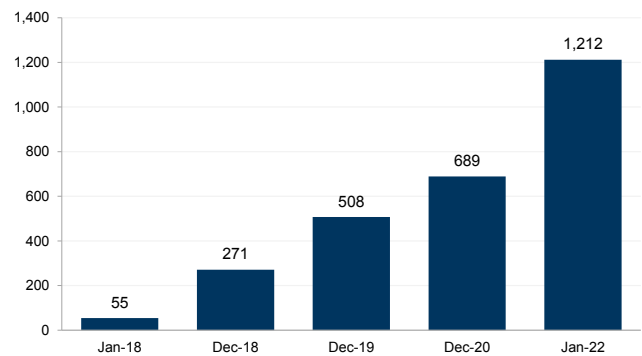
Source: IFPI 'Music Consumer Study' 2021

**Exhibit 69: TikTok's downloads have remained resilient after the pandemic, stabilizing at c.60mn per month**  
Monthly app downloads globally for short-form video - iOS + Android (mn)



Source: Sensor Tower

**Exhibit 70: TikTok's global users broke the 1 billion barrier for the first time in 2021**  
TikTok global users (mn)



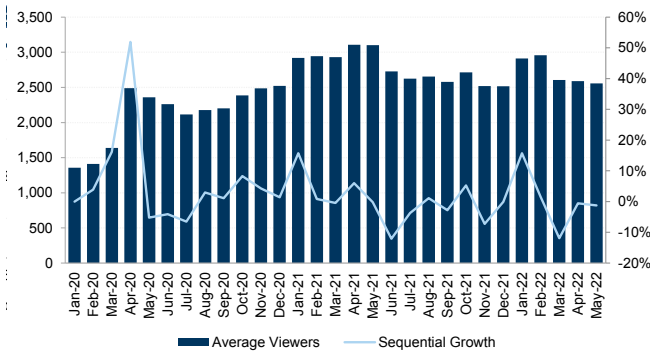
Source: Business of Apps

### Video Games / Metaverse

Video gaming has surged since the onset of the pandemic, with data from Verizon indicating US video game usage during peak hours increased by 75% during the first lockdown and the growth has remained solid even after the 2020 boom, as the number of monthly video game players globally reached a record 3.24bn in 2021, up from approximately 2.77bn in 2020 (source: Statista). Moreover, as video games (from complex multi-player games to basic smartphone gaming apps) increasingly involve complex story lines with audio, visual and sensory components, we believe that video game makers will need access to robust libraries of music to achieve their artistic goals. Last year, we saw several examples of increasing innovative partnerships between the music industry and the gaming industry, which also happens to be new use cases of the metaverse such as: i) Warner Music Group partnership with The Sandbox, a decentralized gaming platform, in order to create “the first music-themed world” within The Sandbox gaming metaverse, ii) Fortnite’s collaborations with artists Marshmello and Travis Scott to present immersive virtual concerts and iii) Twitch’s new strategic partnership with the independent label agency Merlin and renewal of its agreement with Universal Music Group.

**Exhibit 71: In spite of the recent drop, activity from Twitch users remained well above pre-pandemic levels**

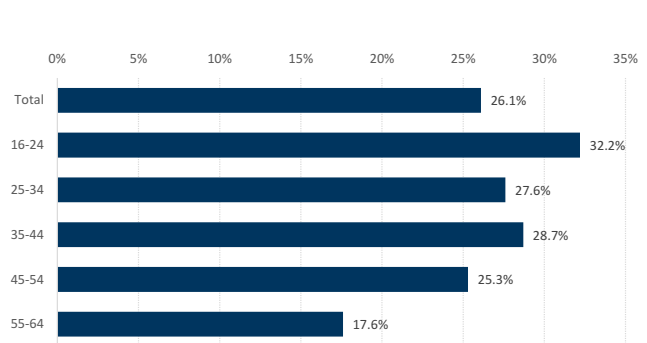
Twitch average viewers (mn)



Source: Company data, Goldman Sachs Global Investment Research

**Exhibit 72: Over a quarter of adults aged 16 or over watched a music livestream in LTM**

Livestream engagement (%)



Source: IFPI Music Consumer Study 2021, Data compiled by Goldman Sachs Global Investment Research



**Exhibit 73: Examples of music-related virtual experiences & collaborations on Roblox, Fornite & Minecraft**

Date Announced	Platform	Category	Name
Feb-19	Fortnite	Concert	DJ Marshmello
Apr-20	Minecraft	Concert	Nether Meant
Apr-20	Fortnite	Concert	Travis Scott
May-20	Minecraft	Music festival	Block by Blockwest
Sep-20	Roblox	Music	Ava's Launch Party
Nov-20	Fortnite	Concert	Lil Nas X
Apr-21	Minecraft	Education/Music	College Green
May-21	Roblox	Music	Zara Launch Party
Jul-21	Roblox	Music	Sony
Aug-21	Roblox	Music	KSI launch party
Aug-21	Fortnite	Music tour	The Rift Tour FT. Ariana Grande
Aug-21	Fortnite	Concert	J Balvin
Sep-21	Roblox	Concert	21 Pilots
Sep-21	Roblox	Concert	(Qishu) Launch Party
Sep-21	Roblox	Concert	Listening Parties
Oct-21	Roblox	Music festival	Electric Daisy Concert
Oct-21	Fortnite	Concert	Soundwave
Nov-21	Roblox	Concert	Verder Concert

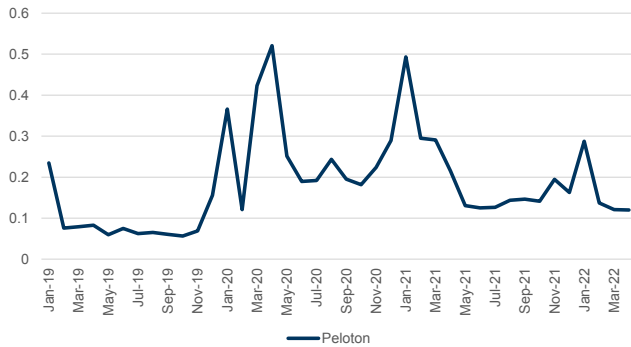
Source: Company reports, Goldman Sachs Global Investment Research

**Connected Fitness**

Lifestyle and fitness companies like Peloton, Equinox, Orange Theory, Barry's and Soul Cycle all utilise music to a large degree in their business models. We see connected fitness, and boutique fitness classes more broadly, as a growth opportunity for music labels. For instance, Peloton downloads increased >5x during the peak of the pandemic and as of April 2022 were still c.45% higher than pre pandemic in April 2019. In addition, connected fitness subscriptions on Peloton continued their sequential increase even after COVID-19 lockdowns, as in the three months ending March 2022 the number reached a record 2.96mn, up from 2.77mn in the prior quarter. Average monthly workouts per subscriber were 20.7 in the January-March 2022 period, up from 14.8 in the previous quarter and well above the 13.9 reported in the same period in 2019. We estimate Peloton currently pays around US\$230mn in annual fees (c.20% of Peloton's subscription revenue) to the recorded music industry with the potential to grow significantly over time as the business model matures.

**Exhibit 74: Despite the recent dip, Peloton downloads remain higher than pre-COVID levels**

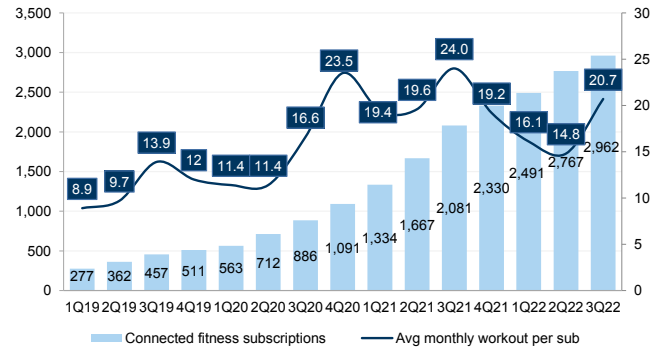
Monthly app downloads globally for fitness - iOS + Android (mn)



Source: Sensor Tower

**Exhibit 75: Connected fitness subscriptions maintained their steady growth after the pandemic demand boom**

Peloton's connected fitness subscriptions and average monthly workout per subscriber (mn; FY ending June)



Source: Company data, Data compiled by Goldman Sachs Global Investment Research

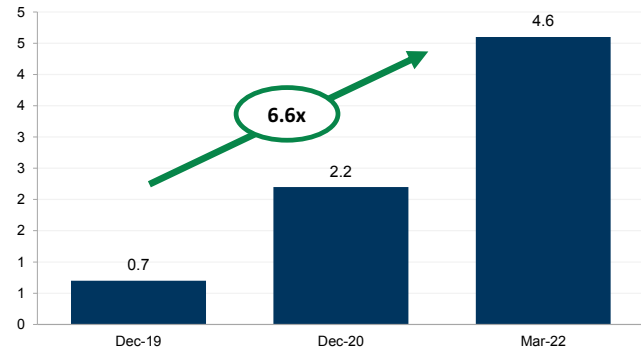
**Podcasts**

Recently, long-form audio has been a focus for DSPs, particularly Spotify which has invested over US\$1bn in its podcast portfolio as of January 2022. Out of this, US\$600mn was spent on US podcast-related acquisitions in the trailing 12 months to February 2020 (source: Statista). The company increased its podcast offering by 4.6mn (number of podcasts available on the platform) between December 2019 to March 2022, up 53% yoy. In addition, during its 1Q22 results call, Spotify highlighted that the podcast share of overall consumption hours on the platform reached all-time record levels during the quarter, driven by strong growth in Latin America and Asia. In terms of podcast MAUs, Spotify saw record numbers in the quarter ending March 2022, with the company disclosing podcast MAUs grew double-digits and at a rate higher than total Spotify MAUs.

According to the Interactive Advertising Bureau (IAB), podcast ad revenues increased to US\$1.4bn (+72% yoy) in 2021 and the advertising podcast sector is expected to exceed US\$2bn in 2022 and US\$4bn by 2024. The rise in the popularity of podcasts is due to the improved and more targeted advertising available to users on the back of the increasing use of automation solutions which enables them to provide better authenticity of messaging in combination with the improved scalability and flexibility of automated buying. As such, we believe podcasts could present incremental revenue opportunities for music content owners through the development of music-themed podcasts.

**Exhibit 76: Spotify's podcast offering increased significantly since December 2019**

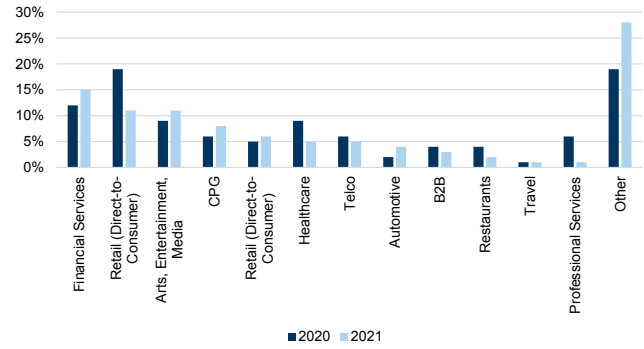
Number of podcasts offered, mn



Source: Company data, Data compiled by Goldman Sachs Global Investment Research

**Exhibit 77: Ad revenue from podcasts comes from a diversified range of sectors**

Podcast ad revenue share by sector, %



Source: Interactive Advertising Bureau, Data compiled by Goldman Sachs Global Investment Research

## Digital distribution: increased differentiation, improved pricing

In 2021, the music streaming landscape remained dominated by a handful of large global/regional players, exhibiting “no winner takes all” characteristics. Looking forward, we anticipate differentiation and segmentation between the major players to increase, as they each focus on their relative strengths, helping drive improved pricing in the industry. For instance, Apple Music is focused on iOS users, bundles with other Apple products and sound quality; Spotify is positioning itself as the leading audio streaming service (music and podcasts) and appeals to younger audiences; YouTube is focused on increasing monetisation in ad-supported and cross-marketing YouTube Music, and Amazon Music is a beneficiary of the increased adoption of smart speakers.

**Spotify** remains the clear leader with 180mn paid users globally implying 34.4% market share. Its share loss however accelerated in 2021 despite its expansion into 85 new markets, down 130bp yoy compared to -70bp in 2020 and -120bp in 2019. The company has reported solid revenues and subscriber figures broadly in line with market expectations so far this year, guiding to 187mn paid users at the end of 2Q22, implying 5mn of net adds.

**Apple Music** regained momentum last year, maintaining its market share at 17.4% (-10bp yoy) on our estimates, having conceded over 290bp share across 2019-2020. We believe that this has been driven by increased marketing efforts around the service, particularly around improved sound quality features on the platform following the launch of spatial and lossless audio at no extra cost in June 2021, as well as the success of the Apple One bundled product. We note that Apple Music reduced its three-month trial period earlier this year for new subscribers to one month in a number of major markets including the US, Canada, Australia, UK and Japan amongst other, marking the first reduction since the launch of the service in 2015 and bringing the duration in line with Spotify. According to 9to5 Mac, this change presents an attempt by Apple to convert its customers into paying subscribers quicker as it is reportedly taking some share from Spotify currently. Apple however still offers extended trials of up to 6 months for new customers who take one of the Apple Music bundles with an eligible audio product (e.g. Beats, AirPods etc).

**YouTube Music** was **the major share gainer** outside of China with 61mn paid accounts on our estimates, from 48mn in 2020, implying 60bp of share gain to 11.7%. YouTube reported >50mn YouTube Music/Premium accounts in September 2021, driven by particularly strong growth in emerging markets and younger users.

**Amazon Music** maintained market share at 6.3% with 33mn paid accounts on our estimates. In April 2022, Amazon Music raised prices for its Unlimited Music subscription for Prime members across some of its major markets including the US, the UK and Canada (+13% for the individual plan to US\$8.99pm from US\$7.99pm or to US\$89 from US\$79 for customers with an annual Prime subscription and +25% for the single-device plan), while the price of Unlimited Music without Prime remained unchanged. Amazon was previously offering a discount on Unlimited Music to its Prime customers so the price increases (effectively removing the prior discount) did not

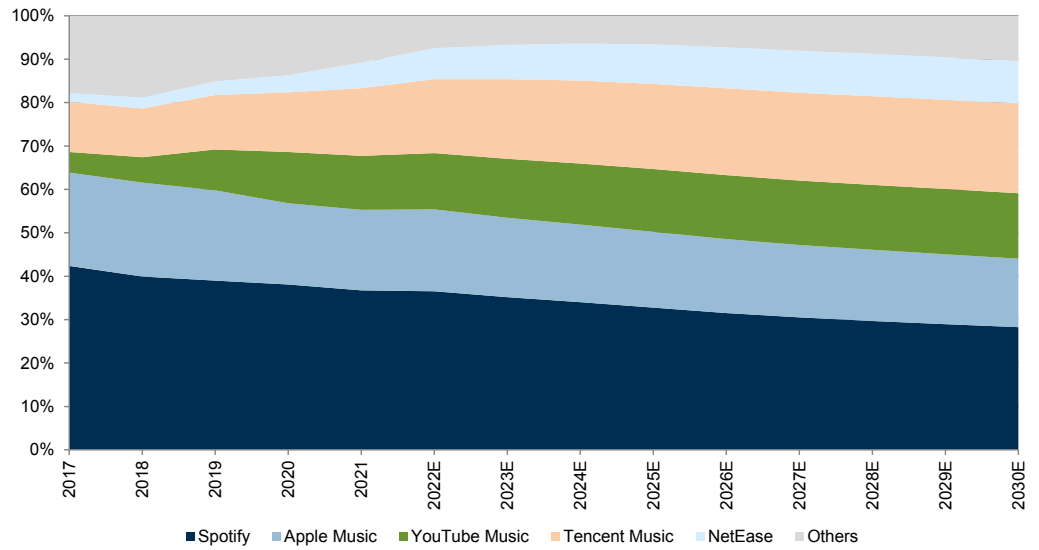
benefit music companies such as UMG or Sony Music.

Within **China**, the **pace of net additions accelerated** for **Tencent Music** and **NetEase**, with these services recording the largest global share gains of 170bp/180bp to 14.6%/5.5% respectively in 2021. We believe this was largely driven by increased marketing and improving the conversion of users to the paid service via offering price discounts. In 2021, Tencent Music and NetEase Cloud ARPU declined by 5%/20% yoy, and on a comparative basis are 27%/21% of Spotify's level, down from 28%/25% in 2020.

**The long tail of smaller streaming services has been consolidating in recent years to c.250 globally from 400 in 2015.** We estimate that these services lost c.300bp of share in 2021, given rising competition from Apple Music and Spotify which have expanded into 52 and 82 new markets over the last 2 years, respectively, as well as from the increased success of YouTube Premium. Within the mix, we note growing momentum for emerging regional streaming services such as Boomplay and Resso. For instance, Boomplay, **Africa's** leading music streaming service, counts >60mn MAUs and has been expanding its catalogue rapidly (now has over 65mn tracks), having signed new licensing agreements with UMG and Merlin covering 47 countries across Africa (from 7 and 11 previously) in 2021. Resso, ByteDance's streaming platform in India and Indonesia, has experienced rapid growth in these markets despite the crowded competitive landscape. We see notably a **significant long-term streaming opportunity within India**, as device penetration and broadband infrastructure improves especially outside the major cities. Resso had 168mn total installs on the App Store and Google Play as of the end of April 2022 despite only launching in March 2020, according to data from Sensor Tower.

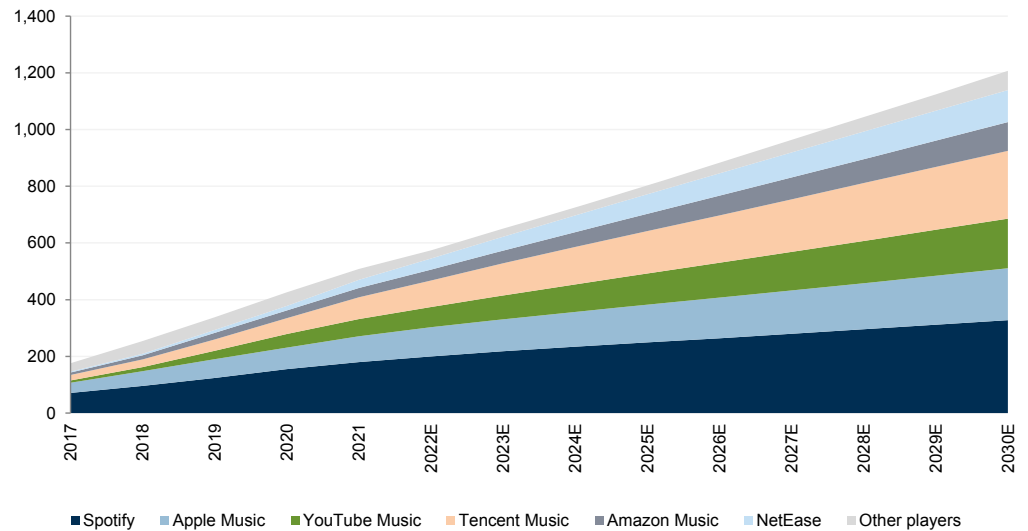
Looking ahead, we expect Spotify to lose c.30bps of share in 2022 to 34.1% and retain its clear leadership over time with 26.0% share of subs in 2030. We forecast Apple Music will fall to 3rd place over time with its share gradually eroding to 14.5% in 2030. We forecast Tencent Music's share to rise the most (+440bp vs. 2021) to 19.0% by 2030 and become the second-largest player globally. Outside of China, we believe YouTube Music will be the largest share taker (+220bp vs. 2021) reaching 13.9% by 2030, driven by successful cross promotion and conversion from its ad funded service. We expect Amazon Music to slightly increase market share, with the platform driving net adds through its bundle offerings and increased smart speaker listening. Amongst the long tail of smaller players, we expect further consolidation with share decreasing by >200bp to c.5% in 2030.

**Exhibit 78: We expect further fragmentation amongst the top DSPs but consolidation within the long tail**  
Streaming subscriber market share by platform, %



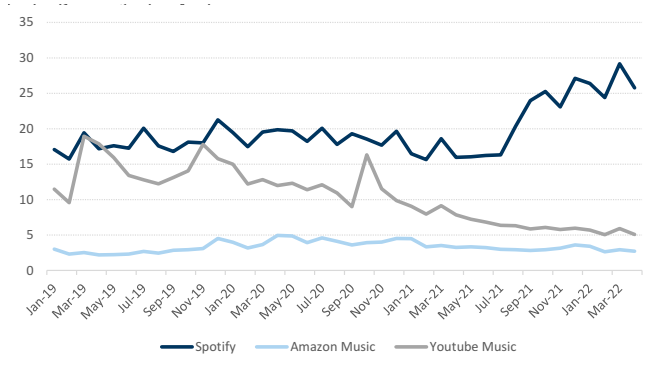
Source: Company data, Goldman Sachs Global Investment Research

**Exhibit 79: We expect Spotify to remain the clear leader, with YouTube Music and Tencent Music the main share gainers**  
Streaming subscribers by platform (in millions)



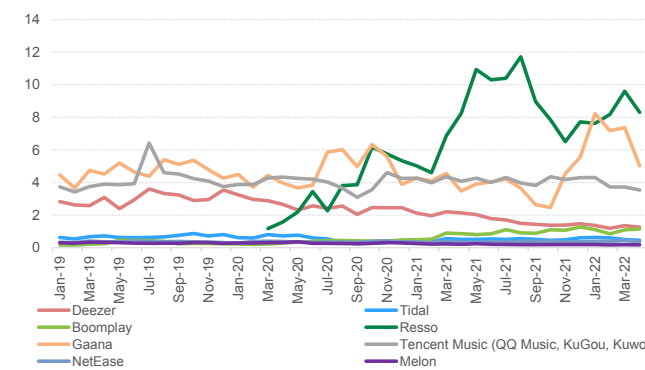
Source: Company data, Goldman Sachs Global Investment Research

**Exhibit 80: Spotify's monthly app downloads have picked up since mid 2021, while Amazon Music has remained resilient**  
 Monthly app downloads globally - Android + iOS (mn)



Source: SensorTower

**Exhibit 81: Emerging regional players such as Resso and Gaana have seen strong growth in app downloads over the last few months**  
 Monthly app downloads globally - Android + iOS (mn)



Source: SensorTower

## Record labels: majors increase market share

### Top 3 labels consolidate their leadership

Whilst the music industry continues to go through significant changes, with the democratisation of music enabling the rise of the DIY and independent artists, we believe that record labels continue to play an essential and integral role in the discovery and development of recording artists and the related marketing, promotion, distribution, sale and licensing of music created by such recording artists given their scale, global reach and strong relationships with TV/movie producers and advertising agencies. Our analysis of market share data shows that the **major labels' market shares have been broadly stable since 2015. In 2021, we calculate a share gain of 280bps, reversing the 190bp share loss in 2020.** We note that this measures labels' share of owned and distributed music, with the contribution from music distributed on behalf of independent labels likely to have increased over the period.

**UMG was the largest record company in 2021**, with market share up 10bp yoy to 31.2%, and has remained broadly at that level since 2019. **Sony was the major gainer with a 210bp increase in 2021 to 22.7%**, reversing the negative momentum of the previous 7 years, although these market share swings have been partly driven by differences and changes in accounting for distributed content. **WMG also gained market share**, up 60bp to 18.4% in 2021, partly reversing a sharp 150bp decline in 2020; WMG had been gaining share across 2015-2019. **Believe, an independent label, continued solid market share gains of 30bp yoy to 2.6%**, up from 1.5% in 2018.

**Within the streaming market, the top 3 majors gained 150bp market share in 2021 to 73%**, which is higher than their share of global recorded music (72%). Previously however, their market share declined from 89% in 2015 to 72% in 2020, which we believe was mainly the result of (i) the majors being early adopters of streaming, with their share eroding over time as competitors caught up, (ii) growing contribution of EM to the global streaming market and (iii) growing amount of content on streaming platforms (60,000 songs were uploaded every day on Spotify in 2021 or nearly 1 song per second, up from 40,000 songs in 2019). At the same time, however, the sheer volume of music being released on digital music services is making it harder for artists to stand out and get noticed, highlighting the crucial role of major record labels. For instance, only 1,040 artists generated over US\$1mn in royalties on Spotify in 2021, with the implied share as a % of total content creators on Spotify going down to 0.009% in 2021 from 0.015% in 2017.

**Despite the strong performance last year, going forward we believe that the majors could see some modest share erosion**, mainly driven by: (i) the surge in music streams volume led by the rise of entry-level and mid-tier artists and (ii) EM growth continuing to outpace that of DM. We estimate the majors' market share in EM is about half their market share in DM. **This will not drive a major change in industry dynamics, however, in our view, with the majors likely to remain by far the dominant players** given their existing scale and infrastructure as well as the strength and depth of their catalogues, while we note that they have been investing more

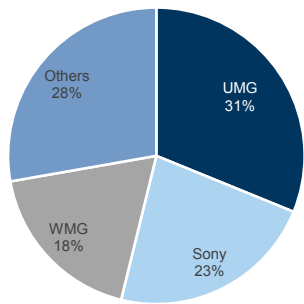


aggressively into indies & local artists, particularly in EM.

As a result, we do not foresee a major change in royalty rates (52% on average) in the medium term given the competitive dynamics in the recorded music and streaming market as discussed above. We believe record labels will have a vested interest in keeping a minimum level of competitive tension among platforms. Over time, we believe major labels' artist discovery, curation, and marketing capabilities and high market share concentrations should allow them to defend the status quo in future negotiations.

**Exhibit 82: The top 3 labels accounted for 72.2% of the recorded music market**

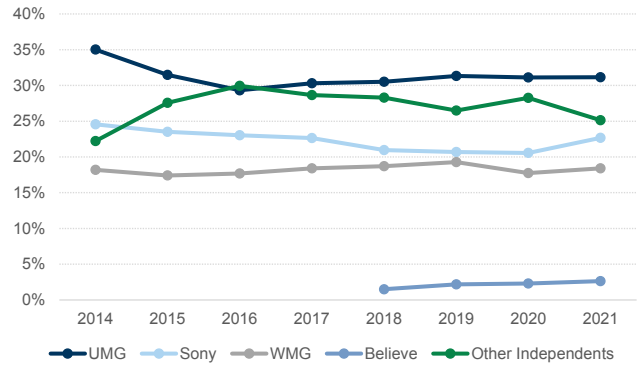
Global recorded music market shares, 2021



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

**Exhibit 83: The top 3 labels gained a combined 280bps of market share in 2021**

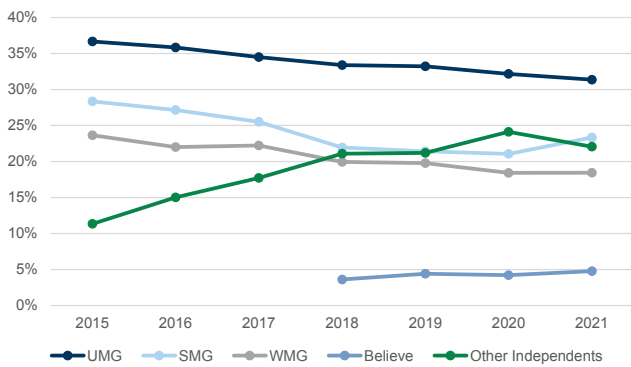
Global recorded music market share



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

**Exhibit 84: The top 3 majors accounted for 73% of global streaming revenues in 2021, up 150bp yoy**

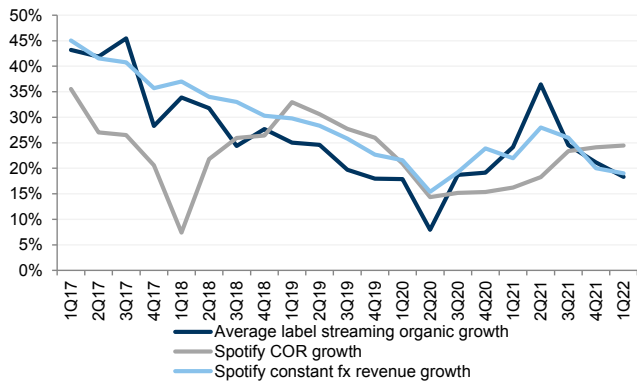
Global streaming market share



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

**Exhibit 85: The majors' average streaming revenue growth has outpaced Spotify's revenue growth since 1Q21, having lagged in previous years**

Streaming revenue growth for the 3 majors (average) vs. Spotify and Spotify's cost of revenue growth yoy



Source: Company data, Goldman Sachs Global Investment Research

**Exhibit 86: The majors accounted for 65% share of streams on Spotify's Global Top 50 chart, increasing to 90% when excluding Bad Bunny's new album; Sony Music is the major share gainer so far this year**  
 Spotify Global Top 50 playlist market share as of May 30, 2022

**Including Bad Bunny's new album 'Un Verano Sin Ti'**

Spotify's Global Top 50 playlist				
Labels	# of Streams	# of Artists	Market Share %	
			# of Streams	# of Artists
UMG	17,742,954	7	13%	14%
Sony	60,988,302	23	44%	46%
WMG	11,035,222	4	8%	8%
Others	48,187,237	16	35%	32%

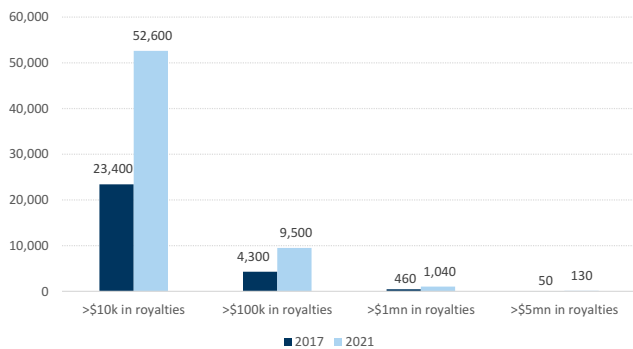
**Excluding Bad Bunny's new album 'Un Verano Sin Ti'**

Spotify's Global Top 50 playlist				
Labels	# of Streams	# of Artists	Market Share %	
			# of Streams	# of Artists
UMG	17,742,954	7	18%	19%
Sony	60,988,302	23	61%	62%
WMG	11,035,222	4	11%	11%
Others	9,700,257	3	10%	8%

Source: Spotify, Data compiled by Goldman Sachs Global Investment Research

**Exhibit 87: The democratisation of music with the growth of streaming has enabled many more artists to generate income from their work outside of touring...**

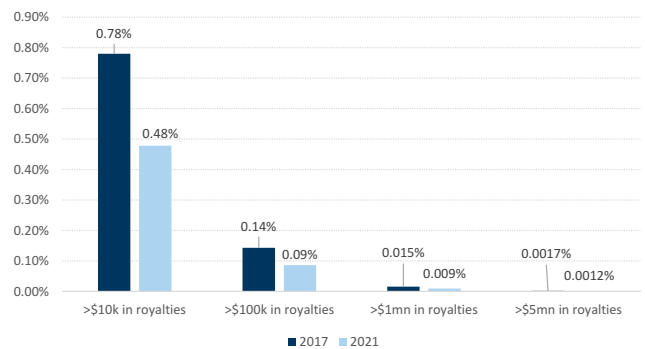
Number of artists generating \$10k, \$100k, \$1mn or \$5mn in royalties on Spotify



Source: Spotify, Data compiled by Goldman Sachs Global Investment Research

**Exhibit 88: ... but the share of artists generating over US\$1mn is only 0.009% and has been decreasing since 2017**

Number of artists generating \$50k, \$100k or \$1mn in royalties as a % of total number of content creators on Spotify



Number of content creators: 3mn in 2017, 11mn in 2021

Source: Spotify, Data compiled by Goldman Sachs Global Investment Research

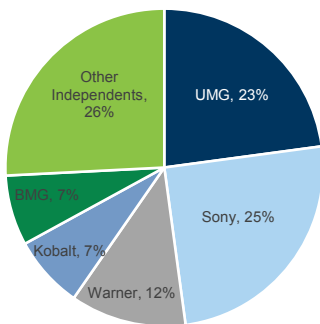
### Top 3 publishers lost share in 2021

Similar to record labels, we believe music publishing companies will continue to play an important role in the promotion, placement, marketing and administration of musical compositions of which they own/share the rights with songwriters, particularly given the complexity and fragmentation of the songwriting royalty collection systems around the world. Here, we believe the top 3 publishers will also retain their leading position given the strength of their catalogues, which is extremely difficult to replicate. While leading independent publisher BMG has significantly expanded its catalogue (owned/and or distributed) in recent years to 3mn songs, representing as many songs as UMGP and twice as many as Warner Chappell, we calculate that BMG generates 3x less revenue per song than the two major publishers.

We estimate that the top 3 publishers lost 220bp of market share in 2021, reversing the c.300bps market share gain in 2020, having seen share erosion across 2014-19.

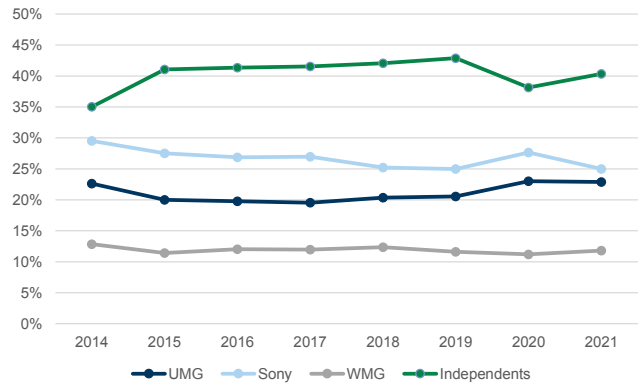
**Exhibit 89: The Top 3 Publishers commanded 60% market share in 2021**

Global music publishing market share, 2021



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

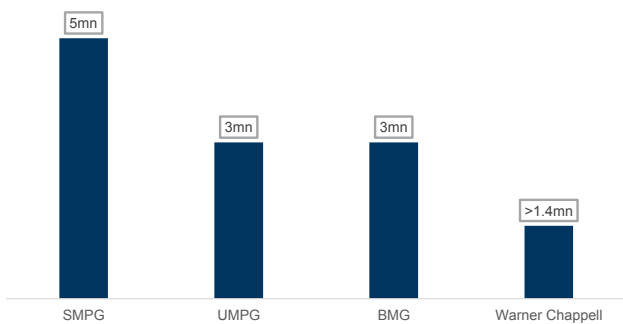
**Exhibit 90: We estimate that the top 3 publishers lost 220bp of share in 2021, having gained c.300bp in 2020**



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

**Exhibit 91: While leading independent publisher BMG represents as many songs as UMGP and twice as many as Warner Chappell...**

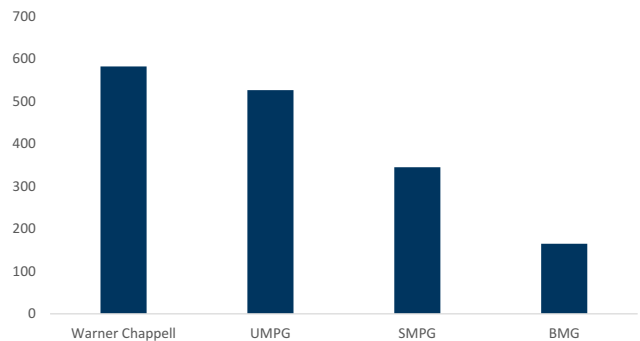
Number of songs owned and/or distributed by publisher



Source: Company data, compiled by Goldman Sachs Global Investment Research

**Exhibit 92: ... the top 3 publishers generate far more revenue per song than BMG**

Revenue per song, 2021 (US\$)



Source: Company data, Goldman Sachs Global Investment Research

## Catalogue investments marking a major shift

### **What has been driving the surge in catalogue acquisitions?**

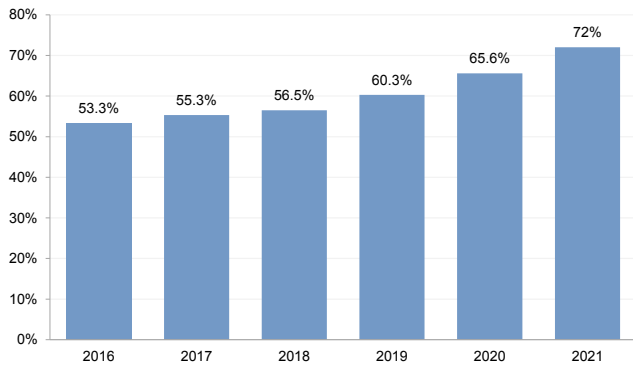
Music publishing catalogues have quickly gained momentum as an attractive asset class for investors, with transactions ranging from large catalogue mergers and acquisitions through to investment vehicles for songwriters' shares. In 2021, the total spend on music catalogue and rights was estimated to be US\$5.05bn (source: Music Business Worldwide), with around half of this value being spent on acquisitions of rights directly from artists, songwriters and/or their estates. We believe that the increase in the number and value of music catalogue acquisitions in the past few years has been driven by the **(i)** shift to streaming which has further increased songs discoverability, the revenue pool and predictability of cash flows, **(ii)** low interest rate environment, and **(iii)** increased monetisation opportunities for catalogue songs (e.g. sync, performance and emerging digital platforms), especially by major labels. Meanwhile, the availability of music catalogues has increased as artists sought alternative revenue streams amid pandemic-related restrictions which limited their ability to perform and tour; however, we believe that the availability of superstar catalogues is now becoming more scarce.

#### ■ **The shift to streaming provides increased revenue pools and predictable cash flows**

The rise of streaming has led to a shift in consumption towards catalogue music (i.e. songs older than 18 months), a trend which has continued into 2021 in markets such as the UK where catalogue's share of audio track streams increased to 72% (vs 60.3% in 2019) and in the US where catalogue accounts for 75% of total US music consumption (vs. 64% in 2019). A song typically goes through a product life cycle stage where sales peak in the period of release, reach maturity (or saturation) and then enter a recession period; however, it has potential to enter a re-growth period if discovered once again. Given millions of songs are now stored and readily available on a digital platform, they become instantly searchable and discoverable regardless of their age, significantly extending the song's life cycle. Moreover, historical streaming data is easy to access and verify, resulting in an improved ability to predict future cash flows by taking into account past cash flows, music genre, age of catalogue, opportunities to improve future monetisation and concentration of earnings.

**Exhibit 93: In the UK, catalogue's share of audio track streams has been steadily rising to 72% in 2021...**

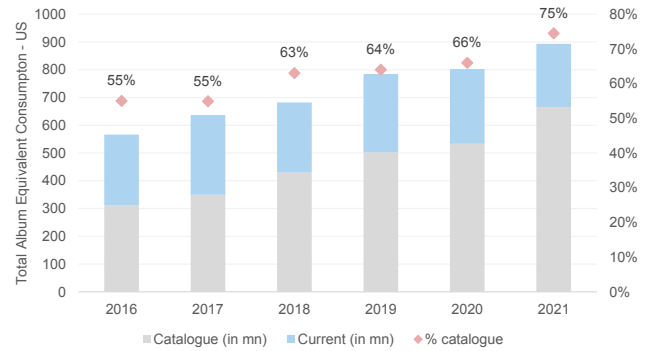
Catalogue's share of audio track streams - UK



Source: BPI

**Exhibit 94: ...and catalogue accounts for 75% of the total US music consumption across formats by volume...**

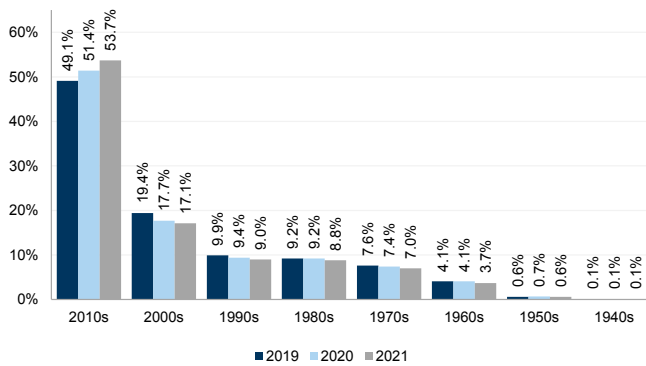
US Total Album Equivalent Consumption (mn)



Source: Luminate, Goldman Sachs Global Investment Research

**Exhibit 95: Increased share of catalogue streams in 2021 were songs from 2010s, which suggests that an average song today would generate around half of its cash flows in the first 10 years**

Catalogue streams by decade (2010s exclude the last 18 months)



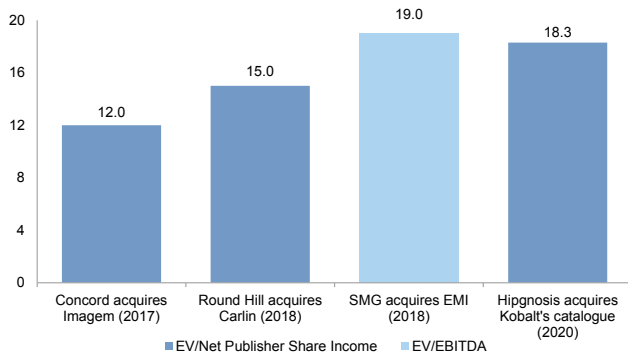
Source: BPI

■ **Low interest rates environment**

A DCF model is typically used to value a music catalogue, with a variety of factors being considered. In particular, the acquirer will assess the age of catalogue, length of the rights being acquired, music genre, the opportunity to improve future monetisation and concentration of earnings. As such, the low interest rates environment in recent years has played a key role in driving the surge in catalogue acquisitions and valuation multiples. Financial and strategic players have deployed significant amount of capital in the space, pushing music publishing catalogue valuations to 18-20x (Hipgnosis' most recent blended acquisition multiple is 19.0x) EV/NPS, from 8-12x historically.

**Exhibit 96: Transaction multiples have markedly risen over the past 3 years for music catalogue assets...**

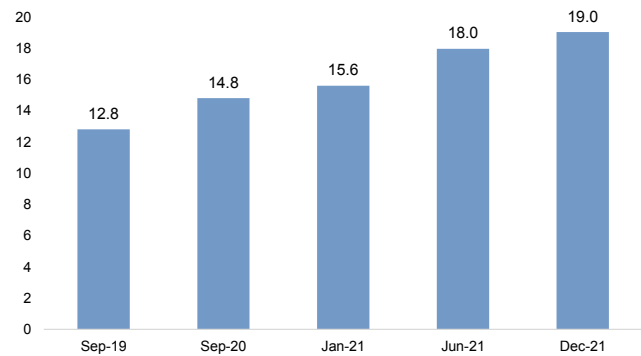
Historical transaction multiples for music catalogue



Source: Company data, Music Business Worldwide, compiled by Goldman Sachs Global Investment Research

**Exhibit 97: ... as reflected in the evolution of Hipgnosis' blended catalogue acquisition multiples**

Based on EV/Net Publisher Share



Source: Company data, Data compiled by Goldman Sachs Global Investment Research

■ **Music catalogues have become more valuable and attractive for strategic and financial players**

The main players driving consolidation in recent years included specialist investment companies and independent music companies (e.g. Hipgnosis Songs, Concord MG, Round Hill, Kobalt Music Capital, Reservoir Media, Lyric Street, and Primary Wave), often backed by large PE institutions. However, more recently, traditional record labels have entered the space and stepped up their investments more aggressively. For instance, UMG spent US\$459mn on catalogue acquisitions in 2021, following a record spend of US\$1.1bn in 2020. Sony Music spent US\$1.4bn on music acquisitions (including Paul Simon’s catalogue) between December 2020-May 2021 and reportedly paid US\$550mn for Bruce Springsteen’s catalogue alone in December 2021 (source: Music Business Worldwide). WMG acquired David Bowie’s publishing catalogue for more than US\$250mn in January 2022 (source: FT) and spent more than US\$100mn for David Guetta’s recording catalogue in June 2021. Sony Music CEO recently commented at an investor event that these deals are not a flip response to the increased activity in the market, rather that they are being very strategic and selective in their acquisitions.

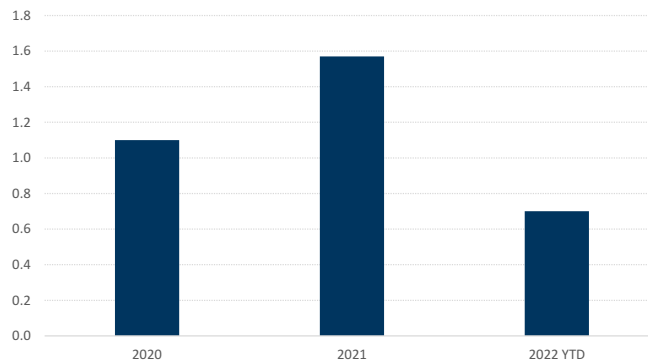
**Exhibit 98: Major music companies and IP investment companies have raised \$6.4bn total funding for catalogue acquisitions over the last 3.5 years ...**

Companies	Date	Funding for catalog acquisitions
WMG	Nov-21	<b>Raised \$535mn</b> via a senior secured notes agreement to spend on potential acquisitions of certain music-related assets
HarbourView/Apollo	Oct-21	HarbourView <b>raised \$1bn</b> , backed by Apollo, to invest in music copyrights and other entertainment assets
Primary Wave/Oaktree Capital	Jun-21	Oaktree Capital <b>committed \$375mn</b> to Primary Wave to support catalog acquisitions, in exchange for a minority interest
BMG/KKR	Apr-21	Committed <b>\$1bn in total</b> to spend solely on catalog, with no upper limit on capital
Hipgnosis Songs Fund	Feb-21	Raised <b>c.\$426mn in 2020</b> and <b>\$100mn in 2021</b> through equity and increased revolving credit facility <b>from \$400mn to \$600mn</b> in 2021 for potential catalog acquisitions
Round Hill	Nov-20	Raised <b>\$291mn</b> of funding to finance acquisitions of individual catalogs
Concord	Aug-20	<b>Raised \$600mn through debt offering</b> partially to fund acquisitions
WMG	Dec-19	Launched Tempo Music Investments in partnership with Providence Equity Partners - <b>\$650mn fund</b> (equity and debt) focused on catalog acquisitions
Primary Wave	Nov-19	Launched its IP Fund 2 to support further catalog acquisitions raising <b>&gt; \$500mn</b> , which followed its first IP Fund in 2016 with <b>&gt; \$300mn in funds</b>

Source: Music Business Worldwide, compiled by Goldman Sachs Global Investment Research

**Exhibit 99: There has been c.\$700mn of disclosed catalogue transactions 2022 YTD**

Value of disclosed catalogue transactions, \$bn



Source: Music Business Worldwide, compiled by Goldman Sachs Global Investment Research

**Exhibit 100: The value and number of (disclosed) transactions have increased significantly in the past 24 months**

Date	Company	Catalogue	Amount	Details
May-22	Hipgnosis Songs Capital	Justin Timberlake	>\$100mn	The deal gives Hipgnosis Songs Capital full control and ownership over Timberlake's interest in 200 songs he has written and co-written during his career
May-22	SMP/Domain Capital	Ashley Gorley	\$40mn	SMP & Domain Capital acquired another 50% (now own 100%) of the song rights for Gorley's music
Apr-22	BMG	Primal Scream	Undisclosed	MBMG acquired 50% stake in the song interests of Bobby Gillespie, Andrew Innes and Robert Young
Mar-22	UMG	Nat King Cole	\$10-\$20mn	UMG acquired recording rights to c.200 songs of Nat King Cole
Mar-22	Hipgnosis Songs Capital	Leonard Cohen	Undisclosed	Hipgnosis Songs Capital acquires his songwriting catalogue
Feb-22	UMG	Neil Diamond	Undisclosed	UMG acquired Neil Diamond's complete song catalogue and all master recordings
Feb-22	UMG	Sting	\$300mn	UMG acquired the publishing rights to Sting's entire song catalogue
Jan-22	Hipgnosis Songs Capital	Kenny Chesney	Undisclosed	Hipgnosis acquired 80% of Kenny Chesney's recorded music royalties
Jan-22	WMG	David Bowie	\$250mn	WMG acquired the global music publishing rights to David Bowie's song catalogue
Dec-21	SMG	Bruce Springsteen	\$500-550mn	Sony acquired Bruce Springsteen's masters and publishing rights
Nov-21	BMG	Motley Crue	\$90mn	BMG acquired 100% of the recordings catalog of Motley Crue
Oct-21	BMG	Tina Turner	c.\$50mn	The deal includes the artist's share of her recordings, plus her music publishing writer's share
Sep-21	Round Hill	The O'Jays	Undisclosed	Round Hill acquired 100% of the master royalty income of 532 original recordings
Jul-21	Hipgnosis Songs Capital	Red Hot Chili Peppers	c.\$140mn	Hipgnosis Songs Capital acquired 100% of the publishing rights
Jun-21	WMG	David Guetta	\$100mn	WMG acquired David Guetta's entire recordings catalogue and agreed a deal for future recordings
May-21	Hipgnosis Songs Capital	Andy Wallace	\$11mn	Hipgnosis Songs Capital acquired 100% of his Producer, Mixer and Performance rights
Mar-21	SMG	Paul Simon	c.\$250mn	Sony acquired Paul Simon's entire publishing catalogue
Mar-21	Hipgnosis	Carole Bayer Sager	c.\$8-\$10mn	Hipgnosis acquired the music publishing catalog (100% share)
Feb-21	Hipgnosis	Andrew Watt	c.\$45mn	Hipgnosis acquired 105 songs (100% ownership) from Andrew Watt
Jan-21	Hipgnosis	Shakira	Undisclosed	100% of Shakira's music publishing rights (both publishing and writer's share)
Jan-21	Hipgnosis	Lindsey Buckingham	Undisclosed	100% of Lindsey Buckingham's publishing rights (both publishing and writer's share)
Jan-21	KKR	Ryan Tedder	\$200mn	KKR acquired a majority stake in Ryan Tedder's music catalogue
Jan-21	Hipgnosis	Neil Young	\$150mn	50% of Neil Young's global copyrights and income interests (both publisher and writer's share)
Dec-20	UMG	Bob Dylan	\$400mn	Publishing rights of Bob Dylan's songwriting catalogue (around 600 copyrights)
Dec-20	Primary Wave	Stevie Nicks	c.\$80mn	Primary Wave acquired a 80% stake in Stevie Nicks' publishing catalogue
Nov-20	Hipgnosis	Catalogue from Kobalt Music Copyrights	\$323mn	33,000 songs / cuts in songs from Kobalt, acquired at 18.3x blended acquisition multiple on historical income; it includes the SONGS publishing catalogue
Sep-20	Reservoir	Sorted Noise	Undisclosed	Reservoir acquired Sorted Noise's catalogue of masters and publishing copyrights
Sep-20	Spirit Music	Tim McGraw	Undisclosed	Spirit Music Group acquired a number of Tim McGraw's master recordings
Aug-20	Concord	Imagine Dragons	> \$100mn	Concord Music Publishing acquired the back catalogue of Imagine Dragons (writer's and co-publishing share in perpetuity, with the other co-publishing share owned by UMG)
Aug-20	Spirit Music	Kara DioGuardi	Undisclosed	Spirit Music Group acquired a large portion of Kara DioGuardi's publishing catalogue, excluding future works
Jun-20	UMG	Young Money Entertainment	> \$100mn	UMG reportedly acquired Young Money Entertainment catalogue, including records from Drake, Nicky Minaj, and Young Money
May-20	Reservoir	Shapiro Bernstein	Undisclosed	Reservoir acquired Shapiro Bernstein, including > 16,000 copyrights
Jan-20	Concord	Pop Publisher Pulse	> \$100mn	Concord Music Publishing bought a majority stake in Pop Publisher Pulse from Fujipacific Music
Aug-19	Reservoir	Chrysalis Records	Undisclosed	Reservoir acquired Chrysalis Records, including both its music publishing and recorded music operations (> 20,000 recordings)
Jul-19	WMG	Forza Music	Undisclosed	WMG acquired the Slovakian Entertainment company Forza Music, including the former state-run record company OPUS with a large portion of the country's music releases produced over 1960-1990s
May-19	WMG	Gene Autry Music Group	Undisclosed	Warner Chappell Music acquired Gene Autry Music Group comprising of 4 publishing companies with catalogues containing > 1,500 songs
Nov-18	SMG	EMI	\$2.3bn	Sony acquired the final 60% of EMI Music Publishing from an investor consortium for \$2.3bn. It owned 40% beforehand, 10% acquired in Jul 2018 for \$287.5mn from Micheal Jackson Estate
Jan-18	Primary Wave	Marley's songs and Blue Mountain Music	\$50mn	Primary Wave acquired 80% of Island Records' share in two publishing catalogues
Jan-18	Round Hill	Carlin Music	\$240mn	Round Hill acquired independent publisher Carlin Music, with > 100,000 copyrights
Dec-17	Kobalt	SONGS Music Publishing	\$160mn	Kobalt Capital acquired the catalogue of SONGS Music Publishing
Jun-17	Concord	Imagem	> \$500mn	Concord fully acquired Imagem Music Group, with copyrights of 250,000 works, implying multiple of c.12x on gross profit (net publisher share)
Apr-15	Concord	Bicycle	Merger	Concord merged with The Bicycle Music Company, and simultaneously raised \$100mn to fund further growth in rights acquisitions. The combined entity owned copyrights of 60,000 songs at the time

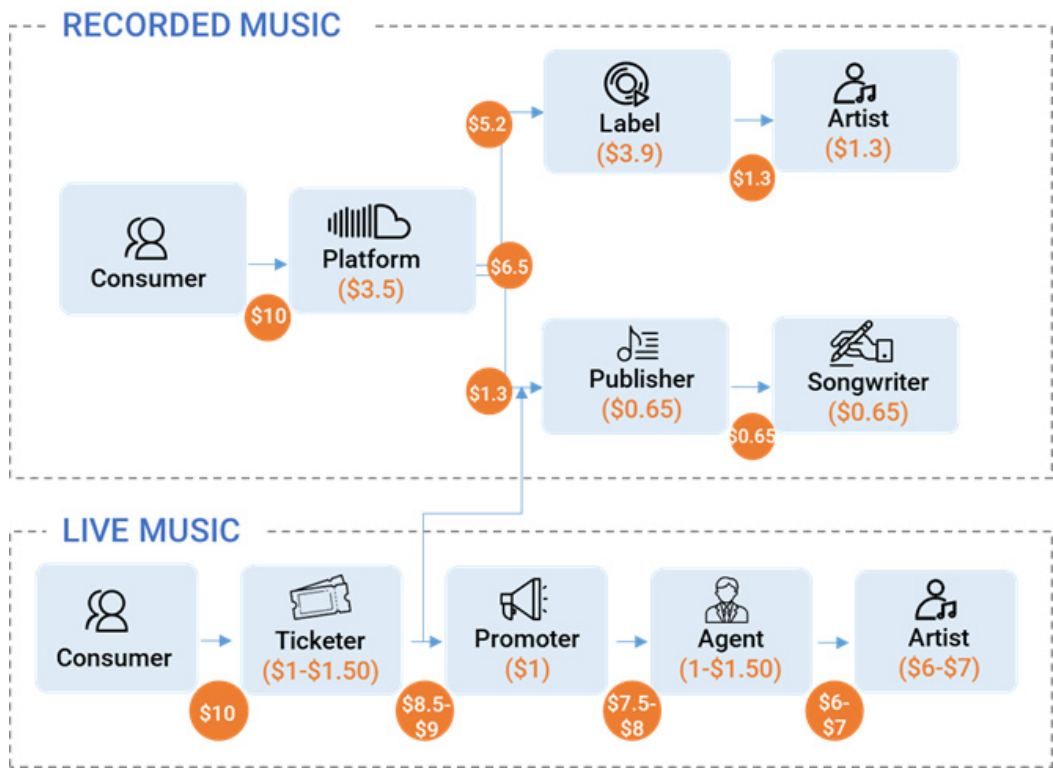
Source: Music Business Worldwide, compiled by Goldman Sachs Global Investment Research



### What are musicians selling?

Each song has two copyrights - the master recording which is owned by the record labels (most often in perpetuity) and the song composition. A songwriter can either sign a co-publishing deal, where the copyrights belong to the publishing company, or an administration deal, where the songwriter retains ownership of these copyrights. Most catalogue transactions have involved the songwriter rights rather than the master recording. By also acquiring the songwriter rights, record labels often gain greater freedom and flexibility in promoting and monetising the catalogues whilst saving c.20% in publishing administration fees. Beyond the revenue streams being acquired on the publishing side, we believe that there could be meaningful monetisation upside for the record label when in full control, which in turn would drive higher publishing revenues over time.

**Exhibit 101: Music industry value chain - record labels capture most of the value in recorded music, whilst artists capture most of the value in live music**  
 Illustrative Recorded and Live Music value chain



Source: Goldman Sachs Global Investment Research

### Exhibit 102: Most of the major catalogue acquisitions were for the publishing copyrights

Select catalogue acquisitions in 2021/22

UMG				
Date	Artist	Amount (\$mn)	Publishing rights	Recorded rights
Feb-22	Neil Diamond	Undisclosed	X	X
Feb-22	Sting	300	X	X
WMG				
Date	Artist	Amount (\$mn)	Publishing rights	Recorded rights
Jun-21	David Guetta	100		X
Jan-22	David Bowie	250	X	X
Sony				
Date	Artist	Amount (\$mn)	Publishing rights	Recorded rights
Mar-21	Paul Simon	250	X	
Dec-21	Bruce Springsteen	525	X	X
Jan-22	Bob Dylan	200		X
Hipgnosis				
Date	Artist	Amount (\$mn)	Publishing rights	Recorded rights
Feb-21	Andrew Watt	45	X	X
Jan-21	Neil Young	150	X	X
Jan-21	Shakira	Undisclosed	X	
Jan-21	Lindsey Buckingham	Undisclosed	X	
BMG				
Date	Artist	Amount (\$mn)	Publishing rights	Recorded rights
Oct-21	Tina Turner	50	X	X
Nov-21	Motley Crue	90		X
Apr-22	Primal Scream	Undisclosed		X
Hipgnosis Song Capital (Blackstone partnership)				
Date	Artist	Amount (\$mn)	Publishing rights	Recorded rights
Mar-22	Justin Timberlake	100	X	
Jul-21	Red Hot Chili Peppers	140	X	
Primary Wave				
Date	Artist	Amount (\$mn)	Publishing rights	Recorded rights
Aug-21	Prince	Undisclosed	X	X
KKR/BMG				
Date	Artist	Amount (\$mn)	Publishing rights	Recorded rights
Jan-21	Ryan Tedder	200	X	X

Source: Music Business Worldwide, Company data, Data compiled by Goldman Sachs Global Investment Research

### These acquisitions may be defensive but major labels are best placed to improve monetisation

While it is difficult to assess returns on investment given the lack of disclosure, we believe the key to a successful catalogue acquisition depends on the ability to successfully drive sync revenues (e.g. placement on TV commercials, movies etc.), an area where labels and publishers have a natural competitive advantage vs. financial players given they can leverage their existing infrastructure and scale. Particularly, major labels have deep industry connections given their long-standing positions and expertise in the industry, which improves their ability to monetise a catalogue:

- The majors have **strong relationships with a significant number of artists and songwriters** (e.g. UMG manages >3mn recordings and c.3mn publishing copyrights), giving the company access to potential catalogue deals earlier and more data around the performance of the catalogue.
- The **ability to better monetise catalogues** through more favourable commercial terms with DSPs, and leveraging global distribution network and vast relationships across adjacent industries (for instance, UMPG is the publisher of choice for top film and TV content studios, e.g. BBC, MBM, NBC, Dreamworks, HBO, StudioCanal, WB, Disney, Lionsgate, Amazon Studios, Viacom, Paramount). Additionally, whilst major labels continue to license catalogues to more traditional audio streaming platforms

they are also using complementary ways by licensing music to connected fitness platforms, such as Peloton or Apple Fitness+, or short-form video platforms like TikTok.

- The **ability to leverage existing overheads and tech platforms** leading to greater cost efficiencies, notably in collecting royalties.
- By acquiring and owning the full suite of rights (publishing + recorded), **labels are able to gain full control over the marketing and monetisation opportunities of the catalogue**. By contrast, if a label were to acquire a bundle of rights only, approvals from the other rights owners for their use would be needed; owning merely royalty streams would present a passive, low-return investment with limited upside and control.

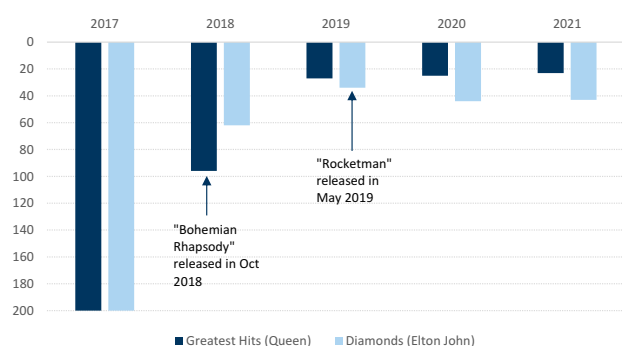
#### Two examples of successful catalogue monetisation....

**Queen's "Bohemian Rhapsody"** - The song entered the Top 100 Billboard chart in 1976, after its initial release by the band. **In October 2018, the 'Bohemian Rhapsody' film was released and helped propel their album "Greatest Hits" to the top 30 in 2019, having been outside the top 200 in 2017**, prior to any promotion of the film. **The album has remained in the top 30 every year since the film's release**, highlighting the sustained levels of elevated consumption of the music, as a result of being introduced to a new audience, and has now become the most streamed classical rock song of all time surpassing 1.6bn streams globally. The release of "Bohemian Rhapsody" **resulted in Queen's music catalogue generating 3x more royalties** in FY19 vs FY18. **Although royalties declined in FY20, they remained 96% higher** than prior to the film release and revenues are likely to continue to be boosted by the release in the coming years, albeit at a decreasing rate.

**Elton John's "Diamonds"** - Following the film release of "Rocketman" (in 2019), **Elton John's album "Diamonds" climbed into the top 40 in 2019**, having previously been outside the top 200 in 2017.

**Exhibit 103: Queen’s “Greatest Hits” album featured in the 2018 ‘Bohemian Rhapsody’ film has remained in the Top 30 every year since, with Elton John’s “Diamonds” album following a similar pattern following the film release of ‘Rocketman’**

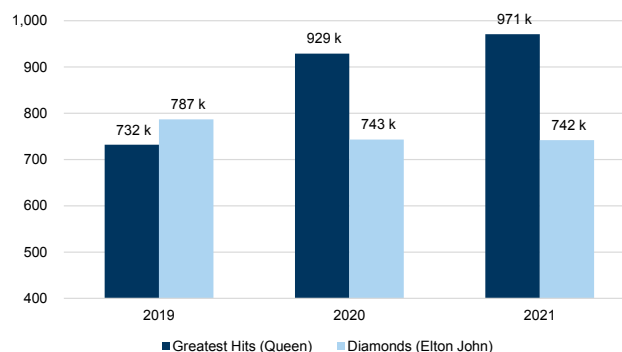
Year-end chart: Billboard Top 200 Albums



Source: Billboard, Data compiled by Goldman Sachs Global Investment Research

**Exhibit 104: Queen’s “Greatest Hits” album entered the top Rock Album charts following the film’s release, with total sales continuing to rise yoy in 2021**

Top Rock Album sales: Album + TEA + On-Demand audio streams SEA

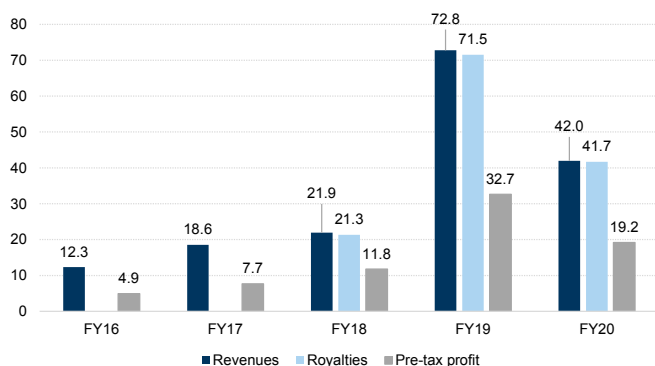


TEA: Track equivalent albums; SEA: Streaming equivalent albums

Source: Luminate

**Exhibit 105: Revenues and pre-tax profits more than tripled following the release of “Bohemian Rhapsody” in FY19 and remained at elevated levels the year after**

Queen Productions Ltd revenues, royalties and pre-tax profit, £mn



FY ending in September; Royalties not disclosed for FY16/17

Source: Company data, Goldman Sachs Global Investment Research

**We expect a slowdown in catalogue acquisitions amid rising interest rates**

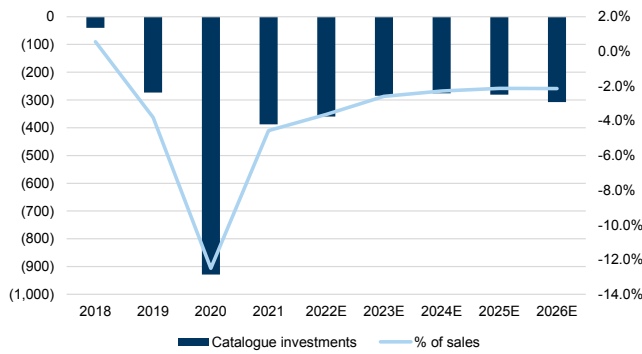
The low interest rate environment drove a surge in catalogue acquisition multiples. However, in the current environment, with higher inflation driving rising interest rates, we believe that valuations and size of transactions may start to come down.

Overall, we expect record labels to spend a lesser amount on catalogue acquisitions compared to the past 2 years, although the magnitude of spending could vary significantly depending on the repertoire that becomes available for sale in a given year. For UMG, we estimate the company will deploy c.€300mn p.a. over 2022-26E from US\$1.1bn/US\$459mn in 2020/2021 in catalogue investments, which compares to Moody’s forecast of €350mn from 2023 onwards. As discussed earlier though, there might not be as many iconic catalogues available for sale in the next 5 years, as by

nature these assets are scarce, unless UMG decides to change its strategy and pursue acquisitions in the new and mid-market which we view as rather unlikely. For financial players, we believe there will continue to be a steady flow of mid-sized catalogues available for sale and for which competition will likely remain high.

**Exhibit 106: We expect spending on catalogue to come down gradually, although the magnitude of spending could vary significantly depending on the repertoire that becomes available for sale in a given year**

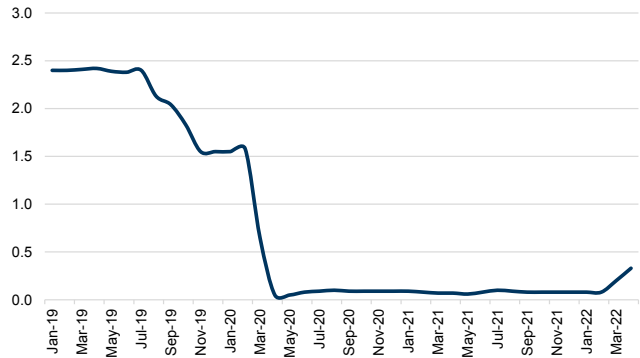
UMG catalogue investments (€mn, LHS), as % of sales (RHS)



Source: Company data, Goldman Sachs Global Investment Research

**Exhibit 107: We expect increasing interest rates from historic lows to put downward pressure on catalogue valuations**

Federal Funds rate (%)



Source: FRED, compiled by Goldman Sachs Global Investment Research

# Disclosure Appendix

## Reg AC

We, Lisa Yang, Eric Sheridan, Rod Hall, CFA, Stephen Laszczyk, Ronald Keung, CFA, Lincoln Kong, CFA, Brett Feldman, James Tate and Manish Adukia, CFA, hereby certify that all of the views expressed in this report accurately reflect our personal views about the subject company or companies and its or their securities. We also certify that no part of our compensation was, is or will be, directly or indirectly, related to the specific recommendations or views expressed in this report.

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## GS Factor Profile

The Goldman Sachs Factor Profile provides investment context for a stock by comparing key attributes to the market (i.e. our coverage universe) and its sector peers. The four key attributes depicted are: Growth, Financial Returns, Multiple (e.g. valuation) and Integrated (a composite of Growth, Financial Returns and Multiple). Growth, Financial Returns and Multiple are calculated by using normalized ranks for specific metrics for each stock. The normalized ranks for the metrics are then averaged and converted into percentiles for the relevant attribute. The precise calculation of each metric may vary depending on the fiscal year, industry and region, but the standard approach is as follows:

**Growth** is based on a stock's forward-looking sales growth, EBITDA growth and EPS growth (for financial stocks, only EPS and sales growth), with a higher percentile indicating a higher growth company. **Financial Returns** is based on a stock's forward-looking ROE, ROCE and CROCI (for financial stocks, only ROE), with a higher percentile indicating a company with higher financial returns. **Multiple** is based on a stock's forward-looking P/E, P/B, price/dividend (P/D), EV/EBITDA, EV/FCF and EV/Debt Adjusted Cash Flow (DACF) (for financial stocks, only P/E, P/B and P/D), with a higher percentile indicating a stock trading at a higher multiple. The **Integrated** percentile is calculated as the average of the Growth percentile, Financial Returns percentile and (100% - Multiple percentile).

Financial Returns and Multiple use the Goldman Sachs analyst forecasts at the fiscal year-end at least three quarters in the future. Growth uses inputs for the fiscal year at least seven quarters in the future compared with the year at least three quarters in the future (on a per-share basis for all metrics).

For a more detailed description of how we calculate the GS Factor Profile, please contact your GS representative.

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## Quantum

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Goldman Sachs Investment Research global Equity coverage universe

	Rating Distribution			Investment Banking Relationships		
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