

Social Media, Music Consumption, and Cross-Platform Spillover Effects

Mimansa Bairathi, Anja Lambrecht, Anita Rao

Social Media Allow Consuming Third-Party Content

- ▶ Songs often serve as background music to TikTok videos



Cross-Platform Spillover Effects?

TikTok could help streams at other platforms

How TikTok is changing the music industry and the way we discover new, popular songs

See All Photos published on 6 Nov 2020 10:00



- TikTok has become a go-to platform for discovering new music.
- Record labels, music marketers, artists, and other creators are all flooding the app with songs.
- Here's a breakdown of Business Insider's recent coverage of TikTok's impact on the music industry.

Sia Woods performs at the "Thrive With Pride" concert hosted by L.A. Pride and TikTok. Photo by Christopher Douglas for Business Insider

Cross-Platform Spillover Effects?

TikTok could help streams at other platforms

How TikTok is changing the music industry and the way we discover new, popular songs



- TikTok has become a go-to platform for discovering new music.
- Record labels, music marketers, artists, and other creators are all flooding the app with songs.
- Here's a breakdown of Business Insider's recent coverage of TikTok's impact on the music industry.

Olivia Rodrigo performs at the "Three With Pride" concert hosted by L.A. Pride and TikTok. Photo: Christopher D'Amico / iStockphoto.com

TikTok could hurt streams at other platforms

Cannibalization of consumption at other platforms (high royalties)

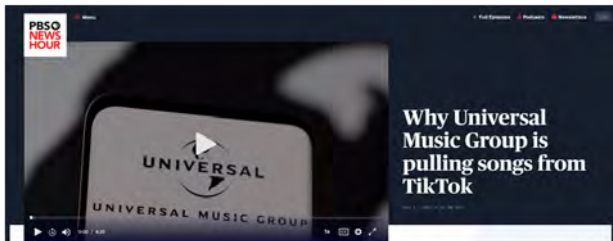


Research Questions

1. Does presence on social media help or hurt consumption of music on other channels?
 - Effect on Spotify streams
2. Does social media aid music discovery?
 - Effect on music discovery via Shazam
 - Heterogeneity across songs – recency and popularity on social media



Universal Music Group Exits Tiktok



Why Universal Music Group is pulling songs from TikTok



Timeline of Events

- ▶ Universal exits TikTok: Jan 31, 2024
- ▶ Exit provides a quasi-experimental setting
 - Users can no longer access Universal songs on TikTok
 - For reasons unrelated to their preferences
- ▶ Enables us to understand causal effect on other platforms

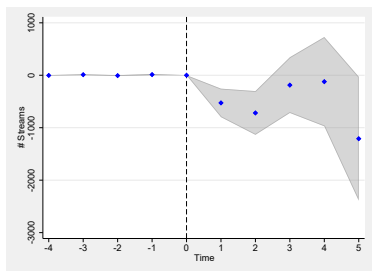
Data and Empirical Strategy

- ▶ Worldwide Spotify streams and Shazam discovery of songs at the daily level
 - Data before-after event: Dec 26, 2023 – Mar 5, 2024
 - Soundcharts.com API
- ▶ Songs with at least one video on TikTok prior to the exit
 - Treatment Group - Universal songs (focus on ATT)
 - Control Group - Sony and Warner songs
- ▶ Alternate Control Group
 - Sony and Warner songs not on TikTok in last 3 months

Decline in Streams on Spotify

- ▶ Use Synthetic difference-in-difference (SDiD)

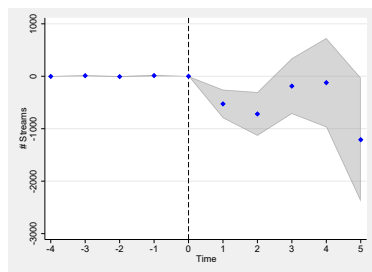
Relative to Sony + Warner
songs used on TikTok



Decline in Streams on Spotify

- ▶ Use Synthetic difference-in-difference (SDiD)
- ▶ Streams of Universal songs decrease by 552.9 (2.2%)

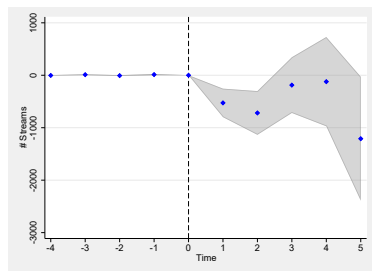
Relative to Sony + Warner
songs used on TikTok



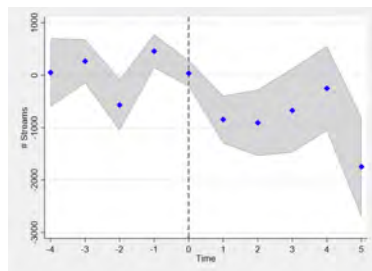
Decline in Streams on Spotify

- ▶ Use Synthetic difference-in-difference (SDiD)
- ▶ Streams of Universal songs decrease by 552.9 (2.2%)

Relative to Sony + Warner
songs used on TikTok



Relative to Song + Warner
songs **not** used on TikTok

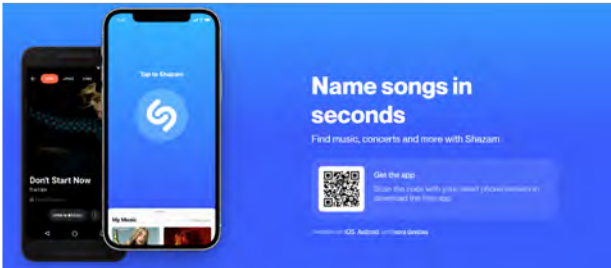


Reduced Discovery Could Drive Drop in Spotify Streams

- ▶ TikTok acts as a marketing channel for music
 - Exposure to songs on TikTok increases music discovery
 - Seek out songs on streaming platforms after hearing them on TikTok

Reduced Discovery Could Drive Drop in Spotify Streams

- ▶ TikTok acts as a marketing channel for music
 - Exposure to songs on TikTok increases music discovery
 - Seek out songs on streaming platforms after hearing them on TikTok
- ▶ If so, we should see a decline in users' discovery of songs
 - Discovery via Shazam

An advertisement for the Shazam app. On the left, two smartphones are shown: one displaying a music player interface with the song 'Don't Start Now' by Dua Lipa, and the other displaying the Shazam app's main screen with the Shazam logo and the text 'Tap to Shazam'. On the right, the text reads 'Name songs in seconds' and 'Find music, concerts and more with Shazam'. Below this is a QR code and the text 'Get the app: Scan this code with your smart phone camera or download from your app.' At the bottom, it says 'Available on the App Store. Get it on Google Play.'

Name songs in seconds

Find music, concerts and more with Shazam

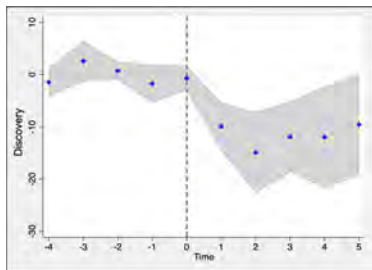
Get the app:
Scan this code with your smart phone camera or
download from your app.

Available on the App Store. Get it on Google Play.

Decline in Discovery via Shazam

- ▶ Use Synthetic difference-in-difference (SDiD)

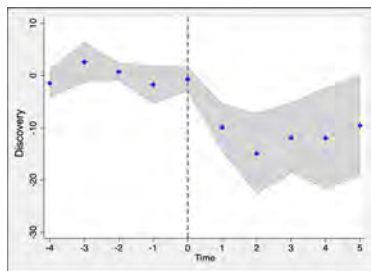
Relative to Sony + Warner
songs used on TikTok



Decline in Discovery via Shazam

- ▶ Use Synthetic difference-in-difference (SDiD)
- ▶ Discovery of Universal songs decrease by 11.6 (10.6%)

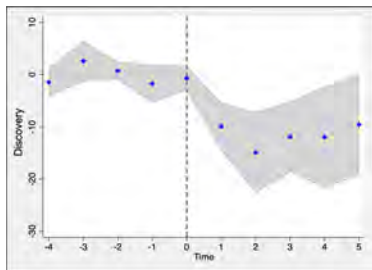
Relative to Sony + Warner
songs used on TikTok



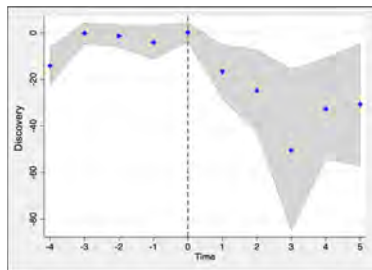
Decline in Discovery via Shazam

- ▶ Use Synthetic difference-in-difference (SDiD)
- ▶ Discovery of Universal songs decrease by 11.6 (10.6%)

Relative to Sony + Warner
songs used on TikTok



Relative to Sony + Warner
songs **not** used on TikTok



Implications

Platforms like Spotify

- ▶ Consumption contingent on discovery elsewhere

Individual artists and labels

- ▶ Need to consider cross-platform spillover effects in distribution and pricing decisions

Policymakers

- ▶ Policies that impact social media platforms can have impact on consumption through other avenues

THANK YOU!

Paper available at:

https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4957683