



Music Trends

From 1921-2020

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■ Objectives

1

How has genre representation changed over different periods?

3

What audio features correlate with the popularity of a track?

2


How are audio features trending over time?

4

How has song duration changed over time?



The Dataset



155k Total Songs	19.7k Artists
16 Total Columns	10 Audio Metrics



13

Broad Genres

- | | |
|------------|------------------|
| 1. Rock | 7. R&B |
| 2. Pop | 8. Electronic |
| 3. Folk | 9. Metal |
| 4. Hip Hop | 10. Blues |
| 5. Jazz | 11. Classical |
| 6. Country | 12. Experimental |

■ Adding Genre Tags

Genres for each song were not available in the dataset.

Genres were determined using the Spotify API where tags were available.

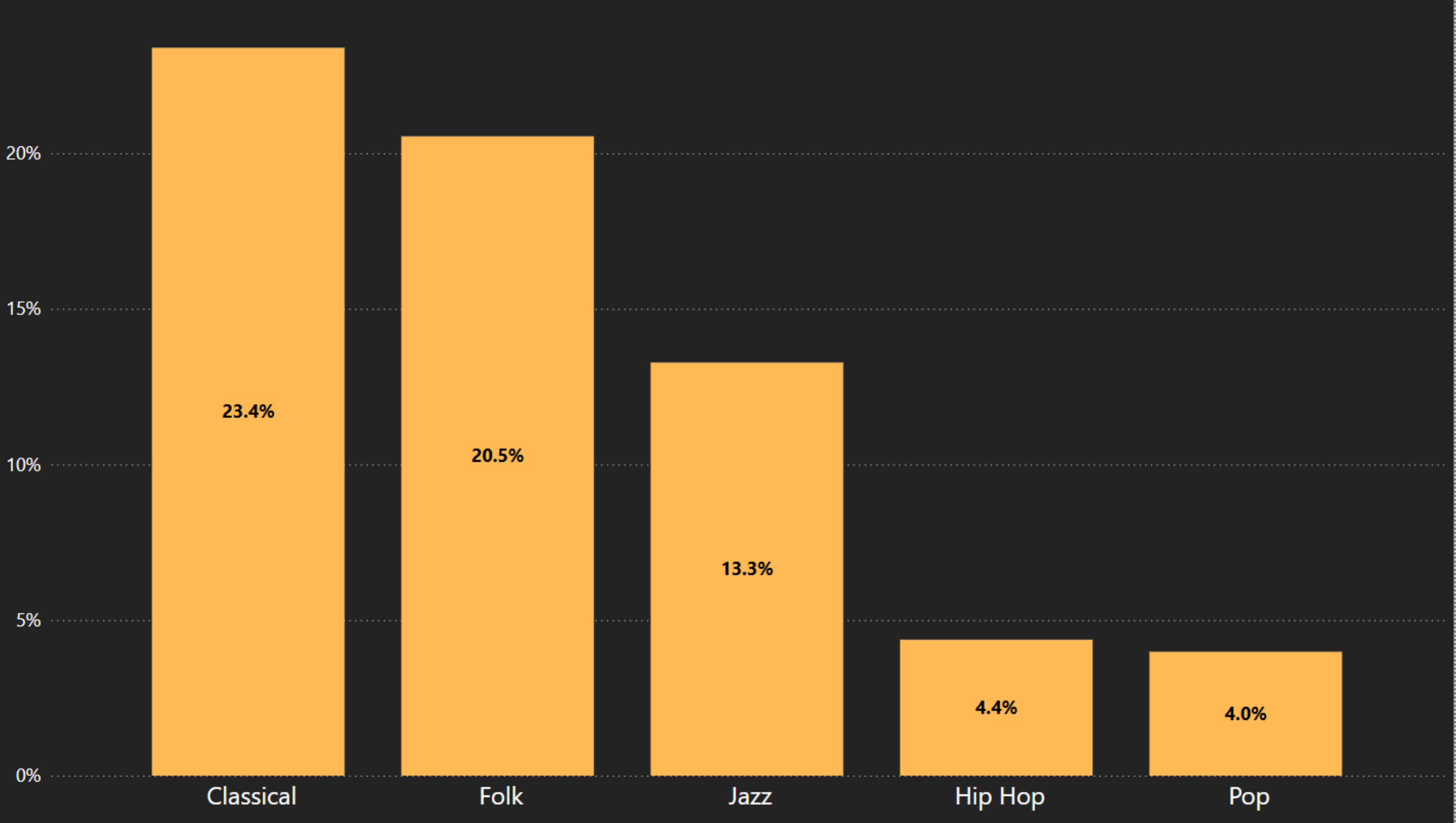
For the remaining tags, the GPT 3.5 Turbo API was used to make an accurate determination.



Genre Breakdown by Eras

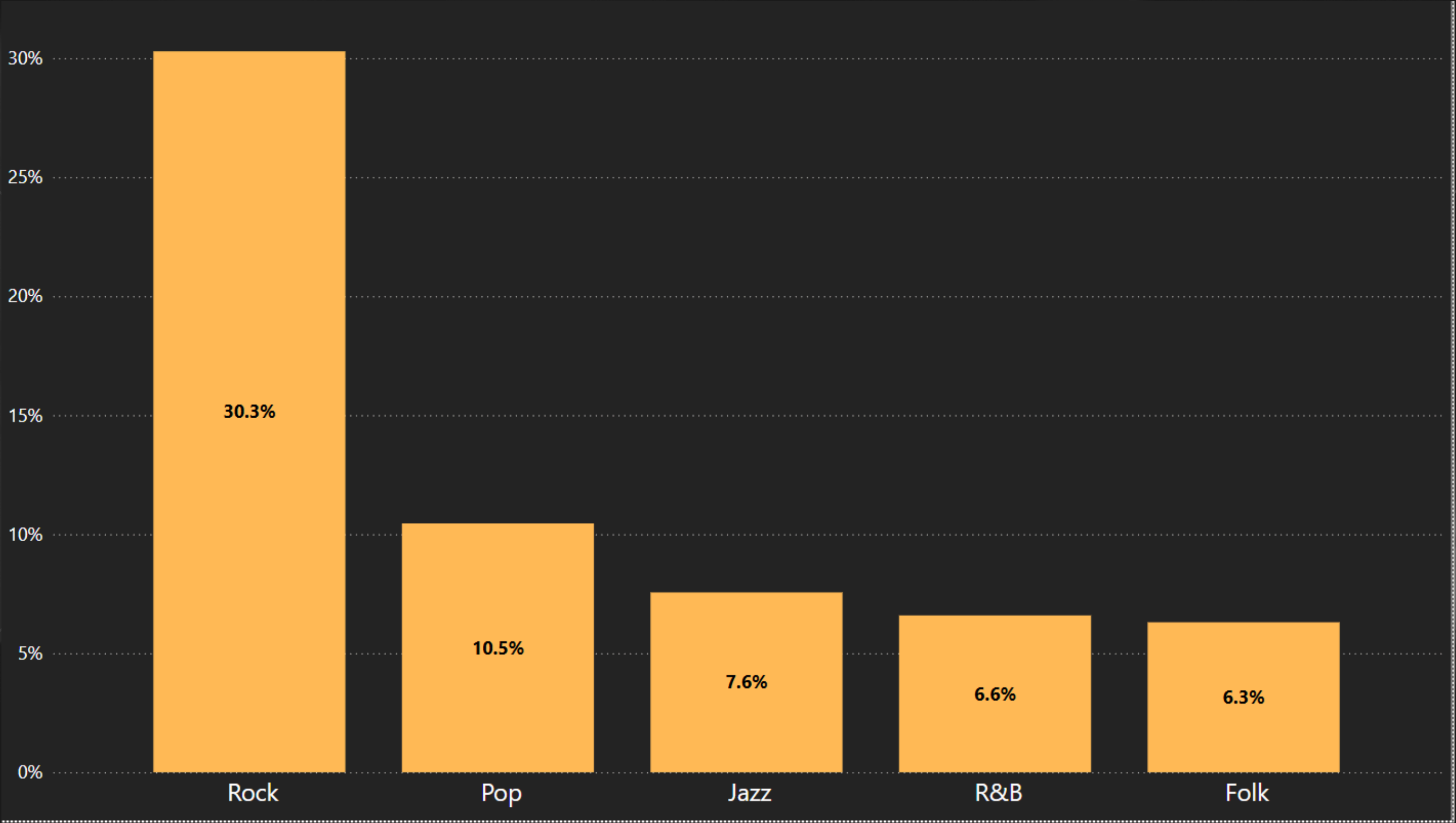


1921 - 1959



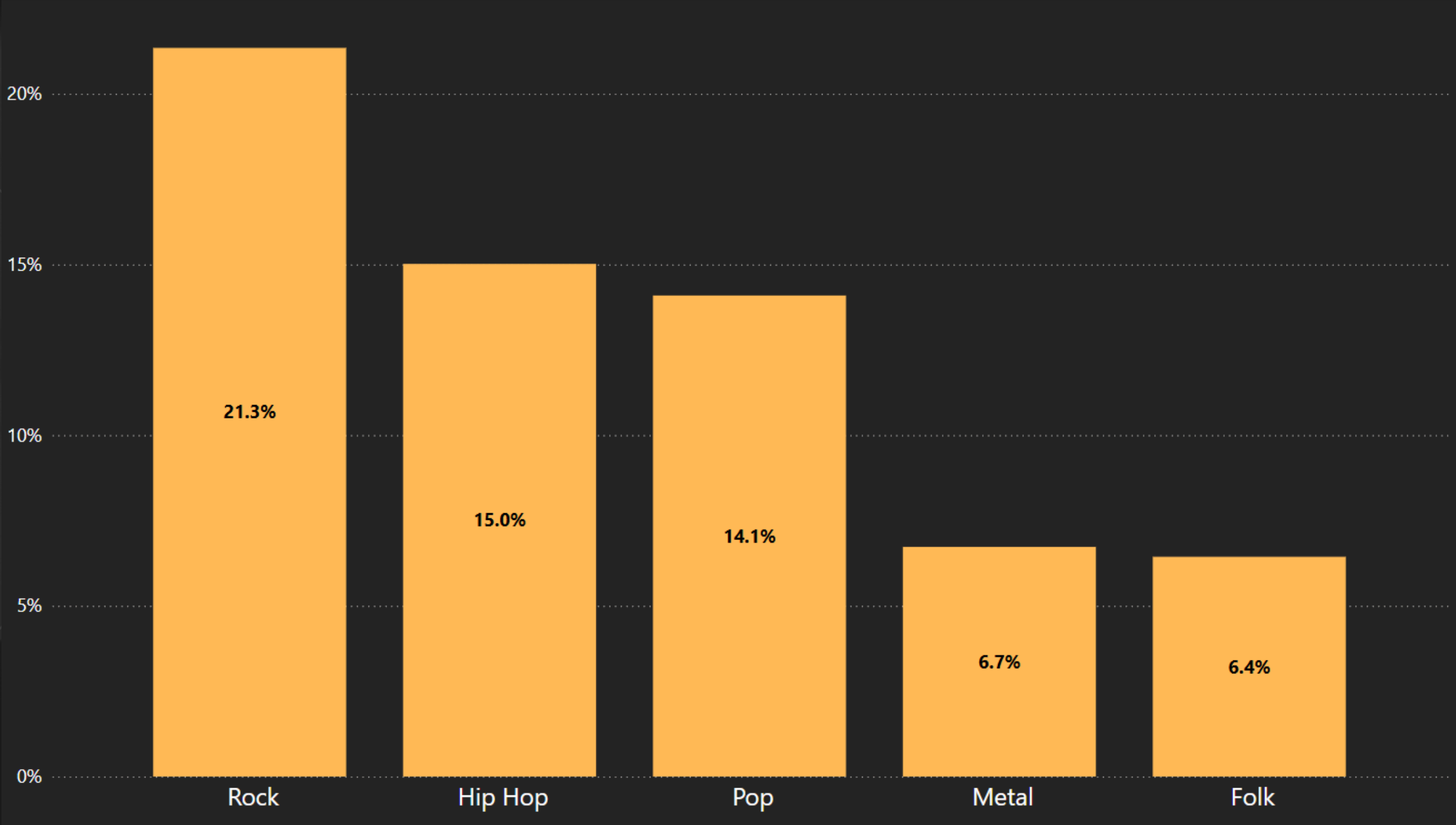


1960 - 1999



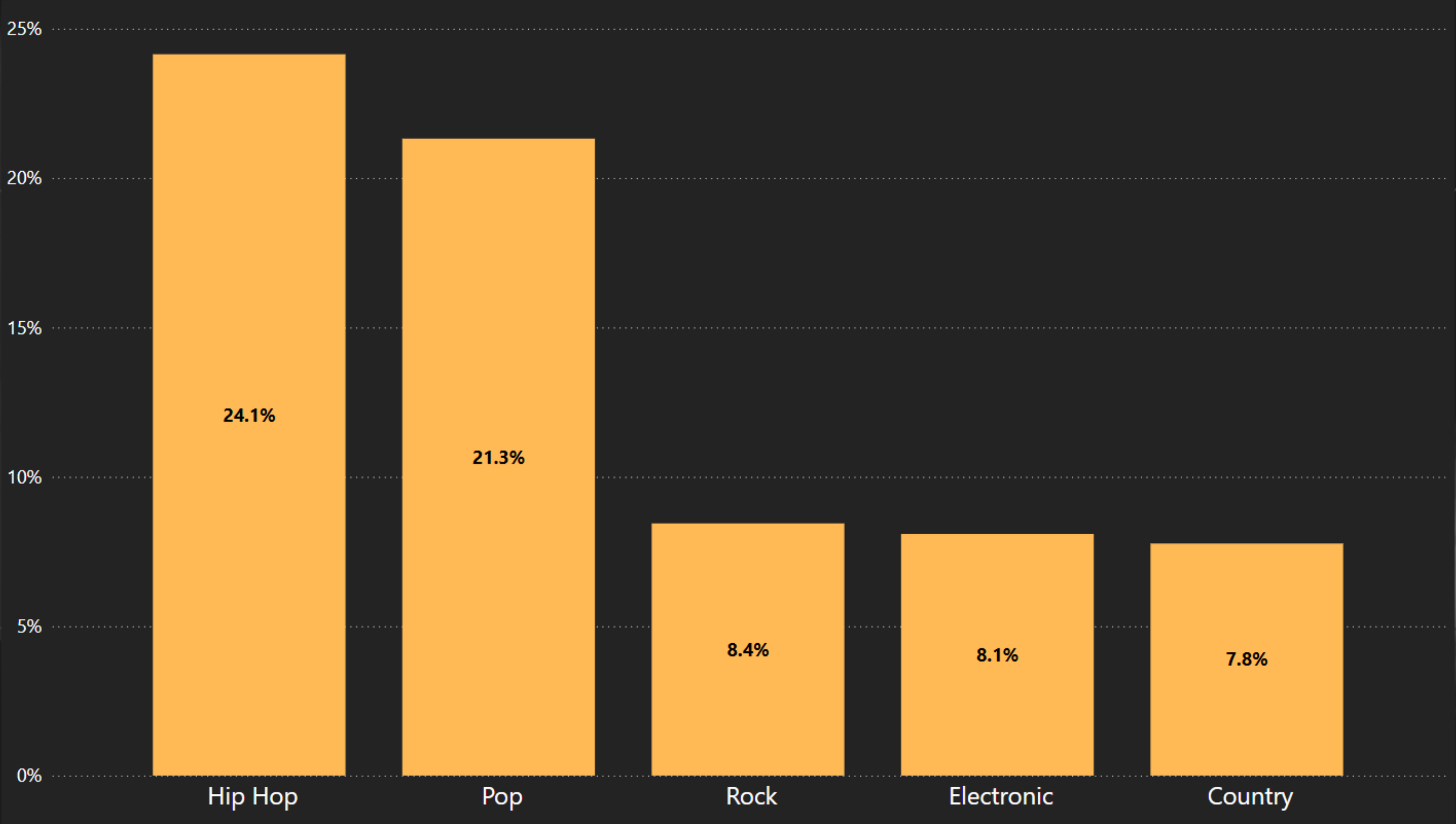


2000 - 2010





2011 - 2020



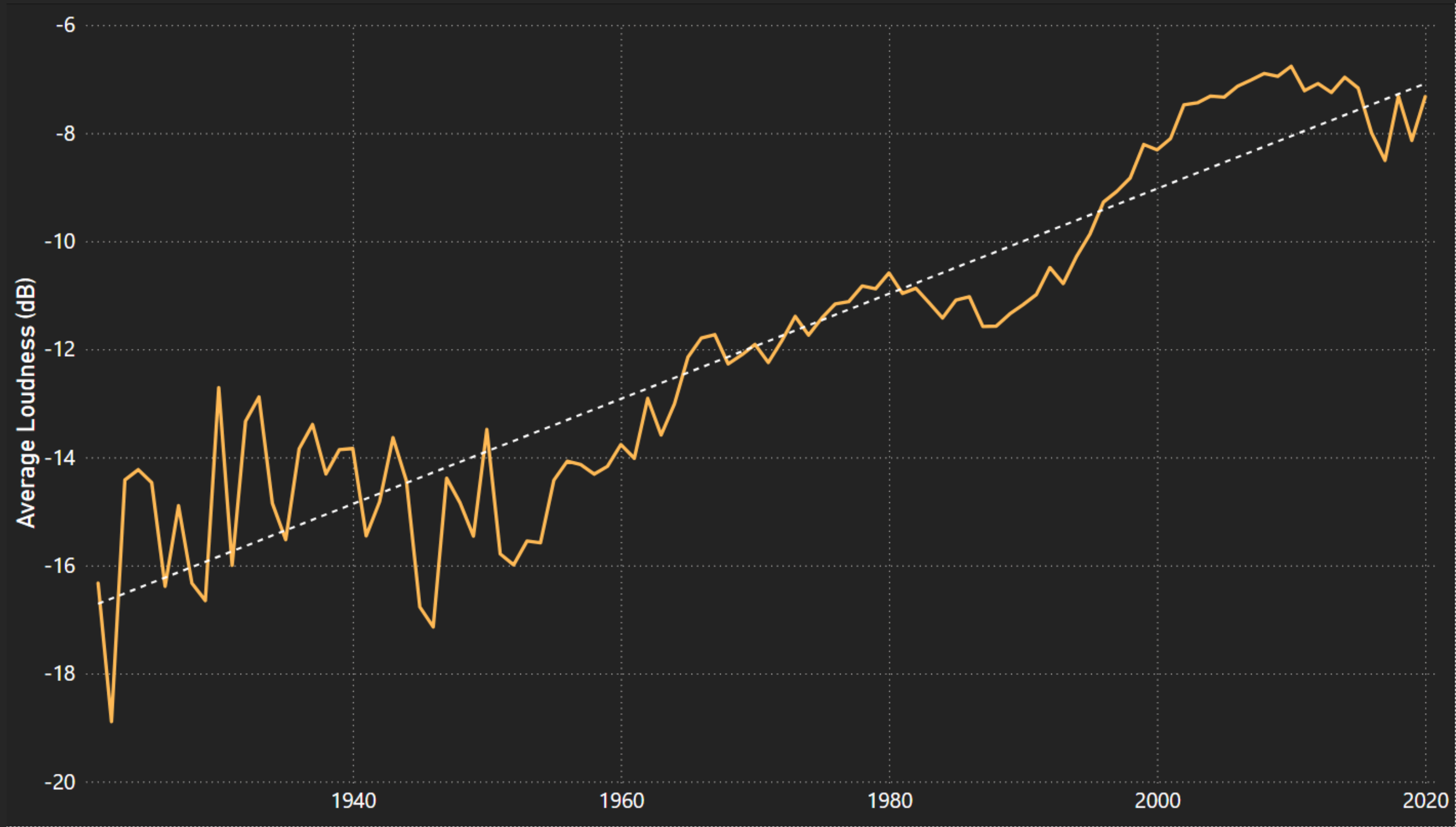


■ Audio Features

1. Loudness (-60 dB to 0 dB)
2. Danceability (0 to 1 confidence interval)
3. Tempo (beats per minute of a track)
4. Acousticness (0 to 1 confidence interval)
5. Energy (0 to 1 perceptual measure)
6. Instrumentalness (0 to 1 prediction interval)

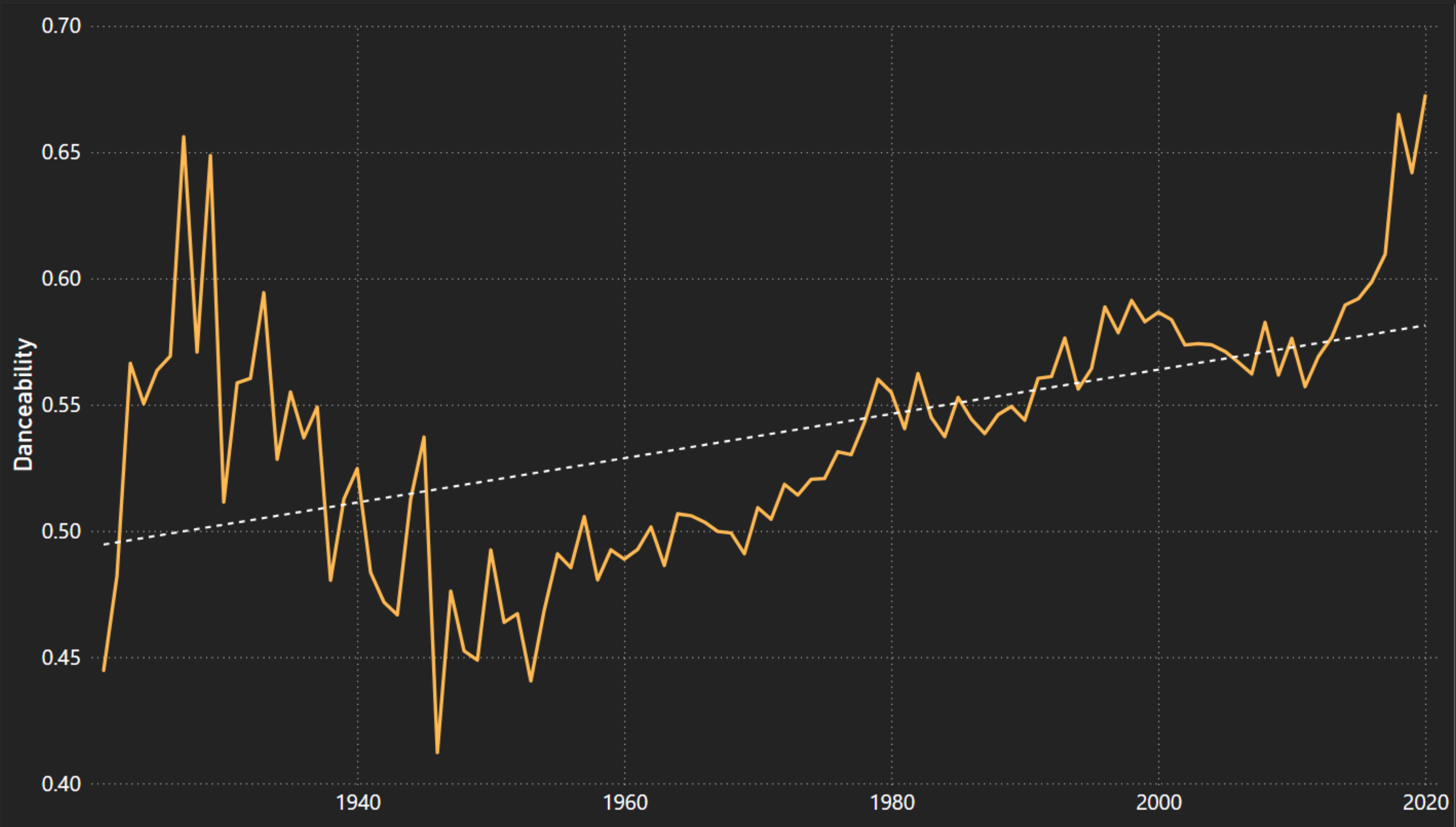


Loudness



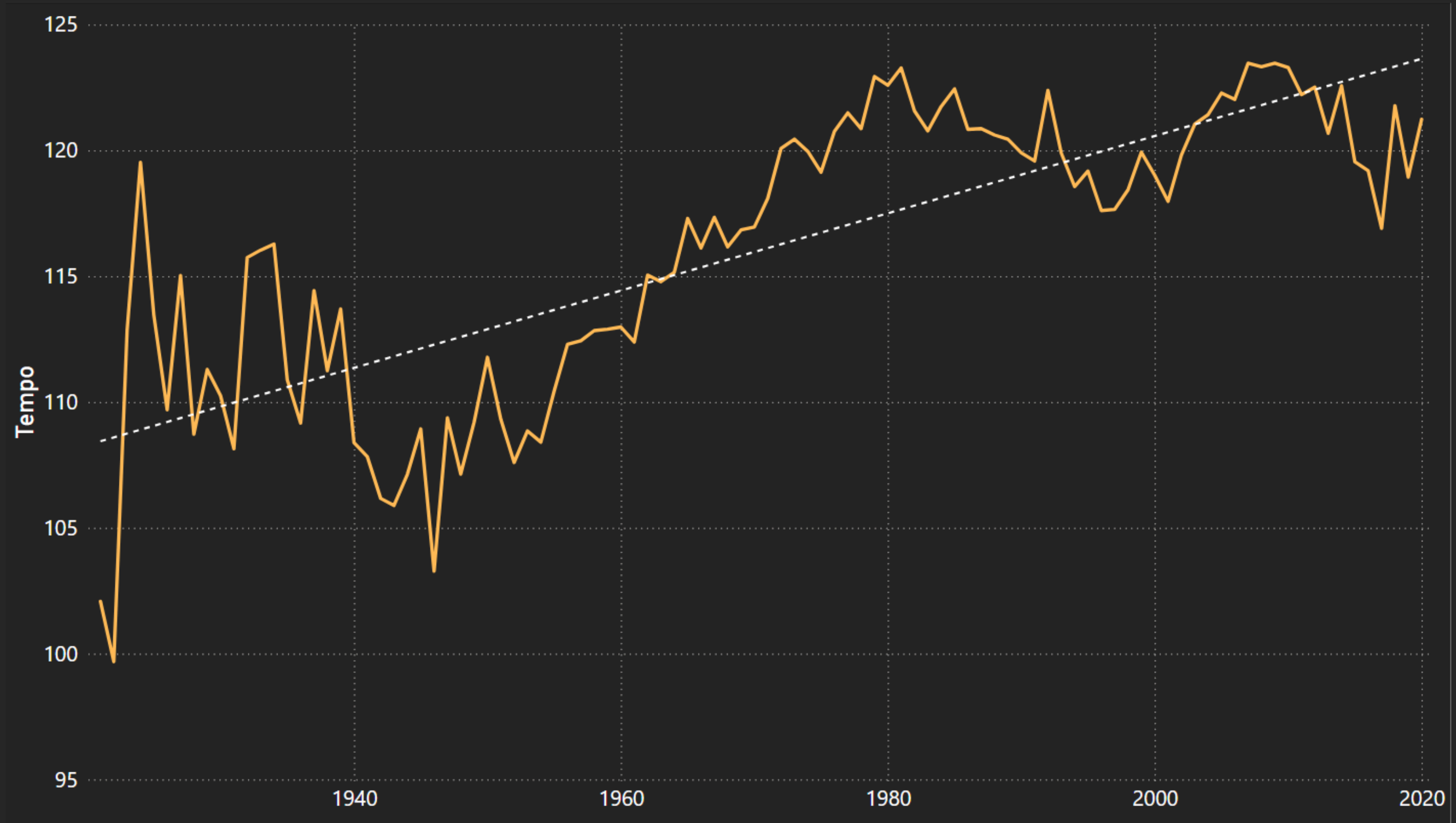


Danceability



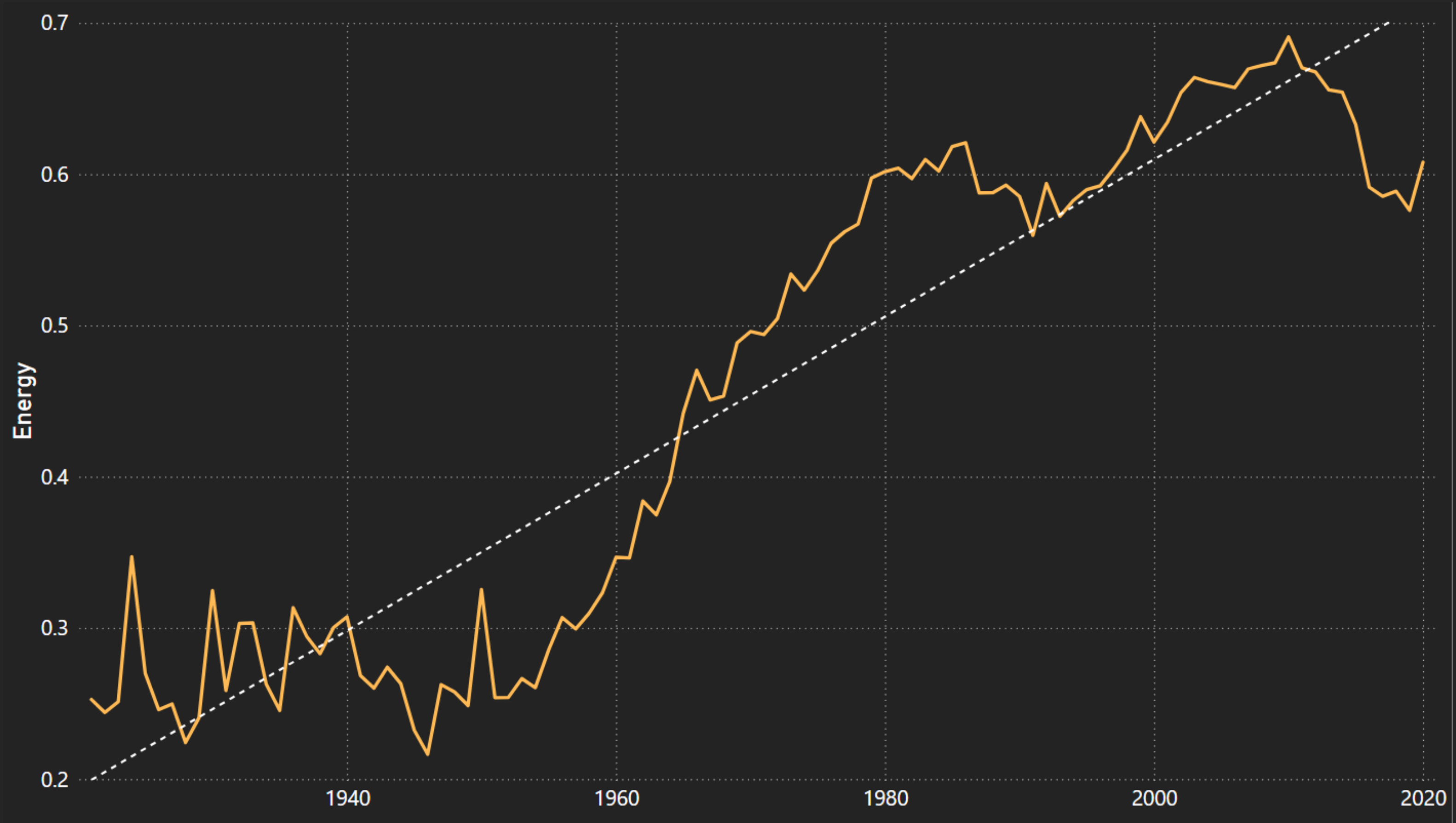


Tempo

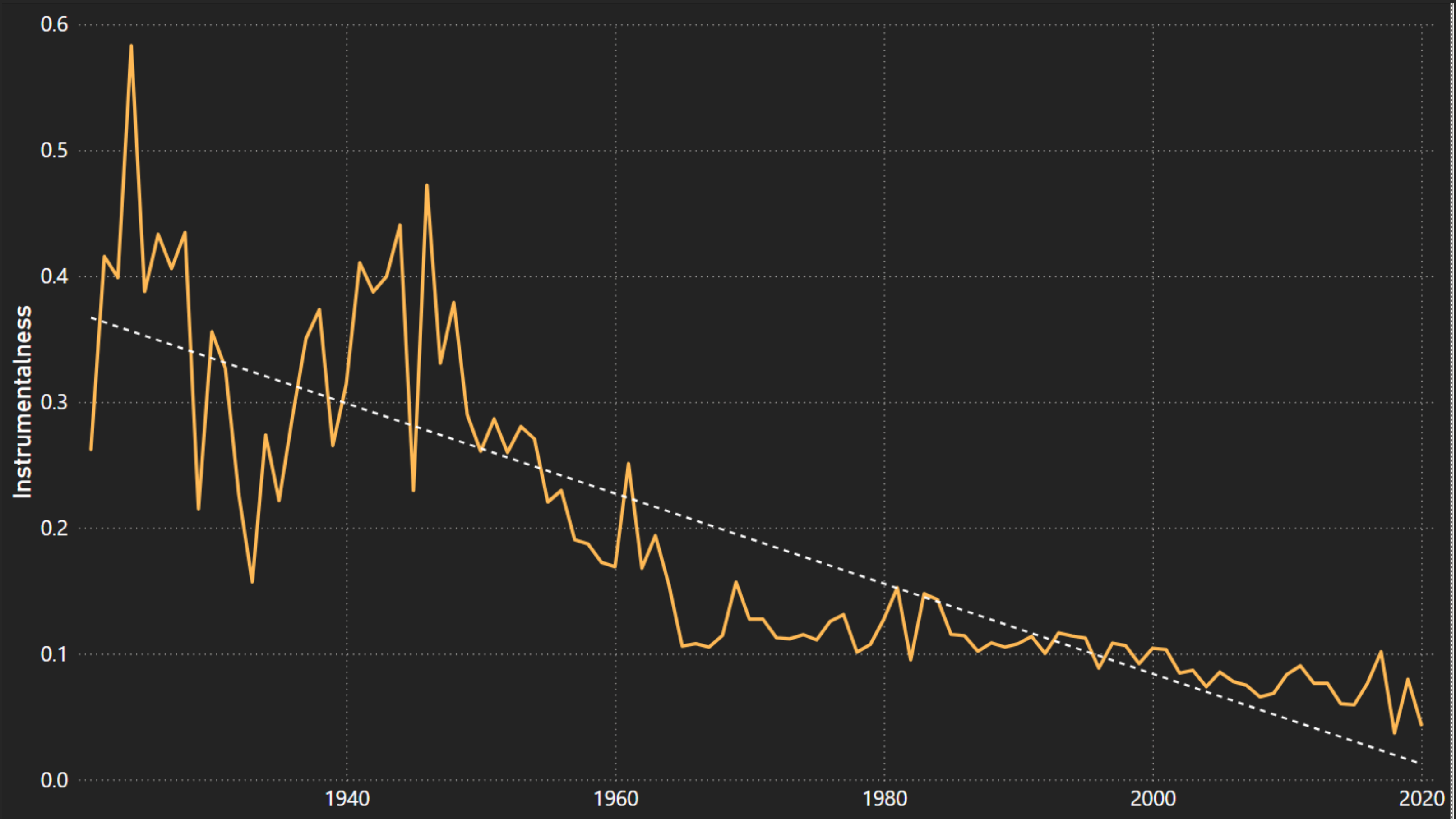




Energy

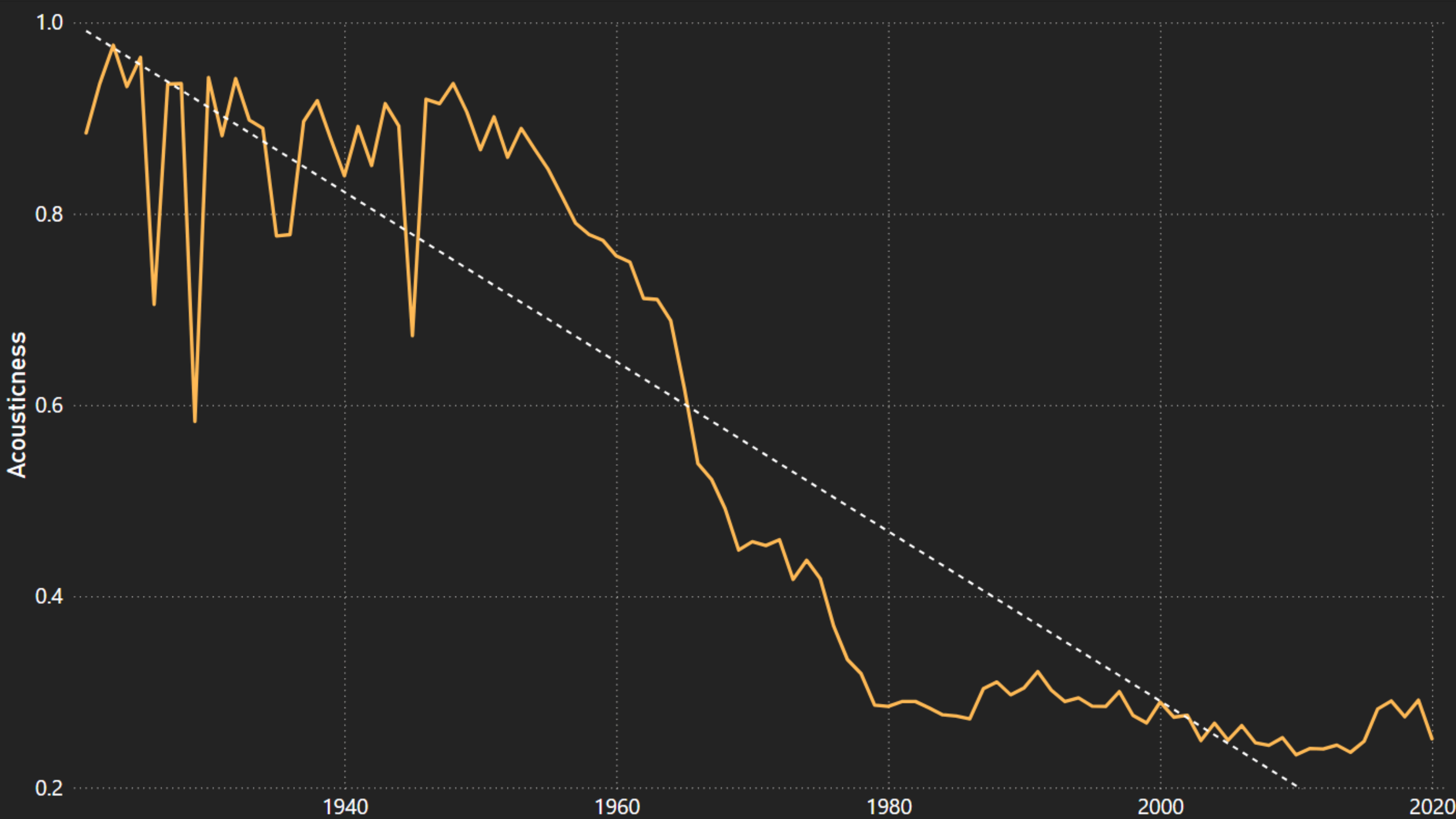


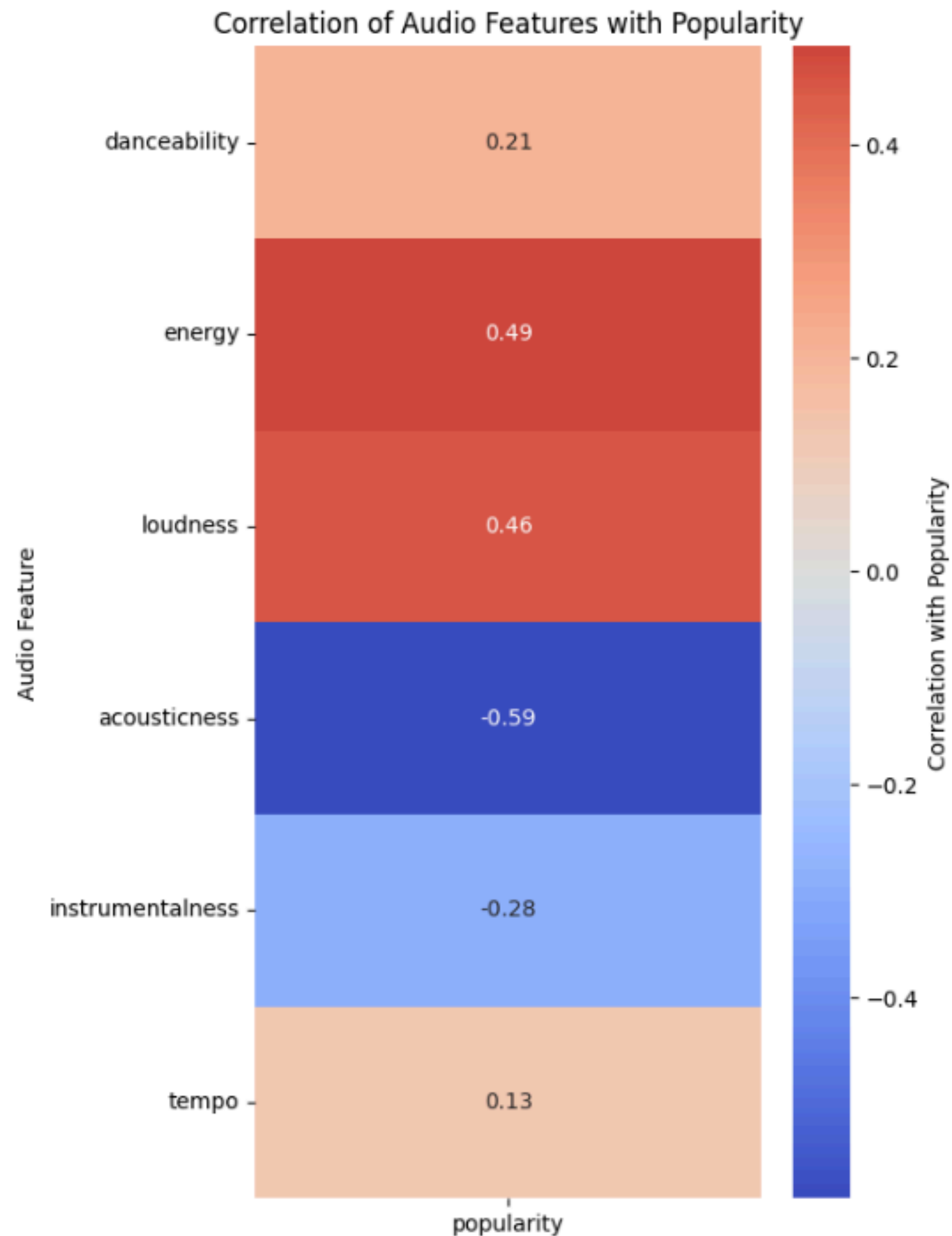
Instrumentalness





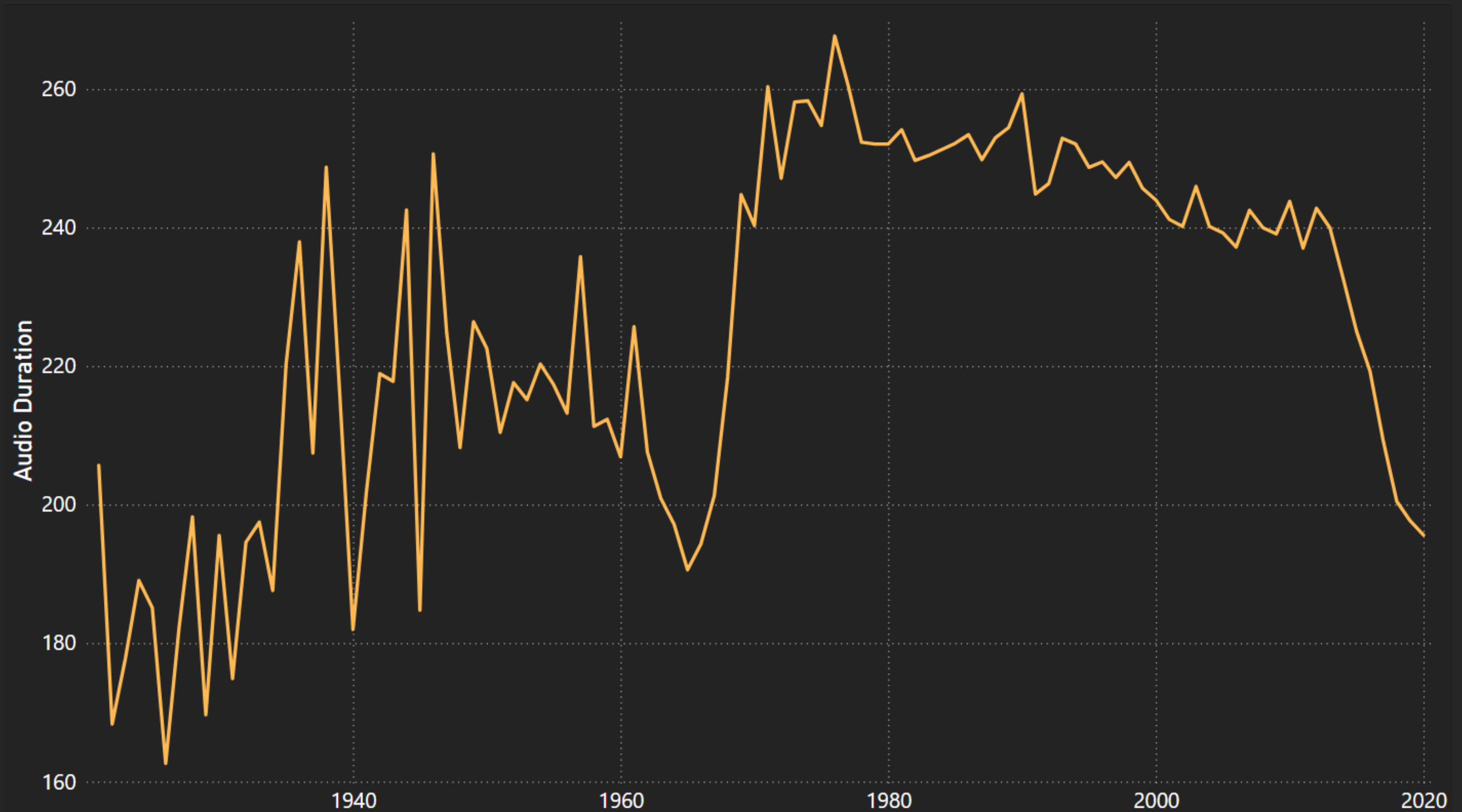
Acousticness





Correlation of
Audio
Features with
Popularity

Track Length Over Time (s)





■ Limitations

1

Genre tags are determined by artist and do not factor multi-genre tracks.

3

No country or region specific data is available.

2

Popularity values are biased to newer tracks due to data collection process.

4

Spotify Audio Features are auto generated and may not always be accurate.



■ Recommendations

1

Focus on promoting or recording Hip Hop and Pop as these genres are increasing in popularity.

3

Keep track length under 3 minutes as music trends to shorter content.

2

Prioritize louder, high tempo, and higher energy music with the inclusion of vocals.

4

Work with music labels and platforms such as Anghami to collect similar data for local music.



Thank You