

DELAY OF GAME: COMPARING PENALTY TIME IN THE NBA TO OTHER SPORTS

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The past decade has seen an explosion in NBA growth, but there is increasing concern regarding the extended duration of regular season games.

“A three-hour NBA game goes against everything basketball is supposed to be — a fast-paced ballet of whirring athleticism, back-and-forth action, and fantastic players looping around the floor in coordinated geometric patterns.”

– Zach Lowe, *The Case for the 40-Minute Game*

Several attempts have been made to shorten the game, either by eliminating pre-game handshakes, limiting half time performances, and even restricting timeouts [1]. Most of the recommendations merely shave minutes of the total broadcast time or even worse eliminate valuable commercial time which account for more than \$ 1.5 billion in annual revenue [2]. Unlike other sports basketball is dominated by fouls, referee reviews, and free throws. This paper seeks to find the relationship between game time and dead time due to penalties in basketball and other sports and answer the question: How can the NBA learn from major sports leagues and restructure its broadcast to more efficiently use its penalty time?

To answer this question, broadcast data was collected on three major sports leagues: the NBA, the NFL, and the EPL ¹(English Premiere League). 9 NBA games, 9 NFL games, and 16 EPL games were charted by hand from the students in Performance Sports & Analytics (Fall ‘20). Each game included timestamped data of the broadcast event, play event, and commercial type. The data was compiled in Excel and filtered to separate playing time and penalty time. Penalty time for each sport was defined as follows:

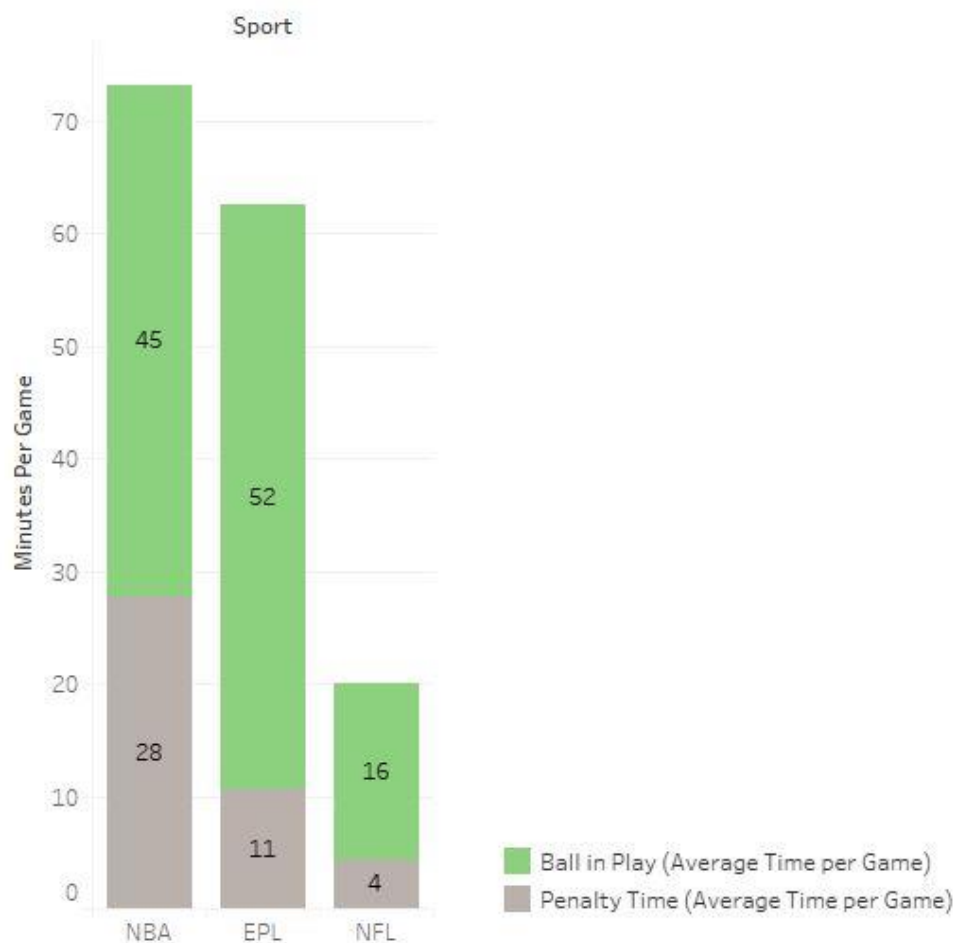
NBA	NFL	EPL
Post Foul Time (Floor) Idle Referee Time Free Throw Time Free Throw Event	Idle Referee Time Penalty Time Coaches Challenge Official Challenge	Foul Time VAR

¹Data from the MLB was available, but excluded as there is no relevant proxy for penalty time in baseball

Lastly, the results were processed and displayed using Tableau.

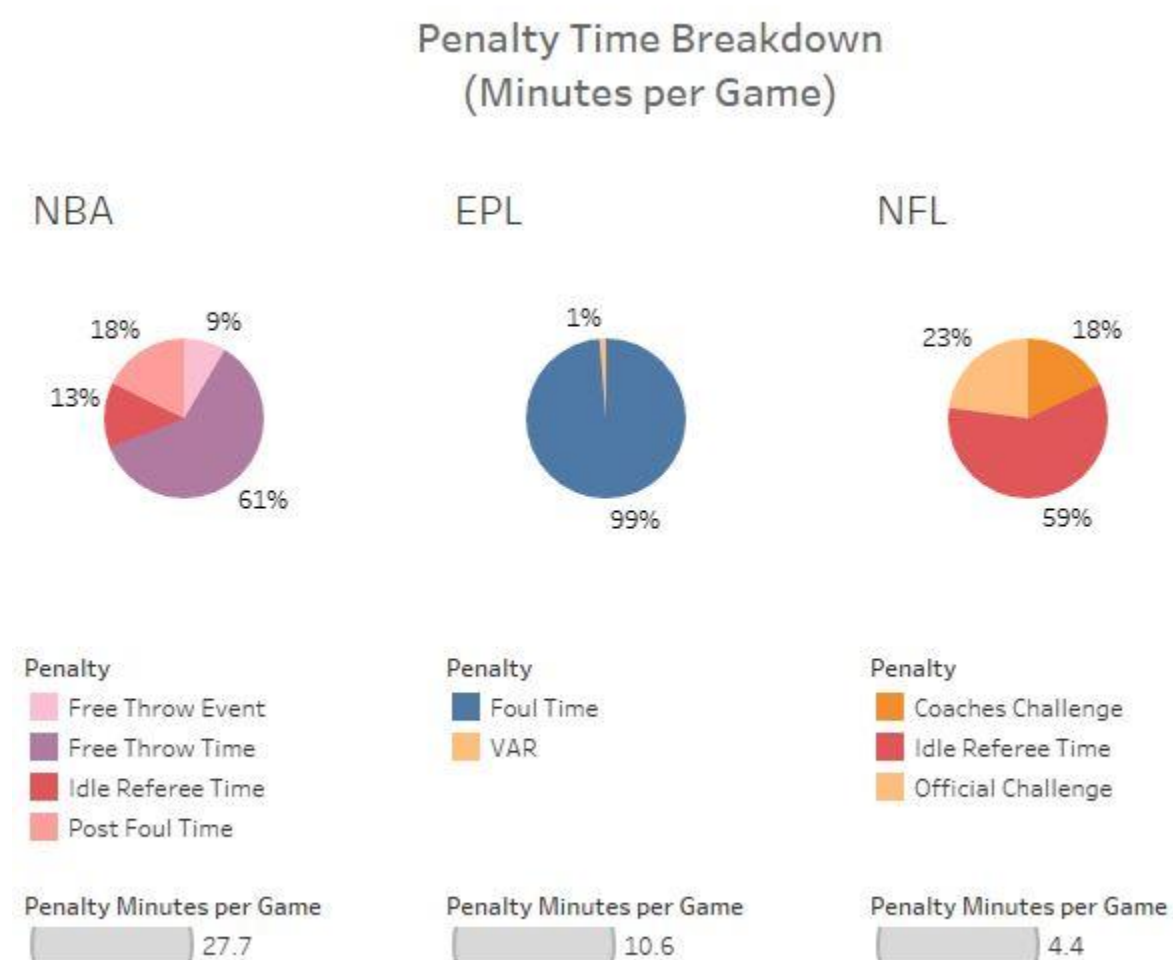
Penalty time in basketball far exceeds its counterparts in the NFL and the EPL. The NBA has more than twice the penalty time of the EPL while having less ball in play action. Despite the NFL having less penalty time than the EPL the proportion of ball in play time to penalty time is comparable for the two leagues because the NFL has less ball in play action.

Penalty Time vs. Ball in Play Time



SO WHY DOES THE NBA HAVE SO MUCH PENALTY TIME?

The NBA draws most of its penalty time from idle free throw time, i.e. players getting set at the line, the ref waiting to give the shooter the ball, the shooter taking dribbles, the shooter breathing, etc.



On the other hand, the NFL spends a higher proportion of their time reviewing plays than the NBA. Meanwhile, the EPL spends 99% of the penalty time during foul time.

SO HOW CAN THE NBA LEARN FROM THE OTHER SPORTS?

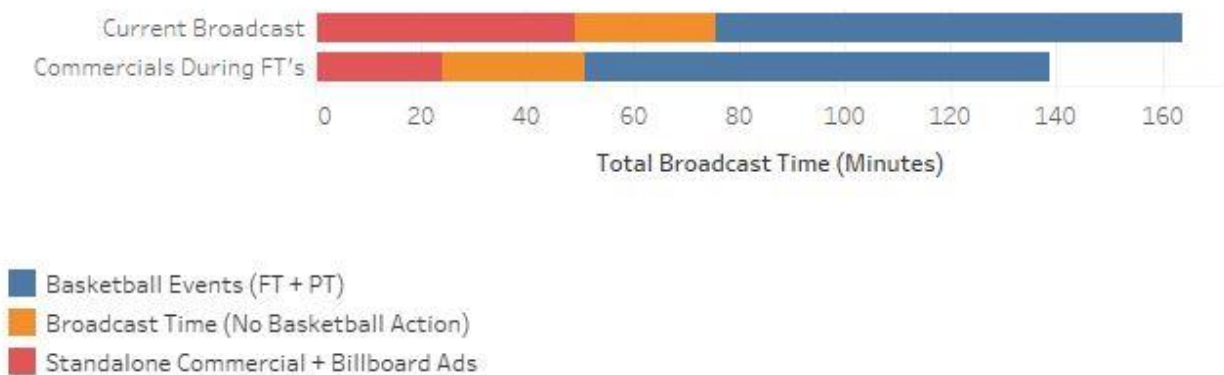
There is one key difference between the NBA and NFL. The NFL utilizes its penalty time to cut to commercial breaks whereas the NBA will show the free throw shooting pageantry. The NBA needs to restructure its broadcast to utilize its penalty time more efficiently, especially during free throw shooting. This means taking a chapter from NFL

book and broadcasting commercials during idle free throw time. This can come in the form of cutting away to break, or more reasonably, broadcasting a split screen - one with commercials and one with free throw shooting.

HOW WOULD THIS LOOK?

If commercials were removed from TV timeouts, halftime shows, and end of quarter breaks and played during free throw stoppages, the NBA broadcast becomes nearly 30 minutes shorter, while preserving the same amount of total commercial broadcast time.

What If We Played Commercials During Free Throws



The consequence, however, is that players would not support a reduction in rest periods.

This seems kind of dastardly, and I tend to agree. However, even if the broadcast cut to commercials (standalone commercials, not split screen ones), the penalty time to play time ratio for the NBA would be the same as the EPL and NFL. From a fan's perspective, free throw shooting represents a departure from what basketball is, "*a fast-paced ballet of whirring athleticism.*" And from a broadcaster's perspective free throw shooting represents an inefficiency that has already been solved by the NFL and EPL.

Basketball is a game unlike any other, and so too is the basketball broadcast. The NBA spends significantly more time than the EPL and NFL on broadcasting penalty time. If the NBA restructured their broadcast to play commercials side by side during free throws it could reduce total game time by 30 minutes while keeping the same total amount of commercials.

MY ARTICLE SUMMED UP AS A REDDIT THREAD



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Posted by **Lakers** u/fq1872 1 year ago

They have commercials playing on a split screen during free throws on ESPN

Did anyone else see that? they literally just cut to a split screen of the free throws and a nba 2k20 commercial in the middle of a game. That's crazy greasy

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[LAL] Kyle Kuzma owledge 177 points · 1 year ago



If it means less commercials during the long breaks then I'm all for it but that's probably not true

References:

[1] <http://grantland.com/features/the-case-40-minute-nba-game/>

[2] <https://sportsnaut.com/disney-nba-seeing-huge-advertising-demand-for-bubble-season-in-orlando/>