NBA: The Global Game

CSCI 217

ANG, TAN

Agenda

Objective

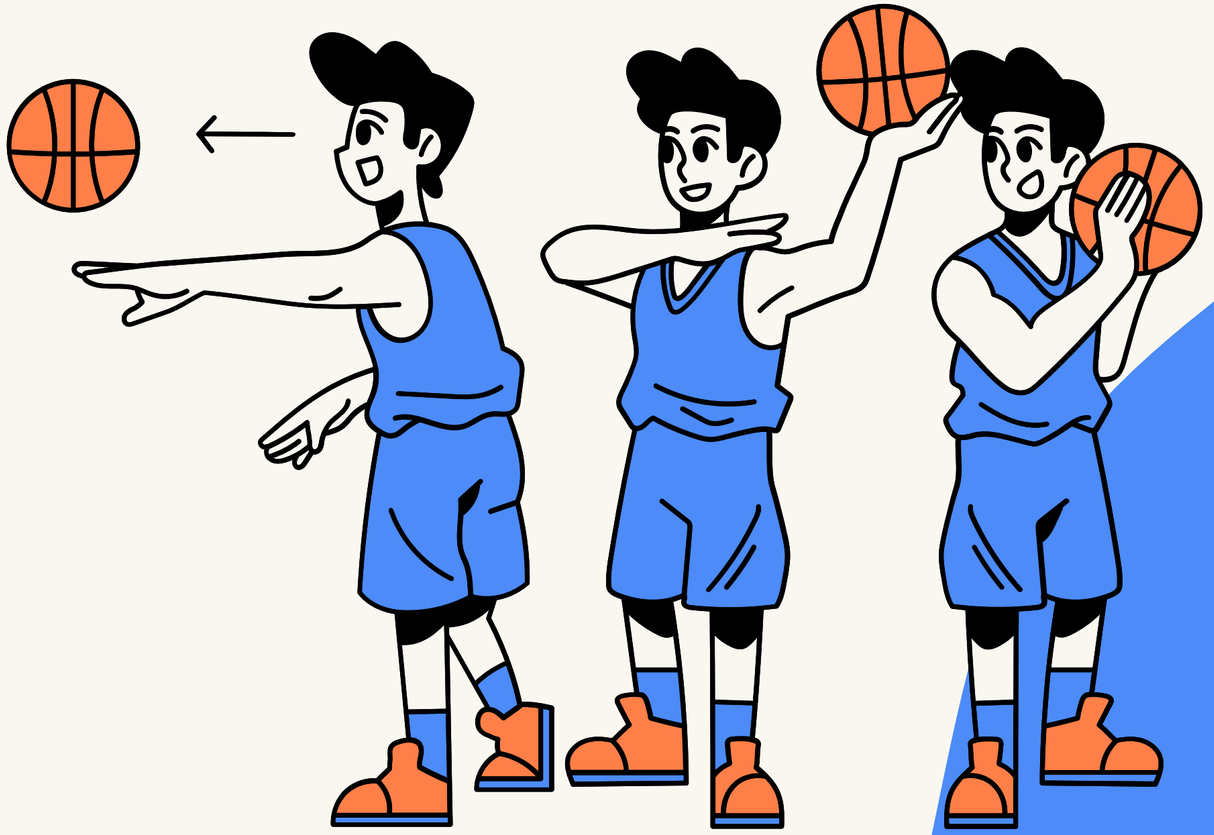
Target Audience

Dataset

Dashboard

Insights

Decision Points



Objective

Showcase the globalization of the NBA by highlighting the growing number and increased impact of international players throughout the last twenty years.

Target Audience

SPORTS ANALYSTS

Provides insights into the global influence of players, highlighting the performance and impact of international players.

BASKETBALL ENTHUSIASTS

Learn more about the history of the NBA by seeing the increasing number of talented players outside the USA

GLOBAL SPORTS MARKETERS

At a glance, identify the countries and continents with the most NBA players, which can guide decisions on where to host global games or purchase TV rights.

NBA Players

BIOMETRIC, BIOGRAPHIC AND BASIC BOX SCORE STATS FROM THE 1996-1997 TO THE 2022-2023 SEASON

Source: https://www.kaggle.com/datasets/justinas/nba-players-data?fbclid=IwZXh0bgNhZW0CMTAAAR0km--og5-nMs-_91qE07_CKIuJ9-s4reF3LjH7BrCmhX0rNxyRrdIC5gI_aem_-sXjqhchVc4Lnu88luKkJw

BACKGROUND

The dataset spans more than twenty years and includes detailed information on every player who has been part of an NBA team's roster.

FEATURES

Demographic variables

- age, height, weight, and place of birth

Biographical details

- Team, draft year, and draft round

Box Score Statistics

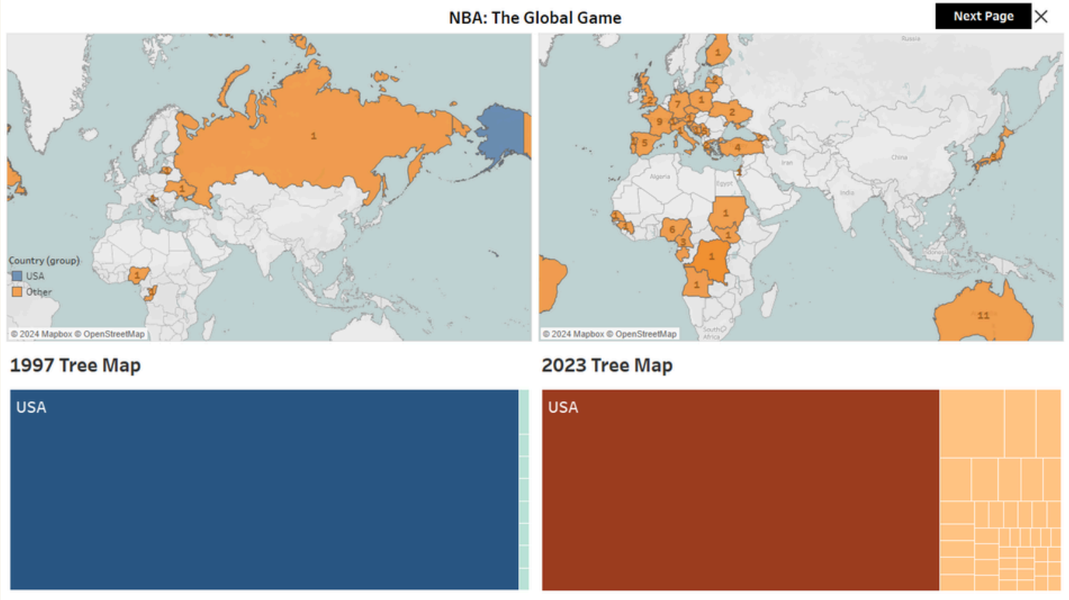
- Games played, average points, rebounds, assists, and more.

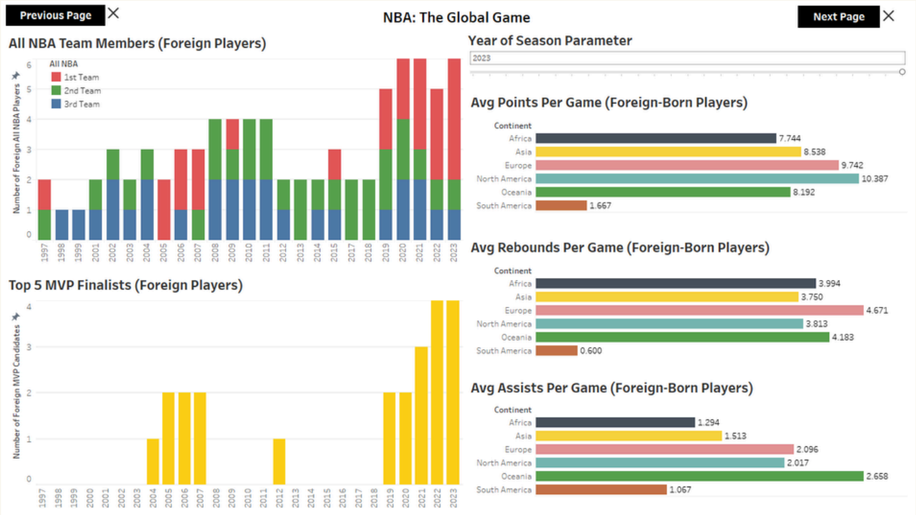
Dataset

Unnamed: 0	player_name	team_abbreviation	age	player_height	player_weight	college	country	draft_year	draft_round	draft_number	gp	pts	reb	ast	net_rating	oreb_pct	dreb_pct	usg_pct	ts_pct	ast_pct	season	All NBA
0	Randy Livingston	HOU	22	193.04	94.800728	Louisiana State	USA	1996	2	42	64	3.9	1.5	2.4	0.3	0.042	0.071	0.169	0.487	0.248	1996-97	N/A
1	Gaylon Nickerson	WAS	28	190.5	86.18248	Northwestern Oklahoma	USA	1994	2	34	4	3.8	1.3	0.3	8.9	0.03	0.111	0.174	0.497	0.043	1996-97	N/A
2	George Lynch	VAN	26	203.2	103.418976	North Carolina	USA	1993	1	12	41	8.3	6.4	1.9	-8.2	0.106	0.185	0.175	0.512	0.125	1996-97	N/A
3	George McCloud	LAL	30	203.2	102.0582	Florida State	USA	1989	1	7	64	10.2	2.8	1.7	-2.7	0.027	0.111	0.206	0.527	0.125	1996-97	N/A
4	George Zidek	DEN	23	213.36	119.748288	UCLA	USA	1995	1	22	52	2.8	1.7	0.3	-14.1	0.102	0.169	0.195	0.5	0.064	1996-97	N/A
5	Gerald Wilkins	ORL	33	198.12	102.0582	Tennessee-Chattanooga	USA	1985	2	47	80	10.6	2.2	2.2	-5.8	0.031	0.064	0.203	0.503	0.143	1996-97	N/A
6	Gheorghe Muresan	WAS	26	231.14	137.438376	None	USA	1993	2	30	73	10.6	6.6	0.4	6.9	0.098	0.217	0.185	0.618	0.024	1996-97	N/A
7	Glen Rice	CHH	30	203.2	99.79024	Michigan	USA	1989	1	4	79	26.8	4	2	3.2	0.025	0.087	0.272	0.605	0.088	1996-97	2nd Team
8	Glenn Robinson	MIL	24	200.66	106.59412	Purdue	USA	1994	1	1	80	21.1	6.3	3.1	-2.9	0.051	0.144	0.278	0.528	0.146	1996-97	N/A
9	Grant Hill	DET	24	203.2	102.0582	Duke	USA	1994	1	3	80	21.4	9	7.3	6.9	0.049	0.232	0.283	0.556	0.356	1996-97	1st Team
10	Gary Trent	POR	22	203.2	113.398	Ohio	USA	1995	1	11	82	10.8	5.2	1.1	2.5	0.101	0.167	0.212	0.569	0.077	1996-97	N/A
11	Grant Long	DET	31	205.74	112.490816	Eastern Michigan	USA	1988	2	33	65	5	3.4	0.6	4	0.096	0.15	0.154	0.523	0.058	1996-97	N/A
12	Greg Anthony	VAN	29	185.42	81.64656	Nevada-Las Vegas	USA	1991	1	12	65	9.5	2.8	6.3	-9.4	0.015	0.099	0.177	0.526	0.358	1996-97	N/A
13	Greg Dreiling	DAL	33	215.9	120.20188	Kansas	USA	1986	2	26	40	2	1.9	0.3	-8	0.059	0.192	0.114	0.466	0.048	1996-97	N/A
14	Greg Foster	UTA	28	210.82	113.398	Texas-El Paso	USA	1990	2	35	79	3.5	2.4	0.4	-0.9	0.078	0.166	0.168	0.508	0.055	1996-97	N/A

Tableau Dashboard
NBA: The Global Game

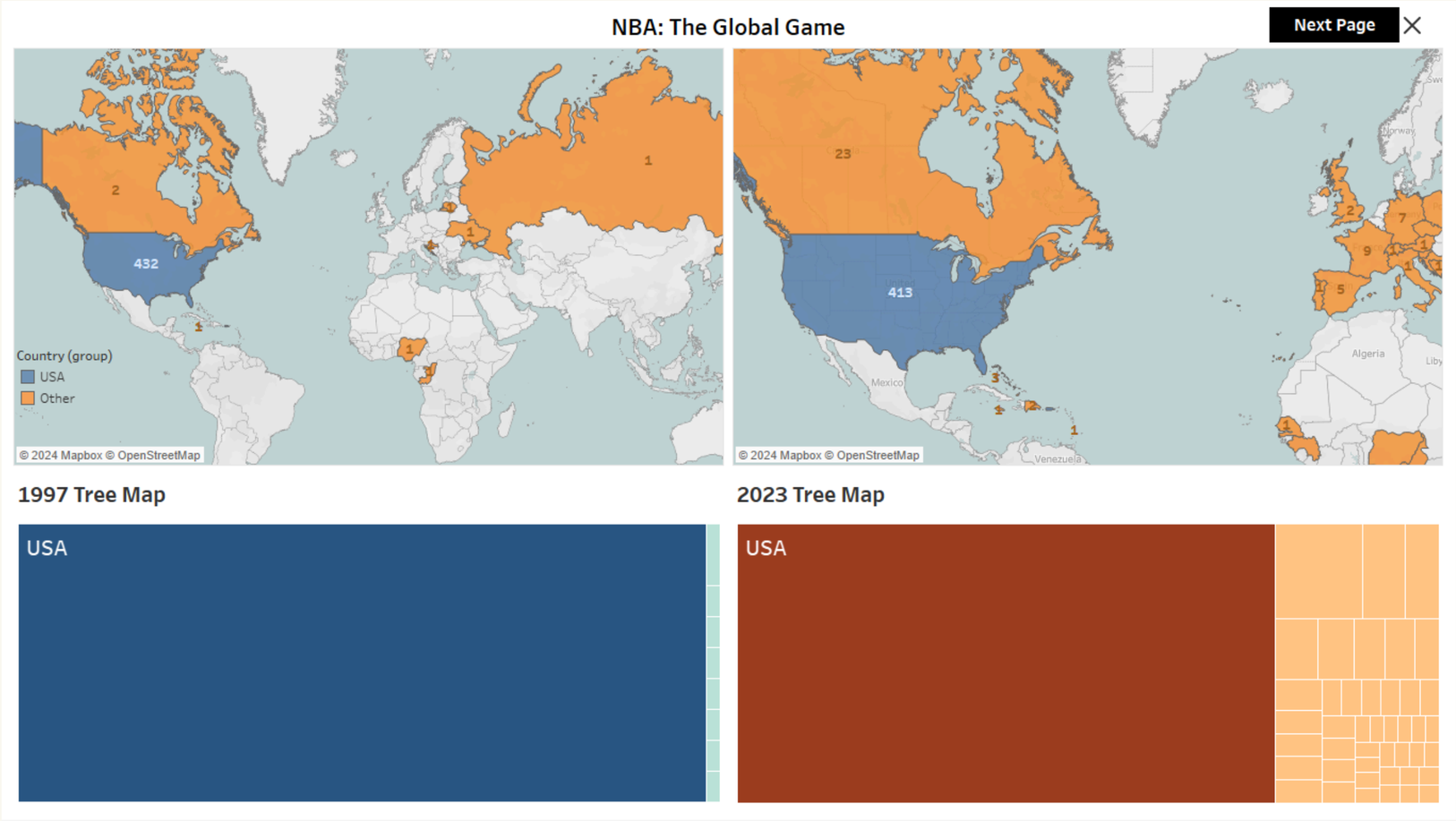
https://public.tableau.com/app/profile/jeremy.marcus.tan/viz/NBA-TheGlobalGame/StatsandAwardsDashboard





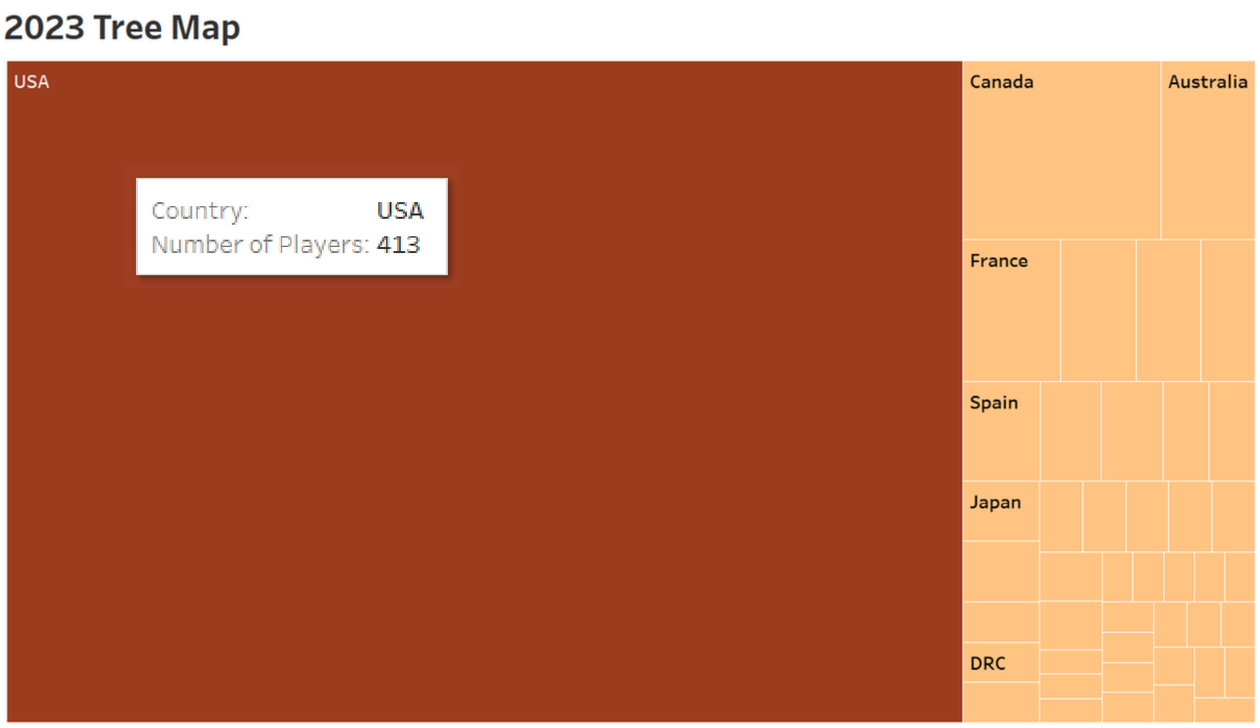
Dashboard (Page 1)

Density of Players born in each country



Users can zoom in, out, and drag the symbol map to look at the number of players coming from each country.

Dashboard (Page 1)



Insights

- There are much more **internationally-born players** in the NBA currently compared to the past in 1997.
- The countries with the most international players in 2023 were **Canada, Australia, and France**.

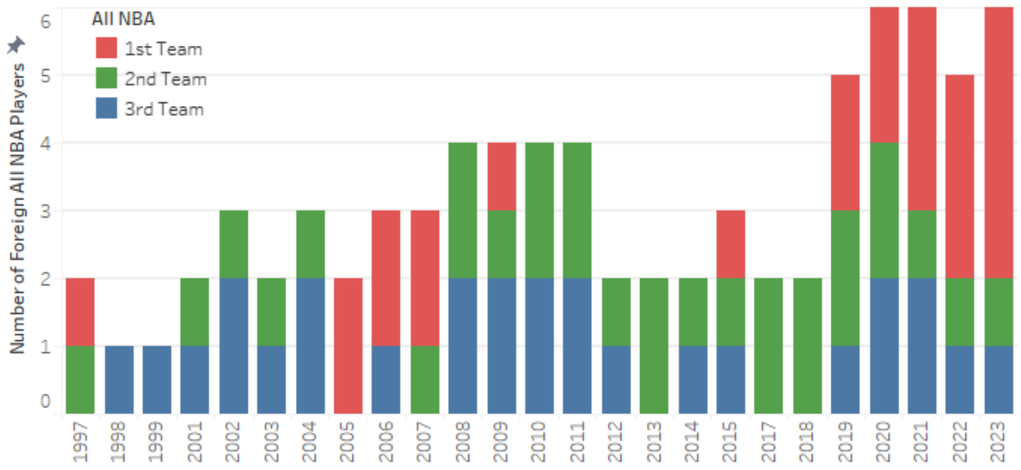
Dashboard (Page 2)

Previous Page

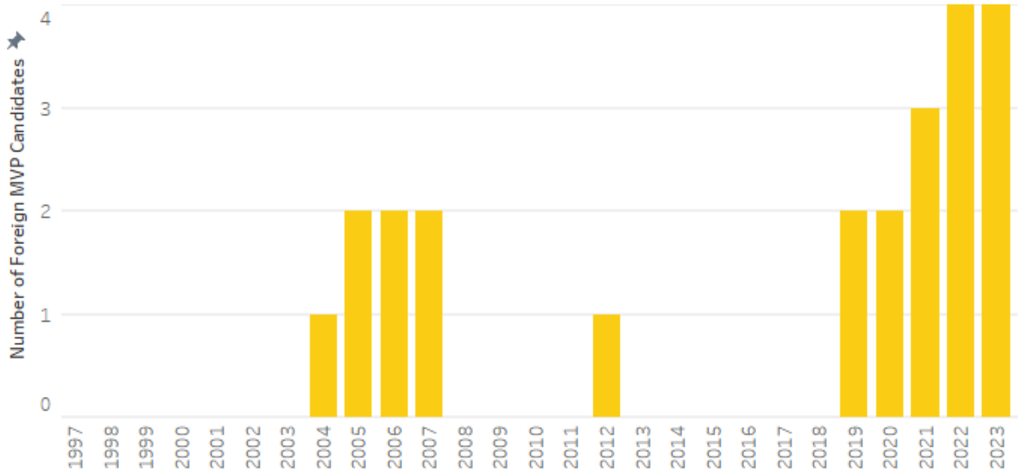
NBA: The Global Game

Next Page

All NBA Team Members (Foreign Players)



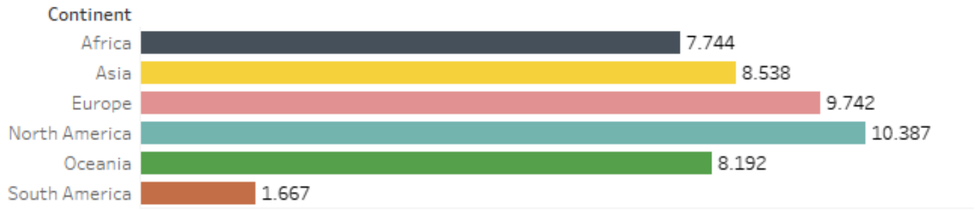
Top 5 MVP Finalists (Foreign Players)



Year of Season Parameter

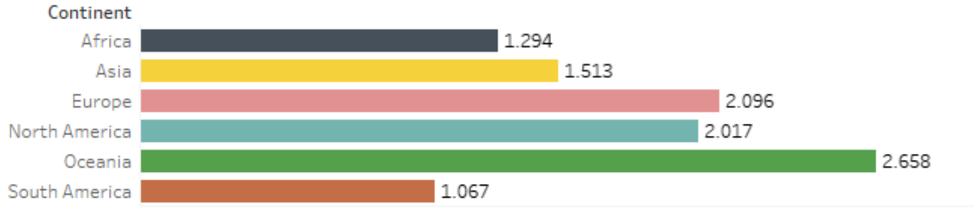
2023

Avg Points Per Game (Foreign-Born Players)



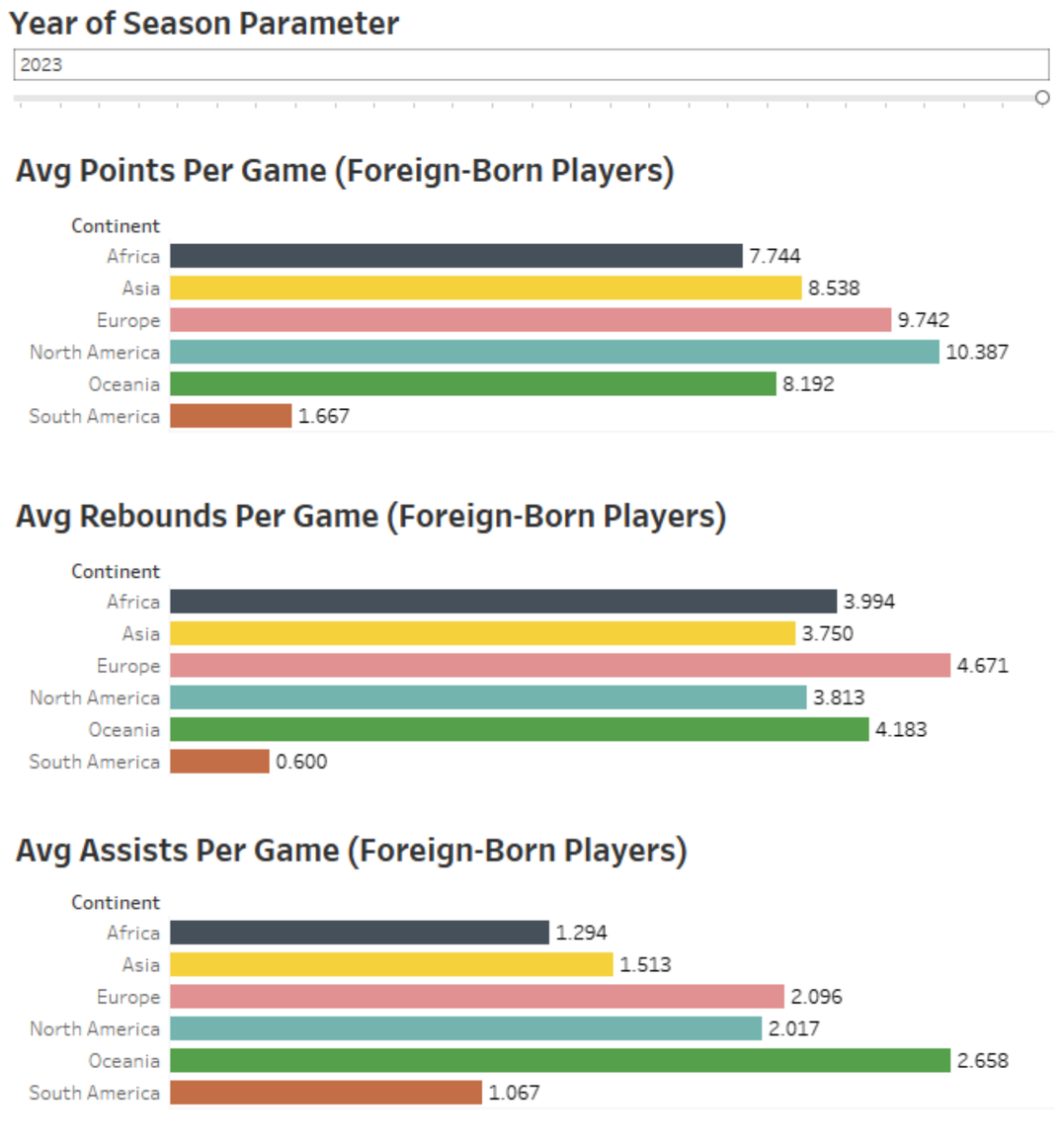
Avg Rebounds Per Game (Foreign-Born Players)

Avg Assists Per Game (Foreign-Born Players)



Dashboard (Page 2)

Comparison of stats of foreign players by continent



Parameter:
User can drag the slider on top to change the season (year)

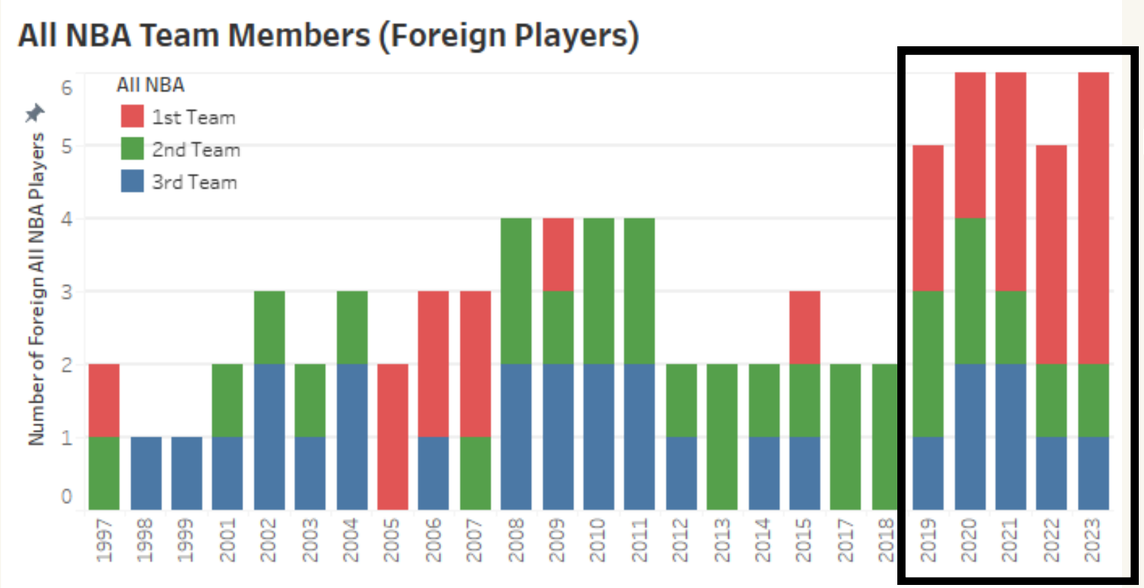
Insights
In the 2022-2023 season,

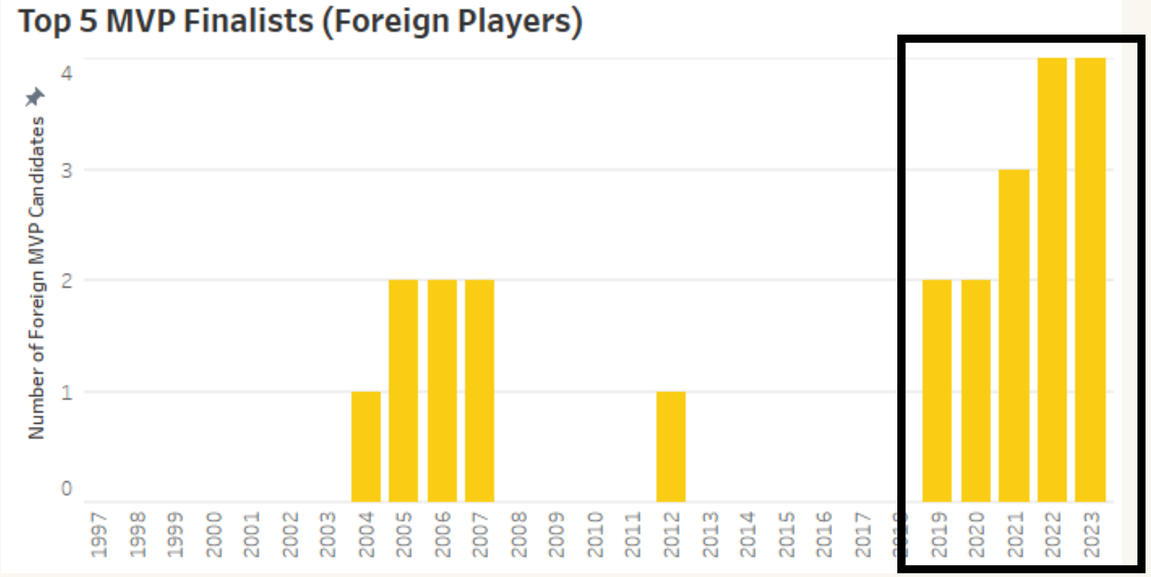
- North America - highest ppg
- Europe - highest rpg
- Oceania - highest apg

Note:
The USA born players are not included under North America.

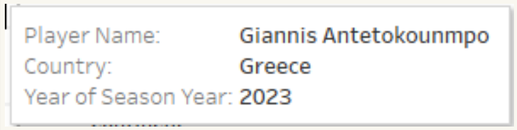
Dashboard (Page 2)

Historical trend of awards won by foreign-born players





Tooltip

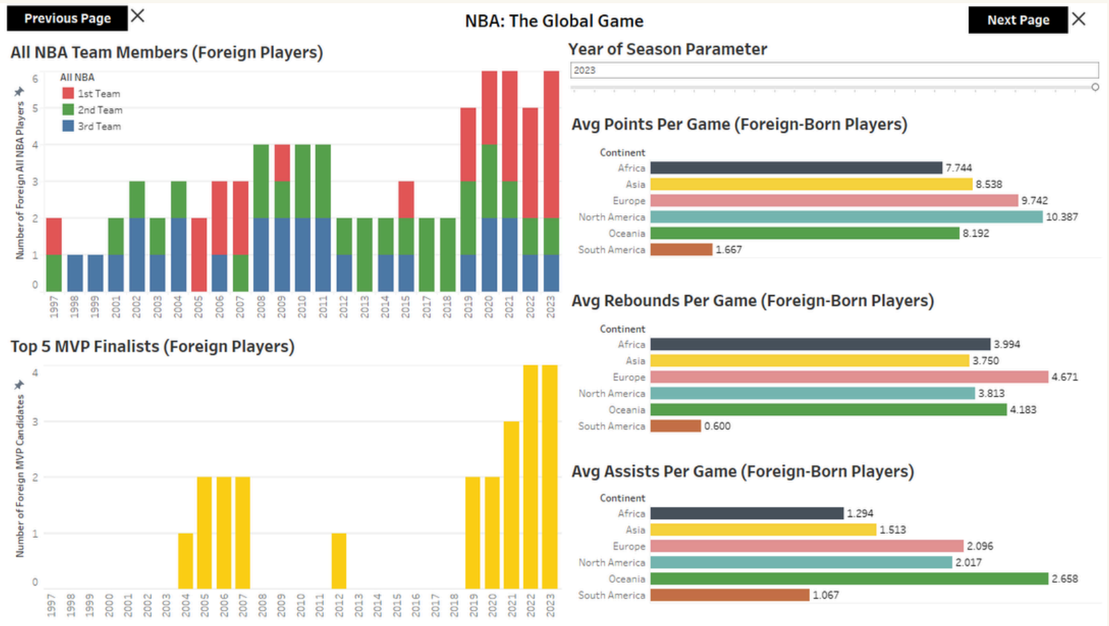


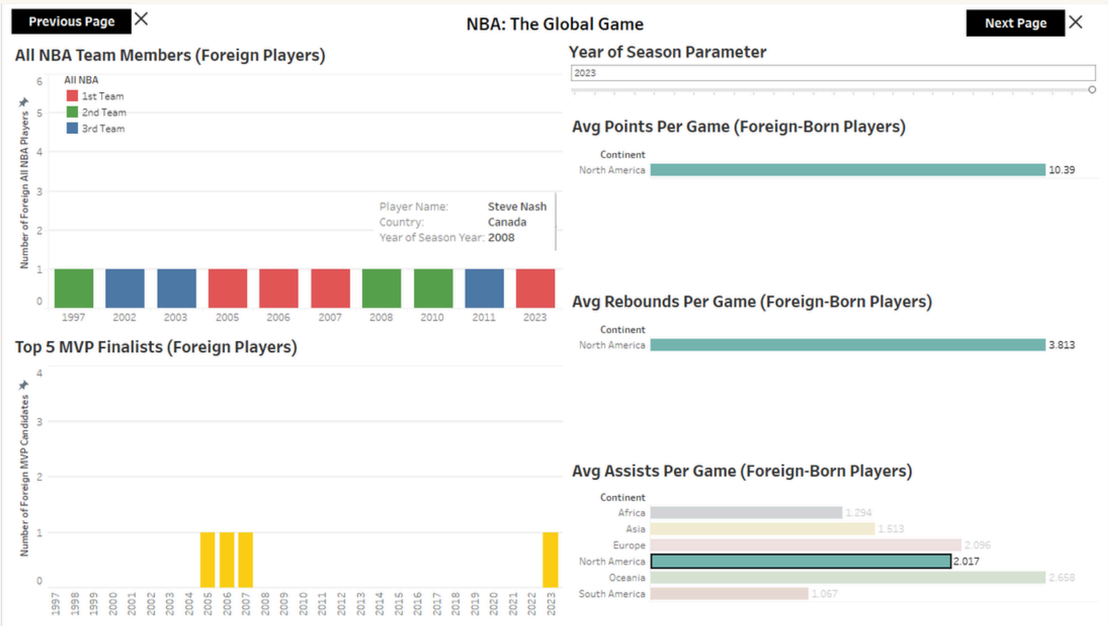
Insights

- Since 2019, there was an increase in the number of international players making All-NBA teams and being finalists in MVP voting.
- These standout foreign born players include Giannis Antetokounmpo, Luka Doncic, Nikola Jokic, and Joel Embiid.

Dashboard (Page 2)

Added Interactivity: Filter Awards by Country





Click on North America

Dashboard (Page 3)

The Best of the Best: Team World vs Team USA

Previous Page

NBA: The Global Game

Team World			Team USA		
Luka Doncic	Pts	32.40	Stephen Curry	Pts	29.40
	Reb	8.60		Reb	6.10
	Ast	8.00		Ast	6.30
Shai Gilgeous-Alexander	Pts	31.40	Devin Booker	Pts	27.80
	Reb	4.80		Reb	4.50
	Ast	5.50		Ast	5.50
Giannis Antetokounmpo	Pts	31.10	Jayson Tatum	Pts	30.10
	Reb	11.80		Reb	8.80
	Ast	5.70		Ast	4.60
Nikola Jokic	Pts	24.50	Kevin Durant	Pts	29.10
	Reb	11.80		Reb	6.70
	Ast	9.80		Ast	5.00
Joel Embiid	Pts	33.10	Anthony Davis	Pts	25.90
	Reb	10.20		Reb	12.50
	Ast	4.20		Ast	2.60

	Avg. Pts	Avg. Reb	Avg. Ast
Foreign	30.50	9.44	6.64
USA	28.46	7.72	4.80

Stats are taken from the 2022-2023 NBA Season.
The best player from each position was chosen according to ESPN's annual player rankings.

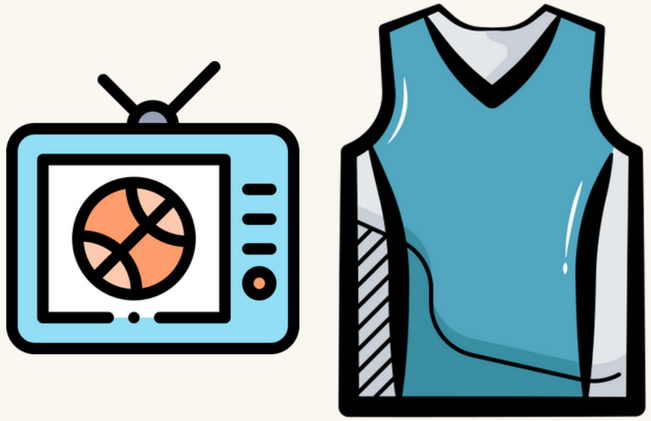
Insights

- The best five international players average more points, rebounds, and assists than the USA players.
- The foreign players are more top-heavy.

Note:

- The user can click on the ESPN logo to go to ESPN's website of player rankings.

Decision Points



NBA FRONT OFFICE/GM

- **Drafting** international players with great potential to be future stars
- Signing international players according to their **playstyle** and the **team's needs**

NBA GLOBAL MARKETERS

- Holding global games in regions with many current NBA players like **Europe, Central Africa, and Australia** to increase the league's **popularity**

FINANCE OFFICERS

- Strategizing on what countries to sell **merchandise** like **apparel** and **footwear** of the NBA's premier international players (Luka, Giannis, Jokic)

Thank you!