



# The Clubs' Stacked Deck

*A brief evaluation of current team-friendly pre-arbitration contracts,  
the factors that hinder players' collective earning potential,  
and why Bo Bichette may be an outlier*

Date: July 2021  
Conor Furey  
[caf2193@columbia.edu](mailto:caf2193@columbia.edu)



# Surplus Value, League Leaders

(annual average of future value)\*



**Ronald Acuña, Jr.** ATL RF  
8/10 years, \$12.5MM AAV → **\$39.87**  
Int'l signing bonus: \$100,000 (201<sup>st</sup> in class)



**Shohei Ohtani** LAA TWP ^  
2 years, \$4.25MM AAV → **\$38.53**  
Int'l SB: \$2.315MM (6<sup>th</sup>)



**Ozzie Albies** ATL 2B  
7/9 years, \$5.0MM AAV → **\$34.64**  
Int'l SB: \$350,000 (68<sup>th</sup>)



**Ketel Marte** ARI 2B/CF  
5/7 years, \$4.8MM AAV → **\$19.71**  
Int'l SB: \$100,000 (2010)



**Aaron Nola** PHI RHS  
4/5 years, \$11.25MM AAV → **\$21.49**  
Rule 4 draft SB: \$3.3MM (6<sup>th</sup>)



**Germán Marquez** COL RHS  
5/6 years, \$8.6MM AAV → **\$19.42**  
Int'l SB: \$225,000 (2011)



**Freddy Peralta** MIL RHS  
5/7 years, \$3.1MM AAV → **\$18.35**  
Int'l SB: \$137,500 (131st)

**Acuña, Jr.** is raking this year (161 wRC+ through 82 games);^ carries a mild health concern

**Ohtani** is producing at an unforeseen rate (league-leading 33 HR with a splitter sitting at 2<sup>nd</sup>-best run-preventing pitch on avg., min. 60 PA); inherent injury risk

**Nola** is shoving for the Phillies, premium value derived from his workload (since start of deal. has faced 7<sup>th</sup>-most batters) and elite CSW% on K-CB (39.8)

**Marquez**: GB tendencies (54.1%), and durability (since start of deal, has faced 2<sup>nd</sup>-most batters), Coors Field SP recruiting factor, are three primary drivers of value for COL

& As of All-Star break

\* This list is forward-looking, consisting of leaders in annual surplus value for remainder of contract; past value/back-loaded standouts include Buster Posey SFG C, José Ramírez CLE 3B, Max Muncy LAD 1F, Alex Bregman HOU 3B/SS; Unique cases: Walker Buehler LAD RHS,^ Fernando Tatis, Jr. SDP SS (long-term deal lowers SV/year); Eloy Jimenez CHW LF, Luis Robert CHW CF, Luis Severino NYY RHS each dealing with injuries

^ Both Ohtani & Buehler reached 2-year extension agreements after the filing deadline, to each re-slot in 2023 with considerable value; modified bWAR used for Ohtani's 2021-22 projections



# Ronald Acuña, Jr. ATL RF & Leadoff Hitter

(prior to 7/10 injury)



**Ronald Acuña, Jr. ATL RF (23.6)**  
8 years, \$12.5MM AAV  
\$39.87 Surplus Value per year

Acuña, Jr.'s early deal contains the classic security/savings trade-off, but its grand scale leaves myriad earning potential on the table

**#1** Exploitative power of club leverage vs. players who are late-bloomers (low signing bonus, often in the international J-2 system)

**#2** Spike in contract payouts coincides with projected revenue returns from Atlanta's *The Battery* mixed-used real estate development

16

July 2, 2014 (International Signing Bonus): \$100,000 (7<sup>th</sup> among 2014-15 ATL international signings)

20

2018 (Pre-ARB-3): \$465,870 (league minimum)

21

2019 (Pre-ARB-2): \$1M

22

2020 (Pre-ARB-1): \$1M

23

2021 (ARB 1, ROS): \$2.87M

24

2022 (ARB 2): \$15M

25

2023 (ARB 3): \$17M

26

2024 (ARB 4): \$17M

27

2025: \$17M

28

2026: \$17M

29

2027: Club Option\* @ \$17M (no escalator)

30

2028: Club Option\* @ \$17M

Note: no upfront signing bonus (disproportional leverage)

\* Assumption: Club Options to be picked up

<sup>^</sup> Surplus Value = Free Market Value (zWAR \* Model's Cost per Win) – Year's Salary

|           | zWAR | Free Market Value | Surplus Value ^ |
|-----------|------|-------------------|-----------------|
| 3.7 (ROS) | \$   | 30.31             | \$ 27.44        |
| 5.9       | \$   | 51.54             | \$ 36.54        |
| 6.5       | \$   | 57.67             | \$ 40.67        |
| 6.2       | \$   | 55.87             | \$ 38.87        |
| 6.2       | \$   | 56.74             | \$ 39.74        |
| 6.2       | \$   | 57.62             | \$ 40.62        |
| 6.2       | \$   | 58.52             | \$ 41.52        |
| 6.2       | \$   | 62.41             | \$ 45.41        |
| 47.1      | \$   | 39.87             | \$ 318.92       |

# Ronald Acuña, Jr.



## Opportunity Cost, Player

### Market for Corner Outfielders\*

AAV, Mookie Betts LAD RF: \$30.42M  
Length, Bryce Harper PHI RF: 13 years  
Total Value (ceiling), Betts: \$365M  
Total Surplus Value (floor): \$83.64,  
Eloy Jimenez CWS LF (original)

Market for Faces of a Franchise/  
Baseball: Trout, Betts, Tatis, Jr., Lindor  
→ added premium that Ohtani & Soto  
will look to take advantage of

Final club option set for age-30  
season<sup>^</sup> — team is assuming minimal  
risk with **Acuña, Jr.** entering FA  
market on back-end of career

## Cost per Win, Team

WAR inherently worth more for a  
team going from 90 to 97 wins  
→ premium value provided by  
**Acuña, Jr.** for NL East contender

Braves afforded the position to  
explore mid-level free agent  
market early on (i.e., Ozuna in  
2020, Morton in 2021), however  
*surplus dollars not proportionally  
reinvested in team*



## Potential Solutions

**Bargaining priority** placed on  
obtaining one-year reduction in  
team control → players reach  
market in value-providing years  
while clubs maintain 3-4 years of  
arbitration

**Caveat:** Comes down to league's  
cooperation/appraisal of ROI for  
bargaining chips offered in exchange

**Union's collaboration** with  
smaller agencies on loan  
programs to carry breakout  
players over until free agency

**Caveat:** Each player's situation  
is different; for some, other  
interests like club stability  
outweigh the financial  
component

\* Not entirely transferrable comps (stages in career, proof of statistical consistency) → further evidence for revisions to a system that tilts negotiating leverage away from the players

<sup>^</sup> Per Tom Tango's rule of thumb in player projections to subtract -0.5 WAR each year after an age-30 season

# CAA Clients Under Team Control – Contract Extension Discussions



## Leverage Dynamics

**Team Holds Leverage  
(Seller Beware)**

**Jake Cronenworth** SDP IF (27.5)  
1 TC + 3 ARB & 12.7 wins  
'15 R-4 SB: \$198,000



**Medium Risk**

**Will Smith** LAD C/3B (26.3)  
1 TC + 3 ARB & 13.1 wins  
'16 R-4 SB: \$1.775 MM



**Player Holds Leverage  
(Due for a Big Pay Day)**

**Trea Turner** WSN SS (28.0)  
ARB 4 & 6.8 wins  
'14 R-4 SB: \$2.9 MM



**Corbin Burns** MIL RHS (26.8)  
3 ARB & 10.3 wins  
'16 R-4 SB: \$536,400



**Jack Flaherty** STL RHS (25.7)  
ARB 2-3 & 7.9 wins  
'14 R-4 SB: \$2.0 MM



**Bryan Reynolds** PIT CF (26.5)  
4 ARB & 11.8 wins  
'16 R-4 SB: \$1.35 MM



**Willy Adames** MIL SS (25.8)  
3 ARB & 9.2 wins  
'12 Int'l SB: \$420,000 (48<sup>th</sup>)



**Alex Reyes** STL RHR (26.8)  
ARB 2-3 & 1.6 wins ^  
'12 Int'l SB: \$950,000 (12<sup>th</sup>)



**Zach Plesac** CLE RHS (26.5)  
1 TC + 3 ARB & 8.6 wins  
'16 R-4 SB: \$100,000



**Sandy Alcántara** MIA RHS (25.8)  
3 ARB & 8.9 wins  
'13 Int'l SB: \$125,000 (148<sup>th</sup>)



**Max Fried** ATL LHS (27.5)  
ARB 2-4 & 7.8 wins  
'12 R-4 SB: \$3.0 MM



**Note:** Bichette sits in an interesting middle ground, possessing significant leverage for a lucrative extension while also on track for free market-resetting value

**Bo Bichette** TOR SS (23.4)  
1 TC, 3 ARB & 19.1 wins &  
2016 R-4 SB: \$1.1 MM



Additional Batters, ascending in leverage: Andrew Vaughn CHW 1B/OF, Carson Kelly ARI C, Jasson Dominguez NYY CF (2019, \$5.1 MM; T-1<sup>st</sup>)

Add. Pitcher, asc.: Michael Kopech CHW RHP, Garrett Crochet CHW LHR, Josh Hader MIL LHR (made it this far off '12 \$40K R-4 SB), Tanner Houck BOS RHS

\* zWAR projection estimates based off [ZiPS Update](#) and/or FanGraphs '21 trade values & Bichette's conventional projection taken from FanGraphs' '21 TVs ^ fWAR not kind to RP

# Bo Bichette TOR SS



**CAA**  
Creative Artists Agency



CTD

**MLB's 1<sup>st</sup> player** to collect 30+ homers, 200+ hits, 20+ stolen bases, 40+ doubles, 100+ RBI, 100+ runs and a .300 AVG in his first 162 career games

Career vs. AL East

|                    |                    |
|--------------------|--------------------|
| <b>vs. Orioles</b> | .368 wOBA (85 PA)  |
| <b>vs. Red Sox</b> | .446 wOBA (79 PA)  |
| <b>vs. Yankees</b> | .408 wOBA (113 PA) |
| <b>vs. Rays</b>    | .276 wOBA (112 PA) |

SS through 162 games since 2012

4. M. Machado – 5.5 fWAR (AS, Y2)
5. C. Correa – 5.3 fWAR (ROY, Y1)
6. **Bo Bichette** – 5.2 fWAR (AS, Y3)
7. T. Turner – 4.5 fWAR (ROY-2, Y2)

## 2021 Performance Adjustments

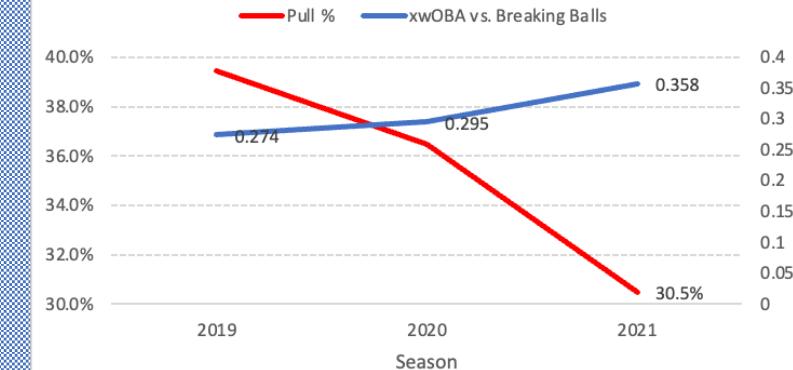
*Elite Combination of Raw Power and...*

**Contact:** Bichette and Freeman\* are the only batters this season within 90th perc. HH% who also hold a sub-25% CSW-rate (95th perc.), as of 7/19

**Speed:** Bichette (6.3 speed metric per FanGraphs) behind only Tatis (6.6) and Ohtani (7.1) for fastest players in top 30 of HH%, as of 7/19

**Punishing Pitchers:** 8<sup>th</sup>-most runs generated (13) from pitches thrown down heart of plate, over ½ off sliders

Bo Bichette's Adjustment Unlocks Power to All Fields



**Note:** Adjustment vs. breaking balls has allowed Bichette to use more of the field (98.6% of PA not shifted)



premium value available in a batter like Bichette or D.J. LeMahieu whose tendencies operate outside of defensive predictive positioning

## ARB Projections – Baseline Value

| Year                         | Age | Contract Type | Comp      | Yearly Raise | B.B. Annual Salary |
|------------------------------|-----|---------------|-----------|--------------|--------------------|
| 2022                         | 24  | TC            | --        | --           | \$ 700,000^        |
| 2023                         | 25  | ARB 1         | T. Story  | \$ 5,000,000 | \$ 5,100,000       |
|                              |     |               | J. Baez   | \$ 5,200,000 |                    |
| 2024                         | 26  | ARB 2         | J. Baez   | \$ 4,800,000 | \$ 10,000,000      |
|                              |     |               | J. Schoop | \$ 5,025,000 |                    |
| 2025                         | 27  | ARB 3         | T. Turner | \$ 5,550,000 | \$ 15,850,000      |
|                              |     |               | C. Seager | \$ 6,150,000 |                    |
| First 4 years: \$ 31,650,000 |     |               |           |              |                    |

\* The main difference is Freeman leads league with 30 runs by taking pitches vs. Bichette's 18 – room for growth in plate approach

^ Assumption: Players bargain League Minimum up to \$700,000 in next CBA

# Bo Bichette TOR SS



## SS Extension Market

**Stage:** 1 year remaining of TC

24.9 y/o Alex Bregman 3B/SS: \$100M / 5 years (\$200M proj.)

24.8 Yoán Moncada 3B: \$90M / 6 years (\$110M proj.)

22.2 Fernando Tatis, Jr. SS: \$340M / 14 years (\$600M proj.)

*Ideal Timing:* Market about to take shape in '22 FA; hold until spring training (post-Seager)

*Ideal Length:* Maintain ability to enter FA at 30 (like Semien, Didi) under what will likely be first year of next CBA through a Player Option (like Bogaerts)



## Earning Potential by Scenario

| Year           | TC      |         | ARB     |         |         | FA      |         |
|----------------|---------|---------|---------|---------|---------|---------|---------|
|                | 2022    | 2023    | 2024    | 2025    | 2026    | 2027    | 2028    |
| Age            | 24      | 25      | 26      | 27      | 28      | 29      | 30      |
| Scenario 1     | 4.8     | 4.9     | 4.8     | 4.6     | 4.4     | 4.3     | 4.0     |
| \$1 Salary (M) |         | 35.00   |         |         | \$27.00 | \$27.00 | \$27.00 |
| Scenario 2     | 5.0     | 5.1     | 5.0     | 4.8     | 4.6     | 4.5     | 4.2     |
| \$2 Salary (M) |         | 38.00   |         |         | \$30.00 | \$30.00 | \$30.00 |
| Scenario 3     | 5.4     | 5.7     | 6.0     | 5.8     | 5.3     | 5.0     | 4.8     |
| \$3 Salary (M) |         | 48.00   |         |         | \$40.00 | \$40.00 | \$40.00 |
| Cost per Win   | \$ 8.49 | \$ 8.62 | \$ 8.75 | \$ 8.89 | \$ 9.03 | \$ 9.17 | \$ 9.50 |
|                | CBA     |         |         |         | CBA     |         | P.O.*   |

## Bottom Line, Contract Offer

Total Value < \$25 Annual Surplus Value for consideration

6/7 years, \$24MM AAV (\$168MM total) → **\$24.33** SV/year

## Projection Scenarios

**Scenario 1:** Development ceiling reached; repeated 2021 production

**Scenario 2:** Improved plate approach, same fielding (slightly below avg.)

**Scenario 3:** Improved plate approach, improved fielding ^

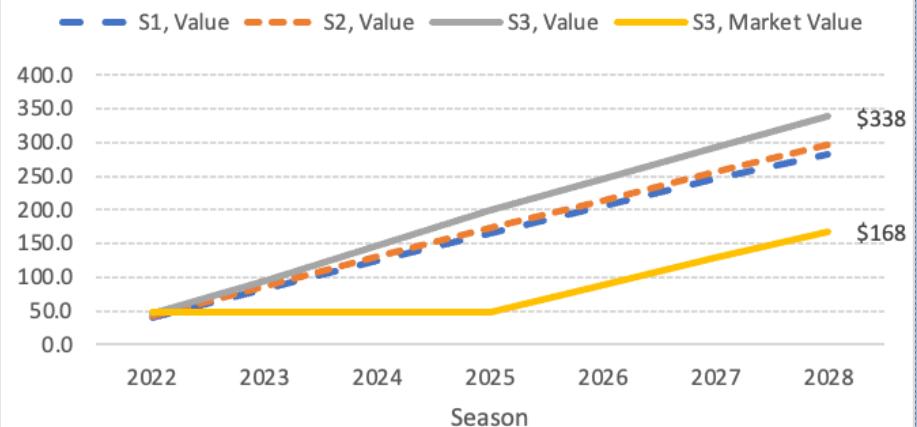
*Assumption:* Continued progression of baserunning skills and slugging (96<sup>th</sup> perc. Max Exit Velocity (+6.3mph from '19) is a promising sign of health and game power)

## Club Factors

**#1:** TOR holds **100% ownership** of Rogers RSN — untaxed in MLB revenue sharing (revenue certainty in an uncertain marketplace) → able to do a deal now

**#2:** TOR's Divisional, ALCS, and WS chances will grow; Springer's signing suggests TOR ready to compete, club interest will be in **minimizing franchise SS's future AAV** in relation to CBT → incentivized to do a deal now

## Bo Bichette, Production vs. Market Value



\* Higher walk rate, better swing selection (connect with A-swings and get more lift on pulled balls)

^ Less a question of range (athleticism, arm) than the glove (can be improved upon)

& Assumption: playoffs expanded under next CBA, more slices of the pie; incremental WAR remains inherently more valuable for a team on cusp of playoffs