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The BABS PROJECT

3.1

BOOK 2

The Broad Assessment Balance Sheet



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The BABS Project

Chapter 4

The Broad Assessment Balance Sheet

For decades, we have been told that the goal in fantasy baseball is to assemble a group of players whose aggregate statistics exceed those of all the other teams in the league. In fact, that is the actual verbiage in the *Official Rotisserie Baseball League Constitution*.

But we don't know what statistics our players are going to put up until after they've done it. Right? *Right?!*

Yeah, yeah, yeah, I remember. Still not sure I buy it completely, but I'm listening.

Can we at least agree that we don't know the *exact* numbers players are going to put up and the ranges around those projections can be very, very wide?

Sure.

Are you comfortable with the idea that a better approach might be to only plan around the variables that we *do* know?

I suppose.

Good. We do know three things about any given player:

- 1. His historical skills profile**
- 2. A general sense of his role**
- 3. Possible variables that may affect his performance**

We might redefine these skills, roles and risks as the "assets" and "liabilities" that each player possesses. Our fantasy team could be considered a collection of assets and liabilities. But that's not typically how we see them. For as long as we've been playing this game, we've been going into our drafts just trying to accumulate the most projected stats. However...

Players are more than just a bunch of projected stats.

Take a player like James Paxton. Please. When you've drafted Paxton, you were not just getting the potential for 200 strikeouts and a 3.75 ERA. You were also getting a wide error bar around that output because there is a long history of injury risk. When you draft a rookie – any rookie – you're not just getting the expectation for a certain level of stats; you're also getting the uncertainty surrounding his lack of experience.

But aren't all those variables built into the projections?

Yes. Most touts attempt to do that, but how do you quantify risk? The adjustments we apply to the projections are often just arbitrary:

- If a player is injury-prone, we'll chop off a bunch of AB or IP to account for how much time we *think* he might miss. Should we reduce his projection by 50 AB or 100 AB? Is a 25 IP discount enough to account for the uncertainty? *We don't know.*
- If a mid-level rookie is promoted after a phenomenal spring, how much do we adjust the 4.25 ERA he posted in Triple-A last year? Take off 0.25 of a run? Maybe cut 0.50 because he's pitching in San Diego? Are the adjustments even close to accurate? *We don't know.*
- If a struggling batter is being reunited with the hitting coach who worked with him when he was a rising star, how do we adjust for that? If a superstar struggled in the playoffs, should we adjust for that? If a player shows up to camp overweight and lethargic, should we adjust for that? These are *subjective* decisions about qualitative variables. The answers? *We don't know.*

There's little science behind it yet we'll be drafting our teams off whatever numbers are on our cheat sheets.

By combining disparate variables into a single projected stat line, you lose the ability to distinguish the skill from the risk.

We need a way to keep everything separate. We need to be able to present each player's underlying skills without making assumptions about his risk factors because, well...

- There is a *chance* an injury-prone player will stay healthy all year.
- There is a *chance* a great spring will have no bearing on what a rookie is going to do.
- There is a *chance* a new hitting coach, playoff performance or March weight will have nothing to do with how a player performs.

And we can't realistically attach a "probability" to those *chances*. But we still need to be aware of those risk factors so we can draw our own conclusions about how important they are, if at all.

The fact is, there are risky players who may have underlying skills that put them in the same class as elite first-rounders. But the risk is what sets them apart. You simply can't build that into a statistical projection and claim it's more accurate.

Consider... **a balance sheet** – an assessment of skills and risks, listed separately and adjacently in a chart. That's something we've never done before – we've never viewed our players and rosters as balance sheets. We may have kept running totals of projections but we rarely kept a formal record of risk factors. It's the balance of skill and risk – assets and liabilities – on both a player and team level, that provides a truer view into our team's potential for success or failure.

Maximizing assets, minimizing liabilities. That's how we are going to build our rosters. The process is one of planning out your optimal cross-section of skills while deciding up front how much risk you are willing to incur. The players then become just puzzle pieces.

The **Broad Assessment Balance Sheet (BABS)** is the formal moniker that I've dubbed this process. It's **broad** because we've already determined that "precise" doesn't work. It's an **assessment** – slightly less rigorous than a full-blown analysis because complexity doesn't buy us enough to make a difference. It's a **balance sheet**, because that is what the output of our effort is going to look like. And I want you to become fast friends, so let's just call her **BABS**.

(If nothing else, BABS finally gives us a strong female presence in this hobby, at least one who knows her way around a light saber.)

SKILLS (ASSETS)	RISK FACTORS (LIABILITIES)

So we start with a balance sheet. What do we put into that balance sheet?

Back in 2009, I developed the Mayberry Method, a player evaluation system named after a place where life was simpler. It reduced each player to a 7-character code: three characters for skill (on a scale of 0-5), one character for playing time (0-5) and three characters for risk (A-F grades for health, experience and consistency). As much as that was a huge step in the right direction, several years ago I decided that it didn't go far enough. It was still too granular.

Here is the original introduction to the Mayberry concept. It fully applies to BABS, perhaps even moreso:

Tonight, the friendly weather forecaster on my local television station has told me that it is going to be partly cloudy tomorrow with a high of 78 degrees. I suspect the meteorologist's advanced modeling system spit out that fancy number – 78. I often think, why not 77? Or 79? The truth is, if I were to walk outside right now, I'd feel no difference if it was 77, or 78, or 79.

In fact, it probably requires a good five degrees for me to feel any noticeable difference, and even then, it would be slight. 79 versus 74? 46 versus 41? 97 versus 92? More important, a five degree difference wouldn't likely make me change my behavior. If I'm not wearing a light jacket at 79, I'm not likely going to do so at 74.

The 10-day forecast is an even more interesting exercise. Besides the fact that I don't believe they can accurately tell me that it is going to rain a week from Sunday, the list of daily high temperatures seems to be an exercise in excessive precision: 80, 82, 81, 80, 77, 77, 74, 76.

What does this tell me? The first half of the week is going to be warm. The second half of the week is going to be marginally cooler.

In fact, they could just say that the temp will be in the low 80s and I would be perfectly okay with that. High 70s, low 80s, high 80s, low 90s... that's all I need. They wouldn't even have to bother with mid-70s or mid-80s because that won't change what I am going to wear anyway.

What do we gain from the extra precision? We delude ourselves into believing we are gaining accuracy when in fact we are gaining an increased probability of being wrong. We're just not good enough to predict the temperature to the exact degree on a daily basis. And most important... there's no great need to be so perfect.

Now let's take this a step further.

What if we were to say the only thing that is important is the climate's affect on something *actionable* – what we wear? It doesn't matter if the temperature is 82 or 95 because in either case, we're heading outside in shorts and sandals. It needs to get cooler than 65 before we consider donning a light jacket, but 64 versus 54 is nearly irrelevant. And we won't consider pulling out the parka until the temps dip into the low 40s.

Now, the range of temperatures that have any actionable consequences becomes quite wide. It's shorts weather, light jacket weather or parka weather. Any number attached to the thermometer just doesn't matter.

AN ASIDE: Interestingly enough, when I lived in New Hampshire, I felt quite comfortable in shorts when temps were in the 50s. Now in Florida, a jacket comes out when temps are in the low 60s. I suppose that is the climate equivalent of park effects.

Let's now convert this concept from weather to baseball skills.

Each fantasy-relevant skill has a different impact on your roster. We used to gauge that impact by evaluating a player's power, for instance, based on how many home runs he is likely to hit. Forget the home runs; focus on the skills elements that contribute to home run power. Or speed skills that contribute to stolen bases. Or the various pitching skills that feed ERA.

With BABS, each skill is going to have – in descending order – an **Extreme** impact on your roster, a **Significant** impact, a **Moderate** impact, no measurable impact, or a **Negative** impact. These modifiers are all comparisons to the rest of the talent pool (e.g. Player X will provide your team with extreme power skill as compared to all other players, etc.). The distinctions between impact levels are based in underlying skills metrics but in very broad strokes.

So what we will be putting into our balance sheet are descriptors of each player's skills – and later on, risks – in these broad terms.

SKILLS (ASSETS)	RISK FACTORS (LIABILITIES)
Extreme power	
Moderate speed	

Wait, no. Sorry, that doesn't work for me. Let's say I have a choice between two speedy guys. One stole 15 more bases than the other but maybe they have the same rating. That's possible, right? Are you telling me I can't rank one better for speed potential?

Maybe not. You are correct that both players could be rated comparably, but let's look at a real world example.

In 2018, Whit Merrifield out-stole Starling Marte 45 to 33. But for 2019, BABS rated both as having the same **significant** speed skills compared to the rest of the player pool. In the eyes of BABS (they are a beautiful shade of blue), both players were essentially interchangeable commodities when it came to stolen base potential. The

odds that one would outperform the other were not significant enough to project with any confidence. And in fact, Marte out-stole Merrifield in 2019, 25 to 20.

Bottom line – any opinion that Merrifield would steal more bases than Marte in 2019 was heavily steeped in recency bias.

So how would I decide what to pay for them? If I'm in a draft league and they both fall to me, I still need to decide who to pick. Do I flip a coin?

You could, but before that, you'd obviously take a look at their respective Liabilities. If you needed a tie-breaker, you could look for some minor variable – Merrifield's team, Marte's ballpark, whatever – if you needed the comfort of giving one player an edge. But in the end, it wouldn't likely be enough to make a difference to your team's success or failure. The error bars are too wide.

Here is another way to look at it. Let's say you couldn't get it out of your head that Merrifield was a better bet for stolen bases. Let's say that someone ahead of you grabbed him in a snake draft or outbid you in an auction. If Marte was still available, feel comfortable knowing that you'd have another shot at landing a Merrifield-type commodity. And if the cost was lower, you'd have gained some profit.

So, we'll be describing each player's skills profile in broad terms on the Assets side of BABS. The risk variables will be handled likewise on the Liabilities side of the ledger.

In the next chapter, we'll start providing some structure to BABS.

The BABS Project

Chapter 5

The BABS Player Profiling System

The foundation of BABS is a basic accounting concept – the balance sheet. On the left side are your Assets; on the right are your Liabilities.

For batters, your Assets are Power, Speed and Batting Effectiveness (which can be used as a proxy for batting average). For pitchers, your assets are Pitching Effectiveness (a proxy for ERA and WHIP), Strikeouts and Saves. Both sides have Playing Time as an Asset as well. While these Assets are not direct correlations to all possible fantasy and Rotisserie categories, they do represent reasonable proxies for almost all of them.

The major items on the Liabilities side are Skill, Health and Experience, or actually "lack of" each. (Perhaps I should have labeled these as Ineptness, Injury and Immaturity – the three "I"s in Liability). There is also a Miscellaneous category for minor variables like moving to a new team, a significant ballpark change, or advancing age. For these variables, you can neither count on them having an effect nor quantify them, though their impact could be considerable. Or not.

ASSETS

Skill and opportunity have always been the two key elements to every projection, and they form the foundation of our Assets. We look for positive contributions in these categories.

Playing time

It all starts here, an element of the forecasting process with a great amount of variability. As such, players will be rated in BABS based on a broad expectation for their potential for playing time:

BATTERS

F	Full-timer	Approx. 500+ PA	Front-liners, regulars
M	Mid-timer	Approx. 350+ PA	Strong side platoon, mid-season call-ups, etc.
P	Part-timer	Approx. 200+ PA	Weak-side platoon, part-timers, etc.
-	No-timer	Fewer than 200 PA	Bench players, back-up catchers, etc.

PITCHERS

F	Full-timer	Approx. 180+ IP	#1, #2 starters
M	Mid-timer	Approx. 120+ IP	#3, #4, #5 starters
P	Part-timer	Approx. 85+ IP	Long men/Bulk inning relievers
-	No-timer	Fewer than 85 IP	Short men/closers

Most reputable touts go through a meticulous process of fitting plate appearances and innings into the available playing time on each team. That's an admirable effort and vital for accurate fantasy valuations.

But let's be honest here; the only players for whom these projections are even close to being on target are those with firm roles who stay healthy all season. These are the only players who achieve a critical mass of PA/IP sufficient enough that their skills can be projected with any possibility of "accuracy." For those players whose playing time projections are arbitrarily downgraded due to the expectation of lost time, you immediately put into question whether that PA/IP discount might also come along with a skills discount as well. We just don't know which of the following scenarios will drive a suppressed playing time projection:

- Player gets hurt, hits the IL, no impact on performance.
- Player gets hurt, performs poorly as he plays through injury, hits the IL.
- Player gets hurt, hits the IL, returns less than healthy and performs poorly.

And of course...

- Player gets hurt, performs poorly, never hits the IL, loses playing time.
- Player performs poorly, loses playing time.

All five scenarios will yield different results, especially if one occurs in May and another occurs in August.

Of the full-timers in the ADP Top 300 from 2009-2021, there were less than 150, on average, who stayed healthy each year, and that included about two dozen relief pitchers broadly defined as "full-timers." Beyond the Top 300, the number of full-timers drops sharply. Even if we could deem that there were 200-250 healthy full-timers, that's still less than 20 percent of the entire player pool.

When we're looking at projections for part-timers and no-timers, we're mostly throwing darts. With performance numbers for anything under 200 PA or 85 IP, the error bars are so wide as to be almost meaningless.

So BABS opts to project playing time in broad chunks within which we can account for a good measure of volatility. There are (F)ull-timers, (M)id-timers, (P)art-timers and (-)No-timers. Beyond that, any quest for precision is mostly a waste of time.

If a batter is defined as a full-timer, BABS captures his playing time if he stays healthy to rack up 650 PAs, but also provides wiggle room if an unexpected IL stint or two knocks him down to 525 PA. At the end of the season, 650 PA versus 525 PA makes a difference, but on Draft Day, we have no way of knowing where a player will end up within that range.

In real terms, I stopped paying much attention to playing time projections a long time ago. If maybe half of the player population is going to be on the injured list at one time or another, plate appearances and innings are going to be shifting constantly. I shake my head (in disappointment, not derision) when someone tells me that Player X is not a viable pick because he has "no path to playing time." Unless there are three players ahead of him on the depth chart, I'll never write anyone off completely. If a player has skill, there will always be an injury or positional shift that will "miraculously" open up a spot. Happens all the time.

In 2019, players like Bo Bichette (ADP 432) and Rookie of the Year Yordan Alvarez (ADP 691) were not on anyone's draft radar except in the deepest of leagues. That's why you should not be reluctant to draft high-skilled prospects at the appropriate time. While they remain risky in terms of performance, the risk of them finding playing time can be far lower.

As it turns out, the pool of players rated as F, M or P will closely constitute the entire draftable population of a 15-team mixed league. No-timers will constitute reserve players in this format, or end-gamers in deeper formats.

Skill

On the skill side, players are not rated on their potential statistical output. I don't care whether Yu Darvish will post an ERA of 2.50, 3.50 or 4.50. There are too many variables to know where that number will land. Instead, players are rated against each other, because that's how it all comes out anyway. Darvish could post a 2.60 mark, but that 2.60 is far less valuable in a season where everyone and his wife's cousin's housekeeper is posting sub-3.00 ERAs. So players are rated against the population mean for each skill:

Extreme Impact	Players in the Top 10% of that skill
Significant Impact	Players in the Top 11-25% of that skill
Moderate Impact	Players in the Top 26-50% of that skill
No projectable impact	Players in the Top 51-75% of that skill

What happened to negative skill?

We'll get to that in a minute. Negative skill is essentially a Liability, so we'll track that on the other side of the ledger.

Here are the codes we will use for each player:

Impact Level	Power	Speed	BatEff	PitchEff	Strikeouts
Extreme	P+	S+	A+	E+	K+
Significant	PW	SB	AV	ER	KK
Moderate	p	s	a	e	k

The best way to remember these notations is that **Extreme** Assets are upper case with a plus (+) sign, **Significant** Assets are two-character upper case and **Moderate** Assets are in lower case.

Extreme	X+	Top 10%
Significant	XX	Top 25%
Moderate	x	Top 50%

Use this for a few days and it will become second nature to you.

Those in the 51-75 percent range for each skill are assigned no rating. Their contribution is typically not enough to substantively move a team in that category's standings, or at least not at a level that you can project. In mixed leagues, these players are usually easily replaceable. They might be more important in AL/NL-only leagues, but that does not make them any more projectable. You're still going to want to target players with at least Moderate skill to move the needle.

So, if I understand this correctly, 10% of the players will have Extreme skill, 25% will have Significant or better and 50% will have Moderate or better skill. That right?

No, no, we are not counting players, we are measuring skill. If we did it your way, the top 75 of 750 players (10%) would be awarded an Extreme rating regardless of whether or not they exhibited Extreme skill. The way BABS does it, a player merits a "+" rating if he is in the top 10 percent of that skill, not the top 10 percent of the player pool. In other words, if the range of reasonably expected performance for batting average (just to use a familiar stat) is .200 to .320, the top 10 percent of that range would be .308 to .320. Any number of players could merit inclusion in that range.

For the assessment of each of the skills categories, I return to my roots with the *Baseball Forecaster* and *BaseballHQ.com* metrics. (For a fuller explanation of these gauges and complete granular data for every player, those are the places to go.) The following ratings incorporate metrics that focus on underlying skills, but there is also an element of demonstrated skill. For example, while the Power metrics focus on hitting the ball hard with lift, it also includes actual home runs and doubles since we still play the game with those outcomes.

Power (P+, PW, p): BABS relies mostly on *Expected Linear Weighted Power Index* here. This combines weighted levels of hard-hit line drives and hard hit fly balls as a percentage of all balls put into play.

Speed (S+, SB, s): Here BABS relies on *Statistically Scouted Speed*, which looks at run-scoring, triples, infield hits and body mass index. BABS also looks at each runner's track record of how often he's given a green light as well as his stolen base success rate.

Batting Effectiveness (A+, AV, a): BABS uses *Expected Batting Average* here, which looks at a batter's contact rate and odds that a batted ball will fall for a hit, which is a product of the speed of the ball, distance it is hit and speed of the batter. While this can be used as a proxy for batting average, the skills measured make it more of a gauge of a player's underlying "hit tool."

Of all the offensive skills that BABS captures, one that the above categories falls short on is **on base average**, or more specifically, the batter's ability to take a walk. So BABS adds an indicator for hitters more adept at drawing walks and another for those who have the plate patience of a hyperactive fly.

For players with an historical walk rate of at least 10 percent, there will be an asterisk "*" along with their batting effectiveness rating. You will see players with "A+*" (that's the best), "AV*" and "a*". You will also see hitters with just a "*" in that column; these have a below average "hit tool" but still manage to walk at least 10 percent of the time. (The hyperactive insects will be discussed under Liabilities.)

Pitching Effectiveness (E+, ER, e): Here BABS uses *Expected Earned Run Average*, which approximates ERA with situation-independent, skills-based metrics, like strikeouts, walks and ground balls. This is similar to xFIP (Fielding Independent Pitching). Like batters, this is used to measure a pitcher's "pitching tool."

Strikeouts (K+, KK, k): BABS combines two metrics for this assessment – strikeout rate and swinging strike rate.

The Assets section of the pitcher balance sheet also has a column for **Saves**. This is an opportunity-driven statistic but can be pared down to two levels, similar to what is done in Mayberry:

Significant	SV	Likely to get 30+ saves
Moderate	sv-	Likely to get 10-29 saves

These seem like wide ranges – okay, they are – but we need to cast a wide net in this category. The Significant saves sources are pretty much guaranteed a front-line shot at 9th inning work. The arms classified as Moderate all have some risk associated with them, from uncertain bullpen depth charts to spotty track records in a closing role. By filtering out anyone projected for fewer than 10 saves, we're essentially saying that those guys are not projectable enough. My advice is always to speculate on relief pitcher skills and be grateful if you back into saves.

I'm not sure I completely understand what classifies someone with P+ versus PW versus p. Is there a number? I have often used the 20-80 scouting scale which tends to translate to counting stats. Is there a BABS benchmark number? It looks to me like P+ = 30-plus homers, PW = 25-29 homers, p = somewhere around 15 -24?

No. The ratings do not correlate to counting stats. Counting stats are faulty. The ratings correlate to tiered skill levels and represent each player's underlying talent. This does not include opportunity for playing time, level of experience or injury history. Strictly underlying skill.

What's more, *these ratings are not projections*. They are gauges of each player's historical measurable skill. When we start planning for the new season, we may draw some conclusions about how a player may progress or regress, but we'll never attach a number to those conclusions. You'll find that, over time, most players do have a more trackable skills progression than their statistics would lead you to believe. Any marked changes in a trend will either be supportable by a change in expectation, or more likely just regress. For instance, let's say a batter shows the following power trend:

<u>Year</u>	<u>BABS</u>
1	p
2	p
3	PW
4	P+
5	PW

This player took a step up in power in Year 3 and Year 4, then regressed in year No. 5. An analysis of his most recent balance sheet might reveal an injury situation, or a change in leagues, or some variable that might have contributed to the regression.

Let's take another look, adding in his actual home run output:

<u>Year</u>	<u>BABS</u>	<u>HR</u>
1	p	23
2	p	19
3	PW	29
4	P+	30
5	PW	32

At face value, this does not seem to make sense. How could his power rating decline in year No. 5 while his home run total increased? Perhaps he hit 25 doubles in year No. 4 with a high hard-hit ball rate, and only 10 doubles in year No. 5. BABS looks at all measures of power and assumes the home runs will find their level.

Going into year No. 6, we might rate this batter as either PW or P+ depending upon the extent that those variables might affect his future performance. If he was hurt and is expected to be healthy, we might return him to P+, which is a skill level he has shown to possess. If the negative variables will likely continue to be a factor, we might keep him at PW. Or, we might return him to P+ as his natural skill level and reflect the downside on the Liabilities side of his balance sheet.

There are several ways to play it, but you'll note that we're still working within a very broad range of outcomes. And we're not limiting those outcomes to a statistical projection of exactly 34 home runs. Or even 30-35 HRs. Because we just don't know where that number will end up.

But doesn't there still need to be some piece of data that tells you whether a player rates as a p, PW or P+?

Okay, let's get into the weeds a little bit, but just a little. Using power as an example, we start by indexing each player's relevant power metrics to a theoretical league average of 100. Above average performance equates to an index over 100; below average performances under 100. We do this for expected linear weighted power (xLWP) as well as for gauges that measure actual output, like isolated power and home run rate. There are several more power metrics, but let's focus on these three. The result is a series of indices. By means of demonstration, perhaps xLWP comes out to 135, ISO comes out to 115, and HR rate is 117. These three data points are weighted to produce a single data point. In this case, that rating might be somewhere around 129. Underlying skill always gets a heavier weight.

How does 129 fit into the player population? We look at the power indices of all batters with at least 300 plate appearances during the previous season and set a range for the upper and lower limits, filtering out extraneous outliers (who will get properly rated later on). As an example, let's say that the indexed skill for power goes from 38 (62% below league average) to 162 (62% above league average), a range of 124. Then we refer back to this:

Extreme Impact	P+	Players in the Top 10% of that skill
Significant Impact	PW	Players in the Top 11-25% of that skill
Moderate Impact	p	Players in the Top 26-50% of that skill

In this case, extreme power (P+) would be any level over 149. Significant power (PW) would be any level between and 132 and 149. Moderate power (p) would be anywhere from 100 to 131. This player with a 129 index would be rated as (p).

Again, this is not a projection. This is an assessment based on both measures of underlying skill and demonstrated output. Projection systems draw conclusions from this data and slap a future number on them – how many home runs this player will hit. BABS prefers to just leave the data out there to bake on their own.

Hmm, I'm still not all in with these alpha ratings. How can you account for all the different skills with just this handful of codes?

At first glance, it may seem that these broad ratings don't define players well enough. But consider that, for batters, three skills codes (power, speed, batting effectiveness) times five different levels (extreme, significant, moderate, none, negative) multiplies out to *125 different combinations*, each a different profile. And

that's not even accounting for playing time and all the possible liabilities. There are, in fact, hundreds of possible profiles that can be defined from just these few codes.

Miscellaneous

There are several miscellaneous categories of positive variables that might have a legitimate impact and are not captured elsewhere. These are variables that need to be on our radar. Most analysts will build them into their statistical projection. BABS prefers to just identify them and let you know they *might* be a factor. Or not. It's your call how important they are.

There are only a couple of items that are important enough to include here:

Pk+ Positive park effect

As noted in Chapter 2, park dimensions *might* have an impact on output, but changes are neither guaranteed nor can be absolutely attributable to a particular change in venue. The only players who will be noted at all are those moving to one of the more extreme hitter parks from one of the more pitcher-friendly parks. The list of these hitter and pitcher parks tends to shift over time, but you can usually find Coors Field on the hitter list. There are usually no more than a half dozen parks on either list. Any movement between other ballparks is ignored.

And note that each player's current ballpark is already baked into their skills ratings. The ballpark rating only comes into play when a player changes teams, and only for the most extreme ballpark changes.

Rg+ Positive regression

There are a few players who had really bad performances last year, sometimes driven by no more than random statistical volatility. Odds are "last year's bums" *might* see some rebound just by virtue of the planets realigning. In any case, it's important to identify them because this is one of our few opportunities to engage in a full frontal assault on recency bias.

LIABILITIES

It's great to roster a bunch of players who you hope will put up big stats. But what separates the winners from the losers is the ability to build risk into the process. Every player provides certain assets but many also have liabilities that influence their potential to provide a fair return on your investment. BABS describes those factors and provides a "risk budget" to help you set rough limits on how many of these risky players are safe to roster.

There are two types of risk factors captured by BABS – Major Liabilities and Minor Liabilities. Here are the ratings we use on the Dark Side of BABS (no storm troopers allowed).

MAJOR Liabilities

Skill

Poor performance in ratio categories like batting average and ERA/WHIP can do great damage as they can drag your team backwards. However, the game today has also put pressure on performers to contribute in counting stats as well. Owning past players like Dee Gordon or Billy Hamilton may have helped in stolen bases, but the opportunity cost of giving up a home run hitter reduced their value. We could provide a negative rating on the asset side, but these are true Liabilities, so we have a column on the Dark Side for players with the red light sabers.

We evaluate these Liabilities on the same scale as the comparable asset. So, while the Assets look at skills in the top 10 percent, 25 percent and 50 percent, the Liabilities look at the bottom 25 percent.

- P Bottom 25% in power
- A Bottom 25% of batting effectiveness skill
- PA Bottom 25% in power and batting effectiveness

We don't have a speed liability, per se, since 90 percent of the player pool would merit that rating these days. But we could add it if we had to.

- E Bottom 25% of pitching effectiveness skill
- K Bottom 25% in strikeout dominance
- EK Bottom 25% in pitching effectiveness and strikeout dominance

We also add a "-" on the Liabilities side for those hitters who walk less than 5 percent of the time.

Health

Every year, this is the one variable that wreaks havoc with our chance at success. Back in 2012, players lost 25,610 days on the injured list. In 2021, that number nearly doubled, to 47,693. This is no small variable.

BABS takes a different approach to injuries. We already know up front that at least 50 percent of the top-ranked players are going to spend some time on the IL. We have little ability to project which players are going to pull up lame at any time, so we have to attach some injury risk to pretty much everyone.

As such, BABS sets a starting point for the health of each player. *Everyone has a minimum baseline of a 25 percent chance to spend some time on the IL.* Everyone. To that, she adds greater odds to those players with an injury history (based on days spent on the IL over the past two years) or current health concerns.

The codes look like this:

inj- Minor Injury Risk

Players who spent more than 20 days on the IL in the most recent season or are currently hurt with a positive prognosis for the upcoming season. I give them 26-50 percent odds of missing significant time.

INJ Major Injury Risk

Players who spent more than 50 days on the IL in the most recent season, spent more than 30 days on the IL in each of two most recent seasons, or are currently hurt with uncertain or negative prognosis for the upcoming season. I give over 50 percent odds that they will miss significant time this year.

I classify "significant time" as enough missed games that it hurts. If Zach Godley goes down for two weeks with a hangnail and you replace him with Jordan Lyles, that's *not* significant. And if this is a real move you need to make, you have a lot more problems than worrying about injuries.

One more...

INJ+ Major Risk – Long term

This rating is assigned to players who are expected to miss at least two months of the upcoming season due to injury, suspension or whatever reason. These are normally identifiable by a suppressed playing time rating, but INJ+ ensures that drafters know that this is wholly driven by health issues.

Experience

For every Mike Trout who hits the ground running upon promotion and never lets up, there are hundreds who don't follow that path. So, as much as we're ready to anoint this year's can't miss prospect as the next first-ballot Hall of Famer, we need to account for the risk of that not happening.

Patrick Davitt's research has shown that hitters need at least 800 plate appearances to establish a baseline, or enough experience from which we can legitimately project further growth. Those 800 PAs could mean a big rookie year and a sophomore slump, or a pedestrian first season followed by a growth year, or two consistent years. But the percentage play is to expect some volatility until that baseline is set.

For the BABS ratings, I've decided to err on the side of caution and increase the benchmark slightly. About 1,000 plate appearances in the Majors – two full seasons – is a good point to determine legitimacy on the batting side. For pitchers, that line is 300 innings for starters and 150 innings for relievers.

On the balance sheet, we'll identify the young players as such:

e Minor Experience Risk

Players with the equivalent of one full season in the majors, but less than two.

- Batters: Greater than 500 plate appearances but fewer than 1,000.
- Starting pitchers: Greater than 150 innings but fewer than 300.
- Relief pitchers: Greater than 75 innings but fewer than 150.

EX Major Experience Risk

Players with less than one full season in the majors.

- Batters: Fewer than 500 plate appearances.
- Starting pitchers: Fewer than 150 innings.
- Relief pitchers: Fewer than 75 innings.

Essentially, anyone who's assigned an Experience liability is not yet a fully formed entity. The biggest risk for us, quite frankly, is not knowing what their true baseline is. So Experience risk creates a huge error bar around potential performance stats. And yes, that means they could also be much better than we expect, but it's not something we can plan on, so it's a Liability.

Finally, given my opinion about ageism, I don't care whether a player reaches these playing time thresholds at age 24, or 27, or 31. Experience is experience at the Major League level, regardless of age.

Minor Liabilities

These are the miscellaneous negative variables that could have an impact, might not, probably won't but can, and are definitely not quantifiable unless they are. That's about as firm a stance as I'll take. But all of these need to be on our radar because, if Nelson Cruz hits .220 with 10 HRs this season – assuming he's still playing when you read this – we need to be able to come back and say, "Well... BABS did say he's old."

Any of these could be bad, good or have no effect:

Pk- Negative park effect

As on the Asset side, we can neither guarantee nor absolutely attribute performance changes to park dimensions. If Trevor Story was traded to Miami, he would qualify for this code, but you'd think someone with his skill would be able to hit reasonably well anywhere. So take it for what it's worth.

Nw New team

This goes beyond park effects. Many players have an adjustment period when going to a new team, and especially a new league. It has to do with variables like team chemistry or familiarity with the opposition. Some analysts tend to give this more weight than others, but it's just another variable that *might* have an impact. Only those players with some baseline of MLB performance are noted.

Ag Advancing age

Once a player hits 36, anything can happen. Some batters hang on for longer; some pitchers face a steep cliff at 38. All are essentially geezers at this point. No matter how many artificial supplements some of them *might* be taking to ward off the fear of premature retirement, I won't be anywhere near players pushing 40.

Rg- Negative regression

As much as we want to believe that last year's breakouts can sustain their numbers, the odds are against them. Players noted here are those who posted performances so far above their historical levels that it's tough to justify their sustainability.

Feel free to add your own Liabilities. If you're worried that a tanking team will trade a key player, jot a note. If you're hoping that an opponent's player is suspended for PEDs, ding him here too. You can change *any* of the ratings, on either side of BABS. Print it, mark it, draw red slash marks across hated players – don't hold back. This is your tool and I have no way of knowing what the heck you're doing anyway.

I'll start getting into the balancing of assets and liabilities in the next chapter, but there is basic point to remember: **The more a player is piling up Liabilities, the greater the risk of him falling short of realizing his Assets.** Pretty logical.

Hmm, I dunno. It seems kinda simplistic and based more on opinion than fact.

The goal is to keep it simple but structured. However, the foundation is still based in real data. The Asset and Liability categories are all driven by data; the secondary categories are more contextual but no less driven by fact.

And now we might have something that looks like this:

SKILLS (ASSETS)		RISK FACTORS (LIABILITIES)
Extreme power		Negative batting effectiveness
Moderate speed		Major injury risk

Or using our shorthand...

SKILLS (ASSETS)		RISK FACTORS (LIABILITIES)
P+, s		-A, INJ

Or... (P+,s | -A,INJ)

Ugh... I don't like this.

Don't worry, you'll get used to it. Most players don't have that many different Assets and Liabilities in their profile. And once we start populating our balance sheet, the Liabilities will revert to a value that's easier to understand and use. Keep reading...

Chapter 6

Analyzing the Player Pool

Most of us will take a look at the player pool and see a massive collection of hundreds – even thousands – of players. The prospect of having to analyze, project, value and rank these players is incredibly daunting.

It's never made a lot of sense to me. How can you precisely say that Player A is better than Player B who is better than Player C? Sure, Clayton Kershaw is better than Clayton Richard, but at the end of the 2016, did it matter whether I owned Kinsler or Kipnis? Not a whit.

Seriously, how do you decide whether Whit Merrifield will be more valuable to your roster than Giancarlo Stanton? And how do you accomplish that task when you don't know what either player is going to do this year?

It's not easy. For starters, we can try to get a sense of where value lies, Asset by Asset, and Liability by Liability.

It starts with one basic statement:

Players with the same asset ratings are comparable and pretty much interchangeable.

This is an important point. We spend so much time trying to find differences between players in order to rank them that we ignore the fact that many of them actually have very similar skill sets. Yes, the numbers they put up might be all over the board but that's a "numbers" problem, not a skills problem. Players are more alike than they are different.

Still, not all similarly-skilled players are exactly the same. Some will have more Liabilities. In your roster-planning process, you'll be making decisions as to how much risk you'd be willing to tolerate.

An example, please?

Okay. In pretty much every 2021 fantasy league, Bryan Reynolds was drafted just outside the top 300 players. But here's the thing... on a broad skills basis, he had the same underlying asset profile as 11 other full-time players who were being drafted earlier, four of them in the top 75. J.T. Realmuto (40) had an injury liability that might have dissuaded you from drafting him at his ADP. Even the player with the

earliest ranking – Nolan Arenado (39) – was on a new team, adding to his risk, and wasn't significantly better than the others.

Reynolds (307) did have some minor Experience risk but also was rated for positive regression; otherwise his balance sheet was clean. If you were willing to build that minor risk into your roster, you would be getting a 21st rounder with essentially the same underlying skill set as 11 others who were being drafted as early as Round 3.

All players who possess the same Asset ratings are part of an "Asset Group."

Arenado, Realmuto and Reynolds were all rated for Moderate power and Moderate batting effectiveness, so they were all part of the (p,a) Asset Group, as were the eight other full-timers in 2021 (there were 10 other Mid-timers and Part-timers as well). These were the full-timers in the (p,a) Asset Group at the beginning of 2021, and how they fared:

ADP	2021	LIAB	AB	HR	RBI	R	SB	Avg	R\$
39	N.Arenado	Nw,Pk-	593	34	105	81	2	.255	\$21
40	J.T.Realmuto	INJ	476	17	73	64	13	.263	\$19
67	G.Torres		459	9	51	50	14	.259	\$14
73	M.Conforto	Rg-	406	14	55	52	1	.232	\$7
123	C.Correa		555	26	92	104	0	.279	\$22
126	K.Bryant		513	25	73	86	10	.265	\$22
152	J.Bell	Nw	498	27	88	75	0	.261	\$17
159	A.Santander	INJ,e	406	18	50	54	1	.286	\$8
196	A.J.Pollock		384	21	69	53	9	.297	\$21
209	J.Walsh	EX	530	29	98	70	2	.277	\$21
291	E.Escobar		549	28	90	77	1	.253	\$17
307	B.Reynolds	e	559	24	90	93	5	.302	\$28
	Mean		494	25	80	74	5	.269	\$19

Aside from a few outliers, you can tell that these players all have very similar skill sets. Mid-20s power, high .260s batting averages and marginal speed. The variances among the players are often random, but sometimes can be tied to the Liability ratings.

That's because players cannot be evaluated based on their assets alone. Walsh and Reynolds both owned an Experience Liability – a lack of a long term track record, which may have played a part in their low rankings. If you had to choose between them and someone like Carlos Correa, you might have opted for Correa based on his clean Liability record alone. But the acquisition cost for Walsh or Reynolds was much lower, and if you were willing to build their risk into your BABS planning – we'll talk about risk budgets shortly – you could have ended up with a huge bargain.

As far as notation, if there are Liabilities, they will be shown as (p,a | INJ). Assets and Liabilities separated by a vertical bar.

You have full control over those decisions. BABS lays out all the facts in front of you.

Hmm. What other players are more "interchangeable" than we'd perceive?

Tons of them. Here are a few profit opportunities you could have had in 2018:

Asset Group	# in Grp	If you missed out on Player	ADP	You could have had Player	ADP
(P+,a)	5	Rhys Hoskins	49	Matt Carpenter	183
(S+)	4	Byron Buxton	51	Mallex Smith	331
(ER,k)	6	M. Bumgarner	26	Aaron Nola	65
(e,k)	11	Jose Berrios	107	Blake Snell	210

And a few more from 2019:

Asset Group	# in Grp	If you missed out on Player	ADP	You could have had Player	ADP
(ER,KK)	14	J. Verlander	22	Charlie Morton	119
(P+)	3	Khris Davis	45	Matt Olson	109
(p,s,a)	4	Tommy Pham	61	Austin Meadows	186
(p,AV)	23	M. Machado	18	Eloy Jimenez	117

If you missed out on any of the earlier-drafted players, there was still a comparable commodity several rounds later. These were all very real profit opportunities.

It's interesting that there were so many players in some of those groups.

True. Imagine the talent pool as a pyramid. The best players have such extreme skills that they often constitute a single Asset Group on their own. The deeper you go into the pool, the more players start looking alike.

When it comes to pitchers, they tend to flock together because their performance metrics have wider error bars than batters. ERAs will always be volatile so the best we can do is focus on the skills. When you put those skills into buckets, you'll find that most pitchers are not much different from one another. What's more, once you get below a certain skills threshold, it hardly matters at all who you put on your roster. You can try to find factors that set individual pitchers apart, but virtually none of it will be projectable in the end.

Interchangeability is even more prevalent with relief pitchers. While there are some whose skills do stand out above the others, *you are drafting these players for saves*, and that is an unpredictable, situational stat. The top saves leaders are different every year, so you should not pay a premium for most of the arms in your bullpen.

How do I know that the players in one Asset Group really have different skills from the players in, say, a neighboring group?

Yeah, I get it. When we see a list of players within an Asset Group, our immediate reaction is to question how we can call them interchangeable, or even comparable. I think the best way to view each Asset Group is as a *range of possibilities*. So if there is a range, how would two neighboring groups compare? Here is an essay written in 2017 that captures the concept pretty well:

Let's look at the players in two nearby Asset Groups, view their projections and see what we can learn.

The projections are from our good friends at BaseballHQ.com. Players are listed in order of their current ADPs.

Significant power, moderate batting effectiveness

(PW,a)	HR	SB	AVG
Bryce Harper	30	10	.274
Evan Gattis	26	1	.255
Evan Longoria	28	2	.269
Jose Bautista	27	3	.249
Jake Lamb	26	5	.268
Jay Bruce	25	5	.257
Nick Castellanos	23	1	.267
Tommy Joseph	30	0	.256
MEAN	27	3	.262

Moderate power, moderate batting effectiveness

(p,a)	HR	SB	AVG
Alex Bregman	23	8	.268
Anthony Rendon	16	8	.271
Salvador Perez	21	0	.257
Mike Moustakas	24	1	.269
Carlos Beltran	18	1	.267
Logan Forsythe	17	7	.257
Brandon Crawford	14	6	.263
Justin Bour	24	1	.260
MEAN	20	4	.264

These two Asset Groups are close to each other in the rankings. But you can still see that the variances in these projected stats correspond well with BABS' ratings. The proof is in the means. The identical (a) batting effectiveness ratings yield batting averages just a few points apart. Speed is negligible in both groups. But the difference in power rating – (PW) versus (p) – yields a more striking variance in output.

But those are the means, and means are meaningless in real life. What's more important are the ranges.

Group	HR	SB	AVG
PW,a	23-30	0-10	.249-.274
p,a	14-24	0-8	.257-.271

With identical (a) ratings, there is complete overlap between the two sets of batting averages. The fact that one displays a wider spread than the other is purely random.

The identical speed groups yield stolen base totals that are too small to be projectable. If you are reaching for a guy projected for 8 SBs over a comparable player projected for 2, you are missing the bigger picture here.

The home run range tells a very important story. You can see that there is a difference between the two groups, but you can also see that the groups still overlap! That is important to know. We cannot project with enough precision to guarantee that every player in the (PW) group will hit more home runs than every player in the (p) group. But the group as a whole will generate more power. That's the best we can do.

While these Asset Groups provide us with a range of *possibilities*, you might say that they also provide us with a range of *potential*. While Nick Castellanos is being projected for 23 HRs here, he's in a group where there is 30-HR upside. Of course, it works in reverse too, unfortunately. While Bryce Harper is being projected for a .274 average, his presence in this asset group says that it's not that far to .249. (*Both scenarios proved to be prescient in 2017.*)

I chose just eight players from each of these two asset groups; I was looking for those with about the same number of plate appearances to create a level playing field for statistical comparison. However, these groups contain many more players. The more players you include, the higher the likelihood that there will be some outliers that extend the ranges. This is to be expected, because the BABS grades are not driven by projections. BABS is driven by the underlying skills metrics, which add a thick layer of grey over the black-or-white numbers above.

The takeaway is that we have to embrace the grey. All performances must be considered as a range of possibilities. Viewing the asset groups in such a way will help keep the numbers in perspective.

BABS' position on position scarcity

There are many opinions about this. BABS says that positional scarcity would only make a difference if we could really project the players at the bottom of the talent pool. But the numbers are so small and variable in those later rounds – the \$1 end-game – that it hardly matters.

The difference between the last catcher or say, the last outfielder – which is what the positional scarcity reach is all about – is not sufficiently projectable to justify the numbers you give up at the top. For instance, most 2019 drafters grabbed J.T. Realmuto early or at a premium because of the shallow catcher pool at the bottom. If Realmuto was an outfielder, he might be drafted several rounds later, or a few dollars cheaper. But why give up the potential to draft better numbers at the top of the draft board where it matters most?

Better to focus on mid-level commodities where the premium is not as steep. Draft your last catcher a round two earlier, or spend \$3 instead of \$1. The variability in the stats that late in the draft make those picks far less projectable anyway. Then let someone else overpay for the bigger names at the top.

That's not how everyone else does it, but I suppose it makes some sense.

If you did everything how everyone else does it, you wouldn't be here, right?

Hmm, okay. So once you put all the players into Asset Groups, then what?

What comes next is an attempt to rank the groups. There is a rudimentary system that I've developed to provide relative value to each Asset and Liability category. This is something that I tinker with constantly because it moves with the distribution of skill and risk each season. So I would strongly *discourage* you from placing absolute faith in the rigid, finite, black-or-whiteness of the Asset Group rankings. Their purpose here is just to provide *some* order.

Looking strictly at the major assets – power, batting and pitching effectiveness, and strikeouts – here is how I would rank the groups, top to bottom. Obviously, adding speed, playing time, the minor categories and the negative impact of Liabilities explodes the list. But this at least gives you a general sense of relative asset strength.

BATTERS

Power	BattEff
P+	A+
PW	A+
P+	AV
P+	a
p	A+
PW	AV
PW	a
p	AV
p	a

PITCHERS

PitchEff	Strikeouts
E+	K+
E+	KK
ER	K+

E+	k
ER	KK
e	K+
e	KK
ER	k
e	k

Can you explain why the (p,AV) group is ranked lower than the (PW,a) group ?

No, I can't. They are both really close. Don't get hung up on whether any closely ranked Asset Groups should be rearranged. In the early stages of the draft (which is when those players would appear), you're just looking for the best fits for your roster's foundation and the best "buys" as compared to the marketplace. The rankings are just rough approximations of value.

How does playing time fit into these rankings?

Given the fluidity of playing time, all players with the same skills profile are going to appear in each Asset Group. So the listing of (PW,a) players is going to include Full-timers as well as Mid-timers and Part-timers (No-timers are excluded, for now). Although all playing time levels are intermixed within the group, the marketplace does a decent job of sorting the players based on expected PA and IP anyway.

BABS handles the details for you when she generates the ranking reports and cheat sheets. The complete lists for the current season can be found at BABSbaseball.com. More on that much later.

The BABS Project

Chapter 7

Draft Planning

There is a podcast on Freakonomics Radio called "The Cheeseburger Diet." This is the story of a Louisville, Kentucky housewife who embarked on a year-long project to rate over 100 local burger joints in her city. She decided to devote two days per week to a dinner of cheeseburgers and fries, and then crown a champion at the end of 52 weeks.

However, she recognized that this journey might have an adverse effect on her weight and cholesterol levels, so she paid special attention to her diet and activities during all those non-burger days. At the end of the year, she had gained no weight and saw only a minor change in her cholesterol levels, but found that the extra effort – which she would not have undertaken otherwise – had pushed her towards a healthier lifestyle overall. Win-win.

When we do things that are bad for us, we'll often subconsciously try to engage in some compensating behavior to dull the effects of the negative. We all probably do that to some small extent in assembling our fantasy teams. If we draft an injury-prone pitcher, we might make a special effort to stock up on healthier arms, or at least avoid others with health issues. But it's not typically something that we consider a deliberate part of the drafting process.

It needs to be.

Think about the recordkeeping we do during a draft. Most of us probably just add our drafted players to an empty roster sheet. If we are using a laptop, we probably have a spreadsheet or software program that displays our team's projected bottom line stats, maybe compared to targets that we've set. We might even see projected in-process standings for all the teams in our league (a wonderfully pointless exercise).

This is all driven by our inaccurate projections. Given that these projections attempt to incorporate both skill and risk factors into the stats themselves, the end result is one big mess. What's more, it's a one-dimensional view of our players and our team, and that's just not good enough.

BABS provides a two dimensional view of every player, and your team. It offers a visual representation of your roster that shows us how much risk we are incurring alongside our Assets.

Take a look:

2020 pre		ASSETS							LIABILITIES						
BATTER	Pos	Tm	PT	Pw	Sp	Av	Pk	Rg	Sk	Inj	Ex	Nw	Pk	Ag	Rg
	ca														
	ca														
	1b														
	3b														
	ci														
	2b														
Berti	ss	MIA	M		SB	a			-P	INJ	EX				
	mi														
Trout	of	LAA	F	P+		AV*									
	of														
	of														
	of														
	of														
	ut														
PITCHER	Pos	Tm	PT	Er	K	Sv	Pk	Rg	Sk	Inj	Ex	Nw	Pk	Ag	Rg
deGrom	sp	NYM	F	E+	KK										
	sp														
	sp														
	sp														
	sp														
	p														
	p														
Hendriks	rp	CHW		E+	K+	SV									Rg-
	rp														

ASSETS**BATTERS**

PT Playing time
Pw Power rating
Sp Speed rating
Av Batting effectiveness rating

Pk Positive ballpark impact
Rg Positive regression

LIABILITIES

Sk Negative skill
Inj Health risk
Ex Experience risk
Nw New team
Pk Negative ballpark impact
Ag Age
Rg Negative regression

PITCHERS

PT Playing time
Er Pitching effectiveness rating
K Strikeouts rating
Sv Saves rating

This is a balance sheet, but it's also a "pencil game." The object is to fill in as many boxes as possible on the Assets side while filling in as few boxes as possible on the Liabilities Side.

This is starting to sound juvenile.

Simple, but structured. Obviously, you don't have to use paper and pencil; you can do this all in a spreadsheet. And it's not just filling boxes. There are also some goals.

Targets?

Exactly. Based on the distribution of playing time and skill within your league's draftable player population, we can determine how many units – or boxes – are needed to assemble a competitive team.

You're losing me again.

Okay, let's take a step back.

Drafting playing time

The process of planning out your roster starts with **playing time**. The goal in any fantasy draft is to roster players who will give you the most plate appearances and innings in order to maximize the potential for counting stats.

Ideally, you'd love to have a full-time regular, productive player occupying every roster spot for the whole season. Of course, while that's an admirable goal, it's never attainable. Injuries are the biggest obstacle to achieving full productivity out of your draft roster. In 12-team AL/NL-only leagues, it's darn near impossible to fill all 23 spots with full-time players; there are just not enough of them. But that should not stop us from setting some reasonable goals.

*Okay, I get that. But how does this relate to **my** leagues?*

The actual numbers are below. I will be talking in terms of the three most common league sizes – 15-team mixed, 12-team mixed and 12 team AL/NL-only – with standard 23-man rosters (14 batters, 9 pitchers). If your league has a different number of teams or player pool penetration, you can easily pro-rate the targets based on your own league configuration. It's just math. I go into that in a later chapter anyway.

For batters, **on average**:

In a 12-team mixed league, you should be able to fill every batter spot with a full-timer. In fact, a good 10 percent of your free agent pool will still have full-timers.

In a 15-team mixed league, you should be able to fill about 90 percent of your active roster spots with full-timers. That's 12 or 13 of your 14 batter spots.

In a 12-team AL/NL-only league, you should be able to fill around half of your active roster spots with full-timers. That's seven, maybe eight of your 14 batter spots. If you think about it, you're usually able to draft full-timers at 1B, 2B, 3B, SS, and four of your outfielders. Everyone else is usually a platoon/part-timer or a playing time speculation.

For pitchers, **on average**:

In a 12-team mixed league, there are more than enough starting pitchers (minimum 120 IP) to fill your complete nine-man staff, should you choose. Although they are becoming scarcer, there should be enough front-line 180-inning starting pitchers for nearly every team to draft 2-3 of them. Way back in 2015, every team in a 12-team mixed was able to draft *five* 180-IP arms!

You could fill your complete staff with starters in a 15-team mixed league as well. There are enough 180-inning starting pitchers for every team to draft two of them.

In a 12-team AL/NL-only league, there are only enough starting pitchers to fill six spots on each team. If you're targeting 180-inning starters, everyone should be able to land one, and perhaps four lucky teams will get two. *Woo-hoo!*

In 2021, there were only 19 relievers who saved 20 or more games – though another 20 saved between 10 and 20 – significantly splintering the saves supply. In 12-team and 15-team mixed leagues, every team would have been able to roster at least one of the surer bets. In a 12-team AL/NL-only league, a few owners had to cobble together some speculations to compete in that category. Given how bullpen usage is evolving, the economics could be completely different by time you read this.

These are averages, but from a goal-setting perspective, they are also minimums. Ideally, you'd want to exceed as many of these as possible to give yourself an edge, but playing time is a scarce commodity and everyone will be scratching and clawing for as many regulars as possible. So this is one area where just achieving the minimums might be enough. Once you have a solid foundation on the playing time side, you can focus your efforts of exceeding the averages on the skills side. You'll find more opportunities there anyway.

Another True Life Story:

"Once upon a time (in the mid-2000s), there was a fantasy writer named Jason Grey. He was one of the best fantasy players in the land, winning multiple titles and always contending in the Tout Wars-AL national experts league. Jason's edge was simple, but brilliant – he'd constantly draft more playing time than anyone else. The

caliber of player drafted almost didn't matter because even mediocre regulars stood to contribute in the Runs and RBI categories. Jason would routinely grab 10-12 full-time batters and overwhelm the opposition in counting stats.

Of course, everyone else eventually caught on and Omar Infante started getting bid up to double-digits. But for a few short years, Jason was a superstar. Then he was hired by a Major League ballclub so it didn't matter any more and he lived happily ever after. The end."

The moral of the story is, "If you can grab an edge in playing time, don't pass it up." This is especially true on offense. It's different for pitching. Stockpiling innings is not always a smart tactic. If you dig a hole in ERA or WHIP, those are tougher to dig out of with too many innings on the books.

Drafting skill and risk

We already know that any player who rates in the upper half of a particular **skill** is going to have a positive BABS rating. A batter with above average power will get a p, PW or P+, depending upon how much above average he is. Those with "p" are just above the mean; those with "PW" and "P+" are higher on the scale. Got that so far?

I think so.

However, skill is not evenly distributed across the player population, so you have to set different targets for each skill. For instance, there are fewer players who have above average speed, so you have to pay more attention to how you draft SBs.

Wait. I thought average meant that there would be just as many players above as below.

No, remember? The skills of guys like Dee Gordon and Billy Hamilton in their prime were so far above the mean that they drove up the average. That reduced the number of players who actually had "above average" skill. As stated earlier, if the measurable range of batting average is .200 to .320, the top 10 percent of that range would be .308 to .320. Any number of players could merit inclusion in that range.

Some of the skills are very scarce. You should have little problem rostering pitchers with an above average ERA but if your plan is to target one of baseball's elite arms (E+), you are probably going to have to jump in early or pay a lot. Only about two percent of pitchers own that extreme skill rating.

But it's good to plan for acquiring at least some extreme skilled players, in any category. The more of them you can grab, the more flexibility you'll have later on if you end up with some holes in your roster. I'll demonstrate that in a minute.

At minimum, you want to roster any level of above-average skill in each category:

BABS Asset Minimum Targets

(Assuming a standard roster with 14 batters and 9 pitchers.)

<u>Asset Minimums</u>	<u>NUMBER OF PLAYERS</u>		
	<u>12-tm mixed</u>	<u>15-tm mixed</u>	<u>12-team AL/NL</u>
Power	14	14	9
Speed	8	7	4
Batting Effectiveness	14	14	9

On the surface, this looks pretty straightforward until you recognize that these skills are not evenly distributed among all positions. In particular, it would be nice to roster eight speedsters in a 12-team mixed league if not for the fact that catchers and most corner infielders don't run. If stolen bases remain a scarce commodity as they were in 2021, you can see how difficult it would be to meet these targets.

The solution with stolen bases – and really, all the Assets and Liabilities – is just to do the best that you can. These are targets to strive for, but you probably won't achieve all of them.

<u>Asset Minimums</u>	<u>NUMBER OF PLAYERS</u>		
	<u>12-tm mixed</u>	<u>15-tm mixed</u>	<u>12-team AL/NL</u>
Pitching Effectiveness	9	9	9
Strikeouts	9	9	9

It is interesting that there is more than enough good pitching for all teams in all leagues to field a solid-skilled staff. But the problem is that many of those players are relievers. So if you were willing to forego innings for skill, you should have no problem maximizing out your pitching categories.

Of course, that's not how most of us play the game. If we were to restate these minimums for **starting pitchers only**, the chart would look like this:

<u>Asset Minimums</u>	<u>12-tm mixed</u>	<u>15-tm mixed</u>	<u>12-team AL/NL</u>
Pitching Effectiveness	7	6	4
Strikeouts	7	6	4

Now it becomes a bit more of a challenge. In AL/NL-only leagues, an average team would be expected to roster only four above-average skilled ERA or strikeout starting pitchers. Those numbers are not mutually exclusive so there will be some pitchers who are above average for ERA, some who are above average for strikeouts and some who are above average for both. In fact:

<u>Asset Minimums</u>	<u>12-tm mixed</u>	<u>15-tm mixed</u>	<u>12-team AL/NL</u>
BOTH Pitch Eff. and Ks	5	4	Just under 3

It's a bit more of a stretch.

The above charts represent your targets, however... **If you build your team exactly to these averages, you will have... an average team.** Anything above that makes you at least minimally more competitive.

So the goal is always to try to exceed these targets.

I understand that these are my targets. But what if it says I should be able to fill all my batter spots with power and I want to draft a perfectly good player speed source like Raimel Tapia?

This is where owning players with extreme skills comes in handy. Every time you roster a player with a P+, S+, A+, E+ or K+, you buy yourself a free open spot. So, if you roster a power hitter with a (P+) rating, that would effectively offset Tapia's limited power. It works the same way with all the categories. That's why (S+) players are gods because they buy you an extra notch toward the difficult-to-reach speed targets.

*Okay I get that. But how about a guy like Nicky Lopez who gives you **nothing** in HRs. Shouldn't his lack of power be considered a Liability?*

Yes, in today's game, that is true. We'll talk about weak bats again in the Liabilities section.

You decide how much of a balanced roster you draft. However, at the end of the final round (or when the last of the auction dollars is spent, or when the last beer is gone – however it is you decide when the draft is over), you should have at least a minimum number of Asset boxes filled on your grid:

NUMBER OF ASSET UNITS		
<u>12-tm mixed</u>	<u>15-tm mixed</u>	<u>12-team AL/NL</u>
50	47	30

These are what average teams will have. Your goal is to have more.

Wait a minute – I think I might have missed something. When we are counting up the Assets for a player, how should we account for the three levels of skills when trying to reach the targets? Is it as simple as the top skill equals 3 units, middle equals 2, and the last equals 1 (e.g. P+ = 3, PW = 2, p = 1)?

Our analytical brains lure us into wanting to do that, but BABS says – NO! Each Asset (and Liability) is considered a single unit; BABS does not attach specific weights to each level. The goal is to have an above average Asset to meet each target. You want to avoid having blank cells in your roster spreadsheet. BABS is all about balance.

But... but... In a mixed 15-team league, if I rostered 14 guys with “p” ratings for power, I would just be average for my league. But, if had 7 guys with “p” ratings and 5 guys with PW ratings, isn't that better?

Sure, in theory. But stocking up and concentrating your power skill in fewer players, leaving holes elsewhere, leads to an unbalanced roster and exposes you to more potential risk. Again, with BABS, balance is important.

If your target is 14 players with above-average power skill...

P+	PW	p	No power	
0	0	14	0	Good. Minimum balanced roster.
0	7	7	0	Better. Additional strength.
1	8	5	0	Even better.
2	5	5	2	Still good. Adds two extreme skills.
2	5	3	4	No good. Imbalanced power. Too many holes.
4	1	4	5	No good. Power stars and scrubs. Too many holes.

You start with balance first and then build strength from there. If you do anything else, BABS will hunt you down and put a curse on your injured list. Don't cross her.

Still... why didn't you just use numeric values (e.g. P+=3, PW=2, P=1, etc.) instead of letter values (P+, PW, P, etc.)? It would have made it so much easier for my spreadsheet to do the math to calculate my needs in each category.

Sigh. Because this is not about math, or the precision that math implies. You can't calculate that “P+” is exactly “x” times better than “PW” or “p”. Admittedly, it's tough for those of us who have the math ingrained (like me!) to wrap our brains around a system that does not use numbers. For what it's worth, BABS majored in Medieval Literature in college. It's quite possible that all of her codes have some root in Latin.

BABS Liabilities – Your Risk Budget

We handle things differently with the liabilities.

While the Asset side of the ledger is handled without the benefit of numbers, per se, using a "risk budget" implies that we need to do a minimum of some faux quantification.

BABS 3.1 assigns a value to each Liability factor. *Risks cost*, and this method reminds us of that. This "cost," however, is metaphorical. I'm not going to send you a bill; it's not about having fewer Roto-dollars to spend. It's just a way to quantify the Liabilities. Here is the "cost" associated with each of the Liabilities:

	<u>Code</u>	<u>Cost (in dollars, Tic Tacs, jelly beans)</u>	
Health Risk			
Minor injury, field	inj-	\$1	
Major injury, field	INJ	\$3	
Long term injury	INJ+	\$5	
*Top players			+\$2
Experience Risk			
1-2 yr experience, field	e	\$1	
<1 yr experience, field	EX	\$2	
*Top players			+\$1
Skills Risk			
Power	-P	\$1	
Batting Effectiveness	-A	\$3	
Power and Batting Eff	-PA	\$4	
Pitching Effectiveness	-E	\$3	
Strikeouts	-K	\$1	
Pitching Eff and Ks	-EK	\$4	
*Top players			+\$3
Minor risks (Pk-, Nw, Ag, Rg-)		\$0.25	

Health Risk and Experience Risk: The greater the risk, the greater the hit to your budget. Pretty straightforward.

Skills Risk: These Liabilities can cause significant harm. Unlike Health and Experience, where we speculate that a player may be affected, Skills Liabilities provide evidential proof of a player's downside. Batting and pitching effectiveness (proxies for batting average and ERA), in particular, take a bigger hit given that they can pull your team backwards.

Minor risks: At \$.25 apiece, a handful of minor variables won't significantly add woe to any individual player's risk profile, but they can add up across an entire roster.

Top players: If Jose Ramirez gets hurt, it is going to impact your team more than if Jose Peraza gets hurt. Rostering high value players with Liabilities will raise your risk exposure more than lesser players who are easier to replace. So BABS adds a penalty to their risk costs, which will push you to your budget limit quicker.

If a player with a liability rating has a market value in the Top 60 of ADPs, or \$20-plus, they get dinged more. A top player with a skills liability (though likely rare) would incur an additional \$3 hit. A top player with an injury liability would incur another \$2. Experience liability among top players adds \$1 to their risk cost.

So, what's my budget? How many risk jelly beans should I limit myself to?

Your budget will depend upon your own tolerance for risk. Here are some rough rules of thumb:

BUDGETS:	Exceptional	Under \$30
	Acceptable	\$31-\$39
	Whatever	\$40 or over

If you are risk-averse and want to be extremely conservative, you can shoot for a budget of less than \$30, or 30 units. Moderate risk tolerance would yield a budget in the 30-40 range. If you are all about throwing caution to the wind, you can set a budget over 40. These units, or dollars, or sunflower seeds have no real-world meaning other than to give us a target. They could be bourbon shots too, which might make for an interesting side game.

I'm generally a risk-averse drafter, especially with high value players. When I priced things out on my 2019-2021 experts league rosters, my roster liability cost ranged from a low of \$30.25 to a high of \$46. For what it's worth, the team that was drafted with \$46 worth of risk finished in 10th place, 3.5 points out of the cellar.

You decide how much risk you want to take on, so I am not going to tell you that you absolutely need to stay below \$30 to mitigate all your risk. Thirty bucks over a 23-man roster averages about \$1.30 per player, so conceivably you could draft an entire team of \$1 risks and stay under budget. It sounds easy in theory, but it's going to be tough to find the players to make that happen. Low risk players are scarce commodities these days.

Okay, cool. But it looks like I can offset a minor risk like negative park effect with another player's positive park effect to get me under the budget, right?

No, no, NO!! There will be a temptation to try to do that, but BABS says NO. One player's positive variable does not negate the negative of another player, and trying to manipulate them to get under your budget cap is, well... cheating. Don't try it.

You can also use this system to evaluate individual players. This is where the system gains wings. Beginning in 2022, the BABS charts will include an additional column where these Liability costs are totaled up for each player. Then you can assess – and quantify! – your risk exposure as you draft each player.

Risk Cost per Player

\$0.00 - \$2.50	The best pool to fish in if you plan a reasonable budget.
\$2.75 - \$5.00	Deeper water, occasional jellyfish stings, a shark or two
Over \$5.00	Titanic, icebergs, Bermuda Triangle, Poseiden Adventure, etc.

Here are sample PRC values for some 2022 players:

Jose Altuve	\$1.00	Jacob deGrom	\$5.25
Javier Baez	\$0.50	Josh Harrison	\$0.00
Jose Berrios	\$0.00	Kyle Lewis	\$8.00
Shane Bieber	\$5.00	Lance Lynn	\$1.25
Adam Frazier	\$1.25	Victor Reyes	\$3.25

Oo! Oo! Can I subtract these risk dollars from a player's auction price to get a more accurate dollar figure to bid from?

No, no, NO!! While that is intriguing, it's not something I would do. For one thing, these risk "dollars" might really be harbor seals, and then you'd be subtracting harbor seals from Roto dollars. Also, there is only marginal science that goes into these values – they are *just a tool* – so then you'd *really* be playing with funny money.

Arrgh, you're no fun. Part of me is willing to play by your weird little rules but part of me really, really wants to use these in my auctions. If I see deGrom as a \$35 pitcher, his \$5.25 risk cost tells me that I shouldn't bid more than \$29.75. That makes too much sense to me.

Yes, it's tempting, and I know I can't stop you. But BABS assumes no risk related to the misuse of these risk costs in the valuing of risky players incorrectly. (But let me know if it works.)

Ha! One last thing... I think you forgot about playing time.

I didn't forget about it. I deliberately ignored it. In BABS 1.0, we had playing time targets, but the changing environment in MLB has made those obsolete. The proliferation of platooning and soaring IL stays make the meeting of goals challenging. I could set new targets based on how things stand today, but they could be different again by the time you read this.

Suffice to say that you need to get as many plate appearances as possible and as many starting pitcher innings as possible. "F" players are better than "M" players who are better than "P" players. We don't need to set specific targets for that.

Actually, by the same token, you should just be collecting as many Assets as possible too. The targets are here as a rough guide, but the underlying goal is just to amass as many as you can. Don't obsess over the numbers. Gather! Accumulate! Stockpile!

Now let's put all this directly into the BABS worksheet:

ASSETS									LIABILITIES						
BATTER	Pos	Tm	PT	Pw	Sp	Av	Pk	Rg	Av	Inj	Ex	Nw	Pk	Ag	Rg
	ca														
	ca														
	1b														
	3b														
	ci														
	2b														
	ss														
	mi														
	of														
	of														
	of														
	of														
	of														
	ut														
12 MIXED				14	8	14									
15 MIXED				14	7	14									
12 AL/NL				9	4	9									
PITCHER	Pos	Tm	PT	Er	K	Sv	Pk	Rg	Er	Inj	Ex	Nw	Pk	Ag	Rg
	sp														
	sp														
	sp														
	sp														
	sp														
	p														
	p														
	rp														
	rp														
12 MIXED				7	7	3									
15 MIXED				6	6	2									
12 AL/NL				4	4	1									

Your goal is to do better. You are now almost ready to head out to your draft. There is one critical missing piece – the marketplace.

The BABS Project

Chapter 8

Marketplace Analysis

This is going to be a short chapter. The title "Marketplace Analysis" is a bit of a misnomer – there is really nothing to analyze here. The marketplace is what it is. All we need is to know is what the marketplace says and use it to our advantage.

You still with me?

Yeah, I'm still processing this. I'm not sure I agree with all of it.

New ideas take time. But this is an important piece. All this BABS intelligence is just half the story. If you use the BABS ranking sheets alone, you will likely overdraft/overpay or underdraft/underpay for most of your players, and randomly.

So we need the collective mindset of the marketplace as a set of markers for your draft prep. We need ADPs and AAVs (average auction values). Otherwise we're just drafting in a vacuum. The marketplace tells us what our competitors may be thinking, which also tells us what we might have to pay (in auction dollars or draft slots) to get our players.

Wait a minute. Back in Chapter 3, you said that the marketplace is wrong.

Yes I did. And they are, when it comes to valuing players. But it bears repeating... it doesn't matter. **The purpose of ADPs and AAVs is solely to tell us what we will have to pay for each player, regardless of whether the price is right or wrong. ADPs and AAVs are about cost, not worth.**

Look at it this way... Let's say you're in the mood for a steak dinner at a fancy restaurant and you spend \$50, but the meat is tough and tasteless. You might think that it wasn't worth \$50, but that's what it cost. The restaurant might be wrong in their assessment of what they should charge for that steak, but they are the "market" and they set the price – either you pay it or you don't.

If you decide not to pay the price, then you may look for other options at price points you are more comfortable with. Maybe you choose the New York Strip over the Ribeye. Maybe you think \$35 is too much to pay for Jose Ramirez so you opt for a \$20 Mike Moustakas instead. Those are the prices – the ADPs, the AAVs, the marketplace – but your assessment of what players are worth (which is what BABS is here to help you with) is what will determine whether or not you draft a player.

The price is an important piece of information so you can determine whether he is worth the investment. BABS tells you whether he is tough and tasteless, or tender and succulent. That's why you need both pieces of information – the cost *and* BABS' assessment of worth – in order to make informed decisions.

The players with the largest disconnect between cost and skill provide the best opportunities for profit. When BABS is higher on a player than the marketplace, that's a profit opportunity. When the marketplace is higher on a player than BABS, that's a player you pass on.

So, what is the marketplace saying these days?

The marketplace typically says the same thing every year. A value is placed on each player based on some general criteria. The following list is in declining order of impact, more or less:

- Performance history, highly influenced by the most recent performance
- Health history and current injury concerns
- ADPs and pricing of previous drafts
- Team context, especially for players who have changed teams
- Media hype
- Personal preferences, including hometown bias

The resulting "value" generated by this group-think – your ADPs and AAVs – is powerful information. You can compare these rankings to what BABS thinks (she's the authority) to help determine a draft strategy for each player, or type of player.

For instance, a player with a 7th round ADP who BABS rates in the same Asset Group as 5th round talent becomes a prime 6th round target. A player with a \$27 AAV who BABS rates in an Asset Group with \$30-plus talent becomes a candidate to buy at anything under \$30, and perhaps still prudent once bidding hits the \$30s.

In the charts (coming soon to a chapter near you), all players with similar skills profiles will be ranked by their market prices. In this way, we will be able to tell which commodities are potentially overpriced or underpriced, and where we might find less expensive options for similar skills. It's the same concept as what we saw back in Chapter 2, and again in Chapter 6.

Here is another example of how this works, from the 2018 draft list:

ADP	AAV	Player	PT	ASSETS	LIABILITES
49	\$20	Hoskins,R	F	P+,a	EX
183	\$7	Carpenter,M	F	P+,a	
196	\$6	Conforto,M	M	P+,a	INJ, e

These three players all were rated as having **Extreme** power and **Moderate** batting average (P+,a). Here, you could have drafted Rhys Hoskins in the 4th round (or pay \$20 for him), even with the risk posed by his lack of Major League EXperience. However, you could have opted for the same essential skills profile *nine rounds later* (\$13 cheaper) with Matt Carpenter, who was less risky. Or, if you missed out on Carpenter, there was still Michael Conforto – same skills profile, but projected for less playing time, and with injury and experience risk.

And you would have ended up with:

	AB	HR	BA
Hoskins,R	558	34	.246
Carpenter,M	564	36	.257
Conforto,M	543	28	.243

That's how BABS works.

Wait a minute. Conforto hit fewer homers than the other two! BABS is flawed!

No, she's not. Conforto's pre-season rating warned us of his injury risk and that is exactly why his power numbers were off. He hit only 10 HR in the first half but 18 in the second half.

And that's basically it. Now it's time to put it all together.

How? I feel like I'm floating out in space with no idea of where I should be drafting anyone. Are you saying that I should target the players I want and then let the marketplace determine where to take them?

You have no choice. That's how we play the game. As much as you think you have control over your team, the market has *always* determines who you end up with. In auctions, you always have to pay \$1 more than everyone else. In snake drafts, your picks are whatever is left over after everyone else gets theirs. Even in salary cap games and DFS, the player prices are the marketplace, just like the steak restaurant.

You have to keep the idea in your head that the ADPs and AAVs that everyone else is working off of are wrong — history proves that time and time again — and anything you can do to separate yourself from the group-think will be to your advantage.

So rather than fighting the current, use it to your advantage. The challenge is targeting the right players. BABS will help you do that. So plan out how you want your roster to look, set your Asset and Liability targets, and then follow the market... which is a process that starts – NOW.

The Draft

Let's jump right into it. This first point is very important:

The players on the following BABS list are not ranked as you would typically see on a standard cheat sheet. You cannot just run down the list and draft the players in order. The players are not in draft order. The *Asset Groups* are in draft order.

Players with comparable skills profiles are slotted into their respective Asset Groups and then sorted by market value within those groups. It's the Asset groups that are ranked and even those ranks are just rough approximations. But it will still be enough for you to draft from.

Okay, okay. Can I see it already??

Yes. It's time. An excerpt appears below as a learning tool. Print it out so you can follow along. The current season's list is online at BABSbaseball.com.

What's on this Spreadsheet?

At the top of the spreadsheet is a **blank roster grid**. You'll keep track of your team during the draft by entering their information in the grid.

Broad Assessment Balance Sheet																
YOUR TEAM ROSTER	Pos	Tm	PT	Pw	Sp	Av	Pk	Rg		Sk	Inj	Ex	Nw	Pk	Ag	Rg
	ca															
	ca															
	1b															
	3b															
	co															
	2b															
	ss															
	mi															
	of															
	of															
	of															
	of															
	of															
	ut															
	Target															
	Pos	Tm	PT	Er	K	Sv	Pk	Rg		Sk	Inj	Ex	Nw	Pk	Ag	Rg
	sp															
	sp															
	sp															
	sp															
	sp															
	sp															
	p															
	rp															
	rp															
	Target															
	resv															
	resv															
	resv															
	resv															
	resv															
	resv															
	Target															

The grey Target bar is where you should input your Asset goals and your Risk Budget, based on the data in Chapter 7. Then as the draft progresses, you'll be able to keep up with where you are and where you need to be. Beneath the roster is your player list. The first two columns represent the marketplace – each player's average draft position ranking and ADPs converted to dollar values. The rest is all BABS. Ain't she great? Let's look at an excerpt from 2019's pre-season ranking list:

		ASSETS										LIABILITIES						
MKTPLACE		BATTER	Pos	Tm	PT	Pw	Sp	Ba		Pk	Rg	Sk	Inj	Ex	Nw	Pk	Ag	Rg
ADP	R\$	PITCHER	Pos	Tm	PT	Er	K	Sv		Pk	Rg	Sk	Inj	Ex	Nw	Pk	Ag	Rg
2	\$51	Betts,Mookie	o9	BOS	F	PW	SB	A+	*									
1	\$58	Trout,Mike	8o	LAA	F	P+	s	AV	*				inj-					
15	\$31	Sale,Chris	SP	BOS	F	E+	K+						inj-					
17	\$30	Story,Trevor	6	COL	F	P+	s	a					inj-					
4	\$44	Ramirez,Jose	5	CLE	F	p	s	A+	*									
7	\$39	Yelich,Christian	o798	MIL	F	p	s	A+	*									
108	\$12	Turner,Justin	5	LA	F	PW		A+					INJ					
6	\$40	Martinez,J.D.	0o79	BOS	F	P+		AV	*									Rg
11	\$34	deGrom,Jacob	SP	NYM	F	E+	KK											Rg
50	\$19	Kershaw,Clayton	SP	LA	M	E+	KK						INJ					
6	\$40	Scherzer,Max	SP	WAS	F	ER	K+											
9	\$36	Turner,Trea	6	WAS	F		S+	a										
191	\$6	Hampson,Garrett	6	COL	M		S+	a						EX				
16	\$31	Judge,Aaron	o9	NYN	F	P+		a	*				INJ					
18	\$29	Harper,Bryce	o98	PHI	F	P+		a	*	Pk					Nw			
22	\$28	Stanton,Giancarlo	0o97	NYN	F	P+		a	*									
40	\$22	Hoskins,Rhys	o7	PHI	F	P+		a	*					e				
71	\$16	Carpenter,Matt	35	STL	F	P+		a	*									
81	\$15	Aguilar,Jesus	3	MIL	F	P+		a						e				
280	\$3	Bruce,Jay	o93	SEA	M	P+		a					INJ		Nw			
41	\$21	Mondesi,Adalberto	6	KC	F	p	S+						inj-	EX				
110	\$12	Gordon,Dee	48o	SEA	F		S+	AV				1						
15	\$31	Altuve,Jose	4	HOU	F		s	A+					inj-					
8	\$37	Acuna,Ronald	o7	ATL	F	PW	s	a					inj-	e				
27	\$26	Blackmon,Charlie	8o	COL	F	p	s	AV										
22	\$28	Verlander,Justin	SP	HOU	F	ER	KK										Ag	
25	\$26	Kluber,Corey	SP	CLE	F	ER	KK											
26	\$26	Cole,Gerrit	SP	HOU	F	ER	KK											
30	\$24	Snell,Blake	SP	TAM	F	ER	KK											Rg
33	\$24	Bauer,Trevor	SP	CLE	F	ER	KK						inj-					Rg
37	\$22	Carrasco,Carlos	SP	CLE	F	ER	KK											
39	\$22	Buehler,Walker	SP	LA	M	ER	KK						inj-	e				
40	\$22	Syndergaard,Noah	SP	NYM	M	ER	KK						INJ					
47	\$20	Severino,Luis	SP	NYN	M	ER	KK						INJ					
50	\$19	Corbin,Patrick	SP	WAS	F	ER	KK								Nw			
56	\$18	Paxton,James	SP	NYN	M	ER	KK						INJ		Nw	Pk		
61	\$18	Strasburg,Stephen	SP	WAS	M	ER	KK						INJ					

[illegible]

66	\$17	Greinke,Zack	SP	ARI	F	ER	k											
119	\$11	Morton,Charlie	SP	TAM	M	ER	k							inj-		Nw		
136	\$10	Tanaka,Masahiro	SP	NYN	M	ER	k							inj-				
146	\$9	Bieber,Shane	SP	CLE	M	ER	k				Rg				EX			
186	\$7	Ryu,Hyun-Jin	SP	LA	M	ER	k							INJ				Rg
217	\$5	Stripling,Ross	SP	LA	M	ER	k							inj-				
33	\$24	Bryant,Kris	5o	CHC	F	PW		a	*					INJ				
54	\$19	Suarez,Eugenio	5	CIN	F	PW		a	*									
95	\$13	Shaw,Travis	54	MIL	F	PW		a	*									
100	\$13	Donaldson,Josh	5	ATL	F	PW		a	*					INJ		Nw		
104	\$12	Conforto,Michael	o78	NYM	F	PW		a	*									
180	\$7	Voit,Luke	3	NYN	M	PW		a						EX				
252	\$4	Cron,C.J.	3	MIN	F	PW		a								Nw		
345	\$1	Pederson,Joc	o78	LA	M	PW		a										
609	-\$5	Adams,Matt	3	WAS	P	PW		a								Nw		
732	-\$7	Cooper,Garrett	o	MIA	P	PW		a						INJ	EX			
63	\$17	Flaherty,Jack	SP	STL	F	e	KK								e			
125	\$10	Ray,Robbie	SP	ARI	M	e	KK							INJ				
132	\$10	Archer,Chris	SP	PIT	F	e	KK							inj-				
148	\$9	Darvish,Yu	SP	CHC	M	e	KK							INJ				
160	\$8	Glasnow,Tyler	SP	TAM	M	e	KK				Rg				e			
171	\$7	Hill,Rich	SP	LA	M	e	KK							INJ				Ag
214	\$5	Maeda,Kenta	SP	LA	M	e	KK											
215	\$5	Reyes,Alex	SP	STL	M	e	KK							INJ	EX			
217	\$5	James,Joshua	SP	HOU	P	e	KK							inj-	EX			
363	\$0	Strahm,Matt	rp	SD	P	e	KK							INJ	EX			Rg

Assets

Players are assembled within their respective Asset Groups. So all the (P+,AV) players are listed together, all the (ER,KK) pitchers, and so on. Within those skills groups, players are ranked by ADP/AAV so we can see how the marketplace values each set of skills. This also helps us uncover the profit and loss opportunities. For instance, it is important to know that, while there were 13 players with an identical (ER,KK) profile, the marketplace ranked them from No. 22 overall down to No. 324.

When it comes to playing time, you'll note that the Full-timers, Mid-timers and Part-timers are all intermixed within each Asset Group. In most cases, the ADP/AAV rankings take care of sorting them out, but when it fails to do that, it offers you potential to leverage the market. For instance, in the (ER,KK) group, full-timer Patrick Corbin was ranked behind several pitchers projected for fewer innings. That was a potential profit opportunity.

Liabilities

Each player's Liabilities are scattered throughout the list. There might be value in ranking players within each group by these risk factors, but we'd lose the ability to maintain a handle on the marketplace. So it is up to you to always have an eye on the Liabilities when you draft a player and keep a running total against your risk budget. It could have a huge impact.

Using the BABS spreadsheet at your draft

When a player is nominated for bidding, or selected by another team, find him on the spreadsheet. If another team acquires him, cross him out. If you acquire him, enter his information into the appropriate row on your blank roster. This can be a manual process or you can delete rows and cut/paste the information from Excel. Your CTL-F (or CMD-F) function to locate these players comes in very handy.

Whoa, whoa, wait a minute. Are you saying that I have to run my draft with a spreadsheet? Seriously? What is this, 1998?

Okay, I should address this. Yes, using a spreadsheet will be a journey into 1990s retro-drafting. Yes, it will require a little more hands-on work. Admittedly, I still use Excel to run my own drafts, but I was an ink-on-paper guy for a long time. At minimum, I think it's a good idea to try it once, just so you have a chance to get more intimate with BABS. Even try it with a mock draft. Then you can move on...

...because there is another option.

Merv Pate from RotoLab.com has fully bought into the program and has created a BABS module in his industry-leading draft software. If you want to automate the process, there is no better way to do it. I highly recommend it.

However, for the purpose of understanding the process, let's continue with this exercise. As you continue to delete players (who have been rostered by you or other owners), the pockets of talent and tiers will thin out. It will become more and more obvious when you need to jump in on a particular skill or type of player.

Your profit opportunities will bubble to the top as other owners will likely have those players ranked lower on their lists. BABS keeps them on your radar constantly, so you can pick which ones best fit the needs of your roster, and at the appropriate time.

Okay, now let's take a look at the decision-making process during a sample draft to show you how it all works...

A Sample Draft Scenario

It is March 2019. The following represents the decision-making process *at the time*. Of course, hindsight reveals that some of these decisions would have been ill-advised (thanks to surprising disappointments like Chris Sale, Jesus Aguilar, et al), but this exercise is intended to show the process. Good process – bad outcome does not invalidate the process.

You are seeded 12th in a 15-team mixed league snake draft. At the beginning of the draft, your BABS spreadsheet will appear as it does above. The early stages will have you drafting the best players from very small Asset Groups, which makes the choices easy. At pick 12, you don't have to go very far down the list to see these options:

ASSETS												LIABILITIES						
MKTPLACE	BATTER	Pos	Tm	PT	Pw	Sp	Ba	Pk	Rg			Sk	Inj	Ex	Nw	Pk	Ag	Rg
ADP	R\$	PITCHER	Pos	Tm	PT	Er	K	Sv	Pk	Rg		Sk	Inj	Ex	Nw	Pk	Ag	Rg
15	\$31	Sale,Chris	SP	BOS	F	E+	K+						inj-					
17	\$30	Story,Trevor	6	COL	F	P+	s	a					inj-					

Either one is reasonable here. In retrospect, Story is the obvious option, but in March 2019, you would not have known that. Let's start with the hitter and see where it takes us. (For what it's worth, Sale's skills metrics were close to expectation, even though he ended up 6-11 with a 4.40 ERA.)

At your second round pick (No. 19), your BABS spreadsheet might look like this:

108	\$12	Turner,Justin	5	LA	F	PW		A+						INJ				
50	\$19	Kershaw,Clayton	SP	LA	M	E+	KK						INJ					
191	\$6	Hampson,Garrett	6	COL	M		S+	a						EX				
18	\$29	Harper,Bryce	o98	PHI	F	P+		a	*	Pk					Nw			
22	\$28	Stanton,Giancarlo	0o97	NYN	F	P+		a	*									

Justin Turner has bubbled up to the top. Should he be your pick? Obviously not. You are at pick 19 and his ADP is way down at 108. While he is the best-skilled player at this point, he can probably be safely passed over, for now. He should still be there for you later on.

Clayton Kershaw can probably be passed over as well, though that's not a slam dunk. Note that your third pick is No. 42, which is awfully close to Kershaw's ADP. So, there is a risk that Kershaw might not make it to you. However, with so many pitchers still on the board, it's probably safe to wait.

Garrett Hampson's ADP is too far into the future for consideration here.

takes the sting out of drafting Kershaw a round earlier. Do you want two starters in your first four picks? Let's try that.

108	\$12	Turner,Justin	5	LA	F	PW		A+							INJ				
191	\$6	Hampson,Garrett	6	COL	M		S+	a							EX				
81	\$15	Aguilar,Jesus	3	MIL	F	P+		a							e				

Round 5, pick 72, and it looks like Jesus Aguilar has finally bubbled up high enough to make him a logical pick.

After five rounds, your team looks like this:

Rd.Pick	Pick #	Player	Assets	Liab	Cost
1.12	12	Trevor Story	P+, s, a	inj-	\$3
2.4	19	Bryce Harper	P+, a*	Nw	\$0.25
3.12	42	Clayton Kershaw	E+, KK	INJ	\$5
4.4	49	Patrick Corbin	ER, KK	Nw	\$0.25
5.12	72	Jesus Aguilar	P+, a	e	\$1
6.4	79				

At this point, you will have deleted 78 rows from your spreadsheet in advance of your next pick – 6th round, pick no. 79. The top of your list might look like this.

		ASSETS										LIABILITIES						
MKTPLACE		BATTER	Pos	Tm	PT	Pw	Sp	Ba		Pk	Rg	Sk	Inj	Ex	Nw	Pk	Ag	Rg
ADP	R\$	PITCHER	Pos	Tm	PT	Er	K	Sv		Pk	Rg	Sk	Inj	Ex	Nw	Pk	Ag	Rg
108	\$12	Turner,Justin	5	LA	F	PW		A+					INJ					
191	\$6	Hampson,Garrett	6	COL	M		S+	a						EX				
280	\$3	Bruce,Jay	o93	SEA	M	P+		a					INJ		Nw			
110	\$12	Gordon,Dee	48o	SEA	F		S+	AV				-P						
324	\$1	Peacock,Brad	SP	HOU	P	ER	KK											
91	\$14	Castellanos,Nick	o9	DET	F	PW		AV										
99	\$13	Cruz,Nelson	0	MIN	F	PW		AV							Nw		Ag	
172	\$7	Ohtani,Shohei	0	LAA	M	PW		AV					inj-	e				

Justin Turner is still sitting there at the top. Should he be your pick *now*? Here are the considerations:

- This is pick No. 79 and his ADP is 108 so you don't necessarily have to select him now. You can continue to keep him in your back pocket.
- However, after this pick, you won't go again until No. 102, which is awfully close to Turner's ADP. So maybe you do need to consider him here. Scan down for other third-basemen. There's Travis Shaw and Josh Donaldson, who

actually have earlier ADPs (95 and 100, respectively), but their skills profile (PW,a) would represent a considerable downgrade from Turner's (PW,A+).

- His (IN)) injury risk – ugh. You already have two players with health concerns.

Others may be swayed to pick Shaw or Donaldson because of their earlier ADPs, but Turner has the better skill set for the price. If you had not already rostered two players with health risk, Turner would be a good pick here.

If you pass on Turner, then Dee Gordon, Nick Castellanos and Nelson Cruz start looking like targets since all three could be gone before your next pick in the seventh round. They represent the best remaining skills profiles at a reasonable market price at this point in the draft.

Let's say that you would prefer another pitcher here. You would continue scanning down the list, and a little further down, find this:

82	\$15	Chapman,Aroldis	rp	YYY		E+	K+	SV							inj-				
83	\$14	Kimbrel,Craig	rp	BOS		E+	K+	SV											
84	\$14	Hand,Brad	rp	CLE		E+	K+	SV											
110	\$12	Doolittle,Sean	rp	WAS		E+	K+	SV							INJ				
141	\$9	Knebel,Corey	rp	MIL		E+	K+	sv-				Rg			inj-				
191	\$6	Robertson,David	rp	PHI		E+	K+	sv-								Nw			
226	\$5	Dominguez,Seranthony	rp	PHI		E+	K+	sv-								EX			
250	\$4	Miller,Andrew	rp	STL		E+	K+	sv-			Pk				INJ		Nw		
186	\$7	Meadows,Austin	o9	TAM	M	p	s	a								EX			
316	\$1	Hernandez,Enrique	o846	LA	F	p	s	a	*										
628	-\$5	Owings,Christopher	o9	KC	M	p	s	a									Nw		
119	\$11	Morton,Charlie	SP	TAM	M	ER	k								inj-		Nw		
136	\$10	Tanaka,Masahiro	SP	YYY	M	ER	k								inj-				
146	\$9	Bieber,Shane	SP	CLE	M	ER	k					Rg				EX			
186	\$7	Ryu,Hyun-Jin	SP	LA	M	ER	k								INJ				Rg
217	\$5	Stripling,Ross	SP	LA	M	ER	k								inj-				

BABS says that a closer might be a good fit here, and there are four front-liners (SV) who are all viable options. However, maybe you want another starter instead. In that case, then Charlie Morton would not be an unreasonable choice.

What? But his ADP is 119 and I am at pick 79. That seems like a big reach.

Well, maybe you can wait until your pick at 102 and he'll still be there, but if you want another starter and he's the best one at that spot, there is no such thing as a reach. Remember – the ADPs are only guideposts; there is no precision here.

Still, notice that there are five pitchers in the (ER,k) Asset Group with Morton, all with comparable skill. You *could* pass on Morton and have a very good chance of landing any of the other four. You wouldn't lose anything in skills and then you would be able to use this pick on someone else. Maybe Castellanos makes sense now because you're pretty sure a Shane Bieber or Hyun-Jin Ryu will be available on the way back. BABS helps you see a few picks down the line.

Rd.Pick	Pick #	Player	Assets	Liab	Cost
1.12	12	Trevor Story	P+, s, a	inj-	\$3
2.4	19	Bryce Harper	P+, a*	Nw	\$0.25
3.12	42	Clayton Kershaw	E+, KK	INJ	\$5
4.4	49	Patrick Corbin	ER, KK	Nw	\$0.25
5.12	72	Jesus Aguilar	P+, a	e	\$1
6.4	79	N.Castellanos	PW, AV		\$0

You should always keep an eye on potential runs on a stat, position or role (e.g. stolen bases, catchers, relief pitchers, etc.), especially if it occurs on players further down the list. Sometimes you may need to jump ahead.

As you fill your roster, also keep an eye on your targets. If you start falling behind on a specific Asset, you'll need to look ahead on the list to see what your options are. And keep tabs on your risk budget as well. A quick scan shows that you've already accumulated \$9.50 towards that budget, which is about \$1.50 per player. That puts you on pace for a \$35 risk budget – not a bad start if you can keep it up.

As an interesting exercise when you're mocking out a draft plan, it's also insightful to see what your team might look like if you made some different choices. In this case, what would these first six rounds look like if you had chosen Chris Sale with your first pick instead of Story? Running through the same decision-making process, it might have looked like this:

Rd.Pick	Pick #	Player	Assets	Liab	Cost
1.12	12	Chris Sale	E+, K+	inj-	\$3
2.4	19	Bryce Harper	P+, a*	Nw	\$0.25
3.12	42	A. Mondesi	p, S+	inj-, EX	\$6
4.4	49	Patrick Corbin	ER, KK	Nw	\$0.25
5.12	72	Jesus Aguilar	P+, a	e	\$1
6.4	79	N.Castellanos	PW, AV		\$0

Two slightly different looks from the No. 12 slot, but each completely justifiable from a BABSian perspective. This version puts you \$10.25 towards your risk budget – closer to \$40 – slightly less ideal.

One more point... I find it helpful to convert the ADPs into draft *rounds*. Rather than keep track of my individual pick number, drafting in rounds allows me a broader perspective. The formula for converting an ADP to a round is...

$$ADP/No. teams in league + 0.49 \quad (\text{rounds up to nearest whole number round})$$

...which is easy to plug into your spreadsheet.

So, that's generally how it works, at least in a snake draft. I'll go more into depth on snake drafting soon as well as in a separate chapter on auctions.

At the end of the draft, you should have a very good idea of the strengths and weaknesses of your roster. Your spreadsheet might look like the one below.

(In order for this chart to fit within the page width, some of the columns have been omitted.)

				ASSETS						LIABILITIES					
ADP	BATTER	Pos	Tm	PT	Pw	Sp	Av	*	Rg	Sk	Inj	Ex	Nw	Pk	Rg
153	Grandal,Yasmani	CA	MIL	M	PW			*					Nw		
305	Suzuki,Kurt	CA	WAS	M			AV						Nw		
46	Bellinger,Cody	1B	LA	F	PW	SB		*							
71	Carpenter,Matt	3B	STL	F	P+		a	*							
189	Voit,Luke	CI	NYN	M	PW		a					EX			
187	Schoop,Jonathan	2B	MIN	F	p		a						Nw		
19	Story,Trevor	SS	COL	F	P+	s	a								
139	Rosario,Amed	MI	NYM	F		S+	a			-P		e			
98	Smith,Mallex	8	SEA	F		S+	a			-P			Nw		Rg
124	Hicks,Aaron	8	NYN	F	p		a	*			inj-				
242	Margot,Manuel	8	SD	M		SB	a				inj-				
295	Hernandez,Teos.	8	TOR	F	PW							e			
318	Cordero,Franchy	8	SD	M	PW	SB					INJ	EX			
42	Hoskins,Rhys	UT	PHI	F	P+		a	*				e			
	Targets				14	7	14								
	Actual				13	8	10			2	5	8	1		.25
372	Perez,Hernan	Rsv	MIL	M		s									
334	Kingery,Scott	Rsv	PHI			s						e			
ADP	PITCHER	Pos	Tm	PT	Er	K	Sv		Rg	Sk	Inj	Ex	Nw	Pk	Rg
12	deGrom,Jacob	SP	NYM	F	E+	KK									Rg
60	Flaherty,Jack	SP	STL	F	e	KK						e			
159	Bieber,Shane	SP	CLE	M	e	k			Rg			EX			
168	Glasnow,Tyler	SP	TAM	M	e	KK			Rg			e			
211	Stripling,Ross	SP	LA	M	ER	k					inj-				
292	Gray,Sonny	SP	NYN	M	e										
335	Burnes,Corbin	SP	MIL	M	e	k						EX			
88	Hand,Brad	rp	CLE		E+	K+	SV								
191	Smith,Will	rp	SF		ER	K+	sv-				INJ				
	Targets				6	6	2								

	Actual				11	10	2				0	4	7			.25
333	Familia,Jeury	Rsv	NYM		E+	KK								Nw		
378	Cahill,Trevor	Rsv	LAA	M		k						INJ		Nw	Pk	
321	Junis,Jakob	Rsv	KC	M												
544	Pena,Felix	Rsv	LAA	M	e	k							e			

These were my actual draft results at the 2019 SiriusXM/FSTA Experts League. There is a wealth of information on this chart. Looking at the targets alone, it's clear that I fell short on some of my offensive targets and exceeded some pitching targets.

On the Liabilities side, I did well keeping my health risk under control but probably drafted a few too many players lacking in experience. Still, my risk cost totaled just \$27.50, which was excellent.

While we count the assets for relief pitchers the same as starters, I like to discount them a bit. So as much as I exceeded those targets, it wasn't by as large a margin as it shows.

This view of the draft also helps to identify the mistakes I made. Drafting both power-deficient Amed Rosario and Mallex Smith was not a good idea. In retrospect, when I drafted a player like Manual Margot, I probably should have looked for a power hitter instead. At that point in the draft, a (p,a) player would have been a better fit. I think I was so focused on making sure I had enough steals that I lost sight of the targets and did not realize my roster was becoming unbalanced. Similarly, another (p,a) hitter would have been a better fit than Teoscar Hernandez.

In retrospect, any productive hitter would have been better than what those two did in 2019.

Well, sure, in 2019. For Margot and Teoscar, I was just a year early.

Anyway, remember that the draft is just a starting point; there is a long season ahead. As long as you've built a solid foundation, you'll have plenty of time to make adjustments as needed.

How did this team do?

Pretty well. Needless to say, the pitching carried me and I cycled through a carousel of outfielders all year. I opened strong, spent most of the spring and early summer in first place with a decent lead, but my good "friends" at BaseballHQ.com passed me just after the Break. I ended up in a three-way battle for second place, and finished fourth. In national experts competitions, I can't complain about a 4th place finish.

BABS VARIABLES

SKILL

Extreme Impact	Top 10% of that skill	P+, S+, A+, E+, K+
Significant Impact	Top 11-25% of that skill	PW, SB, AV, ER, KK
Moderate Impact	Top 26-50% of that skill	p, s, a, e, k
No projectable impact	Top 51-75% of that skill	
Skills Liability	Bottom 25% of that skill	-P, -A, -E, -K

PLAYING TIME

		<u>BATTERS</u>	<u>PITCHER</u>
F	Full-time	500+ PA	180+ IP
M	Mid-time	350-499 PA	120-179 IP
P	Part-time	200-349 PA	85-119 IP
-	No-time	Fewer than 200 PA	Fewer than 85 IP

EXPERIENCE RISK

		<u>Bat PA</u>	<u>SP IP</u>	<u>RP IP</u>
EX	< one full season of MLB experience	500	150	75
e	1-2 full seasons of MLB experience	1,000	300	150

ASSET TARGETS

	<u>12-tm mixed</u>	<u>15-tm mixed</u>	<u>12-team AL/NL</u>
Power	14	14	9
Speed	8	7	4
Batting Eff.	14	14	9
Pitching Eff.	7	6	4
Strikeouts	7	6	4

RISK BUDGET

	<u>Code</u>	<u>Cost</u>		<u>Code</u>	<u>Cost</u>
<u>Skills Risk</u>			<u>Experience</u>		
Power, Ks	-P, -K	\$1	1-2 yr exp	e	\$1
ERA, Average	-E, -A	\$3	<1 yr exp	EX	\$2
Dual skill risk	-PA, -EK	\$4	Top 60/\$20		+\$1
Top 60/\$20		+\$3			
<u>Health Risk</u>			<u>BUDGET</u>		
Minor inj	inj-	\$1	Exceptional	Under \$30	
Major inj	INJ	\$3	Acceptable	\$31-\$39	
Long term	x5	\$5	Whatever	\$40 or over	
Top 60/\$20		+\$2			

Minor risks (Pk-, Nw, Ag, Rg-) \$0.25