

# The Two-Dollar (\$2) Team

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## Introduction

In many business programs, students undertake a comprehensive business simulation game as a capstone project. These games allow students to experience in real time what might happen to a business based on financial strategies undertaken by the students.

The Two-Dollar Team explores a fictitious team and the decisions that will be made by students over the course of ten weeks, starting the second or third week of the term and ending before the last two weeks of a 15-week term. Each team starts with 200 pennies (or any other small currency). The teams have various expenses they have to pay that are fixed while others increase every year due to inflation. Players need to make financial decisions every week representing what they will undertake that year, what costs they might try to minimize, where they might spend more, and whether or not they need to borrow from the bank as part of their cash management strategy.

During the course of a season, things might go very wrong—from a major injury to a key player to a broken HVAC system. Each will cost the team money and force the team to respond. Similarly, each team might go on a winning streak or land a new major sponsor. Some of these occurrences are based on decisions made by the team while others involve some luck (or the lack thereof). Every week students will be forced to develop their strategy and spending based on the actual money they have or need to borrow or pay back with interest. After 10 weeks, the game ends and students whose team has the most money wins. The game is a fun way to get students involved in various finance topics so they understand how various finance issues affect strategy. The various financial issues covered by the game include assets and liabilities, revenue and expenses, budgeting, cash management, borrowing, Excel tracking, and financial strategies.

## The Game

This is an exercise to teach effective fiscal management of a professional sport team. Many people who play fantasy sport think they know how to manage a team, but this game will really test their financial and strategic skills in the sport industry. You are the general manager of the Connecticut Beavers, a fictitious Class AA professional baseball team playing at the historic Yale Baseball Field on the Yale University campus. Your team is in the middle of the pack and usually finishes in second or third place every year. Players' and coaches' salaries are paid for by the sponsoring team which is the New York Yankees, meaning you do not have to pay player salaries, coaching salaries, benefits, workers' compensation, and related expenses. However, the team is operating on very thin margins and actually lost money last year.

You are given \$2.00 in pennies as the money in the bank. From this, you will have to pay various expenses; you can generate revenue as well. Thus, your balance will shift over the course of the game.

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1 From G. Fried, T. DeSchraver, and M. Mondello, 2020, *Sport Finance Web Resource*, 4th ed. (Champaign, IL: Human Kinetics).

That means each GM counts how much money they have and then has to track if their decisions were financially successful or not. They then examine what they did right or wrong and how would they manage the following year. The following represents where money comes from and where it goes for the 2017 season. You have to come up with a plan for 2018 and subsequent years. It should be noted that these numbers are realistic (percentage wise) for a typical AA baseball team and based on such a budget.

### Overall budget

Gross revenue	100%
Direct cost	29%
Net revenue	71%
Operating expenses	100%
Park and game expenses	20%
Team expenses	5%
General and administrative expenses	55%
Debt service	20%
Total (Net revenue – Operating expenses) = Profit or loss	

### Calculating Net Revenue

<b>Ticket revenue</b>	100%
Direct costs	
Facility fee	73%
Payment to MLB	22%
Ticket production	5%
Gross profit (tickets)	40%

<b>Advertising revenue</b>	100%
Direct costs	
Radio	5%
Promotional spots	95%
Gross profit (advertising)	27%

**Concessions revenue**

Game day	70%
Group concessions	30%
Total revenue	100%
Direct costs	
Food	44%
Soft drinks	8%
Beer	9%
Supplies and uniforms	7%
Equipment leasing	1%
Payroll	28%
Payroll taxes	3%
Total costs	100%
Gross profit (concessions)	26%

**Merchandise revenue** 100%

## Direct costs

Beginning inventory	33%
Purchases	61%
Payroll	6%
Total costs	100%
Gross profit (merchandise)	4%

**Other revenue** 100%

Parking	10%
Programs	10%
Other	80%

## Direct costs

Program	33%
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Other	67%
Gross profit (other)	4%

### Calculating Operating Expenses

Park and game expenses	100%
Stadium rent	15%
Utilities	13%
Maintenance	28%
Security	11%
Umpires	7%
Game-day payroll	19%
Game-day payroll taxes	2%
Equipment rental	1%
Miscellaneous	3%

Team expenses	100%
Transportation	40%
Lodging	49%
Laundry and clubhouse	5%
Uniforms	5%

General and administrative expenses	100%
Salaries	33%
Payroll taxes	3.0%
Office operations	0.2%
Dues and fees	2.5%
Promotion and advertising	22.75%
Other	38.50%

Other expenses	100%
Amortization	39.60%
Auto expenses	1.90%
Bad debt expenses	1.00%
Bank service charge	4.3%
Contributions	0.20%
Entertainment	1.0%
Insurance	17.10%
Professional fees	6.40%
Miscellaneous	0.20%
Outside services	1.70%
Postage	4.30%
Rent	0.2%
Repairs	1.70%
Supplies	3.40%
Taxes	6.40%
Telephone	8.6%
Travel	1.70%

Debt services and other expenses	100%
Interest	21.40%
Depreciation	31.0%
Amortization of contracts	47.60%

To make things easier on the GM, revenue and expenses are divided across 10 years on the separate Excel file. You have some fixed revenue and fixed expenses. The revenue and expenses highlighted below are what you can manipulate. You can increase revenue by either a **maximum of 5% a year or 10% a year through raising ticket prices as part of your strategy**. That is a realistic amount as it is very unusual for a team to increase revenue more than 10% a year without some extraordinary reasons. When prices are raised, some related expenses are raised the same amount so you have to determine where you make the most amount of money (profit) to be worth the added expenses. Thus, if a **yellow highlighted revenue cell has a corresponding expense cell** that is also highlighted and if that revenue

area is increased 5% that year then the yellow highlighted expense also needs to be increased 5%. As an example, if you want to increase group concession revenue by 10% by raising costs, you can tell from the Excel file that group concessions is 25% of total concession revenue. If you are not increasing revenue for regular concessions, then you would need to increase 25% of food, soft drink, and beer by 10%. Thus, the total expenses for concessions is 14 cents, so 25% of that is 3.5 cents. If revenue increase 10%, then the group concession would increase 0.35 cents and that would round up to 4 cents. If regular concessions are also increased 10%, then food would go from 10 cents to 11 cents and beverages would grow from 2 cents to 2.2 cents. If there are fixed or expenses that are not highlighted, then they are going to be whatever the number is in the cell and they cannot be changed (fixed costs). You also have to be careful in that *if you raise prices too much, fans can revolt and stop or reduce purchasing*. Similarly, you can reduce expenses, but there always might be a consequence for reducing expenses or skimping on necessities.

## Revenue

**Ticket revenue:** 62 cents in 2017. 40% of tickets sold are season tickets (24.8 cents), 30% are group tickets (18.6 cents), and 30% individual tickets 18.6 cents). Each category can be increased or decreased in 5% increments, so if ticket prices are raised 5% for season ticket holders, then that would be 26 cents of revenue plus 18.6 cents and 18.6 cents if those prices are not changed. Remember to round up numbers as much as possible. Also, remember that if you increase prices too much, you might scare away some fans.

**Advertising revenue:** 46 cents in 2017. Of that amount, 38 cents is from signage and sponsorship and 8 is from other advertising.

**Game-day concession:** 46 cents in 2017, with 50% being food and the other 50% being beverage (25% soft drinks and 25% beer). Each category can be increased or decreased based on price and the cumulative total revenue should be entered. If a revenue source is increased, more supplies are required, so if food revenue is increased 10%, then direct food costs should also increase 10%.

**Group concessions:** 16 cents in 2017. Same break down in terms of percentage as game-day concessions (50% food, 25% soda, and 25% beer).

**Merchandise:** 9 cents in 2017

**Parking:** 2 cents in 2017

**Programs:** 2 cents in 2017

## Drilling Down on Revenue

Players can increase revenue by increments such as fixed amount (e.g., no change, plus or minus 5%, or plus or minus 10%) or any amount between +10% and -10%. Another option allows players to individually change either the price or the volume sold, which is more realistic but also more difficult.

Season ticket (initial price): 0.0248. Players may increase costs by a maximum of 0.0025 each year or reduce the price by that maximum amount, and they have 1,000 season ticket holders. That can only increase or decrease by 50 season ticket holders each year. What we do not want is for players to increase prices and the number of units sold, causing it to add up to more than 10%, because that is not as realistic.

Group tickets: 0.0074 (may increase or decrease by 0.0005) and 2,500 sold (may increase or decrease by a maximum of 100)

Individual tickets: 0.00172 (may increase or decrease by 0.0002) and 5,000 sold (may increase or decrease by a maximum of 200)

Signage sponsorship: 0.76 (may increase or decrease by 0.5) and 50 sponsor packages sold (may increase or decrease by 5 a year)

Game-day food: 0.0042 (may increase or decrease by 0.0003) and 5,500 food packages sold (may increase or decrease by 400 a year).

Game-day soft drinks: 0.00115 (may increase or decrease by 0.0001) and 10,000 soft drinks sold (may increase or decrease by 800 a year)

Game-day beer: 0.00115 (may increase or decrease by 0.0001) and 10,000 beers sold (may increase or decrease by 800 a year)

Group food: 0.0032 (may increase or decrease by 0.0004) and 2,500 food packages sold (may increase or decrease by 200 a year)

Group soft drink: 0.0013 (may increase or decrease by 0.0005) and 3,000 soft drinks sold (may increase or decrease by 250 a year)

Group beer: 0.0013 (may increase or decrease by 0.0005) and 3,000 beers sold (may increase or decrease by 250 a year)

Merchandise revenue: 0.0009 (may increase or decrease by 0.00001) and 10,000 items sold (may increase or decrease by 800 a year)

Parking: 0.0004 (may increase or decrease by 0.00005) and 5,000 parking spots sold (may increase or decrease by 450 a year)

Program: 0.002 (may increase or decrease by 0.0001) and 1,000 sold (may increase or decrease by 100 a year unless discontinued)

The numbers look imposing, but if a program revenue is 2 cents, then for a real team that might be \$20,000 and if they sold 5,000 programs at \$4 each then that would make sense for players. Here they can change the program cost by up to 5% (i.e., increasing the price of a real program from \$4 to \$4.20) and the number of programs can change from 5,000 to between 4,500-5,500.

## Expenses

Direct costs associated with general revenue sources and general expenses include:

Utilities

Maintenance

Security

Transportation

Lodging

Laundry

Salaries

Promotions and advertising

Other expenses

- Auto

- Bank service charges

- Entertainment

- Insurance

- Postage

- Repairs

- Telephones

- Interest (possibly principal)

After expenses and revenues are adjusted by players and money is provided to the teacher (i.e., the bank), the years go by and various things might happen. The team might go on a winning streak that increases walk-up sales or repairs might be needed on equipment. There are multiple issues that could arise. For example, if the players reduce the amount of money they put into maintenance, a piece of equipment might break and there could be charge for repairs, or if the maintenance budget was cut several years in a row, then maybe the piece of equipment might break and, on razor-thin margins, the team could be in trouble. If salaries are reduced or increased, then payroll taxes also need to be



adjusted. Payroll taxes are 10% of salaries, so if salaries are decreased 10%, then payroll taxes would also decrease 10%.

## Borrowing option (not required)

If, at the end of any year, a team is in the red, they have to borrow money. A team may borrow in 10 cent increments at 1 cent a year interest (for every ten cents they borrow) that would need to be paid off the next year (the 10 cents principal as well as one more cent added to interest). If interest is incurred, it needs to be reflected in the expenses sheet under debt service (currently at 5.5 cents), but if a team borrows ten cents, then that will increase to 6.5 and will stay at that level until the team has finished paying off the loan. The interest section cannot go lower than 5.5 as the team has some long-term debt. The teacher will put a dime (for every loan of 10 cents you take out) into your money bag and it will remain there until the loan is paid off. At the end of the game, all borrowed money needs to be repaid.

When events happen that might increase or decrease your revenue, you can enter in those changes for that year. The **next year** you are back to the original amount proposed for the year (without the increase or decrease that happened at the end of the year). For example, you estimated ticket revenue of 75 cents in 2018. After the events are disclosed, you might get an increase or decrease in that revenue. Assume it went to 78 cents for 2018. You get the benefit of the 3 cents for that year, but for the 2019 budget, you start at a baseline of 75 cents again which you can then adjust that up or down based on your strategy. Thus, each team should track their initial numbers before occurrences are raised so they know what to start off the next year at.

After each year's occurrence are disclosed, the changes are entered in by the team into their Excel files. Then the teams go to their income statement and examine their operating income (line 28 for the year being reviewed). If they are in the positive, the instructor gives the team the amount of money they have earned and it is added to their \$2 stockpile. If they are down, then the team has to give money from their \$2 stockpile to the instructor. At the end of the game, the team with the most money or lowest amount of lost funds is the winner. It is a cumulative tally, so although a team might be down 15 cents over the first three years, it is possible for them to earn 25 cents back over the course of the game, so they would end with a 10-cent profit (i.e., \$2.10 in their bag).

When decisions are made each year, teams have to justify why they are making such choices. At the end of the game, teams need to make sure their finances are set and accurate, and students need to indicate what they have learned through the process.