Outside the Lines

A publication of the Society for American Baseball Research Business of Baseball Committee

Volume X, Issue 4 *Fall 2005*

Purchasing Pennants: The New York Yankees Then and Now

Part 2: Salaries

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Introduction

Detailed payroll data provides some of the most interesting information contained in the Yankee financial records. The Yankee records indicate how the players were compensated, fined and bought and sold as parts of a larger Yankee profit-oriented business. One interesting line item at the beginning of each season was the deduction from a player's salary for his uniform deposit. The Yankees refunded the deposit at the end of the season, or worse, immediately after being released. Being called into the secretary's office and handed

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Editor's Note

The late Doug Pappas, the founding Chair of this committee, made a significant contribution to research on the Business of Baseball in 2004 with a series of articles published on BaseballProspectus.com. In those articles, Doug set out a methodology for assessing the effectiveness of a team's front office called Marginal Payroll/Marginal Wins.

This edition of OTL includes updates to Marginal Payroll/Marginal Wins for 2004 and 2005 compiled by Committee Co-chair Gary Gillette. Those are also available in Excel format on the Committee website. In addition, Vince Gennaro extends that analysis in his piece "Measuring the Business Side".

Measuring the Business Side

By Vince Gennaro

With sabermetric stats from EqA to Win Shares, we can dissect a player's performance the way the latest MRI can diagnose Pedro Martinez' rotator cuff. Despite this, there are few stats to measure the effectiveness of a team's front office. One step in this direction is Marginal Payroll/Marginal Wins, developed by Doug Pappas and updated by SABR's Business of Baseball Committee Co-Chair Gary Gillette. This simple arithmetic measure begins to poke at one of the most important accountabilities of a major league team's front office—the productivity of payroll spending.

Building on this measure, I've taken the analysis a step further by attempting to quantify win efficiency—the number of *extra wins* a team would achieve beyond the average wins at their payroll level. With the help of 5 years of data (2001-2005) for all 30 clubs, I utilized regression analysis to determine which front office, if any, had either a consistently positive or negative effect on its team's on-the-field success. Using "actual wins" as the dependent variable, results of this analysis show that 26% of the variation in team-to-team wins is explained by using marginal payroll as the lone independent variable in the equation.

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INSIDE THIS ISSUE

DÉJÀ VU ALL OVER AGAIN ... AS YOGI MIGHT SAY

By Gary Gillette

Three years after the fanfare of trumpets announced that a new collective bargaining agreement (CBA) had been reached without a work stoppage, Commissioner Bud Selig and many members of the sports punditocracy have been generous in giving the new CBA credit for improving competitive balance in the game. Yet, even though the revised revenue-sharing system and the unprecedented new luxury-tax provisions have been in-place since 2002, is there any solid evidence that competitive balance has changed?

The recently completed "8 teams/one champion" postseason—has there ever been a more insipid marketing slogan than MLB's 2005 clinker?—was pretty similar overall to 2004. The fact that the White Sox won and the Yankees lost isn't relevant, as upsets can easily occur in a short series and any team that makes it to October has a decent chance of winning it all.

In 2004, the plutocrats of the AL, the Yankees and Red Sox, outspent everyone else in their AL East slugfest, while the big-spending, big-market Angels won the West. The small-market Twins won the AL Central, but they had won the division for three consecutive seasons, starting before the current CBA took effect. The best that can be said of the 2004 results is that the Twins got some help from the system in keeping their internally developed young team together as it became more expensive.

In the NL, three of the four postseason teams were the same in 2004 and 2005, with only the NL West champs changing from the huge-market, free-spending Dodgers in 2004 to the small-market, new ballpark Padres in 2005.

A quick review of the 2005 pennant races shows the following results in the rankings of the eight postseason teams in terms of revenue and payroll:

AL East: The Yankees, playing in by far the largest market in baseball, had the highest payroll in baseball as well as the highest revenue.

AL Central: The White Sox had the highest payroll and second-highest revenue in the AL Central while playing in the largest market in the division.

AL West: The Los Anaheim Angels had highest payroll and second-highest revenue in the division while playing in the second-largest market in baseball.

AL Wild Card: The Red Sox were second in both categories in MLB and, therefore, was the highest in both categories in the AL Wild Card division as well as being located in the largest market of any non-division winner in the league.

NL East: The Braves had third-highest revenue and third-highest payroll in division while playing in the fourth-largest market.

NL Central: The Cardinals had the third-highest revenue in the third-largest market in the division, but they had the highest payroll.

NL Wild Card: The Astros had the sixth-highest revenue and sixth-highest payroll among non-division winners, playing in the fifth-largest market of the NL Wild Card division.

NL West: Padres had the third-highest revenue and the third-highest payroll, playing in the fourth-largest market in the division.

In 2005, two of the four AL postseason teams (Yankees and Boston) had the highest revenue and highest payrolls in their divisions (counting the 11 non-division winners as comprising a de facto "Wild Card division." The other two teams, the Angels and White Sox, were second in revenue in their divisions but had the highest payroll.

The 2005 NL was not nearly so clear-cut, but it wasn't really different from historical norms, either. The Braves (since the early 1990s) and Cardinals (since the 1930s) have been acknowledged as well-run clubs that consistently out-compete richer teams like the Mets, Phillies, and Cubs that aren't so well managed. Ergo, nothing has changed since 2002 in that regard.

So any claim to progress in 2005 that was based on the 2002 CBA would rest on the Astros and Padres outperforming both their means and their payrolls.

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Marginal Payroll/Marginal Wins—2004

2004 American League

East	W	L	Pct.	Opening Day Payroll	Marginal Payroll	Marginal Wins	Cost per Marginal Win
NYA	101	61	0.623	$184,193,950	$175,793,950	52.4	$3,354,846
BOS	98	64	0.605	$127,298,500	$118,898,500	49.4	$2,406,852
BAL	78	84	0.481	$51,623,333	$43,223,333	29.4	$1,470,181
TB	70	91	0.435	$29,556,667	$21,156,667	21.7	$974,962
TOR	67	94	0.416	$50,017,000	$41,617,000	18.7	$2,225,508

Central	W	L	Pct.	Opening Day Payroll	Marginal Payroll	Marginal Wins	Cost per Marginal Win
MIN	92	70	0.568	$53,585,000	$45,185,000	43.4	$1,041,129
CHA	83	79	0.512	$65,212,500	$56,812,500	34.4	$1,651,526
CLE	80	82	0.494	$34,319,300	$25,919,300	31.4	$825,455
DET	72	90	0.444	$46,832,000	$38,432,000	23.4	$1,642,393
KC	58	104	0.358	$47,609,000	$39,209,000	9.4	$4,171,170

West	W	L	Pct.	Opening Day Payroll	Marginal Payroll	Marginal Wins	Cost per Marginal Win
ANA	92	70	0.568	$100,534,667	$92,134,667	43.4	$2,122,919
OAK	91	71	0.562	$59,425,667	$51,025,667	42.4	$1,203,436
TEX	89	73	0.549	$55,050,417	$46,650,417	40.4	$1,154,713
SEA	63	99	0.389	$81,515,834	$73,115,834	14.4	$5,077,488

2004 National League

East	W	L	Pct.	Opening Day Payroll	Marginal Payroll	Marginal Wins	Cost per Marginal Win
ATL	96	66	0.593	$90,182,500	$81,782,500	47.4	$1,725,369
PHI	86	76	0.531	$93,219,167	$84,819,167	37.4	$2,267,892
FLO	83	79	0.512	$42,143,042	$33,743,042	34.4	$980,902
NYN	71	91	0.438	$96,660,970	$88,260,970	22.4	$3,940,222
MON	67	95	0.414	$41,197,500	$32,797,500	18.4	$1,782,473

Central	W	L	Pct.	Opening Day Payroll	Marginal Payroll	Marginal Wins	Cost per Marginal Win
STL	105	57	0.648	$83,228,333	$74,828,333	56.4	$1,326,743
HOU	92	70	0.568	$75,397,000	$66,997,000	43.4	$1,543,710
CHN	89	73	0.549	$90,560,000	$82,160,000	40.4	$2,033,663
CIN	76	86	0.469	$46,615,250	$38,215,250	27.4	$1,394,717
PIT	72	89	0.447	$32,227,929	$23,827,929	23.7	$1,005,398
MIL	67	94	0.416	$27,528,500	$19,128,500	18.7	$1,022,914

West	W	L	Pct.	Opening Day Payroll	Marginal Payroll	Marginal Wins	Cost per Marginal Win
LA	93	69	0.574	$92,902,001	$84,502,001	44.4	$1,903,198
SF	91	71	0.562	$82,019,166	$73,619,166	42.4	$1,736,301
SD	87	75	0.537	$55,384,833	$46,984,833	38.4	$1,223,563
COL	68	94	0.420	$65,445,167	$57,045,167	19.4	$2,940,473
ARI	51	111	0.315	$69,780,750	$61,380,750	2.4	$25,575,313

Notes

Compiled by Gary Gillette, co-chair, SABR Business of Baseball Committee

Based on Doug Pappas formula

2004 MLB minimum salary = $300,000

Opening Day payroll figures from USA Today and may differ slightly from other sources

Marginal Payroll/Marginal Wins—2005

American League

EAST	W	L	Pct.	Opening Day Payroll	Marginal Payroll	Marginal Wins	Cost per Marginal Win
NYA	95	67	0.586	$208,306,817	$199,458,817	46.4	$4,298,681
BOS	95	67	0.586	$123,505,125	$114,657,125	46.4	$2,471,059
TOR	80	82	0.494	$45,719,500	$36,871,500	31.4	$1,174,252
BAL	74	88	0.457	$73,914,333	$65,066,333	25.4	$2,561,667
TB	67	95	0.414	$29,679,067	$20,831,067	18.4	$1,132,123

CENTRAL	W	L	Pct.	Opening Day Payroll	Marginal Payroll	Marginal Wins	Cost per Marginal Win
CHA	99	63	0.611	$75,178,000	$66,330,000	50.4	$1,316,071
CLE	93	69	0.574	$41,502,500	$32,654,500	44.4	$735,462
MIN	83	79	0.512	$56,186,000	$47,338,000	34.4	$1,376,105
DET	71	91	0.438	$69,092,000	$60,244,000	22.4	$2,689,464
KC	56	106	0.346	$36,881,000	$28,033,000	7.4	$3,788,243

WEST	W	L	Pct.	Opening Day Payroll	Marginal Payroll	Marginal Wins	Cost per Marginal Win
LAA	95	67	0.586	$97,725,322	$88,877,322	46.4	$1,915,460
OAK	88	74	0.543	$56,186,000	$47,338,000	39.4	$1,201,472
TEX	79	83	0.488	$55,849,000	$47,001,000	30.4	$1,546,086
SEA	69	93	0.426	$87,754,334	$78,906,334	20.4	$3,867,958

National League

EAST	W	L	Pct.	Opening Day Payroll	Marginal Payroll	Marginal Wins	Cost per Marginal Win
ATL	90	72	0.556	$86,457,302	$77,609,302	41.4	$1,874,621
PHI	88	74	0.543	$95,522,000	$86,674,000	39.4	$2,199,848
FLO	83	79	0.512	$60,408,834	$51,560,834	34.4	$1,498,861
NYN	83	79	0.512	$101,305,821	$92,457,821	34.4	$2,687,727
WAS	81	81	0.500	$48,581,500	$39,733,500	32.4	$1,226,343

CENTRAL	W	L	Pct.	Opening Day Payroll	Marginal Payroll	Marginal Wins	Cost per Marginal Win
STL	100	62	0.617	$92,106,833	$83,258,833	51.4	$1,619,822
HOU	89	73	0.549	$76,779,000	$67,931,000	40.4	$1,681,460
MIL	81	81	0.500	$39,934,833	$31,086,833	32.4	$959,470
CHN	79	83	0.488	$87,032,933	$78,184,933	30.4	$2,571,873
CIN	73	89	0.451	$61,892,583	$53,044,583	24.4	$2,173,958
PIT	67	95	0.414	$38,133,000	$29,285,000	18.4	$1,591,576

WEST	W	L	Pct.	Opening Day Payroll	Marginal Payroll	Marginal Wins	Cost per Marginal Win
SD	82	80	0.506	$63,290,833	$54,442,833	33.4	$1,630,025
ARI	77	85	0.475	$62,329,166	$53,481,166	28.4	$1,883,140
SF	75	87	0.463	$90,199,500	$81,351,500	26.4	$3,081,496
LAN	71	91	0.438	$83,039,000	$74,191,000	22.4	$3,312,098
COL	67	95	0.414	$48,155,000	$39,307,000	18.4	$2,136,250

Notes

Based on Doug Pappas formula

Updated by Gary Gillette, co-chair, SABR Business of Baseball Committee

2005 MLB minimum salary = $316,000

Opening Day payroll figures from USA Today and may differ slightly from other sources

Measuring the Business Side *(Continued from page 1)*

Since I pooled time-series and cross-sectional data, I also tested for a "season effect" by employing a variable for each season. None of the seasonal dummy variables was statistically significant. I also reintroduced the seasonal dummy variables into the final model and, once again, none of the seasons was statistically significant.

sequenced through the 30 team specific dummy variables, to ensure that all reasonable combinations were attempted, using the 95% confidence level to determine statistical significance. The adjusted R-square for the final model is .468.

Four teams outperformed the average, while six teams underperformed. While it is not certain that this differential effect can be attributable to any specific action taken by the front office, we can be clear that four ballclubs—the A's, Cardinals, Twins and Braves—consistently deliver more wins than their payroll should allow. On the flip side, Detroit, the Mets, Kansas City, Tampa Bay, Baltimore and Colorado consistently (from '01-'05) underperformed, winning fewer games than their payroll would indicate.

Team Win Differential, after adjusting for Payroll Level
After Adjusting for Payroll

Actual Wins		Pythagorean Wins		"Marginal Runs" Wins	
Team	**Δ in Wins**	**Team**	**Δ in Wins**	**Team**	**Δ in Wins**
OAK	**17.7**	**OAK**	**14.8**	**OAK**	**17.7**
STL	**11.5**	**STL**	**10.9**	**STL**	**13.4**
MIN	11.2	**ATL**	**8.1**	SEA	11.8
ATL	**8.9**			LAA	9.8
				ATL	**9.7**
				HOU	8.9
COL	-8.2	BAL	-7.6		
BAL	-9.6	CIN	-9.3	**NYM**	**-8.6**
TBD	**-10**	**NYM**	**-9.5**	CIN	-8.7
KCR	**-11.6**	**KCR**	**-10.5**	**KCR**	**-10**
NYM	**-12.7**	**TBD**	**-11.9**	**TBD**	**-11.3**
DET	**-16.8**	**DET**	**-15.1**	**DET**	**-14.3**

All were statistically significant at the 95% level
Bolded teams = statistically significant in all 3 models
2001-2005 data

I then introduced team specific variables into the model in an effort to capture a consistent and recurring pattern by any team to either underperform or outperform the *average* relationship between payroll and wins. (For each team, I employed a 0-1 dummy variable to reflect across all five years. For example BAL has a value of 1 for 2001, 2002, 2003, 2004 and 2005.) In other words the model searches for a team-specific pattern after "adjusting" for the team's payroll level.

The results of the model indicate that ten of the thirty teams show a statistically significant impact different from the "average" win-payroll relationship. I

In an attempt to validate the model, I ran two alternative analyses using *Pythagorean Wins* and *Marginal Runs Scored/Allowed Wins*. Pythagorean Wins, originally developed by Bill James is: Runs Scored^2/(Runs Scored^2)+(Runs Allowed^2); however, I used the version which substitutes the exponent 1.83. This version has historically been more accurate. Marginal

Measuring the Business Side *(Continued from page 5)*

Runs Scored/Allowed Wins was also developed by Bill James and the formula is as follows: Wpct=Marginal Runs Scored (MRSc)+Marginal Runs Saved (MRSa)/league average runs scored; where MRSc=Runs scored in excess of ½ the league average; MRSa=Runs not allowed less than 1.5 times the league average.

These alternatives try to extract "luck" from the wins total. All independent variables are identical to those in the original Actual Wins version of the model. For all three versions of the model, seven teams show an impact on wins—Oakland, St. Louis and Atlanta on the positive side and Tampa Bay, Kansas City, the Mets, and Detroit on the negative side. Baltimore and Cincinnati appear in two of the three versions, both on the negative side of the ledger. On the positive side, Minnesota, Seattle, the Angels, and Houston appear once each, while the Rockies appear once as having a negative effect on wins. The following are the results of the three versions of the model. The "Δ in Wins" represent the amount of wins per season vs. the wins an average team would have delivered at the same payroll level.

The results of the *Actual Wins* model shows that the Oakland A's have the highest "win efficiency" by averaging 17.7 wins more than the average team would win if they had the A's payroll. Over the 5-year period, the A's averaged under $52 million in player salaries, compared to the Yankees' $156 million. Despite this $ 100+ million gap, the A's averaged only 3 less wins per year than the well-heeled Yanks. The Cardinals, who enjoyed the identical win total to the A's, won 11.5 games per year more than the average team would have won with the Cardinals' payroll. Minnesota, with +11.2 wins, and Atlanta, with +8.9 wins, round out the list of teams who made the best use of their payroll.

What does the higher win total, after adjusting for payroll, really say about a team? Before concluding that "brainpower" is the entire difference, we need to consider other interpretations. One factor that can dramatically affect payroll is the team's *mix of players by salary classification*—free agent, arbitration eligible, pre-arbitration. If a team fills its roster with a high mix of the least expensive, pre-arbitration players, it has the inside track on having a low payroll. But only the most productive scouting, drafting and minor league development systems are likely to produce players that will make a significant contribution to a winning ballclub in their first three years of major league service—after three years plus 100 days of major league service a player is eligible for arbitration. It appears that the Oakland A's have allocated some of their would-be-salary dollars into their development system to provide their major league roster with a higher mix of young, low-salaried and home grown talent. Their success and "win efficiency" can be at least partly attributable to the A's disproportionate productivity from their young players.

"Wins above replacement level" (WARP1) is a measure developed and published by BaseballProspectus.com which attempts to convert a player's offensive, defensive and pitching stats into his impact on team wins. It is a variation of the "original" measure Wins Shares, developed by Bill James. Using WARP1 as a measure of each player's productivity, their contribution to their teams win total, the A's averaged nearly 40% of their win contribution from players who are making within $100,000 of the league minimum salary. Those are players with less than three years of major league service.[8] By contrast over the same five-year period, the Yankees have *less than 1%* of their win contribution from pre-arbitration eligible players. If data were available to measure the dollar expenditures on scouting and minor league development, it would allow researchers to evaluate the relative value of each class of spending on team success.

The following table takes the analysis further by classifying each team within a nine-box grid of payroll level vs. win efficiency. Win efficiency is defined as marginal wins relative to marginal payroll. The teams which were not determined to be statistically significant by the model were included in the middle row. Results of the "Actual Wins" version of the model are interpreted in this grid. The average of 2001-2005 salary data was used to classify teams as low, middle or high payroll teams.

Whether win efficiency analysis sheds light on the performance of some front offices or is a validation of an organizational strategy is up for debate. A comprehensive look at the relationship between winning and all the relevant components of team spending catego-

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Measuring the Business Side *(Continued from page 6)*

ries would be informative to team owners and GMs as they plan their approach to building a winner. Independent of data availability, any well run business has metrics in place to measure its on-going health and the performance of its leaders. Major league baseball teams should continuously look for measures that shed light on whether they are winning in the front office, as well as on the field. Win efficiency can be a start.

Win Efficiency vs. Payroll Level

Win Efficiency	High Payroll	Medium Payroll	Low Payroll
High	**STL ATL**		**OAK MIN**
Medium	BOS NYY SEA LAA CHC LAD SFG	TOR TEX CWS PHL CLE ARZ HOU	FLA CIN MIL SDP PIT WAS
Low	**NYM**	**BAL COL**	**DET TBD KCR**

Vince Gennaro, whose research is focused on the business and economics of baseball, has also written for the Baseball Research Journal.

THE BUSINESS OF BASEBALL

On the Business of Baseball Website, recent additions include an interview with Tal Smith, covering his career in baseball including, especially, with the Astros. As Maury Brown notes in his introduction:

"You simply can't talk about most any facet of Major League Baseball in Houston without touching on Tal Smith. Be it assistant GM to Gabe Paul, the development of the Astrodome, General Manager of the Astros, the development of Minute Maid Park, President of Baseball Operations, as well as, contract negotiations and the salary arbitration process, Smith has touched on it all."

Committee Co-chair Maury Brown has just finished an interview with Fay Vincent which will be posted to the website as soon as Maury and his squad of transcribers are able to transfer it from tape to written word.

Purchasing Pennants *(Continued from page 1)*

a refund check for your uniform deposit was never good news. That meant that you had just been released.

In this essay I look at how the Yankees compensated their players. In order to put perspective to the salaries earned by the early Yankees, I compare them to today's salaries. Although the actual dollar amounts are much higher, the rest of the story is not as obvious.

Table 1: Relative Yankee Salaries

Year	US annual avg non-agricultural wage	average New York Yankee salary	Yankee/ US average salary	Babe Ruth salary	Ruth/ Yankee avg	Ruth/US avg
1920	$1,489	$4,933	3.3	$ 18,570	3.7	12.4
1921	$1,349	$6,854	5.0	$ 39,638	5.7	29.3
1922	$1,305	$7,928	6.0	$ 54,104	6.8	41.4
1923	$1,393	$8,318	5.9	$ 52,669	6.3	37.8
1924	$1,402	$8,443	6.0	$ 47,758	5.6	34.0
1925	$1,434	$8,622	6.0	$ 42,622	4.9	29.7
1926	$1,473	$7,956	5.4	$ 49,605	6.2	33.6
1927	$1,487	$11,324	7.6	$ 76,191	6.7	51.2
1928	$1,490	$11,667	7.8	$ 70,000	6.0	46.9
1929	$1,534	$12,397	8.0	$ 70,000	5.6	45.6
1930	$1,494	$10,829	7.2	$ 80,000	7.3	53.5
1931	$1,406	$9,264	6.5	$ 79,192	8.5	56.3
1932	$1,244	$9,417	7.5	$ 74,214	7.8	59.6
1933	$1,136	$7,507	6.6	$ 42,029	5.6	37.0
1934	$1,146	$8,638	7.5	$ 34,015	3.9	29.6
2003	$32,926	$6,304,673	191	$21,726,881 *	3.4*	658*

* Alex Rodriguez

How the Yankees compensated their players

The Yankees compensated their players in the Ruppert-Huston era the same way they do now: very well. It is obvious that the players did not earn the same kind of exorbitant salaries in 1920 that they earned in 2004. However, relative to the average American, Yankee players did very well. During the Ruth era (1920-1934), the average Yankee salary fluctuated between $4,900 and $12,400. Even when adjusted for inflation ($45,232 and $133,080), these salaries are modest at the low end and less than half the current minimum salary at the high end.

The reason for the dramatic rise in current salaries is twofold. First, free agency has increased the amount of team revenue that owners are now willing to share with players as they bid against one another to attract the best talent. Second, the increased demand for MLB in the last decade has led to a dramatic increase in team revenues. Since 1990 average team revenues have increased from $52 million to more than $130 million. During that same time average payrolls have increased from $17 million to $70 million. Owners are willing to pay more money to players because they have more money to spend and they believe that the best players are bringing in more fans. The Yankees, with the largest revenue stream of all, are willing and able to pay the highest salaries. For these two reasons,

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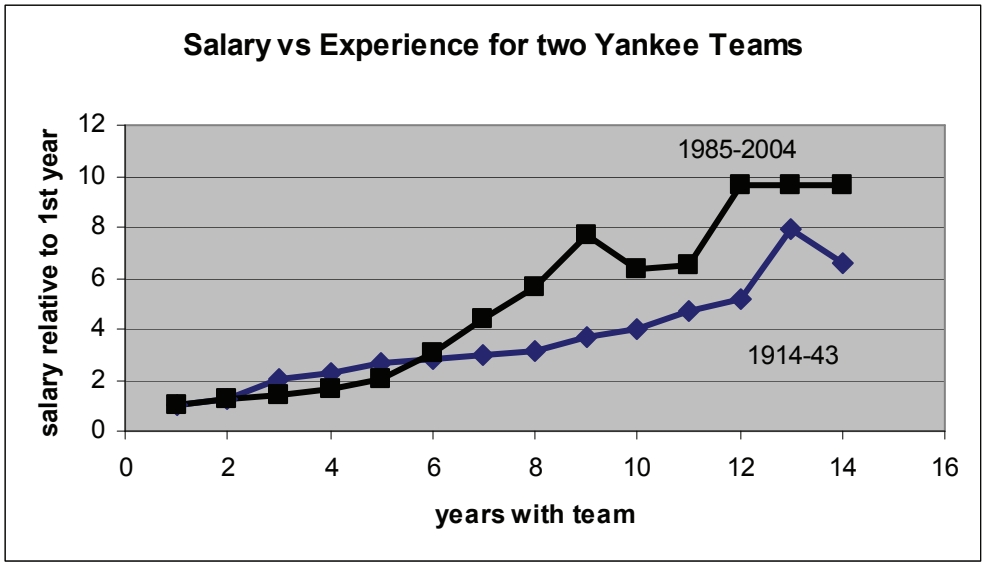
player salaries today dwarf salaries of yesteryear in any method of comparison.

Besides adjusting for inflation, another method of comparing salaries across time is to look at relative salaries. One good way to measure the relative change in salaries over time is to compare baseball salaries to wages earned by the average American worker. An examination of this relationship using Census Bureau data shows that the Yankees have always been well paid relative to their working class brethren. In economic parlance, we call this comparison a measure of the opportunity cost a player faces. In other words: if a ballplayer was not getting paid to play baseball, what else would he do? Clearly this second choice of a career is different for every player. Bobby Brown, the third baseman for the New York Yankees from 1946 to 1954, went to medical school and became a doctor. John Montgomery Ward, a 19th century pitcher and shortstop, earned a law degree after his playing career ended. Most ballplayers, however, were not doctors or lawyers, but more commonly had only average earning potential outside of professional baseball. In order to get a read on these earning potentials it is worth comparing the average baseball player salary to the average wage earned by working class Americans. When making this comparison we see that people with a particular talent for playing baseball have always been in greater demand than the average factory worker.

Figure 1



In Table 1 (previous page) we see that the average Yankee earned from three to eight times the average American's salary during the Ruth era. The Babe himself did even better. He was always the highest paid player on the team, with a salary that ranged anywhere from 3.7 to 8.5 times that of his teammates. In accordance, his salary relative to the average American was higher—anywhere from 12 to 60 times greater. The most famous example of his high salary is his response to a reporter who asked him how he felt about earning a higher salary in 1930 than the President of the United State. "I guess I had a better year than he did," quipped Ruth.

This illustration helps explain why baseball players showed little interest in fighting the reserve clause for so long. Despite the fact that their salaries were artificially stunted by the collusive behavior of teams, the players recognized the fact that they were still much better off than they would be if they had to get a "real" job. The owners recognized this and used this threat to keep players in line on a regular basis. It was the rare superstar who was able successfully to threaten to hold out in return for a hefty raise. Most players realized they were relatively dispensable and the alternative to playing ball was not financially attractive, not to mention the non-pecuniary perks that went with the job, such as the fame, the occasional endorsement opportunity and the free drinks fans could be counted on to buy for you at the hometown watering hole.

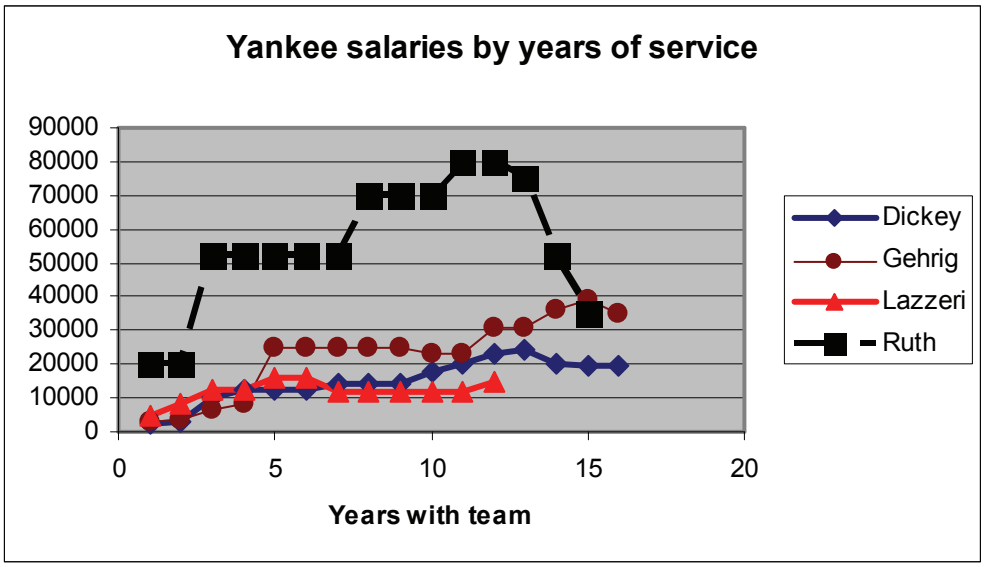
When we examine the relative Yankee to average wage comparison today, we see that, due to the market forces described earlier, players are in an even more advantageous position. The average Yankee in 2004 out-earned his New York neighbors nearly 200 to 1 and Alex Rodriguez, the highest paid Yankee, earned more than 600 times as much as the average American. He did not dominate his teammates as much as Ruth did though, earning barely three times as much as his well-heeled teammates.

An interesting story emerges from the different ways in which the Yankees rewarded their players over

(Continued on page 10)

Purchasing Pennants *(Continued from page 9)*

Figure 2

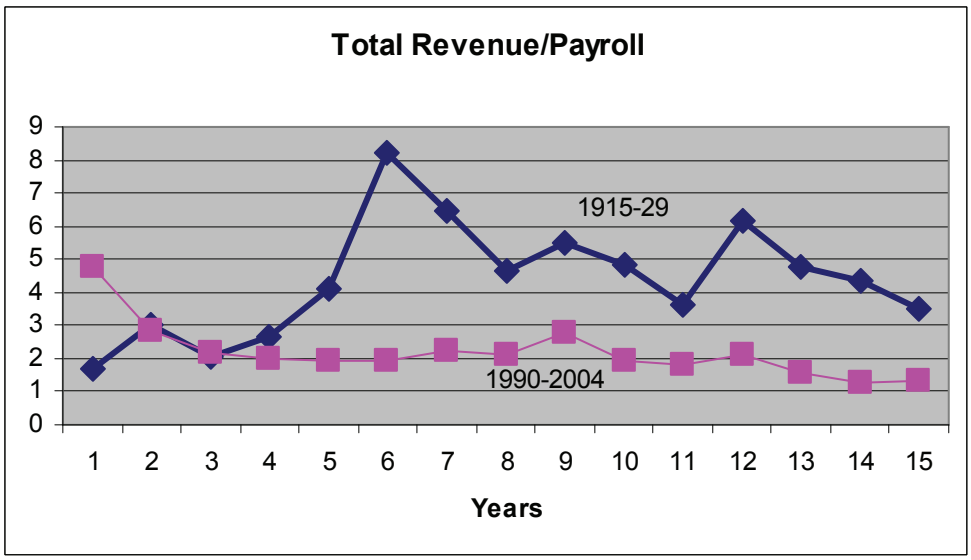


time. Figure 1 illustrates that, in both the early and current eras, the Yankees treat their players very similarly over the early part of their careers. Indeed, the Ruppert era Yankees actually fared better relative to their rookie year salary over the first five years of their careers than do the current Yankees. In the early era the average Yankee doubled his salary in three years with the club, while the modern era counterpart takes five years to double his salary. The big difference comes in the next five years, the peak earning years for a player who has just entered into his prime. In the early era, the salary progression continues at the same pace, so that after ten years the players earned four times their rookie salary. With modern day players eligible for free agency after six years, modern salaries experience an increase in their growth trend over the second five years of a playing career, so that in his ninth year, the average player is earning eight times his rookie salary. Current players on average see a slump in the next two years, before rebounding to a level ten times greater than rookie salary in the next three years.

Ruppert's Yankees saw an increase in their rate of salary growth only after twelve years, when salaries suddenly spiked to a high of eight times rookie salary before beginning to fall off as careers wound down. This spike is misleading, however, as it represents only a small number of players whose careers lasted more than twelve years during this earlier period.

Figure 2 tracks the specific experience of four Yankee players. Babe Ruth, Bill Dickey, Lou Gehrig and Tony Lazzeri each had careers of 12-15 years with the Yankees. Except for Ruth, the salary history is remarkably similar and follows very closely the path of the average Yankee. Ruth's salary escalated in a series of multi-year contracts, each one more lucrative than the last, until the twilight years of his career saw his salary go into freefall. By comparison, the average modern-day Yankee does not see his salary fall in his waning years, but rather it plateaus, representing the final years of his multi-year contract.

Figure 3



(Continued on page 11)

Purchasing Pennants *(Continued from page 10)*

Conclusion

So what can we make of all this? Despite the change in scale, the Yankees of today are remarkably similar to the Yankees of yesteryear. The Yankees pay their players well, though they cannot exploit them as much today as they did prior to free agency. The Yankees have always been paid well relative to the average American. This high rate of pay relative to the player's opportunity cost helps explain why players were so slow to organize and earn free agency and even greater rates of pay.

Had the owners never devised the reserve clause and competed against one another for the best players from the beginning, player salaries would have been higher during this earlier era. Adjusted for inflation, they still would not approach today's lofty heights because of the dramatic increase in television income. It was the combination of free agency and increased revenues which has turned today's average ballplayer into a multi-millionaire.

Michael Haupert is Professor of Economics at the University of Wisconsin-LaCrosse. This is the second of a three-part series on Yankee economics. Part 3, *Player Performance*, will appear in the Winter 2006 *OTL*.

DÉJÀ VU ALL OVER AGAIN *(Continued from page 2)*

However, the Astros won the NL Central outright four years out of five between 1997 and 2001, so winning the NL wild card the past two years surely can't be construed as evidence of anything getting better.

Furthermore, the small-market Padres were a fluke winner, backing into the NL West title by default in an historically weak division. It remains to be seen if San Diego can squeak by again when everyone believes that their richer cousins to the north aren't likely to play so badly in 2006: The listless Dodgers greatly underperformed in 2005, and the superannuated Giants were devastated by injuries, especially to Barry Bonds.

In summary, it certainly doesn't seem that the new CBA and revenue redistribution system has made much of a difference at all. Where is the evidence that the new revenue-sharing/luxury-tax system is really changing the competitive balance situation?

Notes

1) Revenue figures from *Forbes* magazine's annual survey of MLB franchise values.

2) MP/MW data per Doug Pappas; updated by the author for the Business of Baseball Committee for the 2004 and 2005 seasons.

3) Market size from U.S. Census population figures for metropolitan areas.

4) When market size is divided by the number of ML teams in that market, Houston's market size rises to third among NL non-division winners and Detroit's market size is larger than the White Sox share of the Chicago market.

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Business of Baseball Committee

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