ANALYZING THE HISTORICAL DISTRIBUTION OF MAJOR LEAGUEBASEBALL BATTING AVERAGES

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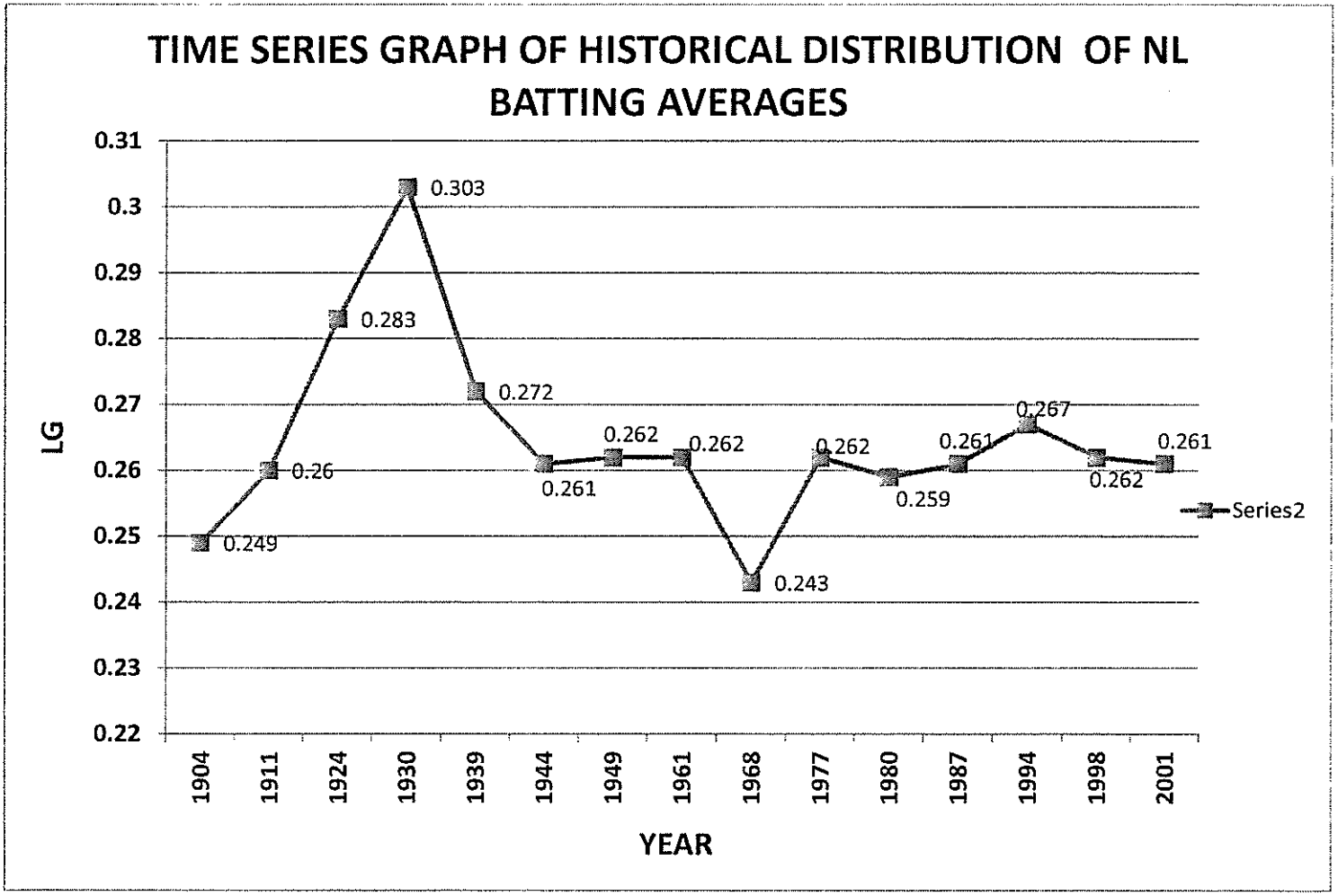
Over the years, batting averages have experienced substantial fluctuations, which have to do with conditions of the game changing, different ball parks, and other factors. In this presentation, we look at how BA have varied, and the ratio of the batting title winner's average to the league average. Graphs and charts will be used to illustrate this further. Please note that ratio is found by dividing the player's BA by the league average, and that can tell U what percent above the league average the batter was.

CHART #1 NL BAT CHAMPS

YEAR	BAT CHAMP	LG AV	RATIO	%
1904	WAGNER	.349	.249	1.40	40
1911	WAGNER	.344	.260	1.32	32
1924	HORNSBY	.424	.283	1.5	50
1930	**TERRY**	**.401**	**.303**	**1.32**	**32**
1939	MIZE	.349	.272	1.28	28
1944	WALKER	.357	.261	1.37	37
1949	ROBINSON	.342	.262	1.31	31
1961	CLEMENTE	.351	.262	1.34	34
1968	ROSE	.335	.243	1.38	38
1977	PARKER	.338	.262	1.29	29
1980	BUCKNER	.324	.259	1.25	25

1987	GWYNN	.370	.261	1.42	42
1994	GWYNN	.394	.267	1.48	48
1998	WALKER	.363	.262	1.39	39
2001	WALKER	.350	.261	1.34	34

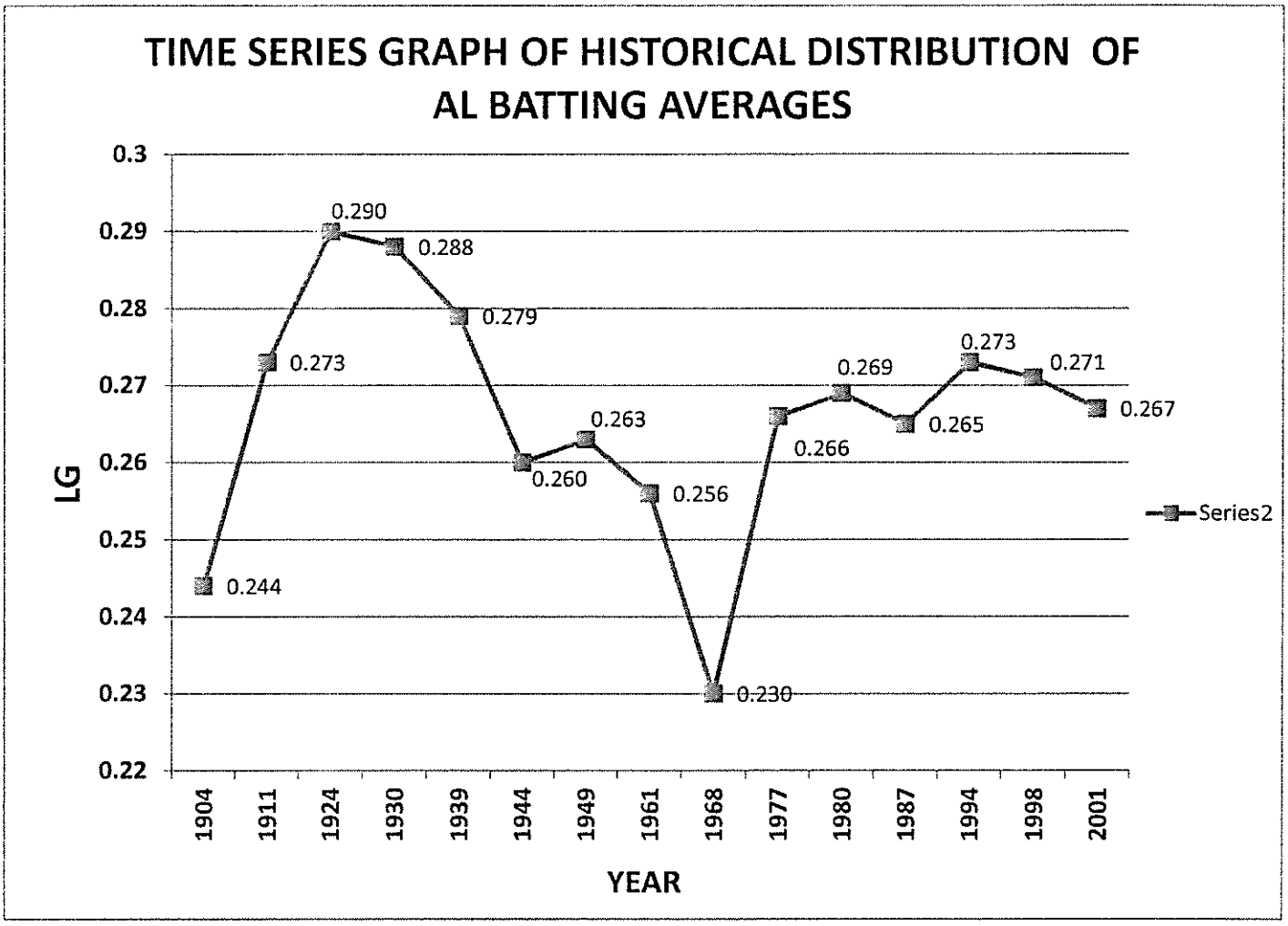


You can see from this chart how the league Batting Averages have fluctuated over the years, as we progressed from the Deadball to the liveball era, with different parks, and other changes to league conditions, such as expansion, the steroids era, and so forth.

CHART #2 AL BAT CHAMPS

YEAR	BAT CHAMP		LG AV	RATIO	%
1904	LAJOIE	.376	.244	1.54	54
1911	COBB	.420	.273	1.54	54
1924	RUTH	.378	.290	1.3	30

1930	SIMMONS	.381	.288	1.32	32
1939	DIMAGGIO	.381	.279	1.37	37
1944	BOUDREAU	.327	.260	1.26	26
1949	KELL	.343	.263	1.3	30
1961	CASH	.361	.256	1.41	41
1968	**YAZ**	**.301**	**.230**	**1.31**	**31**
1977	CAREW	.388	.266	1.46	46
1980	BRETT	.390	.269	1.45	45
1987	BOGGS	.363	.265	1.37	37
1994	O'NEILL	.359	.273	1.32	32
1998	WILLIAMS	.339	.271	1.25	25
2001	ICHIRO	.350	.267	1.31	31



Again, we see some definite variations in BA, and in % above the league average. We had a few batters make runs at .400,

and thus, their % above the league average were quite high!

CHART #3: BATTERS WITH HIGHEST % ABOVE LEAGUE AV BA.

PLAYER	YEAR	% ABOVE LG AV
COBB	1911	54
LAJOIE	1904	54
HORNSBY	1924	50
GWYNN	1994	48
CAREW	1977	46

BRETT 1980 45

Here, we see different eras represented, and will we ever see a .400 batter again?

CONCLUSIONS AND OTHER IMPLICATIONS :

1. While BA have settled in more closely over recent seasons, there is still some fluctuating. Over the last century plus, we saw some substantial variation in league BA.
2. Z scores could be used, by calculating the league mean and SD for batters who were regulars.

3. Histograms could be used to give visual representation of the data. Thus, we could further analyze the variation of BA within a season.

REFERENCES:

1. THE 2004 SPORTS ENCYCLOPEDIA BASEBALL, BY NEFT AND COHEN.
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