

# 1990년대 MLB (Major League Baseball)에서 득점과 실점을 이용한 승률에 관한 연구

실험설계와 분석  
22110663  
통계학과 유승현

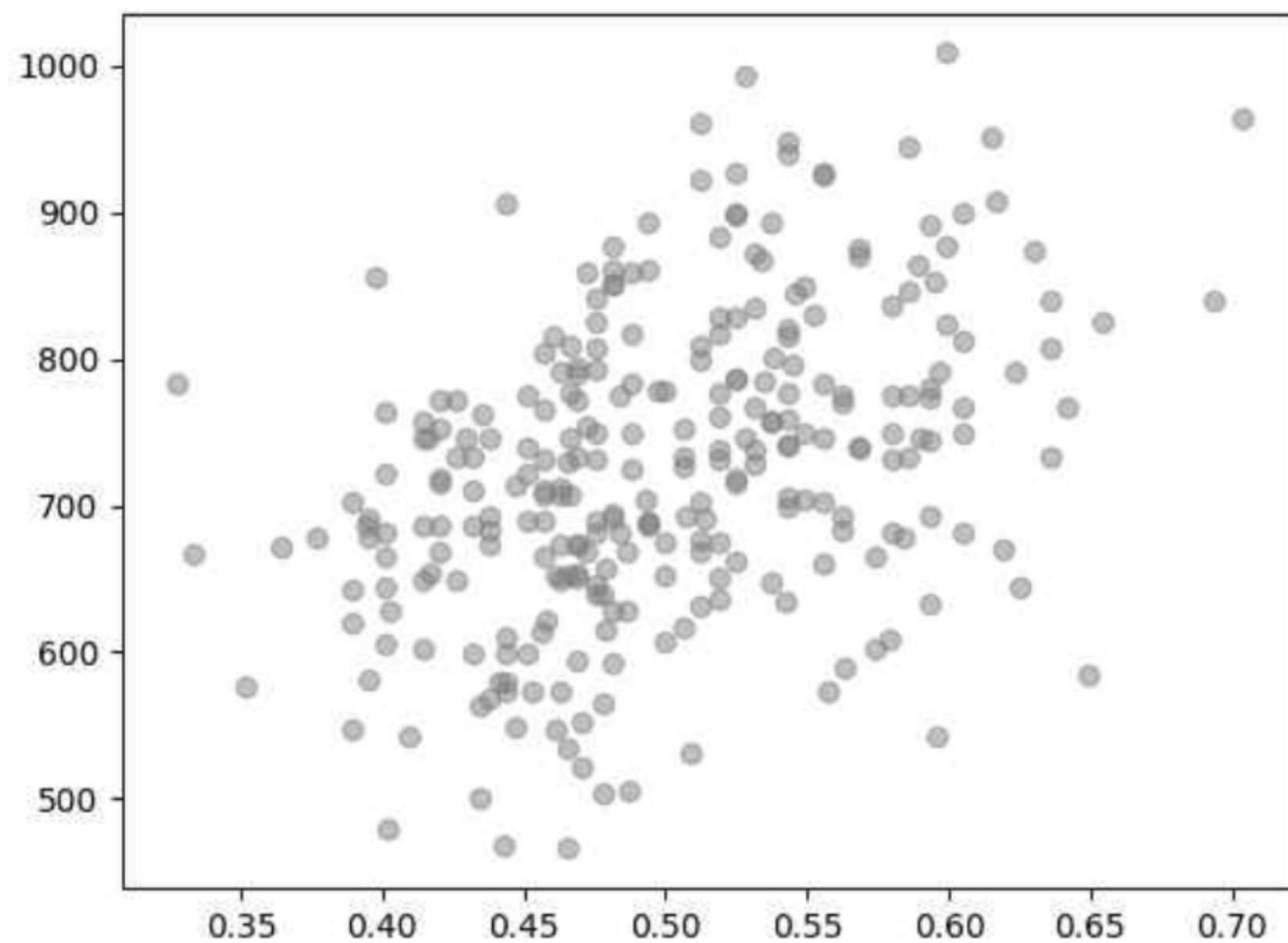
1. 상관분석

2. 회귀분석

3. 비교분석

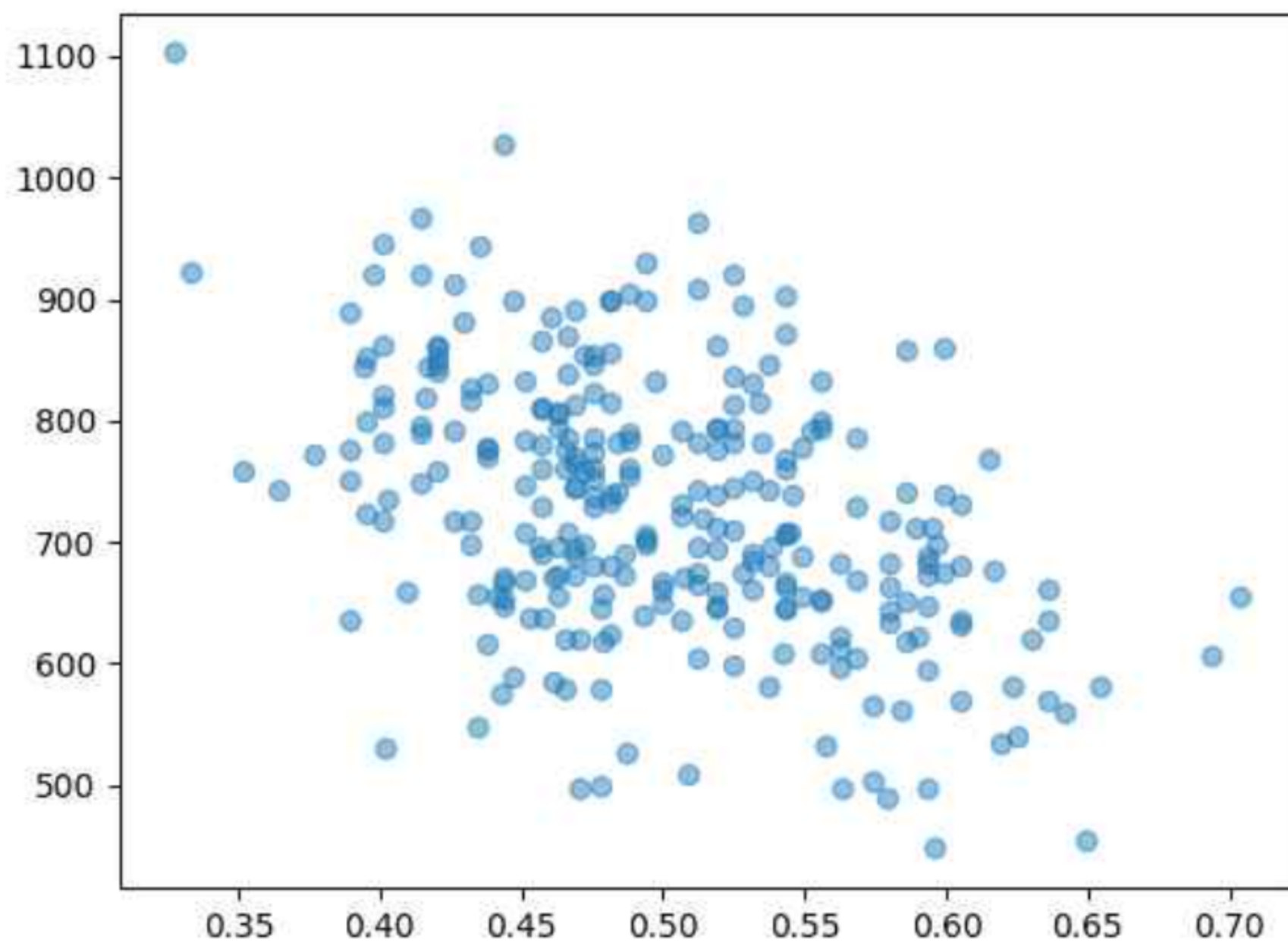
# I. 상관분석(I)

WA와 BRG의 상관관계



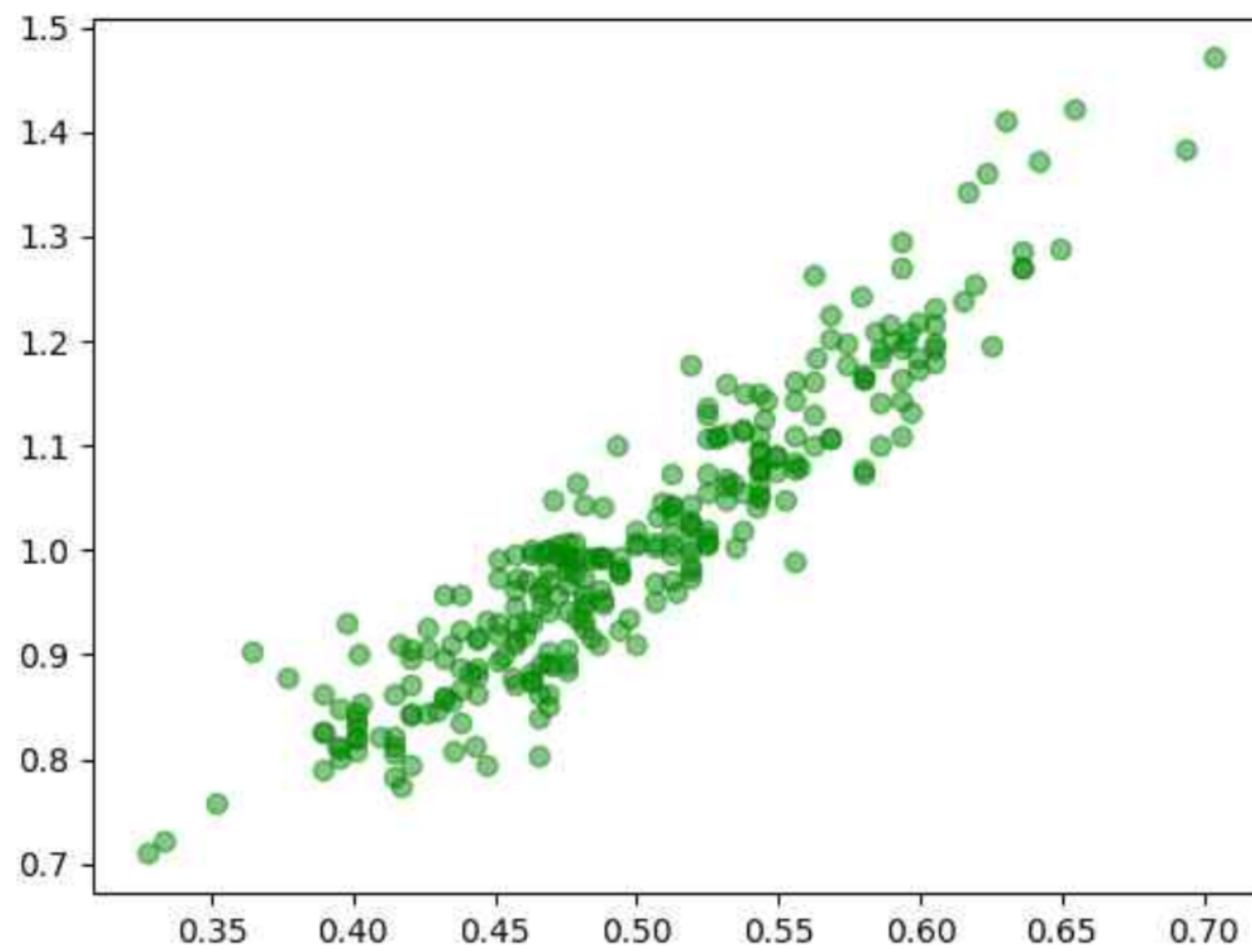
# 1. 상관분석(2)

WA와 PRG의 상관관계



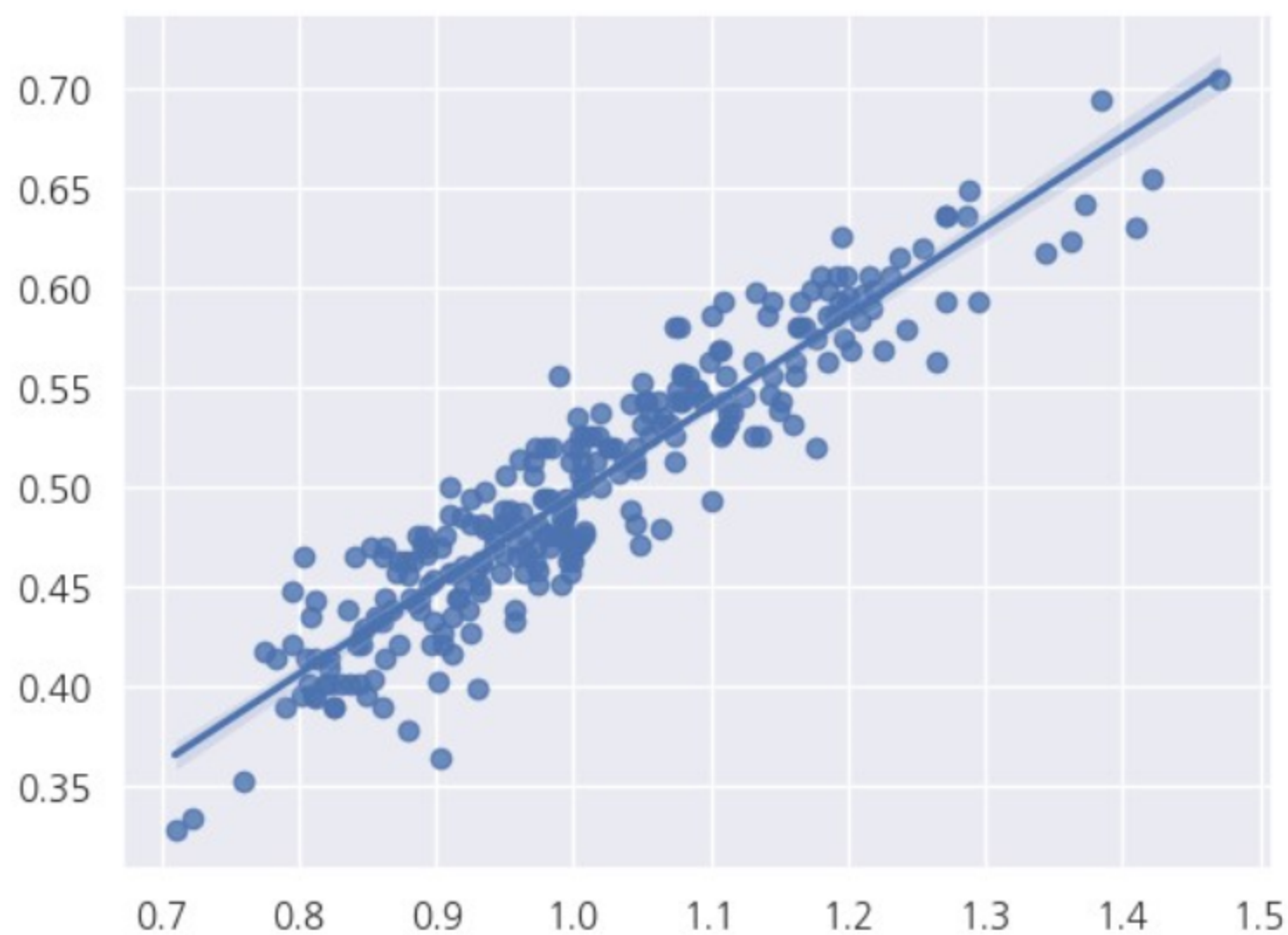
# 1. 상관분석(3)

WA와 BRG/PRG의 상관관계



## 2. 회귀분석

### WA와 BRG/PRG의 단순 선형 회귀 분석



OLS Regression Results

Dep. Variable:	y	R-squared:	0.868			
Model:	OLS	Adj. R-squared:	0.867			
Method:	Least Squares	F-statistic:	1814.			
Date:	Mon, 13 Nov 2023	Prob (F-statistic):	2.42e-123			
Time:	21:53:32	Log-Likelihood:	638.30			
No. Observations:	278	AIC:	-1273.			
Df Residuals:	276	BIC:	-1265.			
Df Model:	1					
Covariance Type:	nonrobust					
	coef	std err	t	P> t	[0.025	0.975]
const	0.0461	0.011	4.284	0.000	0.025	0.067
x1	0.4494	0.011	42.588	0.000	0.429	0.470
Omnibus:	3.292	Durbin-Watson:	2.175			
Prob(Omnibus):	0.193	Jarque-Bera (JB):	3.106			
Skew:	-0.257	Prob(JB):	0.212			
Kurtosis:	3.055	Cond. No.	14.6			

### 3. 비교분석

추정된 승률과 MSPR				
항목	추정된 승률 식에 따른 MSPR			
	피타고리안 (2)	피타고리안 (1.83)	Y1	Y2
MSPR	0.00043546 35	0.00041596 49	0.00040065 87	0.00047415 83