

Calculation of correlation coefficient between total deposit and loan & advance

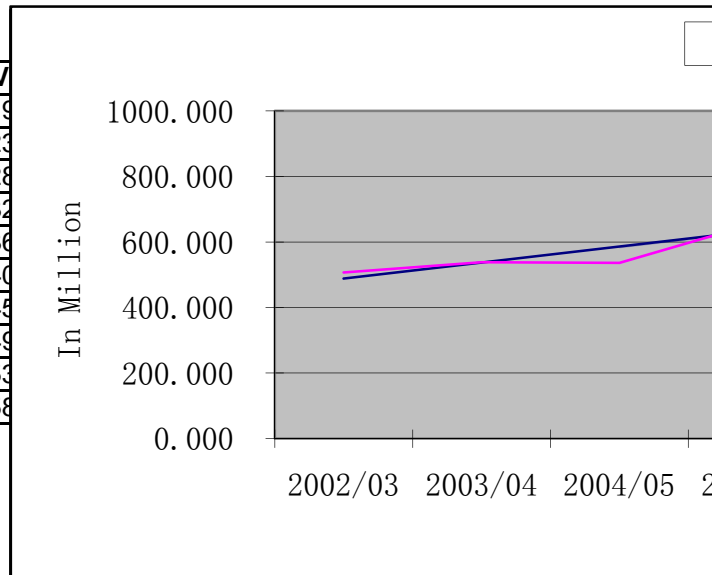
Fiscal Year	Time (t)	X=t- \bar{T}	Net Profit (Y)
2002/03	1.000	-2.000	506.932
2003/04	2.000	-1.000	537.800
2004/05	3.000	0.000	536.245
2005/06	4.000	1.000	658.756
2006/07	5.000	2.000	691.668
2007/08	6.000	3.000	
2008/09	7.000	4.000	
2009/10	8.000	5.000	
2010/11	9.000	6.000	
2011/12	10.000	7.000	
Total	15.000	0.000	2,931.401

$\bar{T} = \text{sum}t/n$

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sum X	15.000
sum y	2,931.401
Sum XY	490.428
Sum X2	10.000
sum (X)2	225.000

Fiscal Year	Trend Value
2002/03	488.19
2003/04	537.23
2004/05	586.28
2005/06	635.32
2006/07	684.36
2007/08	733.40
2008/09	782.45
2009/10	831.49
2010/11	880.53
2011/12	929.58



e.

Amount in million

(X) ²	XY	YC = a+bX
4.000	-1,013.864	488.195
1.000	-537.800	537.237
0.000	0.000	586.280
1.000	658.756	635.323
4.000	1,383.336	684.366
9.000	0.000	733.409
16.000	0.000	782.451
25.000	0.000	831.494
36.000	0.000	880.537
49.000	0.000	929.580
10.000	490.428	2,931.401

$yc = a+bX$(i)

By solving following equations we get the value of (a) and (b),

$\sum Y = Na + b\sum X$

$\sum XY = a\sum X + B\sum X^2$

$a = \frac{\sum y}{n}$

586.280
49.043

$b = \frac{\sum XY}{\sum x^2}$

