

Appendix - 1

(A). Liquidity Ratio:

(1) Cash and bank balance to total deposit ratio.

$$\text{Cash and Bank Balance to Total Ratio} = \frac{\text{Cash and Bank Balance}}{\text{Total Deposit}}$$

(Rs. In thousand)

Year	Cash and bank balance of LBL	Total deposit of LBL	Cash and bank balance of MBL	Total deposit of MBL	Ratio of LBL (in %)	Ratio of MBL (in %)
2006/07	16337	239779	24216	459920	6.81	5.27
2007/08	32066	245981	27856	505766	13.04	5.51
2008/09	34036	248324	23598	594204	13.71	3.97
2009/10	48398	305008	32120	731670	15.87	4.39
2010/11	54832	316730	50296	811421	17.31	6.20
Mean					13.35	5.07

Appendix - 2

(2) Cash and bank balance to current assets ratio

$$\text{Cash and Bank Balance to Current Assets ratio} = \frac{\text{Cash and Bank Balance}}{\text{Current Assets}}$$

(Rs. In thousand)

Year	Cash and bank balance of LBL	Current assets of LBL	Cash and bank balance of MBL	Current assets of MBL	Ratio of LBL (in %)	Ratio of MBL (in %)
2006/07	16337	38884	24216	46076	42.01	52.56
2007/08	32066	54186	27856	65078	59.18	42.80
2008/09	34036	40452	23598	82098	84.14	28.74
2009/10	48398	52357	32120	55876	92.44	57.48
2010/11	54832	66734	50296	53456	82.17	94.09
Mean					71.99	55.14

Appendix - 3

(3) Investment on Govt. securities to current assets ratio:

$$\text{Investment on Govt. Securities to Current Assets} = \frac{\text{Investment on Gov. Securities}}{\text{Current Assets}}$$

(Rs. In thousand)

Year	Invest. on Govt. securities of LBL	Current assets of LBL	Invest. on Govt. securities of MBL	Current assets of MBL	Ratio of LBL (in %)	Ratio of MBL (in %)
2006/07	1750	38884	28556	46076	4.50	61.98
2007/08	1750	54186	27500	65078	3.23	42.26
2008/09	0	40452	27500	82098	0	33.50
2009/10	0	52357	12500	55876	0	22.37
2010/11	0	66734	12500	53456	0	23.38
Mean					1.55	36.70

Appendix - 4

(B). Assets Management Ratio:

(1) Loan and Advance to total deposit:

$$\text{Loan and Advances to Total Deposits Ratio} = \frac{\text{Loan and Advances}}{\text{Total Deposit}}$$

(Rs. In thousand)

Year	Loan and advances of LBL	Total deposit of LBL	Loan and advances of MBL	Total deposit of MBL	Ratio of LBL (in %)	Ratio of MBL (in %)
2006/07	248104	239779	380104	459920	103.47	82.65
2007/08	236917	245981	446521	505766	96.32	88.29
2008/09	226720	248324	557109	594204	91.30	93.76
2009/10	229436	305008	675197	731670	75.22	92.28
2010/11	257846	316730	761720	811421	81.41	93.87
Mean					89.54	90.17

Appendix - 5

(2) Total investment to total deposit:

$$\text{Total Investments to Total Deposits Ratio} = \frac{\text{Total Investment}}{\text{Total Deposit}}$$

(Rs. In thousand)

Year	Total investment of LBL	Total deposit of LBL	Total investment of MBL	Total deposit of MBL	Ratio of LBL (in %)	Ratio of MBL (in %)
2006/07	20186	239779	88523	459920	8.42	19.25
2007/08	21226	245981	89486	505766	8.63	17.69
2008/09	31223	248324	83376	594204	12.57	14.03
2009/10	78049	305008	64363	731670	25.59	8.80
2010/11	60284	316730	64595	811421	19.03	7.96
Mean					14.85	13.55

Appendix - 6

(3) Loan and advance to total working fund:

$$\text{Loan and Advances to TWF Ratio} = \frac{\text{Total Loan and Advances}}{\text{Total Working Fund}}$$

(Rs. In thousand)

Year	Loan and advances of LBL	Total working fund of LBL	Loan and advances of MBL	Total working fund of MBL	Ratio of LBL (in %)	Ratio of MBL (in %)
2006/07	248104	325718	380104	558747	76.17	68.03
2007/08	236917	346138	446521	621397	68.45	71.86
2008/09	226720	309578	557109	710128	73.24	78.45
2009/10	229436	373885	675197	839301	61.36	80.45
2010/11	257846	390663	761720	941514	66.00	80.90
Mean					69.04	75.94

Appendix - 7

(4) Investment to govt. securities to total working fund:

$$\text{Investment on Govt. Securities to Total Working Fund} = \frac{\text{Total Investment on Govt. Securities}}{\text{Total Working Fund}}$$

(Rs. In thousand)

Year	Investment to govt. securities of LBL	total working fund of LBL	Investment to govt. securities of MBL	total working fund of MBL	Ratio of LBL (in %)	Ratio of MBL (in %)
2006/07	1750	325718	28556	558747	0.54	5.11
2007/08	1750	346138	27500	621397	0.51	4.43
2008/09	0	309578	27500	710128	0	3.87
2009/10	0	373885	12500	839301	0	1.49
2010/11	0	390663	12500	941514	0	1.33
Mean					0.21	3.25

Appendix - 8

(5) Investment on share and debenture to total working fund:

$$\text{Inv. on Shares and Debenture to TWF Ratio} = \frac{\text{Inv. on Shares and Debentures}}{\text{Total Working Fund}}$$

(Rs. In thousand)

Year	Inv. on share and debenture of LBL	Total working fund of LBL	Inv. on share and debenture of MBL	Total working fund of MBL	Ratio of LBL (in %)	Ratio of MBL (in %)
2006/07	4936	325718	3590	558747	1.52	0.64
2007/08	4936	346138	2208	621397	1.43	0.36
2008/09	1723	309578	1025	710128	0.56	0.14
2009/10	1549	373885	1067	839301	0.41	0.13
2010/11	1549	390663	3787	941514	0.40	0.40
Mean					0.86	0.33

Appendix - 9

(C). Profitability Ratio:

1) Return on loan and advance:

$$\text{Return on Loan and Advances Ratio} = \frac{\text{Net Profit / Loss}}{\text{Loan and Advances}}$$

(Rs. In thousand)

Year	Net profit of LBL	Loan and advances of LBL	Net profit of MBL	Loan and advances of MBL	Ratio of LBL (in %)	Ratio of MBL (in %)
2006/07	6770	248104	7348	380104	2.73	1.93
2007/08	831	236917	5621	446521	0.35	1.26
2008/09	5391	226720	11981	557109	2.38	2.15
2009/10	8664	229436	8637	675197	3.78	1.28
2010/11	6613	257846	22211	761720	2.56	2.92
Mean					2.36	1.91

Appendix - 10

(2) Return on total working fund ratio:

$$\text{Return on Total Working Funds Ratio} = \frac{\text{Net Profit / Loss}}{\text{Total Working Fund}}$$

(Rs. In thousand)

Year	Net profit of LBL	Total working fund of LBL	Net profit of MBL	Total working fund of MBL	Ratio of LBL (in %)	Ratio of MBL (in %)
2006/07	6770	325718	7348	558747	2.08	1.32
2007/08	831	346138	5621	621397	0.24	0.90
2008/09	5391	309578	11981	710128	1.74	1.69
2009/10	8664	373885	8637	839301	2.32	1.03
2010/11	6613	390663	22211	941514	1.69	2.36
Mean					1.61	1.46

Appendix - 11

3) Total interest income to total working fund ratio:

$$\text{Total Interest Earned to Total Working Funds Ratio} = \frac{\text{Total Interest Earned}}{\text{Total Working Fund}}$$

(Rs. In thousand)

Year	Interest income of LBL	Total working fund of LBL	Interest income of MBL	Total working fund of MBL	Ratio of LBL (in %)	Ratio of MBL (in %)
2006/07	40315	325718	66958	558747	12.38	11.98
2007/08	38548	346138	62380	621397	11.14	10.04
2008/09	40257	309578	68593	710128	13.00	9.66
2009/10	41267	373885	87380	839301	11.04	10.41
2010/11	47459	390663	96376	941514	12.15	10.24
Mean					11.94	10.46

Appendix - 12

(4) Total interest paid to Total working fund ratio:

$$\text{Total Interest Paid to Total Working Funds Ratio} = \frac{\text{Total Interest Paid}}{\text{Total Working Fund}}$$

(Rs. In thousand)

Year	Interest paid of LBL	Total working fund of LBL	Interest paid of MBL	Total working fund of MBL	Ratio of LBL (in %)	Ratio of MBL (in %)
2006/07	23142	325718	40873	558747	7.10	7.32
2007/08	22448	346138	38568	621397	6.49	6.21
2008/09	20840	309578	40772	710128	6.73	5.74
2009/10	22533	373885	46978	839301	6.03	5.60
2010/11	26619	390663	55049	941514	6.81	5.85
Mean					6.63	6.14

Appendix - 13

Credit Risk Ratio:

$$\text{Credit Risk Ratio} = \frac{\text{Total Investment} + \text{Total loan and Advances}}{\text{Total Assets}}$$

(Rs. In thousand)

Year	Total investment of LBL	Loan and advance of LBL	Total assets of LBL	Total investment of MBL	Loan and advance of MBL	Total assets of MBL	Ratio of LBL (in %)	Ratio of MBL (in %)
2006/07	20186	248104	325718	88523	380104	558747	82.37	83.87
2007/08	21226	236917	346138	89486	446521	621397	74.58	86.26
2008/09	31223	226720	309578	83376	557109	710128	83.32	90.19
2009/10	78049	229436	373885	64363	675197	839301	82.24	88.12
2010/11	60284	257846	390663	64595	761720	941514	81.43	87.76
Mean							80.79	87.24

Appendix - 14

(D). Growth Ratio

1) Growth Ratio of Total Deposit

$$\text{Growth Ratio} = \frac{\text{Ending Value} - \text{Beginning Values}}{\text{Beginning Value}} \times 100$$

(Rs. In thousand)

Year	Total Deposit of LBL	Total deposit of MBL	Growth Ratio of LBL (in %)	Growth Ratio of MBL (in %)
2059/60	234732	455006	-	-
2006/07	239779	459920	2.15	1.08
2007/08	245981	505766	2.59	9.97
2008/09	248324	594204	0.95	17.49
2009/10	305008	731670	22.83	23.13
2010/11	316730	811421	3.84	10.90
Mean			6.47	12.51

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2) Growth Ratio of Loan and Advances

$$\text{Growth Ratio} = \frac{\text{Ending Value} - \text{Beginning Values}}{\text{Beginning Value}} \times 100$$

(Rs. In thousand)

Year	Loan and Advances of LBL	Loan and Advances of MBL	Growth Ratio of LBL (in %)	Growth Ratio of MBL (in %)
2059/60	236695	358521	-	-
2006/07	248104	380104	4.82	6.02
2007/08	236917	446521	-4.51	17.47
2008/09	226720	557109	-4.30	24.77
2009/10	229436	675197	1.20	21.20
2010/11	257846	761720	12.38	12.81
Mean			1.92	14.04

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3) Growth Ratio of Total Investment

$$\text{Growth Ratio} = \frac{\text{Ending Value} - \text{Beginning Values}}{\text{Beginning Value}} \times 100$$

(Rs. In thousand)

Year	Total Investment of LBL	Total Investment of MBL	Growth Ratio of LBL (in %)	Growth Ratio of MBL (in %)
2059/60	27212	17487	-	-
2006/07	20186	21226	-25.82	21.38
2007/08	31223	78049	5.15	1.09
2008/09	60284	88523	47.10	-6.83
2009/10	89486	83376	149.97	-22.80
2010/11	64363	64595	-22.76	0.36
Mean			30.73	-1.36

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4) Growth Ratio of Net Profit

$$\text{Growth Ratio} = \frac{\text{Ending Value} - \text{Beginning Values}}{\text{Beginning Value}} \times 100$$

(Rs. In thousand)

Year	Net Profit of LBL	Net Profit of MBL	Growth Ratio of LBL (in %)	Growth Ratio of MBL (in %)
2059/60	7411	10130	-	-
2006/07	6770	7348	-8.65	-27.46
2007/08	831	5621	-87.72	-23.50
2008/09	5391	11981	548.74	113.15
2009/10	8664	8637	60.71	-27.91
2010/11	6613	22211	-23.67	157.16
Mean			97.88	38.29

Appendix - 18

(E). Trend Analysis

1) Trend Analysis of Loan and Advances to Total Deposit Ratio.

Calculation of LBL

Year	loan and advance to total deposit(Y)	X=x-2008/09	X ²	XY
2006/07	103.47	-2	4	-206.9
2007/08	96.32	-1	1	-96.32
2008/09	91.3	0	0	0
2009/10	75.22	1	1	75.22
2010/11	81.41	2	4	162.82
N=5	Y = 447.72	X = 0	X ² =10	XY - 65.22

(Source: Annul report of LBL)

Let trend line be

$$Y = a + b x \dots\dots\dots (I)$$

Where x = X - Middle year

Here,

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

$$b = \frac{\sum xy}{N}$$

$$= \frac{447.72}{5} = 89.54$$

$$= \frac{-65.22}{10} = -6.522$$

Substituting these values of a and b in eq (I) we get the required trend line

$$Y_c = 89.54 - 6.522x$$

Calculation of MBL

Year	Loan and Advance to Total Deposit(Y)	X=x- 2008/09	X ²	XY
2006/07	82.65	-2	4	-165.3
2007/08	88.29	-1	1	-88.29
2008/09	93.76	0	0	0
2009/10	92.28	1	1	92.28
2010/11	93.87	2	4	187.74
N = 5	Y = 450.85	X = 0	X² = 10	XY = 26.43

(Source: Annul report of MBL)

Let trend line be

$$Y = a + b x \dots\dots\dots (I)$$

Where $x = X - \text{Middle year}$

Here,

$$\begin{aligned}
 a &= \frac{y}{N} \\
 &= \frac{450.85}{5} \\
 &= 90.177
 \end{aligned}$$

$$\begin{aligned}
 b &= \frac{xy}{N} \\
 &= \frac{26.43}{10} \\
 &= 2.643
 \end{aligned}$$

Substituting these values of a and b in eqⁿ (I) we get the required trend line

$$Y_c = 90.177 + 2.643x$$

2) Trend Analysis of Total Investment to Total Deposit Ratio.

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Calculation of LBL

Year	total investment to total deposit(Y)	X=x-2008/09	X ²	XY
2006/07	8.42	-2	4	-16.84
2007/08	8.63	-1	1	-8.63
2008/09	12.57	0	0	0
2009/10	25.59	1	1	25.59
2010/11	19.03	2	4	38.06
N = 5	74.24	0	10	38.18

Let trend line be

$$Y = a + b x \dots\dots\dots (I)$$

Where x = X - Middle year

Here,

$$a = \frac{y}{N}$$

$$b = \frac{xy}{N}$$

$$= \frac{74.24}{5} = 14.848$$

$$= \frac{38.18}{10} = 3.818$$

Substituting these values of a and b in eq. (I) we get the required trend line

$$Y_c = 14.848 + 3.818x$$

$$Y_c = 2.36 + 0.309X$$

Calculation of MBL

Year	Total Investment to Total Deposit(Y)	X=x- 2008/09	X ²	XY
2006/07	19.25	-2	4	-38.5
2007/08	17.69	-1	1	-17.69
2008/09	14.03	0	0	0
2009/10	8.8	1	1	8.8
2010/11	7.96	2	4	15.92
N = 5	67.73	0	10	-31.47

Let trend line be

$$Y = a + b x \dots\dots\dots (I)$$

Where $x = X - \text{Middle year}$

Here,

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

$$= \frac{67.73}{5}$$

$$= 13.546$$

$$b = \frac{\sum xy}{N}$$

$$= \frac{-31.47}{10}$$

$$= -3.147$$

$$Y_c = 13.54 - 3.147 X$$

Appendix - 20

3) Trend Analysis of Return on loan and advance Ratio.

Calculation of LBL

Year	Return on loan and advance ratio	X=x- 2008/09	X ²	XY
2006/07	2.73	-2	4	-5.46
2007/08	0.35	-1	1	-0.35
2008/09	2.38	0	0	0
2009/10	3.78	1	1	3.78
2010/11	2.56	2	4	5.12
N = 5	11.8	0	10	3.09

(Source: Annul report of LBL)

Let trend line be

$$Y = a + b x \dots\dots\dots (I)$$

Where $x = X - \text{Middle year}$

Here,

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

$$= \frac{11.5}{5}$$

$$= 2.36$$

$$b = \frac{\sum xy}{N}$$

$$= \frac{3.09}{10}$$

$$= 0.309$$

Substituting these values of a and b in eq. (I) we get the required trend line

$$Y_c = 2.36 + 0.309x$$

Calculation of MBL

Year	Return on Loan and Advance Ratio	X=x- 2008/09	X ²	XY
2006/07	1.93	-2	4	-3.86
2007/08	1.26	-1	1	-1.26
2008/09	2.15	0	0	0
2009/10	1.28	1	1	1.28
2010/11	2.92	2	4	5.84
N = 5	9.54	0	10	2

Source: Annul report of MBL

Let trend line be

$$Y = a + b x \dots\dots\dots (I)$$

Where x = X - Middle year

Here,

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

$$b = \frac{\sum xy}{N \sum x^2}$$

$$= \frac{9.54}{5}$$

$$= \frac{2}{10}$$

$$= 1.908$$

$$= 0.2$$

Substituting these values of a and b in eq. (I) we get the required trend line

$$Y_c = 1.908 + 0.2 X$$

Appendix - 21

(i) Calculation of Correlation Coefficient Between Total Deposit and Total Investment of LBL.

FY	Total Deposit (X)	Total Investment (Y)	XY	X ²	Y ²
2006/07	239.779	20.186	4840.179	57493.969	407.475
2007/08	245.981	21.226	5221.193	60506.652	450.543
2008/09	248.324	31.223	7753.420	61664.809	974.876
2009/10	305.008	78.049	23805.569	93029.880	6091.646
2010/11	316.730	60.284	19093.751	100317.893	3634.161
Total	1355.822	210.968	60714.113	373013.203	11558.701

N = 5

$$X = 1355.822, \quad Y = 210.968, \quad XY = 60714.113, \quad X^2 = 373013.203, \\ Y^2 = 11558.701$$

Where,

N = No. of observation of X and Y

X = Sum of the observations in series X

Y = Sum of the observations in series Y

XY = Sum of the square of observations in series X

X² = Sum of the square of observations in series Y

Y² = Sum of the product of the observations in series X and Y

$$r = \frac{N \sum XY - \sum X \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \times \sqrt{N \sum Y^2 - (\sum Y)^2}}$$

$$\text{or, } r = \frac{5 \times 60714.113 - 1355.822 \times 210.968}{\sqrt{5 \times 373013.203 - (1355.822)^2} \times \sqrt{5 \times 11558.701 - (210.968)^2}}$$

$$\text{or, } r = \frac{303570.565 - 286035.056}{\sqrt{1865066.015 - 1838253.296} \times \sqrt{57793.505 - 44507.497}}$$

$$\text{or, } r = \frac{17535.510}{163.746 \times 115.265}$$

or,

or, $r = 0.929$

and,

$$r^2 = (0.929)^2$$

or, $r^2 = 0.863$

and,

$$\text{P.E.} = 0.6745 \times \frac{1-r^2}{N}$$

or, $\text{P.E.} = 0.6745 \times \frac{1-(0.929)^2}{5}$

or, $\text{P.E.} = 0.0413$

(ii) Calculation of Correlation Coefficient Between Total Deposit and Total Investment of MBL.

FY	Total Deposit (X)	Total Investment (Y)	XY	X ²	Y ²
2006/07	459.920	88.523	40713.498	211526.406	7836.321
2007/08	505.766	89.486	45258.976	255799.247	8007.744
2008/09	594.204	83.376	49542.353	353078.394	6951.557
2009/10	731.670	64.363	47092.476	535340.989	4142.596
2010/11	811.421	64.595	52413.739	658404.039	4172.514
Total	3102.981	390.343	235021.042	2014149.615	31110.712

$N = 5$

$$X = 3102.981, \quad Y = 390.343, \quad XY = 235021.042, \quad X^2 = 2014149.615, \\ Y^2 = 31110.712$$

$$r = \frac{N \sum XY - \sum X \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \times \sqrt{N \sum Y^2 - (\sum Y)^2}}$$

or, $r = \frac{5 \times 235021.042 - 3102.981 \times 390.343}{\sqrt{5 \times 2014149.615 - (3102.981)^2} \times \sqrt{5 \times 31110.712 - (390.343)^2}}$

or, $r = \frac{1175105.21 - 1211226.912}{\sqrt{10070748.08 - 9628491.086} \times \sqrt{155553.56 - 152367.657}}$

$$\text{or, } r = \frac{-36121.702}{665.024 \times 56.444}$$

$$\text{or, } r = -0.962$$

and,

$$r^2 = (-0.962)^2$$

$$\text{or, } r^2 = 0.925$$

and,

$$\text{P.E.} = 0.6745 \times \frac{1-r^2}{N}$$

$$\text{or, } \text{P.E.} = 0.6745 \times \frac{1-(-0.962)^2}{5}$$

$$\text{or, } \text{P.E.} = 0.023$$

Appendix - 22

(i) Calculation of Correlation Coefficient Between Total Deposit and Loan & Advances of LBL.

FY	Total Deposit (X)	Loan and advances of (Y)	XY	X ²	Y ²
2006/07	239.779	248.104	59490.129	57493.969	61555.595
2007/08	245.981	236.917	58277.081	60506.652	56129.665
2008/09	248.324	226.720	56300.017	61664.809	51401.958
2009/10	305.008	229.436	69979.815	93029.880	52640.878
2010/11	316.730	257.846	81667.564	100317.893	66484.560
Total	1355.822	1199.023	325714.606	373013.203	288212.559

$$N = 5$$

$$X = 1355.822, \quad Y = 1199.023, \quad XY = 325714.606, \quad X^2 = 373013.203, \\ Y^2 = 288212.559$$

$$r = \frac{N \sum XY - \sum X \sum Y}{\sqrt{N \sum X^2 - (\sum X)^2} \times \sqrt{N \sum Y^2 - (\sum Y)^2}}$$

$$\text{or, } r = \frac{5 \times 325714.606 - 1355.822 \times 1199.023}{\sqrt{5 \times 373013.203 - (1355.822)^2} \times \sqrt{5 \times 288212.559 - (1199.023)^2}}$$

$$\text{or, } r = \frac{1628573.03 - 1625661.762}{\sqrt{1865066.015 - 1838253.296} \times \sqrt{1441062.795 - 1437656.155}}$$

$$\text{or, } r = \frac{2911.268}{163.746 \times 58.366}$$

or,

$$\text{or, } r = 0.305$$

and,

$$r^2 = (0.305)^2$$

$$\text{or, } r^2 = 0.093$$

and,

$$\text{P.E.} = 0.6745 \times \frac{1-r^2}{N}$$

$$\text{or, } \text{P.E.} = 0.6745 \times \frac{1-(0.305)^2}{5}$$

$$\text{or, } \text{P.E.} = 0.274$$

(ii) Calculation of Correlation Coefficient Between Total Deposit and Total Loan & Advances of MBL.

FY	Total Deposit (X)	Loan and advances of (Y)	XY	X ²	Y ²
2006/07	459.920	380.104	174817.432	211526.406	144479.051
2007/08	505.766	446.521	225835.140	255799.247	199381.003
2008/09	594.204	557.109	331036.396	353078.394	310370.438
2009/10	731.670	675.197	494021.389	535340.989	455890.989
2010/11	811.421	761.720	618075.604	658404.039	580217.358
Total	3102.981	2820.651	1843785.961	2014149.615	1690338.839

N = 5

$$X = 3102.981, \quad Y = 2820.651, \quad XY = 1843785.961, \quad X^2 = 2014149.615,$$

$$Y^2 = 1690338.839$$

$$r = \frac{N\Sigma XY - \Sigma X\Sigma Y}{\sqrt{N\Sigma X^2 - (\Sigma X)^2} \times \sqrt{N\Sigma Y^2 - (\Sigma Y)^2}}$$

or,
$$r = \frac{5 \times 1843785.961 - 3102.981 \times 2820.651}{\sqrt{5 \times 2014149.615 - (3102.981)^2} \times \sqrt{5 \times 1690338.839 - (2820.651)^2}}$$

or,
$$r = \frac{9218929.805 - 8752426.461}{\sqrt{10070748.08 - 9628491.086} \times \sqrt{8451694.195 - 7956072.064}}$$

or,
$$r = \frac{466503.344}{665.024 \times 704.004}$$

or,
$$r = -0.996$$

and,

$$r^2 = (0.996)^2$$

or,
$$r^2 = 0.992$$

and,

$$\text{P.E.} = 0.6745 \times \frac{1-r^2}{N}$$

or,
$$\text{P.E.} = 0.6745 \times \frac{1-(0.996)^2}{5}$$

or,
$$\text{P.E.} = 0.0024$$