# **CAPITAL INVESTMENT IN GEMS AND JEWELLERY INDUSTRY**

**CAPITAL INVESTMENT**

Capital is the financial value of the assets, such as cash. Investment is the item which was purchased with the hope.

Capital Investment is defined on the funds invested in an enterprise or a firm for the purpose of increasing its business objectives. Capital Investment may also be defined as a firm's acquisition of fixed assets or capital assets such as machinery and manufacturing plants that is expected to be productive over coming years. There are many sources of Capital Investment including banks, equity investors, financial institutions, and angel investors and venture capital.

**TYPES OF INVESTMENT**

1. Autonomous investment
2. Induced Investment

**AUTONOMOUS INVESTMENT**

The level of income does not affect the autonomous investment.

**INDUCED INVESTMENT**

It is that investment, which is a function of income levels, and there is a positive relationship between two. It is said that high incomes create demand for goods and services. It depends on the level of income.

In national income determination, we mostly consider autonomous investment only. Because, national Income determination is a short run analysis and in the short run, induced investment has a very little role to play. So, we take autonomous investment only.

Changes to property, plant and equipment (PPE), a large line item on the balance sheet, fall under the Cash Flow from Investing Activities mentioned under Cash Flow Statement in Annual Report.

**OBJECTIVES**

* To see if capital invested in Gems and Jewellery Industries in India have affected their growth or not.
* To see if capital investment is a function of productivity or not.

**DATA ANALYSIS**

1. **CUMULATIVE FOREIGN DIRECT INVESTMENTS INFLOW ON GEMS AND JEWELLERY SECTOR FROM [2008-2017]**

|  |  |
| --- | --- |
| **FINANCIAL YEAR** | **CUMULATIVE FDI INFLOW (US $ MILLION)** |
| 2008 | 167.54 |
| 2009 | 251.04 |
| 2010 | 282 |
| 2011 | 301.9 |
| 2012 | 338.15 |
| 2013 | 390.76 |
| 2014 | 433.32 |
| 2015 | 696.48 |
| 2016 | 772.05 |
| 2017 | 895.96 |
| 2018 | 1111.52 |

**GRAPH FOR THE ABOVE TABLE**

As we can see that the investments on Gems and Jewellery Sector has been increasing gradually as there are most positive incomes in the outputs of this sector. Indian government was also taking many initiatives like Make in India etc.

1. **INVESTMENT AND INCOMES BY DIFFERENT GEMS AND JEWELLERY COMPANIES**
2. ANALYSIS OF MALABAR GOLD AND DIAMONDS

|  |  |  |
| --- | --- | --- |
| **FINANCIAL YEAR** | **CASH FLOW FROM INVESTING ACTIVITIES** | **TOTAL INCOME** |
| 2007 - 2008 | 0 | 2500000 |
| 2008 - 2009 | 0 | 605000 |
| 2009 - 2010 | 32780 | 598000 |
| 2010 - 2011 | 9396689 | 1259048 |
| 2011 - 2012 | 48253922 | 4023746 |
| 2012 - 2013 | 3616274 | 3399228 |
| 2013 - 2014 | 46854610 | 1974811 |
| 2014 - 2015 | 7056400 | 7827064 |
| 2015 - 2016 | 53471 | 3500000 |
| 2016 - 2017 | 0 | 45000000 |

CORRELATION

|  |  |  |
| --- | --- | --- |
|  | **CASH FLOW FROM INVESTING ACTIVITIES** | **TOTAL INCOME** |
| **CASH FLOW FROM INVESTING ACTIVITIES** | 1 |  |
| **TOTAL INCOME** | -0.19151041 | 1 |

Value of Correlation: -0.19151041

REGRESSION

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| *Regression Statistics* | |  |  |  |  |  |  |  |
| Multiple R | 0.19151 |  |  |  |  |  |  |  |
| R Square | 0.036676 |  |  |  |  |  |  |  |
| Adjusted R Square | -0.08374 |  |  |  |  |  |  |  |
| Standard Error | 14048749 |  |  |  |  |  |  |  |
| Observations | 10 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| ANOVA |  |  |  |  |  |  |  |  |
|  | *df* | *SS* | *MS* | *F* | *Significance F* |  |  |  |
| Regression | 1 | 6.01E+13 | 6.01E+13 | 0.304581 | 0.596101 |  |  |  |
| Residual | 8 | 1.58E+15 | 1.97E+14 |  |  |  |  |  |
| Total | 9 | 1.64E+15 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| Intercept | 8613571 | 5250964 | 1.640379 | 0.139556 | -3495172 | 20722315 | -3495172 | 20722315 |
| X Variable 1 | -0.13403 | 0.242856 | -0.55189 | 0.596101 | -0.69406 | 0.425998 | -0.69406 | 0.425998 |

Value of R2 IS 0.036676

CONCLUSION

The total income of Malabar Gold and Diamonds is not affected by the cash flow from investing activities as the company is not investing much but then also their total income is increasing due to increase in their sales.

1. ANALYSIS OF RAJESH EXPORTS LIMITED

|  |  |  |
| --- | --- | --- |
| **FINANCIAL YEAR** | **CASH FLOW FROM INVESTING ACTIVITIES** | **TOTAL INCOME** |
| 2007 - 2008 | 1345816449 | 86670905116 |
| 2008 - 2009 | 2585568513 | 1.23611E+11 |
| 2009 - 2010 | 4136634077 | 1.85294E+11 |
| 2010 - 2011 | 11110395 | 2.08644E+11 |
| 2011 - 2012 | 16021211 | 2.58503E+11 |
| 2012 - 2013 | 5489392 | 3.12286E+11 |
| 2013 - 2014 | 1163331360 | 2.35382E+11 |
| 2014 - 2015 | 511741048 | 3.79236E+11 |
| 2015 - 2016 | 4691229241 | 3.86227E+11 |
| 2016 - 2017 | 966055999 | 4.49914E+11 |

CORRELATION

|  |  |  |
| --- | --- | --- |
|  | **CASH FLOW FROM INVESTING ACTIVITIES** | **TOTAL INCOME** |
| **CASH FLOW FROM INVESTING ACTIVITIES** | 1 |  |
| **TOTAL INCOME** | -0.069611339 | 1 |

Value of Correlation: -0.069611339

REGRESSION

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| *Regression Statistics* | |  |  |  |  |  |  |  |
| Multiple R | 0.069611 |  |  |  |  |  |  |  |
| R Square | 0.004846 |  |  |  |  |  |  |  |
| Adjusted R Square | -0.11955 |  |  |  |  |  |  |  |
| Standard Error | 1.25E+11 |  |  |  |  |  |  |  |
| Observations | 10 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| ANOVA |  |  |  |  |  |  |  |  |
|  | *df* | *SS* | *MS* | *F* | *Significance F* |  |  |  |
| Regression | 1 | 6.12E+20 | 6.12E+20 | 0.038955 | 0.848461 |  |  |  |
| Residual | 8 | 1.26E+23 | 1.57E+22 |  |  |  |  |  |
| Total | 9 | 1.26E+23 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| Intercept | 2.7E+11 | 5.47E+10 | 4.935795 | 0.001141 | 1.44E+11 | 3.96E+11 | 1.44E+11 | 3.96E+11 |
| X Variable 1 | -4.82075 | 24.42501 | -0.19737 | 0.848461 | -61.1449 | 51.50342 | -61.1449 | 51.50342 |

Value of R2 IS 0.004846

CONCLUSION

Rajesh Exports Limited has a total income which is much larger than the cash flow from investing activities as they are increasing their sales by selling products in wholesale and also producing higher quality products and thus, increasing customer loyalty. So, the cash flow from investing activities has a little effect on total income.

1. ANALYSIS OF PC JEWELLERS

|  |  |  |
| --- | --- | --- |
| **FINANCIAL YEAR** | **CASH FLOW FROM INVESTING ACTIVITIES** | **TOTAL INCOME** |
| 2007 - 2008 | 33500000 | 3213400000 |
| 2008 - 2009 | 66900000 | 6299760000 |
| 2009 - 2010 | 153400000 | 10030060000 |
| 2010 - 2011 | 87090000 | 19938460000 |
| 2011 - 2012 | 382915150 | 36732170289 |
| 2012 - 2013 | 5830198350 | 46130695174 |
| 2013 - 2014 | 2461860183 | 53947327607 |
| 2014 - 2015 | 2229107000 | 64077054000 |
| 2015 - 2016 | 863600000 | 73086300000 |
| 2016 - 2017 | 6445900000 | 84795500000 |

CORRELATION

|  |  |  |
| --- | --- | --- |
|  | **CASH FLOW FROM INVESTING ACTIVITIES** | **TOTAL INCOME** |
| **CASH FLOW FROM INVESTING ACTIVITIES** | 1 |  |
| **TOTAL INCOME** | 0.677126667 | 1 |

Value of Correlation: 0.677126667

REGRESSION

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| *Regression Statistics* | |  |  |  |  |  |  |  |
| Multiple R | 0.677127 |  |  |  |  |  |  |  |
| R Square | 0.458501 |  |  |  |  |  |  |  |
| Adjusted R Square | 0.390813 |  |  |  |  |  |  |  |
| Standard Error | 2.28E+10 |  |  |  |  |  |  |  |
| Observations | 10 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| ANOVA |  |  |  |  |  |  |  |  |
|  | *df* | *SS* | *MS* | *F* | *Significance F* |  |  |  |
| Regression | 1 | 3.54E+21 | 3.54E+21 | 6.773791 | 0.031488 |  |  |  |
| Residual | 8 | 4.18E+21 | 5.22E+20 |  |  |  |  |  |
| Total | 9 | 7.71E+21 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| Intercept | 2.47E+10 | 9.28E+09 | 2.66006 | 0.028803 | 3.28E+09 | 4.61E+10 | 3.28E+09 | 4.61E+10 |
| X Variable 1 | 8.163001 | 3.136418 | 2.602651 | 0.031488 | 0.930408 | 15.39559 | 0.930408 | 15.39559 |

Value of R2 IS 0.458501

CONCLUSION

The total income of PC Jewellers is affected to some extent by cash flow from investing activities as PC Jewellers spends more on other factors that increase their total income as compared to amount spent on investing activities.

1. ANALYSIS OF GITANJALI GEMS

|  |  |  |
| --- | --- | --- |
| **FINANCIAL YEAR** | **CASH FLOW FROM INVESTING ACTIVITIES** | **TOTAL INCOME** |
| 2007 - 2008 | 4685420000 | 48362320000 |
| 2008 - 2009 | 2505590000 | 50888760000 |
| 2009 - 2010 | 614860000 | 65276340000 |
| 2010 - 2011 | 688800000 | 94564020000 |
| 2011 - 2012 | 298640000 | 78530120000 |
| 2012 - 2013 | 5886440000 | 1.03998E+11 |
| 2013 - 2014 | 1928222000 | 73430846000 |
| 2014 - 2015 | 15862000 | 72098303000 |
| 2015 - 2016 | 233662000 | 86144399000 |
| 2016 - 2017 | 104908000 | 1.06113E+11 |

CORRELATION

|  |  |  |
| --- | --- | --- |
|  | **CASH FLOW FROM INVESTING ACTIVITIES** | **TOTAL INCOME** |
| **CASH FLOW FROM INVESTING ACTIVITIES** | 1 |  |
| **TOTAL INCOME** | -0.141158786 | 1 |

Value of Correlation: -0.141158786

REGRESSION

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| *Regression Statistics* | |  |  |  |  |  |  |  |
| Multiple R | 0.141159 |  |  |  |  |  |  |  |
| R Square | 0.019926 |  |  |  |  |  |  |  |
| Adjusted R Square | -0.10258 |  |  |  |  |  |  |  |
| Standard Error | 2.11E+10 |  |  |  |  |  |  |  |
| Observations | 10 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| ANOVA |  |  |  |  |  |  |  |  |
|  | *df* | *SS* | *MS* | *F* | *Significance F* |  |  |  |
| Regression | 1 | 7.25E+19 | 7.25E+19 | 0.162647 | 0.697295 |  |  |  |
| Residual | 8 | 3.57E+21 | 4.46E+20 |  |  |  |  |  |
| Total | 9 | 3.64E+21 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| Intercept | 8.03E+10 | 8.81E+09 | 9.111229 | 1.69E-05 | 5.99E+10 | 1.01E+11 | 5.99E+10 | 1.01E+11 |
| X Variable 1 | -1.36628 | 3.38779 | -0.4033 | 0.697295 | -9.17854 | 6.445977 | -9.17854 | 6.445977 |

Value of R2 IS 0.019926

CONCLUSION

Gitanjali Gems is an International company and has a well settled and expanded business all over the world that even though there is lesser cash flow from investing activities, their total income increases continuously.

1. ANALYSIS OF TRIBHOVANDAS BHIMJI ZAVERI

|  |  |  |
| --- | --- | --- |
| **FINANCIAL YEAR** | **CASH FLOW FROM INVESTING ACTIVITIES** | **TOTAL INCOME** |
| 2007 - 2008 | 123200000 | 4394000000 |
| 2008 - 2009 | 250730000 | 6688800000 |
| 2009 - 2010 | 101830000 | 8852500000 |
| 2010 - 2011 | 117722687 | 11944737307 |
| 2011 - 2012 | 56816408 | 13870789605 |
| 2012 - 2013 | 605629000 | 16642200000 |
| 2013 - 2014 | 557881000 | 18309572000 |
| 2014 - 2015 | 263643000 | 19487068000 |
| 2015 - 2016 | 108694000 | 16594052000 |
| 2016 - 2017 | 6964000 | 17036068000 |

CORRELATION

|  |  |  |
| --- | --- | --- |
|  | **CASH FLOW FROM INVESTING ACTIVITIES** | **TOTAL INCOME** |
| **CASH FLOW FROM INVESTING ACTIVITIES** | 1 |  |
| **TOTAL INCOME** | 0.342791886 | 1 |

Value of Correlation: 0.342791886

REGRESSION

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| *Regression Statistics* | |  |  |  |  |  |  |  |
| Multiple R | 0.342792 |  |  |  |  |  |  |  |
| R Square | 0.117506 |  |  |  |  |  |  |  |
| Adjusted R Square | 0.007195 |  |  |  |  |  |  |  |
| Standard Error | 5.19E+09 |  |  |  |  |  |  |  |
| Observations | 10 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| ANOVA |  |  |  |  |  |  |  |  |
|  | *df* | *SS* | *MS* | *F* | *Significance F* |  |  |  |
| Regression | 1 | 2.87E+19 | 2.87E+19 | 1.06522 | 0.332217 |  |  |  |
| Residual | 8 | 2.16E+20 | 2.69E+19 |  |  |  |  |  |
| Total | 9 | 2.44E+20 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| Intercept | 1.15E+10 | 2.46E+09 | 4.661903 | 0.001619 | 5.8E+09 | 1.72E+10 | 5.8E+09 | 1.72E+10 |
| X Variable 1 | 8.646395 | 8.377517 | 1.032095 | 0.332217 | -10.6722 | 27.96498 | -10.6722 | 27.96498 |

Value of R2 IS 0.117506

CONCLUSION

Tribhovandas Bhimji Zaveri has an increase on total income but it is not much dependent on cash flow from investing activities as the company is increasing their sales by spending more on other expenses such as advertisement expenses and communication expenses, thus increasing total income.

1. ANALYSIS OF TARA JEWELS

|  |  |  |
| --- | --- | --- |
| **FINANCIAL YEAR** | **CASH FLOW FROM INVESTING ACTIVITIES** | **TOTAL INCOME** |
| 2007 - 2008 | 60280000 | 6118770000 |
| 2008 - 2009 | 85800000 | 7476670000 |
| 2009 - 2010 | 161260000 | 7877000000 |
| 2010 - 2011 | 223640000 | 10915540000 |
| 2011 - 2012 | 184286505 | 13991000000 |
| 2012 - 2013 | 302393175 | 16355000000 |
| 2013 - 2014 | 483565356 | 14221200000 |
| 2014 - 2015 | 222712703 | 14189400000 |
| 2015 - 2016 | 292654624 | 13677000000 |
| 2016 - 2017 | 30389756 | 11970000000 |

CORRELATION

|  |  |  |
| --- | --- | --- |
|  | **CASH FLOW FROM INVESTING ACTIVITIES** | **TOTAL INCOME** |
| **CASH FLOW FROM INVESTING ACTIVITIES** | 1 |  |
| **TOTAL INCOME** | 0.653747808 | 1 |

Value of Correlation: 0.653747808

REGRESSION

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| *Regression Statistics* | |  |  |  |  |  |  |  |
| Multiple R | 0.653748 |  |  |  |  |  |  |  |
| R Square | 0.427386 |  |  |  |  |  |  |  |
| Adjusted R Square | 0.355809 |  |  |  |  |  |  |  |
| Standard Error | 2.78E+09 |  |  |  |  |  |  |  |
| Observations | 10 |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| ANOVA |  |  |  |  |  |  |  |  |
|  | *df* | *SS* | *MS* | *F* | *Significance F* |  |  |  |
| Regression | 1 | 4.6E+19 | 4.6E+19 | 5.971022 | 0.040339 |  |  |  |
| Residual | 8 | 6.17E+19 | 7.71E+18 |  |  |  |  |  |
| Total | 9 | 1.08E+20 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  | *Coefficients* | *Standard Error* | *t Stat* | *P-value* | *Lower 95%* | *Upper 95%* | *Lower 95.0%* | *Upper 95.0%* |
| Intercept | 8.24E+09 | 1.66E+09 | 4.974445 | 0.001087 | 4.42E+09 | 1.21E+10 | 4.42E+09 | 1.21E+10 |
| X Variable 1 | 16.78062 | 6.867263 | 2.443567 | 0.040339 | 0.944684 | 32.61656 | 0.944684 | 32.61656 |

Value of R2 IS 0.427386

CONCLUSION

The total income of Tara Jewels is dependent on the cash flow from investing activities but to only some extent as it depends more on employment and other affecting factors.

**OVERALL CONCLUSIONS**

As we can see, in the data, the income brought in by Gems and Jewellery Industry are varying directly with the investments. So investment is a function of productivity.

We also see that with every fiscal year, the investment increases, therefore sustaining and contributing to the growth of the company.