# CHAPTER 6
# Data Analysis and Discussion

# Part I: Analysis of Financial Variables & Ratios

## 6.1 Analysis using Financial Variables

It is pertinent to study the quantitative impact of Ind AS adoption on various items of financial statements to comprehend the impact of Ind AS adoption in the financial reporting of companies. For this purpose, data under AS and Ind AS have been retrieved from the annual report of the year 2015-16 and from 2016-17. The figures related to the year ***2016*** are considered for the study. The AS figures pertain to the year-end figures from the annual report of 2015-16 and Ind AS figures are pertaining to the comparative figures from the annual report of 2016-17. Hence, it is possible to analyze the same item under AS and Ind AS.

The variables under study have been selected based on the theoretical impact brought in by Ind AS to the items of financial statements. Only those items have been selected which are commonly applied to all the selected companies under study. Ratios are also calculated under both AS and Ind AS to see the relative results. Paired T test is used to measure the significance of the results.

**Table No 6.1 Variables considered under study.**

| **Variables under study** | **Major changes introduced by Ind AS** |
|---|---|
| Revenue | Time value of money is considered while recognising income, only percentage of completion method can be used in case of service contracts, Interest is recognised using effective interest rate |
| COG | Defines fair value and provides an explanation in respect of distinction between 'net realisable value' and 'fair value' for inventory. |
| Employee Benefits | Actuarial gains or losses to be recognised in OCI (Other Comprehensive Income) |
| Depreciation | Component approach is introduced. |
| Amortisation | Annual Impairment testing for Intangible Assets with indefinite lives, special treatment introduced for goodwill. |
| Provision for Financial Assets | Introduced ECL method (Expected Credit Loss Model) |
| Finance Cost | Interest expense is calculated using Effective Interest Rate Method (EIR) |
| Deferred Tax | Only Balance Sheet model can be used. Deferred tax charged on Ind AS adjustments also. |

| | |
|---|---|
| EPS | Requires presentation of basic and diluted EPS from continuing and discontinued operations separately. Proposed dividend is not recognised under Ind AS. |
| Total Debt | Debt instruments are now valued at either amortised cost/FVTPL/FVTOCI. |
| Other Equity | Other Equity includes items from other comprehensive income. |
| Current Assets | Current assets include financial assets and other current assets, financial assets are valued at fair value. |
| Current Liability | Current Liability include financial liability and other current liabilities and provisions, which are now shown at discounted values. |
| Working Capital | Combined effect of current assets and current liabilities |
| Property Plant and Equipment | Use of fair value, Capitalisation of major overhaul, eligible spare parts are recognised as assets. |
| Short Term Financial Asset | Measured at fair value, Classification based on entity's business model, Amortised cost based on Effective Interest Rate, Investments to be categorised as FVTOCI, FVTPL, and Amortised cost, Impairment is measured using Expected Credit Loss Method. |
| Long Term Financial Asset | |
| Short Term Financial Liability | |
| Long Term Financial Liability | |

(Source: Compiled from respective Ind AS accounting standards issued by ICAI)

The first part of the analysis chapter brings together the various items and the basic nature of those items under AS and Ind AS. Descriptive statistical variables like mean and standard deviation are calculated for the figures under both the standards and for all industries.

In the tables given below, the items mentioned in table no. 6.1 are compiled for all the selected companies under Ind AS (2016-17) and AS (2015-16); where 2016 is a common year from the corresponding annual reports available from the respective websites of the selected companies.

### 6.1.1 Revenue

**Table No 6.2 Revenue under Ind AS and AS**

(Amount in Millions)

| **AUTO** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
|---|---|---|---|---|
| Amara raja Batteries | 46155.4 | 46892.73 | -737.33 | 1.57 |
| Apollo Tyres | 86485.08 | 86164.13 | 320.95 | 0.37 |
| Bajaj Automobiles | 221517.1 | 222527.8 | -1010.70 | 0.45 |
| Balkrishna Industries | 31913.9 | 32124.48 | -210.58 | 0.66 |
| CEAT | 54187.5 | 54586.64 | -399.14 | 0.73 |
| HERO Motor Corp | 282033.1 | 283599.2 | -1566.10 | 0.55 |
| Motherson Sumi | 52441 | 53120 | -679.00 | 1.28 |
| Sundaram Clayton | 13724.6 | 13694.8 | 29.80 | 0.22 |
| Tata Motors | 423453.9 | 419480 | 3973.90 | 0.95 |
| TVS | 109670.4 | 111062.5 | -1392.10 | 1.25 |
| **PHARMA** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Aurobindo Pharma | 90789.6 | 89223.8 | 1565.80 | 1.75 |
| Biocon | 21297 | 21602 | -305.00 | 1.41 |
| Cadilla | 64332 | 64365 | -33.00 | 0.05 |
| Cipla | 116617.1 | 117799 | -1181.90 | 1.00 |
| Divi's Laboratory | 37139.93 | 37139.52 | 0.41 | 0.00 |
| Dr Reddy's Pharmaceuticals | 102348 | 101506 | 842.00 | 0.83 |
| SUVEN | 4995.22 | 4995.22 | 0.00 | 0.00 |
| Jubilant Life Sciences | 26074.2 | 26075.19 | -0.99 | 0.00 |
| Lupin Pharma | 107589.4 | 108100.1 | -510.70 | 0.47 |
| Piramal | 18271 | 18271 | 0.00 | 0.00 |
| **IT** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Wipro | 446808 | 446846 | -38.00 | 0.01 |
| First Source Solutions | 8262.12 | 8262.12 | 0.00 | 0.00 |
| Infosys | 539830 | 539830 | 0.00 | 0.00 |
| Info edge | 7176.07 | 7234.76 | -58.69 | 0.81 |
| Mphasis | 29236.44 | 29266.63 | -30.19 | 0.10 |
| Mind tree | 43398 | 43565 | -167.00 | 0.38 |
| NIIT | 14842 | 14677 | 165.00 | 1.12 |
| Oracle | 35284.31 | 34868.09 | 416.22 | 1.19 |
| Persistent | 14232.56 | 14232.56 | 0.00 | 0.00 |
| Zensar | 12331.23 | 12331.22 | 0.01 | 0.00 |
| **Grand Average** | **102081.21** | **102114.75** | **-33.54** | **-0.03** |
| **Standard Deviation** | **137897.79** | **137679.55** | **218.24** | **0.16** |

(Source: Compiled from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Interpretation**

Table no 6.2 depicts the revenue under Ind AS and AS. Revenue is almost the same under both the standards. There is a minor increase seen in automobile companies such as Apollo, Sundaram Clayton, and Tata Motors under Ind AS. Pharmaceutical companies like Aurobindo pharma and Dr. Reddy's also show an increase along with NIIT and Oracle from the IT industry. The changes brought in by Ind AS in the valuation of fixed-term contracts have been the reason for the increase in the pharma and IT sectors.

Revenue is grown due to re-assessment of revenue recognition criteria and change in accounting treatment from Agent to Principal basis under Ind AS. "In the case of agency relationship amounts collected on behalf of Principal are not revenue. i.e., the amount of commission only is presented as revenue."(*24IndAS18_2017_.Pdf*, n.d.) The automobile is a less service-oriented sector and hence the revenue is greater under AS.

Theoretically, it can be said that revenue reporting under Ind AS is beneficial for service sectors while AS is beneficial to production companies.

| **Descriptive Statistics** | **AUTO** | | | **PHARMA** | | | **IT** | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Ind AS** | **AS** | **%** | **Ind AS** | **AS** | **%** | **Ind AS** | **AS** | **%** |
| **Average** | 132158.19 | 132325.23 | **0** | 58945.35 | 58907.68 | **0** | 115140.07 | 115111.33 | **0** |
| **Standard deviation** | 134080.65 | 133245.79 | **1** | 42370.77 | 42364.79 | **0** | 200875.65 | 200898.66 | **0** |

(Source: Calculated from Table No 6.2 using excel)

In general, the data related to revenue shows an average decline of 0.03% with negligible decline in the industry specific averages as observed from the descriptive statistics. All the industries show the same average revenue they earned under AS as under Ind AS. The changes in accounting standards didn't affect the revenue under either the standards.

### 6.1.2 Cost of Goods Sold (COG)

**Table No 6.3 Cost of Goods Sold (COG) under Ind AS and AS**

(Amount in Millions)

| **AUTO** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
|---|---|---|---|---|
| Amara raja Batteries | 29105.10 | 29644.69 | -539.59 | 1.82 |
| Apollo Tyres | 49921.59 | 49921.59 | 0.00 | 0.00 |
| Bajaj Automobiles | 150568.60 | 150568.60 | 0.00 | 0.00 |

| | | | | |
|---|---|---|---|---|
| Balkrishna Industries | 14092.80 | 14123.71 | -30.91 | 0.22 |
| CEAT | 30896.22 | 30896.22 | 0.00 | 0.00 |
| HERO Motor Corp | 193098.20 | 193148.80 | -50.60 | 0.03 |
| Motherson Sumi | 28535.00 | 29204.00 | -669.00 | 2.29 |
| Sundaram Clayton | 7021.60 | 6987.90 | 33.70 | 0.48 |
| Tata Motors | 291093.50 | 295952.90 | -4859.40 | 1.64 |
| TVS | 79791.70 | 80254.80 | -463.10 | 0.58 |
| **PHARMA** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Aurobindo Pharma | 42905.20 | 42905.20 | 0.00 | 0.00 |
| Biocon | 9875.00 | 9950.00 | -75.00 | 0.75 |
| Cadilla | 18918.00 | 18918.00 | 0.00 | 0.00 |
| Cipla | 48992.50 | 48992.50 | 0.00 | 0.00 |
| Divi's Laboratory | 15261.21 | 15266.68 | -5.47 | 0.04 |
| Dr Reddy's Pharmaceuticals | 26543.00 | 25701.00 | 842.00 | 3.28 |
| SUVEN | 1664.02 | 1664.02 | 0.00 | 0.00 |
| Jubilant Life Sciences | 14541.14 | 14541.14 | 0.00 | 0.00 |
| Lupin Pharma | 32716.00 | 32807.50 | -91.50 | 0.28 |
| Piramal | 8853.70 | 8854.70 | -1.00 | 0.01 |
| **IT** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Wipro | 26031.00 | 26026.00 | 5.00 | 0.02 |
| First Source Solutions | 0.00 | 0.00 | 0.00 | 0.00 |
| Infosys | 0.00 | 0.00 | 0.00 | 0.00 |
| Info edge | 0.00 | 0.00 | 0.00 | 0.00 |
| Mphasis | 380.58 | 380.58 | 0.00 | 0.00 |
| Mind tree | 0.00 | 0.00 | 0.00 | 0.00 |
| NIIT | 305.00 | 305.00 | 0.00 | 0.00 |
| Oracle | 0.00 | 0.00 | 0.00 | 0.00 |
| Persistent | 0.00 | 0.00 | 0.00 | 0.00 |
| Zensar | 525.85 | 525.86 | -0.01 | 0.00 |
| **Grand Average** | **37387.88** | **37584.71** | **-196.83** | **-0.52** |
| **Standard Deviation** | **63811.02** | **64470.45** | **-659.43** | **-1.02** |

(Source: Compiled from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Interpretation**

Table No 6.3 shows the cost of goods sold as per Ind AS and AS. The cost of goods sold under Ind AS has declined across all the industries in general. This is because of the differences in revenue which can be seen from table no 6.1.1. In general, when the cost of goods sold decreases, it manifests as an increase in revenue.

When the cost of goods increases, it cancels the growth shown in revenue and leads us to the deduction that there is no growth in the earned profit. In the pharmaceutical industry, except Dr. Reddy's, all the companies show a decline in the value of the cost of goods sold during transition. In the automobile sector also most of the companies show a decrease during the transition.

Most of the companies in the IT sector don't have COG, so the difference is not seen in this sector. Even in the companies with a change in COG, the increase is minimal, and the difference percentage is less than 5%.

| Descriptive Statistics | AUTO | | | PHARMA | | | IT | | |
|---|---|---|---|---|---|---|---|---|---|
| | Ind AS | AS | % | Ind AS | AS | % | Ind AS | AS | % |
| **Average** | 87412.43 | 88070.32 | **-1** | 22390.98 | 22329.70 | **0** | 2724.24 | 2723.74 | **0** |
| **Standard deviation** | 94284.81 | 95376 | **-1** | 15438.13 | 15413.31 | **0** | 8191.54 | 8189.96 | **0** |

(Source: Calculated from Table No 6.3 using excel)

It is evident that the averages of all the selected industries are illustrating a negligible impact on the cost of goods sold during the transition from AS to Ind AS with minimal standard of deviation.

### 6.1.3 Employee Benefits

**Table No 6.4 Employee Benefits under Ind AS and AS**

(Amount in Millions)

| AUTO | Ind AS | AS | Ind AS-AS | Difference (%) |
|---|---|---|---|---|
| Amara raja Batteries | 2429.1 | 2430.02 | -0.92 | 0.04 |
| Apollo Tyres | 5659.42 | 5664.88 | -5.46 | 0.10 |
| Bajaj Automobiles | 9171.2 | 9184.4 | -13.20 | 0.14 |
| Balkrishna Industries | 2057 | 2090.91 | -33.91 | 1.62 |
| CEAT | 3690.43 | 3671.65 | 18.78 | 0.51 |
| HERO Motor Corp | 13159.3 | 13195.6 | -36.30 | 0.28 |
| Motherson Sumi | 7133 | 6869 | 264.00 | 3.84 |
| Sundaram Clayton | 2067.4 | 2104.9 | -37.50 | 1.78 |
| Tata Motors | 31889.7 | 30267.5 | 1622.20 | 5.36 |
| TVS | 6523.9 | 6642.3 | -118.40 | 1.78 |
| **PHARMA** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Aurobindo Pharma | 8070.4 | 8098 | -27.60 | 0.34 |
| Biocon | 3219 | 3187 | 32.00 | 1.00 |
| Cadilla | 6958 | 7174 | -216.00 | 3.01 |
| Cipla | 17790.6 | 17896.5 | -105.90 | 0.59 |
| Divi's Laboratory | 3529.48 | 3573.62 | -44.14 | 1.24 |

| | | | | |
|---|---|---|---|---|
| Dr Reddy's Pharmaceuticals | 16934 | 17100 | -166.00 | 0.97 |
| SUVEN | 409.33 | 416.35 | -7.02 | 1.69 |
| Jubilant Life Sciences | 2161.83 | 2170.5 | -8.67 | 0.40 |
| Lupin Pharma | 12180.7 | 11906.6 | 274.10 | 2.30 |
| Piramal | 3611.9 | 3636.5 | -24.60 | 0.68 |
| **IT** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Wipro | 212671.00 | 213797.00 | -1126.00 | 0.53 |
| First Source Solutions | 4239.12 | 4248.16 | -9.04 | 0.21 |
| Infosys | 282070 | 282060 | 10.00 | 0.00 |
| Info edge | 2939.44 | 2790.4 | 149.04 | 5.34 |
| Mphasis | 13769.25 | 13769.25 | 0.00 | 0.00 |
| Mind tree | 25732 | 25766 | -34.00 | 0.13 |
| NIIT | 8554 | 8439 | 115.00 | 1.36 |
| Oracle | 16908.62 | 16668.67 | 239.95 | 1.44 |
| Persistent | 7044.07 | 6938.89 | 105.18 | 1.52 |
| Zensar | 6415.05 | 6424.9 | -9.85 | 0.15 |
| **Grand Average** | **24632.94** | **24606.08** | **26.86** | **0.11** |
| **Standard Deviation** | **60621.99** | **60734.32** | **-112.33** | **-0.19** |

(Source: Compiled from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Interpretation**

Table No 6.4 summarizes the employee benefits under Ind AS and AS. Employee benefits have displayed a mixed trend since the adoption of Ind AS. Only 9 companies show an increase under Ind AS. Companies such as Infosys and Mphasis show no change in their employee benefits after Ind AS. The decrease in employee benefit ranges from 0% to 5%, out of which, the Tata Motors recording the highest difference.

The major change in employee benefits is about the treatment of actuarial gains or losses from post-employment benefit plans. Under AS after the actuarial valuation of planned assets related to these plans, the gain or loss was transferred to the profit and loss account. Under Ind AS it is transferred to Other Comprehensive Income (OCI) and is charged to the shareholder's fund.

Those companies who had negative change in actuarial valuation under AS show an increase in employee benefits under Ind AS while those companies who had positive change in actuarial valuation under AS show a decrease in employee benefits under Ind AS. When the negative change in actuarial valuation is charged directly to

other equity, the value of employment benefits has increased under Ind AS and subsequently, the risk of shareholders has gone up under Ind AS.

| Descriptive Statistics | AUTO | | | PHARMA | | | IT | | |
|---|---|---|---|---|---|---|---|---|---|
| | Ind AS | AS | % | Ind AS | AS | % | Ind AS | AS | % |
| **Average** | 8378.04 | 8212.12 | **2** | 7486.52 | 7515.91 | **0** | 58034.26 | 58090.23 | **0** |
| **Standard deviation** | 8980.29 | 8510.07 | **6** | 6195.03 | 6215.16 | **0** | 101346.97 | 101565.55 | **0** |

(Source: Calculated from Table No 6.4 using excel)

Pharmaceutical companies and IT companies show negligible differences in employee benefits between AS and Ind AS. Automobile industries show an increase of 2% under Ind AS while the average of pharma and IT companies show no change in them. Overall, the deviation in the value of employee benefits has decreased under Ind AS.

### 6.1.4 Depreciation

**Table No 6.5 Depreciation under Ind AS and AS**

(Amount in Millions)

| AUTO | Ind AS | AS | Ind AS-AS | Difference (%) |
|---|---|---|---|---|
| Amara raja Batteries | 1393.5 | 1389.35 | 4.15 | 0.30 |
| Apollo Tyres | 2622.8 | 2657.52 | -34.72 | 1.31 |
| Bajaj Automobiles | 2625.2 | 2625.2 | 0.00 | 0.00 |
| Balkrishna Industries | 2808 | 2805.23 | 2.77 | 0.10 |
| CEAT | 1003.1 | 938.94 | 64.16 | 6.83 |
| HERO Motor Corp | 3829.1 | 3866.7 | -37.60 | 0.97 |
| Motherson Sumi | 2005 | 2005 | 0.00 | 0.00 |
| Sundaram Clayton | 540.9 | 540.9 | 0.00 | 0.00 |
| Tata Motors | 13966.5 | 13099.8 | 866.70 | 6.62 |
| TVS | 2206.6 | 1744.5 | 462.10 | 26.49 |
| **PHARMA** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Aurobindo Pharma | 2630 | 2630 | 0.00 | 0.00 |
| Biocon | 1351 | 1263 | 88.00 | 6.97 |
| Cadilla | 2110 | 2110 | 0.00 | 0.00 |
| Cipla | 4152.9 | 4116.5 | 36.40 | 0.88 |
| Divi's Laboratory | 1164.45 | 1164.45 | 0.00 | 0.00 |
| Dr Reddy's Pharmaceuticals | 5364 | 5364 | 0.00 | 0.00 |
| SUVEN | 174.7 | 166.93 | 7.77 | 4.65 |
| Jubilant Life Sciences | 834.87 | 833.67 | 1.20 | 0.14 |

| | | | | |
|---|---|---|---|---|
| Lupin Pharma | 3004.7 | 3004.7 | 0.00 | 0.00 |
| Piramal | 613.3 | 614 | -0.70 | 0.11 |
| **IT** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Wipro | 8640.00 | 8640.00 | 0.00 | 0.00 |
| First Source Solutions | 123.01 | 134.85 | -11.84 | 8.78 |
| Infosys | 11150 | 11150 | 0.00 | 0.00 |
| Info edge | 177.86 | 181.05 | -3.19 | 1.76 |
| Mphasis | 221.86 | 220.41 | 1.45 | 0.66 |
| Mind tree | 1200 | 1192 | 8.00 | 0.67 |
| NIIT | 506 | 505 | 1.00 | 0.20 |
| Oracle | 497.71 | 497.72 | -0.01 | 0.00 |
| Persistent | 469.03 | 469.55 | -0.52 | 0.11 |
| Zensar | 187.05 | 187.05 | 0.00 | 0.00 |
| **Grand Average** | **2585.77** | **2537.27** | **48.50** | **1.91** |
| **Standard Deviation** | **3239.81** | **3145.54** | **94.27** | **2.99** |

(Source: Compiled from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Interpretation**

Table 6.5 summarizes the value of depreciation under Ind AS and AS. Out of the selected companies, eleven companies show no change under either of the standards. Seven companies have greater values under AS compared to Ind AS. Majority of these companies are from IT sector. Auto and Pharma companies show greater values under Ind AS when compared to AS. On average there is approximately a 2% increase in depreciation under Ind AS.

Ind AS introduced two major changes to the accounting treatment of Depreciation. One, component depreciation which allows the company to charge different rates for various parts of the same asset. And the other, allowing to charge depreciation on selected spare parts of the machinery. Both have been alluring for industries making heavy duty machines and involved in manufacturing and production like automobile and pharmaceutical sectors, which uses high end machinery for the production purpose are now showing a higher depreciation charge under Ind AS. The IT sector on the other hand has very few capital assets of its own hence it ignores the major changes in depreciation. The new provisions can help the companies to have better funds in case of replacement of the assets and reduces the tax burden on the company.

| Descriptive Statistics | AUTO | | | PHARMA | | | IT | | |
|---|---|---|---|---|---|---|---|---|---|
| | Ind AS | AS | % | Ind AS | AS | % | Ind AS | AS | % |
| **Average** | 3300.07 | 3167.31 | **4** | 2139.99 | 2126.73 | **1** | 2317.25 | 2317.76 | **0** |
| **Standard deviation** | 3867.33 | 3624.43 | **7** | 1663.51 | 1664.55 | **0** | 4049.28 | 4048.74 | **0** |

(Source: Calculated from Table No 6.5 using excel)

Tata motors and TVS report a considerable increase in the level of depreciation under Ind AS causing the automobile industry to experience a boost of 4% overall. In pharmaceutical companies, Biocon and Suven show a remarkable increase under Ind AS causing an overall hike of 1% during transition. The IT industry remains neutral regarding both the standards even though the first source solutions report a decrease during transition, most of the companies depict a negligible change during transition.

Ind AS offers certain optional exemptions for the first-time adopting companies. One of such optional exemptions is to carry forward the carrying value of PPE under AS as the deemed cost of fair value of PPE under Ind AS. Many automobile companies didn't opt for this optional exemption while many pharmaceutical and IT companies have opted for this exemption. This is one of the biggest reasons of changes in the value of PPE under Ind AS in the automobile sector.

### 6.1.5 Amortisation

**Table No 6.6 Amortisation under Ind AS and AS**

(Amount in Millions)

| **AUTO** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
|---|---|---|---|---|
| Amara raja Batteries | 13.4 | 13.4 | 0.00 | 0.00 |
| Apollo Tyres | 28.57 | 28.57 | 0.00 | 0.00 |
| Bajaj Automobiles | 446.4 | 446.4 | 0.00 | 0.00 |
| Balkrishna Industries | 13.7 | 6.12 | 7.58 | 123.86 |
| CEAT | 65.25 | 65.25 | 0.00 | 0.00 |
| HERO Motor Corp | 547.3 | 547.3 | 0.00 | 0.00 |
| Motherson Sumi | 3 | 3 | 0.00 | 0.00 |
| Sundaram Clayton | 8.6 | 8.6 | 0.00 | 0.00 |
| Tata Motors | 9325.7 | 11437.7 | -2112.00 | 18.47 |
| TVS | 153.9 | 153.9 | 0.00 | 0.00 |
| **PHARMA** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Aurobindo Pharma | 0 | 0 | 0.00 | 0.00 |
| Biocon | 46 | 47 | -1.00 | 2.13 |
| Cadilla | 102 | 102 | 0.00 | 0.00 |

| | | | | |
|---|---|---|---|---|
| Cipla | 274 | 291.6 | -17.60 | 6.04 |
| Divi's Laboratory | 16.56 | 16.56 | 0.00 | 0.00 |
| Dr Reddy's Pharmaceuticals | 1131 | 1127 | 4.00 | 0.35 |
| SUVEN | 0.26 | 0.26 | 0.00 | 0.00 |
| Jubilant Life Sciences | 34.94 | 34.94 | 0.00 | 0.00 |
| Lupin Pharma | 51.4 | 51.4 | 0.00 | 0.00 |
| Piramal | 182.2 | 182.2 | 0.00 | 0.00 |
| **IT** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Wipro | 114.00 | 49.00 | 65.00 | 132.65 |
| First Source Solutions | 195.08 | 195.08 | 0.00 | 0.00 |
| Infosys | 0 | 0 | 0.00 | 0.00 |
| Info edge | 31.77 | 28.58 | 3.19 | 11.16 |
| Mphasis | 65.75 | 67.2 | -1.45 | 2.16 |
| Mind tree | 118 | 117 | 1.00 | 0.85 |
| NIIT | 309 | 322 | -13.00 | 4.04 |
| Oracle | 529.27 | 529.27 | 0.00 | 0.00 |
| Persistent | 116.32 | 116.32 | 0.00 | 0.00 |
| Zensar | 160.1 | 185.63 | -25.53 | 13.75 |
| **Grand Average** | **467.3862** | **539.4486** | **-72.0624** | **-13.36** |
| **Standard Deviation** | **1689.427** | **2072.197** | **-382.77** | **-18.47** |

(Source: Compiled from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Interpretation**

Table 6.6 shows the amortisation figures under Ind AS and AS. Most of the IT companies show differences under Ind AS. The highest percentage increase is in Wipro as they started recognizing customer contracts as Intangible assets under Ind AS.

Amortisation figures have decreased approximately by 13 % under Ind AS. Auto and Pharma companies don't show much of an impact under Ind AS. Only Tata motors and Balkrishna Industries depicts changes under Ind AS. The changes in Pharma companies are meagre compared to other sectors.

Ind AS has introduced two basic changes in Intangible assets. One is the special treatment of self-generated goodwill, and the next is to widen the scope of Intangible assets. Ind AS has divided the intangible assets as the ones with definite lives and the ones with indefinite lives. Goodwill, a traditional intangible asset, is not to be recognized unless it is generated because of a merger or acquisition. Such

intangible assets are to be checked for impairment at every year end. Intangible assets which have a life of more than 10 years are only amortized under Ind AS.

As Ind AS recognizes customer contracts as an intangible asset, companies like Wipro and Info Edge have shown higher amortisation under Ind AS. The decrease in amortisation under Ind AS in selected companies is mainly due to the special treatment of goodwill. This change in the criteria of recognition of intangible assets has gradually increased the level of amortisation accounted under Ind AS in the IT industry. At the same time the same recognition criteria has been the reason for derecognition of several assets including self-generated goodwill from intangible assets of the automobile sector and thereby causing a decrease in the value of amortisation under Ind AS.

| Descriptive Statistics | AUTO | | | PHARMA | | | IT | | |
|---|---|---|---|---|---|---|---|---|---|
| | Ind AS | AS | % | Ind AS | AS | % | Ind AS | AS | % |
| **Average** | 1060.58 | 1271.02 | **-17** | 183.84 | 185.296 | **-1** | 123.34 | 120.09 | **2** |
| **Standard deviation** | 2910.68 | 3577.61 | **-19** | 344.18 | 343.4725 | **0** | 92.23 | 100.84 | **-9** |

(Source: Calculated from Table no 6.6 using excel)

The amortization of the automobile sector and pharmaceutical sector has diminished by 17% and 1% respectively during the transition towards Ind AS. The IT sector has shown an increase of 2%. The primary reason for decrease is found to be the special treatment of self-generated goodwill while the issue for increase being, recognition of wider variety of assets under intangible assets.

### 6.1.6 Provision for Financial Assets

**Table No 6.7 Provision for Financial Assets under Ind AS and AS**

(Amount in Millions)

| AUTO | Ind AS | AS | Ind AS-AS | Difference (%) |
|---|---|---|---|---|
| Amara raja Batteries | 26.8 | 26.77 | 0.03 | 0.11 |
| Apollo Tyres | 0 | 0 | 0.00 | 0.00 |
| Bajaj Automobiles | 7.8 | 7.8 | 0.00 | 0.00 |
| Balkrishna Industries | 44.19 | 44.19 | 0.00 | 0.00 |
| CEAT | 29.5 | 29.5 | 0.00 | 0.00 |
| HERO Motor Corp | 60 | 60 | 0.00 | 0.00 |
| Motherson Sumi | 0 | 0 | 0.00 | 0.00 |
| Sundaram Clayton | 0 | 0 | 0.00 | 0.00 |
| Tata Motors | 1387.9 | 1114.8 | 273.10 | 24.50 |

| | | | | |
|---|---|---|---|---|
| TVS | 0 | 0 | 0.00 | 0.00 |
| **PHARMA** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Aurobindo Pharma | 475.4 | 475.4 | 0.00 | 0.00 |
| Biocon | -43 | -43 | 0.00 | 0.00 |
| Cadilla | 0 | 0 | 0.00 | 0.00 |
| Cipla | 470.8 | 470.8 | 0.00 | 0.00 |
| Divi's Laboratory | 0.74 | 0.74 | 0.00 | 0.00 |
| Dr Reddy’s Pharmaceuticals | 11 | 11 | 0.00 | 0.00 |
| SUVEN | 0.82 | 0.82 | 0.00 | 0.00 |
| Jubilant Life Sciences | 127.3 | 127.3 | 0.00 | 0.00 |
| Lupin Pharma | 137.9 | 148.4 | -10.50 | 7.08 |
| Piramal | 39.5 | 39.3 | 0.20 | 0.51 |
| **IT** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Wipro | 1939.00 | 714 | 1225.00 | 171.57 |
| First Source Solutions | 1.06 | 1.06 | 0.00 | 0.00 |
| Infosys | -450 | -450 | 0.00 | 0.00 |
| Info edge | 0 | 0 | 0.00 | 0.00 |
| Mphasis | 2.7 | 2.7 | 0.00 | 0.00 |
| Mind tree | 0 | 0 | 0.00 | 0.00 |
| NIIT | 93 | 25 | 68.00 | 272.00 |
| Oracle | -34.52 | -99.69 | 65.17 | 65.37 |
| Persistent | 0.06 | 0.06 | 0.00 | 0.00 |
| Zensar | 102.08 | 102.08 | 0.00 | 0.00 |
| **Grand Average** | **147.67** | **93.63** | **54.03** | **57.71** |
| **Standard Deviation** | **437.73** | **271.39** | **166.33** | **61.29** |

(Source: Compiled from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Interpretation**

Table 6.7 shows the changes in provision for financial assets under AS and Ind AS. It can be observed from the table that most of the companies show no change in the creation of provisions, however, some of them have accounted for huge changes. Seven companies show changes under Ind AS out of which six companies show an increase and Lupin Pharma shows a decrease of 7%.

Financial asset is a novel term brought in under Ind AS to represent debtors, other receivables including short term loans and advances, cash, and bank equivalents. It includes most of the current assets except inventory and other current assets. Under AS, the provision for receivables was provided as per the estimate of management

based on previous experiences. Ind AS offers a new approach towards the provision of financial assets. The expected credit loss method or ECL method is a matrix approach on calculation of provisions. It is basically used in providing for doubtful debts, the same approach is also used for financial assets. This is the reason why the provisions are high in certain companies under Ind AS opposed to AS.

| Descriptive Statistics | AUTO | | | PHARMA | | | IT | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Ind AS** | **AS** | **%** | **Ind AS** | **AS** | **%** | **Ind AS** | **AS** | **%** |
| **Average** | 155.619 | 128.31 | **21** | 122.05 | 123.08 | **-1** | 165.34 | 29.52 | **460** |
| **Standard deviation** | 433.49 | 347.26 | **25** | 193.64 | 193.77 | **0** | 641.96 | 283.74 | **126** |

(Source: Calculated from Table no 6.7 using excel)

In general, it is concluded that the ECL approach has inconsequential impact on provision of financial assets, except NIIT and Wipro. The IT sector accounted for a 460% increase in provision of financial assets because of these two companies. The automobile sector shows an increase of 21% while the pharmaceutical sector manifests a decline in the provision of 1%.

### 6.1.7 Finance Cost

**Table No 6.8 Finance Cost under Ind AS and AS**

(Amount in Millions)

| **AUTO** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
|---|---|---|---|---|
| Amara raja Batteries | 55.3 | 4.85 | 50.45 | 1040.21 |
| Apollo Tyres | 901.41 | 883.31 | 18.10 | 2.05 |
| Bajaj Automobiles | 10.5 | 4.8 | 5.70 | 118.75 |
| Balkrishna Industries | 394.7 | 342.77 | 51.93 | 15.15 |
| CEAT | 933.15 | 891.55 | 41.60 | 4.67 |
| HERO Motor Corp | 48.9 | 21.5 | 27.40 | 127.44 |
| Motherson Sumi | 474 | 222 | 252.00 | 113.51 |
| Sundaram Clayton | 322.5 | 328.3 | -5.80 | 1.77 |
| Tata Motors | 15920 | 14811.1 | 1108.90 | 7.49 |
| TVS | 487.3 | 462.4 | 24.90 | 5.38 |
| **PHARMA** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Aurobindo Pharma | 2293.1 | 2293.1 | 0.00 | 0.00 |
| Biocon | 19 | 9 | 10.00 | 111.11 |
| Cadilla | 264 | 224 | 40.00 | 17.86 |

| | | | | |
|---|---|---|---|---|
| Cipla | 1470.7 | 1325.2 | 145.50 | 10.98 |
| Divi's Laboratory | 30.05 | 23.18 | 6.87 | 29.64 |
| Dr Reddy's Pharmaceuticals | 641 | 638 | 3.00 | 0.47 |
| SUVEN | 58.73 | 54.17 | 4.56 | 8.42 |
| Jubilant Life Sciences | 2006.55 | 2024.26 | -17.71 | 0.87 |
| Lupin Pharma | 241.1 | 147.8 | 93.30 | 63.13 |
| Piramal | 7868.8 | 7922.1 | -53.30 | 0.67 |
| **IT** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Wipro | 5499 | 5278 | 221.00 | 4.19 |
| First Source Solutions | 89.08 | 162.37 | -73.29 | 45.14 |
| Infosys | 0 | 0 | 0.00 | 0.00 |
| Info edge | 0.77 | 0.77 | 0.00 | 0.00 |
| Mphasis | 64.27 | 64.27 | 0.00 | 0.00 |
| Mind tree | 159 | 3 | 156.00 | 5200.00 |
| NIIT | 68 | 43 | 25.00 | 58.14 |
| Oracle | 0 | 0 | 0.00 | 0.00 |
| Persistent | 0.92 | 0.92 | 0.00 | 0.00 |
| Zensar | 22.35 | 15.57 | 6.78 | 43.55 |
| **Grand Average** | **1344.81** | **1273.38** | **71.43** | **5.61** |
| **Standard Deviation** | **3192.66** | **3027.83** | **164.83** | **5.44** |

(Source: Compiled from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Interpretation**

Table 6.8 shows the value of finance cost under Ind AS and AS. Interest paid is the major component of finance cost along with the fluctuations in foreign currency. Ind AS calculates the interest cost using the Effective Interest Rate (EIR) method, which has increased the finance cost of the companies. EIR is based on compounding approach and thereby costs the firm a higher price for the debt. This can also be one of the reasons for the companies to cut down on their debt portion within their capital structure. Under AS, preference shares issued by companies were classified as equity. Under Ind AS, certain classes of preference shares, e.g., "redeemable preference shares are classified as financial liabilities."(*2020 - First-Time Adoption of IND AS.Pdf*, n.d.)

Borrowing costs eligible for inclusion as transaction costs for measuring amortised cost of financial assets were charged to the Statement of Profit and Loss under AS. Most of the companies have treated the unwinding discount on warranty

provision as part of finance cost under Ind AS which caused a considerable change in finance cost under Ind AS. As on transition date, such costs written off previously are adjusted against Borrowings resulting in reduction in carrying amount of borrowings.

| Descriptive Statistics | AUTO | | | PHARMA | | | IT | | |
|---|---|---|---|---|---|---|---|---|---|
| | Ind AS | AS | % | Ind AS | AS | % | Ind AS | AS | % |
| **Average** | 1954.78 | 1797.26 | **9** | 1489.30 | 1466.08 | **2** | 590.34 | 556.79 | **6** |
| **Standard deviation** | 4917.61 | 4584.17 | **7** | 2397.42 | 2423.51 | **-1** | 1725.51 | 1659.64 | **4** |

(Source: Calculated from Table no 6.8 using excel)

The automobile sector and IT sector implies an increase of 9% and 6 % in finance cost under Ind AS. The pharmaceutical sector shows an increase of 2%. There has been a drastic change in Mindtree, Biocon, Amara raja, Bajaj, Hero and Motherson sumi. The automobile companies are most affected by the changes brought in by Ind AS.

### 6.1.8 Deferred Tax

**Table No 6.9 Deferred tax under Ind AS and AS**

(Amount in Millions)

| AUTO | Ind AS | AS | Ind AS-AS | Difference (%) |
|---|---|---|---|---|
| Amara raja Batteries | 202.5 | 219.92 | -17.42 | 7.92 |
| Apollo Tyres | 422.98 | 396.1 | 26.88 | 6.79 |
| Bajaj Automobiles | -237.7 | 466.7 | -704.40 | 150.93 |
| Balkrishna Industries | -28.1 | 495.22 | -523.32 | 105.67 |
| CEAT | 320.38 | 329.68 | -9.30 | 2.82 |
| HERO Motor Corp | 3138 | 3013.3 | 124.70 | 4.14 |
| Motherson Sumi | -169 | -179 | 10.00 | -5.59 |
| Sundaram Clayton | 76.5 | 40 | 36.50 | 91.25 |
| Tata Motors | 25.4 | 46.8 | -21.40 | 45.73 |
| TVS | 175.5 | 229.2 | -53.70 | 23.43 |
| **PHARMA** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Aurobindo Pharma | 29.1 | 21.5 | 7.60 | 35.35 |
| Biocon | -267 | -71 | -196.00 | -276.06 |
| Cadilla | 340 | 285 | 55.00 | 19.30 |
| Cipla | -749.7 | 962.4 | -1712.10 | 177.90 |
| Divi's Laboratory | -197.8 | 167.53 | -365.33 | 218.07 |
| Dr Reddy’s Pharmaceuticals | -1159 | -935 | -224.00 | -23.96 |

| | | | | |
|---|---|---|---|---|
| SUVEN | 0.65 | 117.14 | -116.49 | 99.45 |
| Jubilant Life Sciences | 29.49 | 19.06 | 10.43 | 54.72 |
| Lupin Pharma | -145.2 | -73 | -72.20 | -98.90 |
| Piramal | -2722.2 | | -2722.20 | |
| **IT** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Wipro | -586.00 | -692.00 | 106.00 | -15.32 |
| First Source Solutions | 48.97 | 32.97 | 16.00 | 48.53 |
| Infosys | 90 | 90 | 0.00 | 0.00 |
| Info edge | -106.41 | 4.16 | -110.57 | 2657.93 |
| Mphasis | -158.7 | 6.25 | -164.95 | 2639.20 |
| Mind tree | -137 | -144 | 7.00 | -4.86 |
| NIIT | -75 | 240 | -315.00 | 131.25 |
| Oracle | -106.11 | -87.22 | -18.89 | -21.66 |
| Persistent | -4.57 | 31.1 | -35.67 | 114.69 |
| Zensar | -48.93 | -45.06 | -3.87 | -8.59 |
| **Grand Average** | **-66.64** | **171.99** | **-238.62** | **138.74** |
| **Standard Deviation** | **819** | **632** | **187** | **30** |

(Source: Compiled from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Interpretation**

Table 6.9 shows the changes in deferred tax after implementing Ind AS. It depicts deferred tax under AS and Ind AS. Theoretically speaking, Ind AS has shifted the whole idea of deferred tax from an income centered approach towards a balance sheet approach. This requires recognition of tax consequences of differences between the carrying amounts of assets and liabilities and their tax base. On the other hand, AS 22 is rooted in income statement approach which identifies the tax consequences based on timing differences.

The transition towards Ind AS has created deferred tax assets and liabilities in various items of financial statements. Fair value accounting being one of the vital changes brought in by Ind AS, has contributed to a considerable share of deferred tax under Ind AS. Companies like Mphasis also includes MAT (Minimum Alternative Tax) under deferred tax head leading to record a drastic change of 2639% change. Piramal pharmaceuticals didn't disclose any deferred tax under AS and later under Ind AS, it reports a -2272 million as deferred tax, it is assumed that this is because of the transitional changes to Ind AS. Info Edge includes a wide range of items in the disclosure of deferred tax assets under Ind AS when compared to AS. Elements like

financial assets, provisions, property plant and equipment, employee benefits contribute to the difference in deferred tax under Ind AS.

| Descriptive Statistics | AUTO | | | PHARMA | | | IT | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Ind AS** | **AS** | **%** | **Ind AS** | **AS** | **%** | **Ind AS** | **AS** | **%** |
| **Average** | 392.65 | 505.79 | **22** | -484.17 | 54.85 | **-983** | -108.38 | -56.38 | **92** |
| **Standard deviation** | 986 | 905 | **9** | 896 | 488 | **83** | 186 | 246 | **24** |

(Source: Calculated from Table no 6.9 using excel)

Deferred tax has marginally declined across all the industries among which pharma shows the deepest decline of approximately 983% whereas in auto sector and IT, it is 22% and 92 % respectively. Standard deviation is also considerably high in the case of the Pharma sector. In general, deferred tax has a drastic impact on the pharma sector than other industries.

### 6.1.9 Earnings Per Share (EPS)

**Table No 6.10 Earnings Per Share (EPS) under Ind AS and AS**

(Amount in Millions)

| **AUTO** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
|---|---|---|---|---|
| Amara raja Batteries | 28.78 | 28.65 | 0.13 | 0.45 |
| Apollo Tyres | 19.69 | 16.75 | 2.94 | 17.55 |
| Bajaj Automobiles | 135.8 | 126.2 | 9.60 | 7.61 |
| Balkrishna Industries | 45.37 | 58.73 | -13.36 | 22.75 |
| CEAT | 11 | 11.18 | -0.18 | 1.61 |
| HERO Motor Corp | 158.26 | 156.86 | 1.40 | 0.89 |
| Motherson Sumi | 5.43 | 5.38 | 0.05 | 0.93 |
| Sundaram Clayton | 71.39 | 69 | 2.39 | 3.46 |
| Tata Motors | 1.8 | 6.8 | -5.00 | 73.53 |
| TVS | 10.3 | 9.1 | 1.20 | 13.19 |
| **PHARMA** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Aurobindo Pharma | 27.85 | 27.73 | 0.12 | 0.43 |
| Biocon | 18.78 | 40.44 | -21.66 | 53.56 |
| Cadilla | 19.9 | 19.31 | 0.59 | 3.06 |
| Cipla | 18.21 | 17.41 | 0.80 | 4.60 |
| Divi's Laboratory | 41.84 | 41.73 | 0.11 | 0.26 |
| Dr Reddy’s Pharmaceuticals | 80.59 | 79.42 | 1.17 | 1.47 |

| | | | | |
|---|---|---|---|---|
| SUVEN | 7.83 | 7.46 | 0.37 | 4.96 |
| Jubilant Life Sciences | 4.58 | 4.96 | -0.38 | 7.66 |
| Lupin Pharma | 62.92 | 64.1 | -1.18 | 1.84 |
| Piramal | 57.7 | 61.49 | -3.79 | 6.16 |
| **IT** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Wipro | 33.38 | 32.97 | 0.41 | 1.24 |
| First Source Solutions | 2.26 | 2.24 | 0.02 | 0.89 |
| Infosys | 55.26 | 55.51 | -0.25 | 0.45 |
| Info edge | 10.4 | 11.76 | -1.36 | 11.56 |
| Mphasis | 21.78 | 21.81 | -0.03 | 0.14 |
| Mind tree | 34.66 | 36.08 | -1.42 | 3.94 |
| NIIT | 31.37 | 31.75 | -0.38 | 1.20 |
| Oracle | 105.95 | 109.62 | -3.67 | 3.35 |
| Persistent | 31.27 | 33.26 | -1.99 | 5.98 |
| Zensar | 53.59 | 52.69 | 0.90 | 1.71 |
| **Grand Average** | **40.26** | **41.35** | **-1.08** | **-0.17** |
| **Standard Deviation** | **37.85** | **36.94** | **0.91** | **2.45** |

(Source: Compiled from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Interpretation**

Table No 6.10 condenses the earnings per share as per AS and Ind AS. The table only considers basic earnings per share. Some of the selected companies do not have diluted earnings per share and to maintain the effortless comparison between the figures and draw a meaningful conclusion, the study considers only basic earnings per share.

The conditions on EPS remain similar under both AS and Ind AS, however, the values are affected by other standards also. For example, Biocon reports an immense 53% decline in the EPS because of the shares held by ESOP trust. Earlier, under AS, the same was a part of the shares outstanding and now, under Ind AS, it is recorded separately from the equity shares outstanding as the scheme is yet to be implemented by the company.

In companies like Tata Motors and Balkrishna Industries, the decrease in EPS is due the reduced volume of profit under Ind AS. Regarding Apollo Tyers, profit has surged under Ind AS because of the retrospective recognition of government grant.

| Descriptive Statistics | AUTO | | | PHARMA | | | IT | | |
|---|---|---|---|---|---|---|---|---|---|
| | Ind AS | AS | % | Ind AS | AS | % | Ind AS | AS | % |
| **Average** | 48.782 | 48.865 | **0.2** | 34.02 | 36.405 | **-7** | 37.992 | 38.769 | **-2** |
| **Standard deviation** | 56.09694 | 54.00432 | **4** | 25.59982 | 25.4866 | **0** | 29.02509 | 29.75055 | **-2** |

(Source: Calculated from Table no 6.10 using excel)

Apart from the above-mentioned few, most of the companies have displayed the same level of EPS under both standards. The difference is merely -0.17% with a standard deviation of 2.45%. The Pharma sector shows the most decline during the transition period without having any differences in the standard deviation. The auto sector reports the same level of EPS while the IT sector also accounts for a decrease of 2%.

### 6.1.10 Total Debt

**Table No 6.11 Total Debt under Ind AS and AS**

(Amount in Millions)

| AUTO | Ind AS | AS | Ind AS-AS | Difference (%) |
|---|---|---|---|---|
| Amara raja Batteries | 4217.60 | 4025.35 | 192.25 | 4.78 |
| Apollo Tyres | 6310.08 | 5900.03 | 410.05 | 6.95 |
| Bajaj Automobiles | 20270.40 | 21895.20 | -1624.80 | -7.42 |
| Balkrishna Industries | 12721.10 | 12883.06 | -161.96 | -1.26 |
| CEAT | 6092.60 | 6190.00 | -97.40 | -1.57 |
| HERO Motor Corp | 2650.56 | 2801.77 | -151.21 | -5.40 |
| Motherson Sumi | 2794.70 | 2801.70 | -7.00 | -0.25 |
| Sundaram Clayton | 5445.26 | 5603.47 | -158.21 | -2.82 |
| Tata Motors | 299791.60 | 229562.80 | 70228.80 | 30.59 |
| TVS | 23021.70 | 23021.70 | 0.00 | 0.00 |
| **PHARMA** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Aurobindo Pharma | 37519.10 | 41914.00 | -4394.90 | -10.49 |
| Biocon | 3620.00 | 3620.00 | 0.00 | 0.00 |
| Cadilla | 10343.00 | 10343.00 | 0.00 | 0.00 |
| Cipla | 11318.10 | 11318.10 | 0.00 | 0.00 |
| Divi's Laboratory | 418.88 | 418.87 | 0.01 | 0.00 |
| Dr Reddy’s Pharmaceuticals | 30835.00 | 30840.00 | -5.00 | -0.02 |
| SUVEN | 1014.06 | 1027.21 | -13.15 | -1.28 |
| Jubilant Life Sciences | 19332.60 | 19210.16 | 122.44 | 0.64 |
| Lupin Pharma | 3868.20 | 3868.20 | 0.00 | 0.00 |
| Piramal | 141564.00 | 124014.00 | 17550.00 | 14.15 |
| **IT** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |

| | | | | |
|---|---|---|---|---|
| Wipro | 66960.00 | 66960.00 | 0.00 | 0.00 |
| First Source Solutions | 1929.60 | 1748.02 | 181.58 | 10.39 |
| Infosys | 685.00 | 696.00 | -11.00 | -1.58 |
| Info edge | 3.79 | 3.79 | 0.00 | 0.00 |
| Mphasis | 1325.10 | 1325.10 | 0.00 | 0.00 |
| Mind tree | 418.00 | 418.00 | 0.00 | 0.00 |
| NIIT | 817.00 | 1002.78 | -185.78 | -18.53 |
| Oracle | 0.00 | 0.00 | 0.00 | 0.00 |
| Persistent | 26.91 | 25.70 | 1.21 | 4.71 |
| Zensar | 140.25 | 140.25 | 0.00 | 0.00 |
| **Grand Average** | **23848.47** | **21119.28** | **2729.20** | **0.72** |
| **Standard deviation** | **58189.87** | **46130.64** | **12960.14** | **7.91** |

(Source: Compiled from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Interpretation**

Table No 6.11 gives a comprehensive understanding of the total debt under Ind AS and AS. Total debt consists of the aggregate of long term and short-term borrowings of the company. Out of the selected companies, 18 companies show differences under Ind AS: majority of them showing a decline in total debt under Ind AS. Automobile sector shows the highest change of 21% while in IT sector the total debt is almost same under AS and Ind AS. This can be observed from the descriptive statistics shown below.

The components consisting of total debt come under financial liabilities in Ind AS. Financial liabilities can be measured at amortized cost or fair value through profit and loss (FVTPL). Financial guarantee contracts are measured through FVTPL and caused a 30% rise in debt of Tata motors under Ind AS. IT sector has lesser debt component when compared to other sectors is one of the reasons why there is no change in the same.

| **Descriptive Statistics** | **AUTO** | | | **PHARMA** | | | **IT** | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Ind AS** | **AS** | **%** | **Ind AS** | **AS** | **%** | **Ind AS** | **AS** | **%** |
| **Average** | 38331.56 | 31468.51 | **21** | 25983.29 | 24657.35 | **5** | 7230.57 | 7231.96 | **-0.01** |
| **Standard deviation** | 92149.54 | 70006.51 | **31** | 42538.39 | 37477.28 | **13** | 20996.41 | 20995.04 | **0** |

(Source: Calculated from Table no 6.11 using excel)

Theoretically, under Ind AS, financial liabilities are allowed special treatment of compound financial instruments and embedded financial instruments. Ind as differentiates the equity part and debt part of compound financial instruments. It follows the substance over form principle for the accounting of embedded financial instruments. “Under AS, preference shares issued by companies were classified as Equity. Under Ind AS, certain class of preference share, e.g., Redeemable Nonconvertible Preference Shares are classified as Financial Liabilities.”

In general, by the introduction of Ind AS has not influenced the debt of the company. The grand mean shows a 0.72% difference between Ind AS figures and AS figures, however, there is a 7.9% difference in standard deviation. It can be concluded that the impact of the auto sector is nullified by IT and pharma sector.

### 6.1.11 Other Equity

**Table No 6.12 Other Equity under Ind AS and AS**

(Amount in Millions)

| **AUTO** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
|---|---|---|---|---|
| Amara raja Batteries | 20987.9 | 20845.61 | 142.29 | 0.68 |
| Apollo Tyres | 46069.33 | 39455.04 | 6614.29 | 16.76 |
| Bajaj Automobiles | 129771.8 | 120022.9 | 9748.90 | 8.12 |
| Balkrishna Industries | 27623.3 | 27759.6 | -136.30 | 0.49 |
| CEAT | 19086.05 | 19508.13 | -422.08 | 2.16 |
| HERO Motor Corp | 87944.7 | 79048.1 | 8896.60 | 11.25 |
| Motherson Sumi | 23216 | 23043 | 173.00 | 0.75 |
| Sundaram Clayton | 4929.9 | 4210.8 | 719.10 | 17.08 |
| Tata Motors | 225829.3 | 216889 | 8940.30 | 4.12 |
| TVS | 19108.3 | 18892.9 | 215.40 | 1.14 |
| **PHARMA** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Aurobindo Pharma | 68073.3 | 67520 | 553.30 | 0.82 |
| Biocon | 58966 | 31885 | 27081.00 | 84.93 |
| Cadilla | 61738 | 60350 | 1388.00 | 2.30 |
| Cipla | 118252 | 121786.1 | -3534.10 | 2.90 |
| Divi's Laboratory | 43039.5 | 42970.47 | 69.03 | 0.16 |
| Dr Reddy’s Pharmaceuticals | 119931 | 115201 | 4730.00 | 4.11 |
| SUVEN | 610.74 | 610.91 | -0.17 | 0.03 |
| Jubilant Life Sciences | 19978.02 | 19665.71 | 312.31 | 1.59 |
| Lupin Pharma | 118229.5 | 115025.2 | 3204.30 | 2.79 |
| Piramal | 127661 | 121420.9 | 6240.10 | 5.14 |

| IT | Ind AS | AS | Ind AS-AS | Difference (%) |
|---|---|---|---|---|
| Wipro | 407316 | 404111 | 3205.00 | 0.79 |
| First Source Solutions | 10998.07 | 10976.46 | 21.61 | 0.20 |
| Infosys | 599340 | 560090 | 39250.00 | 7.01 |
| Info edge | 16742.43 | 16430.95 | 311.48 | 1.90 |
| Mphasis | 45040.52 | 43172.89 | 1867.63 | 4.33 |
| Mind tree | 22963 | 22486 | 477.00 | 2.12 |
| NIIT | 11619 | 10864 | 755.00 | 6.95 |
| Oracle | 39148.33 | 29466.04 | 9682.29 | 32.86 |
| Persistent | 14846.46 | 14709.25 | 137.21 | 0.93 |
| Zensar | 9116.58 | 8988.76 | 127.82 | 1.42 |
| **Grand Average** | **83939.2** | **79580.19** | **4359.01** | **5.47** |
| **Standard Deviation** | **125389.9** | **119768** | **5621.94** | **4.69** |

(Source: Compiled from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Interpretation**

Table No. 6.12 shows the aggregate of other equity under Ind AS and AS. During the reign of AS, this was a separate line item in balance sheet under the heading of reserves and surplus. Ind AS instigated a separate statement in the financial statements known as the statement of changes in equity. This statement gives an in-depth understanding of the components affecting equity. It records the movements of several reserves along with the movements in the fair value through other comprehensive income and profit and loss statements. Statement of changes in equity is thus a summary of reserves and changes in fair value.

Ind AS doesn't recognize the proposed dividend. During the transition period, the proposed dividend recognized under AS is reversed and added back to the retained earnings. This contributes to a primary reason for the hike in other equity under Ind AS. The fair value changes reported under Ind AS also pave way to the changes between the reported figures of other equity. Companies like Biocon and Oracle experiences 80% and 50% change because of the reversal of immense amounts of proposed dividend. Ind as requires the provisions and certain other liabilities to be shown in present value. The changes thus brought in also create a difference between AS and Ind AS figures.

| Descriptive Statistics | AUTO | | | PHARMA | | | IT | | |
|---|---|---|---|---|---|---|---|---|---|
| | Ind AS | AS | % | Ind AS | AS | % | Ind AS | AS | % |
| **Average** | 60456.66 | 56967.51 | **6** | 73647.91 | 69643.53 | **6** | 117713 | 112129.5 | **5** |
| **Standard deviation** | 69635.88 | 66072.37 | **5** | 45432.27 | 45978.31 | **-1** | 208561.1 | 198695.6 | **5** |

(Source: Calculated from Table no 6.12 using excel)

The descriptive statistics show that the automobile sector and pharmaceutical sector account for a 6% increase in other equity after implementation of Ind AS while the IT sector records a 5% increase. Despite the increase in average, pharmaceutical sector records limited difference in standard deviation. In the automobile sector and IT sector, the deviation remains at 5%.

In general, other equity has shown an increase of 5% after the implementation of Ind AS with a deviation of 5% between the companies.

### 6.1.12 Current Assets

**Table No 6.13 Current Assets under Ind AS and AS**

(Amount in Millions)

| **AUTO** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
|---|---|---|---|---|
| Amara raja Batteries | 14081.4 | 14080.81 | 0.59 | 0.00 |
| Apollo Tyres | 24213.72 | 23503.9 | 709.82 | 3.02 |
| Bajaj Automobiles | 47252.5 | 46182.5 | 1070.00 | 2.32 |
| Balkrishna Industries | 17093.2 | 15902.9 | 1190.30 | 7.48 |
| CEAT | 14471.1 | 14485.8 | -14.70 | 0.10 |
| HERO Motor Corp | 61512.2 | 59350.9 | 2161.30 | 3.64 |
| Motherson Sumi | 15673 | 14761 | 912.00 | 6.18 |
| Sundaram Clayton | 5057.5 | 4988.7 | 68.80 | 1.38 |
| Tata Motors | 118616.9 | 107059.1 | 11557.80 | 10.80 |
| TVS | 18863.7 | 20175.4 | -1311.70 | 6.50 |
| **PHARMA** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Aurobindo Pharma | 77745 | 69957.3 | 7787.70 | 11.13 |
| Biocon | 23711 | 23023 | 688.00 | 2.99 |
| Cadilla | 29233 | 29235 | -2.00 | 0.01 |
| Cipla | 64673.7 | 64639 | 34.70 | 0.05 |
| Divi's Laboratory | 30581.03 | 31131.24 | -550.21 | 1.77 |
| Dr Reddys Pharmaceuticals | 102111 | 100949 | 1162.00 | 1.15 |
| SUVEN | 4270.31 | 4666.84 | -396.53 | 8.50 |
| Jubilant Life Sciences | 10675.97 | 10732.92 | -56.95 | 0.53 |
| Lupin Pharma | 72564.8 | 72353.3 | 211.50 | 0.29 |
| Piramal | 33628.7 | 34990.9 | -1362.20 | 3.89 |
| **IT** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Wipro | 452603 | 450287 | 2316.00 | 0.51 |
| First Source Solutions | 5203.06 | 5559.98 | -356.92 | 6.42 |
| Infosys | 460970 | 460970 | 0.00 | 0.00 |
| Info edge | 12071.67 | 12092.61 | -20.94 | 0.17 |

| | | | | |
|---|---|---|---|---|
| Mphasis | 28793.52 | 28493.33 | 300.19 | 1.05 |
| Mind tree | 16492 | 16374 | 118.00 | 0.72 |
| NIIT | 5728 | 5664 | 64.00 | 1.13 |
| Oracle | 33196.84 | 33226.47 | -29.63 | 0.09 |
| Persistent | 11173.1 | 11021.24 | 151.86 | 1.38 |
| Zensar | 9647.5 | 9535.5 | 112.00 | 1.17 |
| **Grand Average** | **60730.28** | **59846.45** | **883.83** | **1.47** |
| **Standard Deviation** | **109675.1** | **109179.2** | **495.87** | **0.45** |

(Source: Compiled from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Interpretation**

Table no. 6.13 depicts the current assets under Ind AS and AS. Current assets represent the aggregate of inventory and financial assets. Financial assets comprise of investments, trade receivables, loans and advances, cash and cash equivalents and other financial assets. Ind AS demands the measurement of financial assets under fair valuation and the changes in fair value to be adjusted either through profit and loss statement or other comprehensive income. Under AS, all these assets were valued at historical cost. Ind AS also brings forth the expected credit loss system to provide for the doubtful debts under trade receivables as opposed to simple provisions allocated under AS.

Companies like Tata motors and Aurobindo pharma records the highest spike in current assets under Ind AS. While fair valuation of current investments is the reason in tata motors, it is the trade receivables in Aurobindo pharma. Despite the introduction of fair valuation and expected credit loss in current assets, certain companies record the current assets the same under both the standards. Such companies include tech giants like Infosys and Oracle. It is assumed that all these companies have already accepted fair valuation for measuring their financial assets as they are global conglomerates who should report to international stock exchanges.

| **Descriptive Statistics** | **AUTO** | | | **PHARMA** | | | **IT** | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Ind AS** | **AS** | **%** | **Ind AS** | **AS** | **%** | **Ind AS** | **AS** | **%** |
| **Average** | 33683.52 | 32049.1 | **5** | 44919.45 | 44167.85 | **2** | 103588 | 103322 | **0.2** |
| **Standard deviation** | 34406.01 | 31107.02 | **11** | 32243.5 | 31100.5 | **4** | 186388 | 185921 | **0.2** |

(Source: Calculated from Table no 6.13 using excel)

Current assets show an increased value under Ind AS. Fair value measurement of financial assets is the major reason for a hike in the value of current assets under Ind AS when compared to AS. This is seen in all the selected industries unanimously with 5 % in auto and 2 % in pharma. On average, the IT sector shows minimal increase, but many companies have shown individual increment in the value of current assets under Ind AS.

### 6.1.13 Current Liabilities

**Table No 6.14 Current Liabilities under Ind AS and AS**

(Amount in Millions)

| **AUTO** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
|---|---|---|---|---|
| Amara raja Batteries | 6378 | 6293.59 | 84.41 | 1.34 |
| Apollo Tyres | 20788.18 | 22007.42 | -1219.24 | 5.54 |
| Bajaj Automobiles | 27809.9 | 29530.2 | -1720.30 | 5.83 |
| Balkrishna Industries | 16050.2 | 15043.04 | 1007.16 | 6.70 |
| CEAT | 11667.94 | 11944.7 | -276.76 | 2.32 |
| HERO Motor Corp | 34483.2 | 40488.2 | -6005.00 | 14.83 |
| Motherson Sumi | 11875 | 11509 | 366.00 | 3.18 |
| Sundaram Clayton | 4859.9 | 4840 | 19.90 | 0.41 |
| Tata Motors | 187017.4 | 177510.6 | 9506.80 | 5.36 |
| TVS | 23158.8 | 23158.8 | 0.00 | 0.00 |
| **PHARMA** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Aurobindo Pharma | 53436.9 | 45538.7 | 7898.20 | 17.34 |
| Biocon | 8626 | 8108 | 518.00 | 6.39 |
| Cadilla | 19220 | 19203 | 17.00 | 0.09 |
| Cipla | 29544.7 | 30812 | -1267.30 | 4.11 |
| Divi's Laboratory | 5161.22 | 5161.22 | 0.00 | 0.00 |
| Dr Reddy’s Pharmaceuticals | 43888 | 47987 | -4099.00 | 8.54 |
| SUVEN | 1047.86 | 1042.22 | 5.64 | 0.54 |
| Jubilant Life Sciences | 11552.27 | 11982.74 | -430.47 | 3.59 |
| Lupin Pharma | 19551 | 22935.5 | -3384.50 | 14.76 |
| Piramal | 86379.7 | 86388.5 | -8.80 | 0.01 |
| **IT** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Wipro | 152119 | 166071 | -13952.00 | 8.40 |
| First Source Solutions | 1561.45 | 1574.5 | -13.05 | 0.83 |
| Infosys | 115880 | 155370 | -39490.00 | 25.42 |
| Info edge | 3586.17 | 2876.91 | 709.26 | 24.65 |
| Mphasis | 7491.44 | 7449.74 | 41.70 | 0.56 |

| | | | | |
|---|---|---|---|---|
| Mind tree | 6879 | 7511 | -632.00 | 8.41 |
| NIIT | 2168 | 3173 | -1005.00 | 31.67 |
| Oracle | 9833.82 | 19785.76 | -9951.94 | 50.30 |
| Persistent | 2071.92 | 2120.98 | -49.06 | 2.31 |
| Zensar | 1476.3 | 1478.17 | -1.87 | 0.13 |
| **Grand Average** | **30852.11** | **32963.18** | **-2111.07** | **6.4** |
| **Standard Deviation** | **45036.35** | **48020.95** | **-2984.6** | **6.2** |

(Source: Compiled from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Interpretation**

Table no 6.14 summarizes the current liabilities under Ind AS and AS. Current liabilities include financial liabilities, and they are valued at fair value as opposed to the liabilities which are shown at historical cost under AS. Current liabilities also include provisions shown at discounted values. Under AS, provisions were created without considering the time value impact of their outflow. This contributes to the difference in the current liabilities under Ind AS.

Short-term provisions under AS include the proposed dividend. Ind AS does not recognize the proposed dividend and hence it is eliminated from the short-term provisions under Ind AS. This elimination is one of the reasons that Oracle reports a massive 50% decline in current liabilities under Ind AS primarily because of the introduction of time value.

| **Descriptive Statistics** | **AUTO** | | | **PHARMA** | | | **IT** | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Ind AS** | **AS** | **%** | **Ind AS** | **AS** | **%** | **Ind AS** | **AS** | **%** |
| **Average** | 34408.85 | 34232.56 | **0.5** | 39138.79 | 40475.44 | **3** | 30306.71 | 36741.11 | **18** |
| **Standard deviation** | 54432.26 | 51518.91 | **2** | 26566.83 | 26093.32 | **16** | 55387.54 | 65617.77 | **6** |

(Source: Calculated from Table no 6.14 using excel)

Current Liability shows a decreased value under Ind AS. The cancellation of proposed dividend from short term provisions along with fair value measurement of financial liabilities and present valuation of provisions are the major reasons for the decline in the value of current liabilities under Ind AS when compared to AS. This is seen in all the selected industries unanimously with an 18% decline in the IT industry while the automobile sector shows a minimal impact of 0.5%.

### 6.1.14 Working Capital

**Table No 6.15 Working Capital under Ind AS and AS**

(Amount in Millions)

| **AUTO** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
|---|---|---|---|---|
| Amara raja Batteries | 7703.4 | 7787.22 | -83.82 | 1.08 |
| Apollo Tyres | 3425.54 | 1496.48 | 1929.06 | 128.91 |
| Bajaj Automobiles | 19442.6 | 16652.3 | 2790.30 | 16.76 |
| Balkrishna Industries | 1043 | 859.86 | 183.14 | 21.30 |
| CEAT | 2803.16 | 2541.1 | 262.06 | 10.31 |
| HERO Motor Corp | 27029 | 18862.7 | 8166.30 | 43.29 |
| Motherson Sumi | 3798 | 3252 | 546.00 | 16.79 |
| Sundaram Clayton | 197.6 | 148.7 | 48.90 | 32.89 |
| Tata Motors | -68400.5 | -70451.5 | 2051.00 | -2.91 |
| TVS | -4295.1 | -2983.4 | -1311.70 | -43.97 |
| **PHARMA** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Aurobindo Pharma | 24308.1 | 24418.6 | -110.50 | 0.45 |
| Biocon | 15085 | 14915 | 170.00 | 1.14 |
| Cadilla | 10013 | 10032 | -19.00 | 0.19 |
| Cipla | 35129 | 33827 | 1302.00 | 3.85 |
| Divi's Laboratory | 25419.81 | 25970.02 | -550.21 | 2.12 |
| Dr Reddy's Pharmaceuticals | 58223 | 52962 | 5261.00 | 9.93 |
| SUVEN | 3222.45 | 3624.62 | -402.17 | 11.10 |
| Jubilant Life Sciences | -876.3 | -1249.82 | 373.52 | -29.89 |
| Lupin Pharma | 53013.8 | 49417.8 | 3596.00 | 7.28 |
| Piramal | -52751 | -51397.6 | -1353.40 | -2.63 |
| **IT** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Wipro | 300484 | 284216 | 16268.00 | 5.72 |
| First Source Solutions | 3641.61 | 3985.48 | -343.87 | 8.63 |
| Infosys | 345090 | 305600 | 39490.00 | 12.92 |
| Info edge | 8485.5 | 9215.7 | -730.20 | 7.92 |
| Mphasis | 21302.08 | 21043.59 | 258.49 | 1.23 |
| Mind tree | 9613 | 8863 | 750.00 | 8.46 |
| NIIT | 3560 | 2491 | 1069.00 | 42.91 |
| Oracle | 23363.02 | 13440.71 | 9922.31 | 73.82 |
| Persistent | 9101.18 | 8900.26 | 200.92 | 2.26 |
| Zensar | 8171.2 | 8057.33 | 113.87 | 1.41 |
| **Grand Average** | **29878.17** | **26883.27** | **2994.9** | **11.14** |
| **Standard Deviation** | **81981.58** | **75226.25** | **6755.337** | **8.98** |

(Source: Compiled from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Interpretation**

Table No 6.15 Summarizes the net working capital under AS and Ind AS. Net working capital is the difference between current assets and current liabilities and shows the net effect of current assets and current liabilities. It is indispensable for a company to keep adequate working capital for the smooth functioning of the enterprise. Current assets include inventories and financial assets and other current assets. Current liabilities comprise of financial liabilities, current liabilities and short-term provisions.

Ind AS does not give any specific guideline or requirements related to working capital, however, it reconstructs the whole current assets and liabilities by introducing fair value measurement, expected credit loss system, present valuation in provisions to name a few. These have been discussed in table no 6.13 and 6.14. The changes seen in working capital are considered a culmination of all the alterations brought into the current assets and liabilities.

| Descriptive Statistics | AUTO | | | PHARMA | | | IT | | |
|---|---|---|---|---|---|---|---|---|---|
| | Ind AS | AS | % | Ind AS | AS | % | Ind AS | AS | % |
| **Average** | -725.33 | -2183.45 | **67** | 17078.69 | 16251.96 | **5** | 73281.16 | 66581.31 | **10** |
| **Standard deviation** | 25592.71 | 25029.79 | **2** | 31404.71 | 29814.83 | **5** | 132084.2 | 120550.9 | **10** |

(Source: Calculated from Table no 6.15 using excel)

Working capital has escalated under Ind AS, especially in the auto and IT sector. Pharma also depicts a betterment of working capital under Ind AS. It can be assumed that the introduction of fair value measurement in current assets has had a positive effect on working capital also. It is assumed that the changes brought into the current assets and current liabilities have considerably helped the companies to improve their working capital management.

### 6.1.15 Property Plant and Equipment (PPE)

**Table No 6.16 Property Plant and Equipment under Ind AS and AS**

(Amount in Millions)

| PPE | Ind AS | AS | Ind AS-AS | Difference (%) |
|---|---|---|---|---|
| Amara raja Batteries | 12479.5 | 13122.66 | -643.16 | 4.90 |
| Apollo Tyres | 32869 | 30883.83 | 1985.17 | 6.43 |
| Bajaj Automobiles | 19363.8 | 19363.8 | 0.00 | 0.00 |

| | | | | |
|---|---|---|---|---|
| Balkrishna Industries | 28540.6 | 28496.02 | 44.58 | 0.16 |
| CEAT | 19170.39 | 19048.95 | 121.44 | 0.64 |
| HERO Motor Corp | 34654.6 | 37178.5 | -2523.90 | 6.79 |
| Motherson Sumi | 14086 | 14086 | 0.00 | 0.00 |
| Sundaram Clayton | 4331.6 | 4435.5 | -103.90 | 2.34 |
| Tata Motors | 175732.5 | 122527.8 | 53204.70 | 43.42 |
| TVS | 16726.7 | 15459.3 | 1267.40 | 8.20 |
| **PHARMA** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Aurobindo Pharma | 25681.3 | 25681.3 | 0.00 | 0.00 |
| Biocon | 8596 | 9035 | -439.00 | 4.86 |
| Cadilla | 19986 | 19997 | -11.00 | 0.06 |
| Cipla | 37022.8 | 37244.4 | -221.60 | 0.59 |
| Divi's Laboratory | 14357.1 | 14357.1 | 0.00 | 0.00 |
| Dr Reddy's Pharmaceuticals | 35938 | 35938 | 0.00 | 0.00 |
| SUVEN | 3050.56 | 3050.56 | 0.00 | 0.00 |
| Jubilant Life Sciences | 14111.72 | 14081.83 | 29.89 | 0.21 |
| Lupin Pharma | 23278.4 | 23278.4 | 0.00 | 0.00 |
| Piramal | 7125.2 | 7013.6 | 111.60 | 1.59 |
| **IT** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Wipro | 36418 | 37262 | -844.00 | 2.27 |
| First Source Solutions | 256.6 | 265.49 | -8.89 | 3.35 |
| Infosys | 82480 | 82480 | 0.00 | 0.00 |
| Info edge | 725.33 | 902.04 | -176.71 | 19.59 |
| Mphasis | 434.24 | 434.24 | 0.00 | 0.00 |
| Mind tree | 4109 | 4304 | -195.00 | 4.53 |
| NIIT | 4694 | 4694 | 0.00 | 0.00 |
| Oracle | 2513.9 | 2615 | -101.10 | 3.87 |
| Persistent | 2771.92 | 2811.16 | -39.24 | 1.40 |
| Zensar | 820.17 | 820.17 | 0.00 | 0.00 |
| **Grand Average** | **22744.16** | **21028.92** | **1715.243** | **8.15** |
| **Standard Deviation** | **33085.72** | **25386.84** | **7698.877** | **30.33** |

(Source: Compiled from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Interpretation**

Table No 6.16 portrays the value of fixed assets under AS and Ind AS. Fixed assets include building, machinery, land, computer, and similar revenue generating assets. Under Ind AS the terminology used for the same is property plant and equipment (PPE). During the initial transition companies were given an option to carry forward the book value of the fixed assets under AS is taken as the deemed

value under Ind AS. The deemed value is further adjusted for decommissioning liability.

Ind AS makes provision for the reversal of excess depreciation because of reduction in carrying amounts of PPE due to adjustment for capitalisation of foreign exchange gains and losses of long-term foreign currency borrowings and indirectly attributable expenses. Under AS, these expenses were capitalised.

While majority of Pharma and IT companies have opted the carrying value of their assets as their deemed value under Ind AS, Automobiles have preferred to follow fair value method. It is evident from the impact that can be observed from the auto companies. This is the reason for the changes in the value of PPE in companies like Tata Motors, TVS, Hero Motor Corp. Even though pharma companies and IT companies chose to adopt the exemption for deemed value allowed under Ind AS, many companies report the changes in values of PPE because of the reversal of depreciation due to adjustment of foreign exchange borrowings. Info Edge reports a decline of 19.59%.

| **Descriptive Statistics** | **AUTO** | | | **PHARMA** | | | **IT** | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Ind AS** | **AS** | **%** | **Ind AS** | **AS** | **%** | **Ind AS** | **AS** | **%** |
| **Average** | 35795.47 | 30460.24 | **18** | 18914.71 | 18967.72 | **0** | 13522.32 | 13658.81 | **-1** |
| **Standard deviation** | 50066.39 | 33747.39 | **48** | 11665.01 | 11675.17 | **0** | 26572.89 | 26630.85 | **0** |

(Source: Calculated from Table no 6.16 using excel)

Essentially, there is a minor increase in the value of aggregate PPE under Ind AS mainly because of the automobile sector. It alone records an 18% increase while the pharma and IT sector hardly amounts to 1% increase.

### 6.1.16 Short Term Financial Asset (STFA)

**Table No 6.17 Short Term Financial Asset under Ind AS and AS**

(Amount in Millions)

| **AUTO** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
|---|---|---|---|---|
| Amara raja Batteries | 7521 | 7951.33 | -430.33 | 5.41 |
| Apollo Tyres | 15369.73 | 12662.93 | 2706.80 | 21.38 |
| Bajaj Automobiles | 29573.3 | 36672.2 | -7098.90 | 19.36 |
| Balkrishna Industries | 10062.5 | 13038.94 | -2976.44 | 22.83 |
| CEAT | 6912.92 | 8178.6 | -1265.68 | 15.48 |
| HERO Motor Corp | 48836.7 | 51826.3 | -2989.60 | 5.77 |

| | | | | |
|---|---|---|---|---|
| Motherson Sumi | 7783 | 7734 | 49.00 | 0.63 |
| Sundaram Clayton | 2048.1 | 2769.4 | -721.30 | 26.05 |
| Tata Motors | 51894.8 | 55508.6 | -3613.80 | 6.51 |
| TVS | 11915.7 | 11334.4 | 581.30 | 5.13 |
| **PHARMA** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Aurobindo Pharma | 47271.6 | 43400.8 | 3870.80 | 8.92 |
| Biocon | 18441 | 18085 | 356.00 | 1.97 |
| Cadilla | 19966 | 21478 | -1512.00 | 7.04 |
| Cipla | 25255.9 | 32765.2 | -7509.30 | 22.92 |
| Divi's Laboratory | 18484 | 19508 | -1024.00 | 5.25 |
| Dr Reddy's Pharmaceuticals | 76815 | 81063 | -4248.00 | 5.24 |
| SUVEN | 2944.58 | 3828.97 | -884.39 | 23.10 |
| Jubilant Life Sciences | 4948.59 | 5889.5 | -940.91 | 15.98 |
| Lupin Pharma | 46494.7 | 48918.6 | -2423.90 | 4.95 |
| Piramal | 28827 | 30061 | -1234.00 | 4.10 |
| **IT** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Wipro | 119632 | 115426 | 4206.00 | 3.64 |
| First Source Solutions | 4848.81 | 4795.57 | 53.24 | 1.11 |
| Infosys | 413680 | 460970 | -47290.00 | 10.26 |
| Info edge | 11983.53 | 10344.45 | 1639.08 | 15.85 |
| Mphasis | 27106.9 | 27930.82 | -823.92 | 2.95 |
| Mind tree | 15510 | 14326 | 1184.00 | 8.26 |
| NIIT | 4680 | 5250 | -570.00 | 10.86 |
| Oracle | 7345.75 | 7425.73 | -79.98 | 1.08 |
| Persistent | 10661.39 | 11021.24 | -359.85 | 3.27 |
| Zensar | 9217.96 | 9535.51 | -317.55 | 3.33 |
| **Grand Average** | **36867.75** | **39323.34** | **-2455.59** | **-6.24** |
| **Standard Deviation** | **74288.52** | **82188.61** | **-7900.09** | **-9.61** |

(Source: Compiled from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Interpretation**

Table no 6.17 describes the values of short-term financial assets under Ind AS and AS. The term financial assets are introduced under Ind AS. "Financial assets are defined as any asset that is (a)cash, (b)equity instrument of another entity(c)a contractual right to receive cash or another financial asset or exchange the same in favor of the enterprise (d)any other contract that is settled using company's equity instrument or cash or any other financial asset." (*Ministry Of Corporate Affairs - Indian Accounting Standards*, n.d.)

In other words, financial assets include most of the current assets except inventory. Short-term financial assets are those financial assets which are current in nature.

"Financial assets are classified into three categories based on business model test and contractual cash flow characteristic. They are, (a) financial assets carried at fair value through profit or loss (FVTPL) (b)financial assets carried at amortized cost (c) financial assets at fair value though other comprehensive income (FVTOCI)".(*ICAI - The Institute of Chartered Accountants of India*, n.d.)

Under AS, the current assets were divided into trade receivables, cash and cash equivalents, loans and advances, investments, and other current assets. for the purpose of comparison between the standards, those items which come under financial assets were identified from the year 2015-16 balance sheet and they are manually calculated to reach at the short-term financial assets under AS.

The introduction of financial assets has paved the way to the reclassification of the items under current assets. Items like dues to suppliers, the current portion of the long-term loan were part of other current assets under AS are now reclassified into other current financial assets. The same items brought under the heading of financial assets are now recognized at fair value. This is the primary reason why financial assets show a decrease under Ind AS. Companies like Sundaram clayton, Apollo Tyers, Balkrishna Industries have been impacted because of the reclassification in other current assets. The same has happened in SUVEN and Cipla. Reclassification and fair valuation have brought down the current assets under Ind AS.

Under Ind AS, the provisions for bad and doubtful debts are created based on Expected Credit Loss (ECL) method. Under ECL method, impairment loss provision recognition and measurement consider time value of money (Present Value) and losses expected to occur in future based on forecast economic conditions and limitations. This is also another reason for the decreased value of financial assets under Ind AS.

| **Descriptive Statistics** | **AUTO** | | | **PHARMA** | | | **IT** | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Ind AS** | **AS** | **%** | **Ind AS** | **AS** | **%** | **Ind AS** | **AS** | **%** |
| **Average** | 19191.78 | 20767.67 | **-8** | 28944.84 | 30499.81 | **-5** | 62466.63 | 66702.53 | **-8** |
| **Standard deviation** | 18006.24 | 19594.47 | **-8** | 22363.8 | 22951.61 | **-3** | 128166.2 | 142491.6 | **-10** |

(Source: Calculated from Table no 6.17 using excel)

In general, financial assets have decreased after transition to Ind AS due to reclassification of current assets. While the auto and IT sector reports for 8% decrease, pharma records a 5% decrease along with 3% in standard deviation. The standard deviation has generally decreased over all the selected industries.

### 6.1.17 Long Term Financial Asset (LTFA)

**Table No 6.18 Long Term Financial Asset under Ind AS and AS**

(Amount in Millions)

| **AUTO** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
|---|---|---|---|---|
| Amara raja Batteries | 253.9 | 288.06 | -34.16 | 11.86 |
| Apollo Tyres | 11314.84 | 10354.15 | 960.69 | 9.28 |
| Bajaj Automobiles | 77474 | 84765.8 | -7291.80 | 8.60 |
| Balkrishna Industries | 6057.1 | 6985.82 | -928.72 | 13.29 |
| CEAT | 2847.4 | 3331.57 | -484.17 | 14.53 |
| HERO Motor Corp | 11618.1 | 10193.6 | 1424.50 | 13.97 |
| Motherson Sumi | 276 | 8449 | -8173.00 | 96.73 |
| Sundaram Clayton | 1460.5 | 899.4 | 561.10 | 62.39 |
| Tata Motors | 135118 | 106879.4 | 28238.60 | 26.42 |
| TVS | 12702.6 | 12398.7 | 303.90 | 2.45 |
| **PHARMA** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Aurobindo Pharma | 12650.2 | 15996.7 | -3346.50 | 20.92 |
| Biocon | 34360 | 13922 | 20438.00 | 146.80 |
| Cadilla | 33203 | 33768 | -565.00 | 1.67 |
| Cipla | 39756.7 | 50904.2 | -11147.50 | 21.90 |
| Divi's Laboratory | 688 | 1866.61 | -1178.61 | 63.14 |
| Dr Reddy's Pharmaceuticals | 20460 | 24157 | -3697.00 | 15.30 |
| SUVEN | 280.81 | 270.75 | 10.06 | 3.72 |
| Jubilant Life Sciences | 17269.77 | 19832.13 | -2562.36 | 12.92 |
| Lupin Pharma | 37743.5 | 40123.9 | -2380.40 | 5.93 |
| Piramal | 221271 | 217662 | 3609.00 | 1.66 |
| **IT** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Wipro | 11763 | 11929 | -166.00 | 1.39 |
| First Source Solutions | 12430.9 | 14154.24 | -1723.34 | 12.18 |
| Infosys | 620 | 730 | -110.00 | 15.07 |
| Info edge | 7767.29 | 5876.72 | 1890.57 | 32.17 |
| Mphasis | 17835.65 | 22621.95 | -4786.30 | 21.16 |
| Mind tree | 9426 | 10894 | -1468.00 | 13.48 |
| NIIT | 3595 | 4251 | -656.00 | 15.43 |
| Oracle | 23.03 | 0 | 23.03 | 100 |

| | | | | |
|---|---|---|---|---|
| Persistent | 3718.44 | 3694.95 | 23.49 | 0.64 |
| Zensar | 147.47 | 320.45 | -172.98 | 53.98 |
| **Grand Average** | **24804.41** | **24584.04** | **220.37** | **0.89** |
| **Standard Deviation** | **45528.97** | **43267.59** | **2261.381** | **5.22** |

(Source: Compiled from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Interpretation**

Table No 6.18 illustrates the value of long-term financial assets under Ind AS and under AS. Long-term financial assets is a term newly introduced by Ind AS, referring to the total of financial assets that are non-current. Under the previous AS, non-current assets encompassed security deposits, capital advances, balances due from government authorities, prepaid expenses, as well as investments, loans, and advances. Ind AS has reclassified certain items, which were previously considered financial assets, as long-term financial assets. Therefore, for comparison purposes, the figures under AS are computed separately.

Several companies have adopted fair valuation for the purpose of recognition of long-term financial assets. Companies such as Motherson sumi, Sundaram Clayton, Biocon record a massive increase under Ind AS due to the fair valuation of the non-current investments. Zensar and Divi's reports a decrease in long-term financial assets under Ind AS due to the reclassification of items.

| **Descriptive Statistics** | **AUTO** | | | **PHARMA** | | | **IT** | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Ind AS** | **AS** | **%** | **Ind AS** | **AS** | **%** | **Ind AS** | **AS** | **%** |
| **Average** | 25912.24 | 24454.55 | **6** | 41768.3 | 41850.33 | **0** | 6732.678 | 7447.231 | **10** |
| **Standard deviation** | 44741.33 | 38188.45 | **17** | 64704.97 | 63799.89 | **1** | 6092.382 | 7343.614 | **17** |

(Source: Calculated from Table no 6.18 using excel)

When the selected companies are observed as a whole, long-term financial assets show no change under either the standards, however, auto and IT sector reports a 6% and 10% change. Auto companies recorded a hike because of the fair valuation of long-term financial assets. IT companies experienced a decline due to reclassification under Ind AS. The pharma sector reports an average of 0% change during the transition period.

### 6.1.18 Short Term Financial Liability (STFL)

**Table No 6.19 Short Term Financial Liability under Ind AS and AS**

(Amount in Millions)

| **AUTO** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
|---|---|---|---|---|
| Amara raja Batteries | 4787 | 3355.47 | 1431.53 | 42.66 |
| Apollo Tyres | 15372.73 | 12854.45 | 2518.28 | 19.59 |
| Bajaj Automobiles | 23324.4 | 26315.7 | -2991.30 | 11.37 |
| Balkrishna Industries | 14312.4 | 10954.46 | 3357.94 | 30.65 |
| CEAT | 10446.16 | 10550.08 | -103.92 | 0.99 |
| HERO Motor Corp | 37384.5 | 28017.7 | 9366.80 | 33.43 |
| Motherson Sumi | 9486 | 6769 | 2717.00 | 40.14 |
| Sundaram Clayton | 4505.4 | 3385.5 | 1119.90 | 33.08 |
| Tata Motors | 164673.6 | 122683.4 | 41990.20 | 34.23 |
| TVS | 20235.5 | 18079.4 | 2156.10 | 11.93 |
| **PHARMA** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Aurobindo Pharma | 52596.9 | 38567 | 14029.90 | 36.38 |
| Biocon | 7109 | 6198 | 911.00 | 14.70 |
| Cadilla | 18214 | 15025 | 3189.00 | 21.22 |
| Cipla | 26065.4 | 21225.2 | 4840.20 | 22.80 |
| Divi's Laboratory | 4648 | 3136.3 | 1511.70 | 48.20 |
| Dr Reddys Pharmaceuticals | 40296 | 28088 | 12208.00 | 43.46 |
| SUVEN | 956.58 | 1014.77 | -58.19 | 5.73 |
| Jubilant Life Sciences | 11123.08 | 7976.54 | 3146.54 | 39.45 |
| Lupin Pharma | 17129.8 | 16410.5 | 719.30 | 4.38 |
| Piramal | 85120 | 85787 | -667.00 | 0.78 |
| **IT** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Wipro | 422570 | 389423 | 33147.00 | 8.51 |
| First Source Solutions | 1328.65 | 1366.25 | -37.60 | 2.75 |
| Infosys | 460970 | 460970 | 0.00 | 0.00 |
| Info edge | 274.36 | 288.11 | -13.75 | 4.77 |
| Mphasis | 6266.11 | 6337.12 | -71.01 | 1.12 |
| Mind tree | 4500 | 3444 | 1056.00 | 30.66 |
| NIIT | 811 | 943 | -132.00 | 14.00 |
| Oracle | 32710.52 | 30512.07 | 2198.45 | 7.21 |
| Persistent | 1169.06 | 1184.45 | -15.39 | 1.30 |
| Zensar | 1074.95 | 1277.71 | -202.76 | 15.87 |
| **Grand Average** | **49982.04** | **45404.64** | **4577.397** | **10.08** |
| **Standard Deviation** | **109626** | **105087.3** | **4538.788** | **4.31** |

(Source: Compiled from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Interpretation**

Table No 6.19 summarizes the short-term financial liability under Ind AS and AS. Financial liability is any liability which is a contractual obligation to deliver cash or financial assets to an outside entity. It also includes exchange of financial assets or liability which is unfavorable to the entity. It includes trade payable, bank loans, finance lease obligations, operating lease payable, debentures/bonds, financial guarantee, derivative instruments, and redeemable preference share capital. Short-term financial liabilities are those financial liabilities which are current in nature.

Financial liabilities are classified into two categories: financial liabilities at amortized cost, financial liabilities at fair value through profit and loss (FVTPL). Financial liabilities do not include taxes payable, advance from customers, minority interest and non-financial items. These are excluded from AS figures to measure the value of financial liability. Along with reclassification, fair valuation of financial liabilities during transition also resulted in changes of values under Ind AS.

| **Descriptive Statistics** | **AUTO** | | | **PHARMA** | | | **IT** | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Ind AS** | **AS** | **%** | **Ind AS** | **AS** | **%** | **Ind AS** | **AS** | **%** |
| **Average** | 30452.77 | 24296.52 | **25** | 26325.88 | 22342.83 | **17** | 93167.47 | 89574.57 | **4** |
| **Standard deviation** | 48164.39 | 35617.51 | **35** | 26260.37 | 25170.99 | **4** | 184207.5 | 177919 | **4** |

(Source: Calculated from Table no 6.19 using excel)

Most of the companies have reported a high financial liability under Ind AS. There has been an increase of 10% with a deviation of 4%. The automobile sector has witnessed a massive hike of 25% while the pharmaceutical sector records a 17% increase and IT reports 4%. The IT sector does not hold much liability when compared to pharma and auto, hence they report a low percentage increase.

### 6.1.19 Long Term Financial Liability

**Table No 6.20 Long Term Financial Liability under Ind AS and AS**

(Amount in Millions)

| **AUTO** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
|---|---|---|---|---|
| Amara raja Batteries | 724.7 | 724.7 | 0.00 | 0.00 |
| Apollo Tyres | 2572.9 | 2202.53 | 370.37 | 16.82 |
| Bajaj Automobiles | 1178.6 | 1624.8 | -446.20 | 27.46 |
| Balkrishna Industries | 8307.7 | 8322.8 | -15.10 | 0.18 |
| CEAT | 5927.28 | 5899.6 | 27.68 | 0.47 |

| | | | | |
|---|---|---|---|---|
| HERO Motor Corp | 29162.6 | 27668.8 | 1493.80 | 5.40 |
| Motherson Sumi | 2130 | 1971 | 159.00 | 8.07 |
| Sundaram Clayton | 995.6 | 996 | -0.40 | 0.04 |
| Tata Motors | 135118 | 106879.4 | 28238.60 | 26.42 |
| TVS | 4942.3 | 4942.3 | 0.00 | 0.00 |
| **PHARMA** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Aurobindo Pharma | 3347 | 3347 | 0.00 | 0.00 |
| Biocon | 1372 | 1365 | 7.00 | 0.51 |
| Cadilla | 4439 | 4300 | 139.00 | 3.23 |
| Cipla | 422.5 | 413 | 9.50 | 2.30 |
| Divi's Laboratory | 5 | 5 | 0.00 | 0.00 |
| Dr.Reddy's Pharmaceuticals | 10604 | 10515 | 89.00 | 0.85 |
| SUVEN | 416.38 | 432.26 | -15.88 | 3.67 |
| Jubilant Life Sciences | 11148.31 | 11233.62 | -85.31 | 0.76 |
| Lupin Pharma | 258.3 | 264 | -5.70 | 2.16 |
| Piramal | 56444 | 56459 | -15.00 | 0.03 |
| **IT** | **Ind AS** | **AS** | **Ind AS-AS** | **Difference (%)** |
| Wipro | 65458 | 90912 | -25454.00 | 28.00 |
| First Source Solutions | 1159.51 | 1163.22 | -3.71 | 0.32 |
| Infosys | 620 | 730 | -110.00 | 15.07 |
| Info edge | 41.66 | 41.66 | 0.00 | 0.00 |
| Mphasis | 11.3 | 11.3 | 0.00 | 0.00 |
| Mind tree | 765 | 1090 | -325.00 | 29.82 |
| NIIT | 251 | 251 | 0.00 | 0.00 |
| Oracle | 8768.33 | 8700.81 | 67.52 | 0.78 |
| Persistent | 26.91 | 26.91 | 0.00 | 0.00 |
| Zensar | 7.74 | 7.74 | 0.00 | 0.00 |
| Grand Average | **11887.52** | **11750.02** | **137.5057** | **1.17** |
| Standard Deviation | **27586.5** | **25812.45** | **1774.054** | **6.87** |

(Source: Compiled from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Interpretation**

Table no 6.20 shows the total of long-term financial liabilities under Ind AS and AS. Financial liabilities which are non-current in nature are incorporated in this head. For the purposes of comparison, the values under AS are calculated from the long-term liabilities disclosed in the AS balance sheet. Fair valuation is used during the transition to measure the deemed cost. This has caused changes in values under Ind AS. Reclassification of several liability items has also been the reason for the changes in value under Ind AS.

Amortization of borrowing cost is considered as part of effective interest rate method for financial liabilities and classified as amortised cost. Adjustment for premium on redemption of bonds and debentures which was previously offset against security premium under AS. there has been increase in revenue and book profit due to discounting of interest free security deposits.

"Under AS, transaction costs were allocated to Profit or Loss over the duration of the borrowing on a linear basis, either incurred or written off. However, Ind AS 109 mandates that transaction costs incurred in the origination of borrowings (financial liability) should be subtracted from the carrying amount of borrowings, which are classified as subsequently measured at Amortised Cost. These transaction costs are acknowledged in the profit or loss over the anticipated tenure of the borrowing as a component of the interest expense under the effective interest method" (*Bajaj_auto_ltd_ar_2017_weba_indi_copy.Pdf*, n.d.)This treatment caused changes in the value of financial liability under Ind AS.

The increase in tata motors is due to inclusion of financial guarantee contracts under Ind AS, while Wipro, Mind tree have reclassified the items into financial liability and witnessed a decrease in the value of financial liabilities. On the other hand, reclassification has increased the value of financial liabilities of Apollo Tyers. In the case of Bajaj, "the exemption of interest on the sales tax liability deferred for payment is considered as a government grant and measured at internal rate of return available" has led to a decrease of 27% under Ind AS.

| **Descriptive Statistics** | **AUTO** | | | **PHARMA** | | | **IT** | | |
|---|---|---|---|---|---|---|---|---|---|
| | **Ind AS** | **AS** | **%** | **Ind AS** | **AS** | **%** | **Ind AS** | **AS** | **%** |
| **Average** | 19105.97 | 16123.19 | **18** | 8845.649 | 8833.388 | **0** | 7710.945 | 10293.46 | **-25** |
| **Standard deviation** | 41632.77 | 32881.25 | **27** | 17235 | 17243.59 | **0** | 20465.22 | 28449.33 | **-28** |

(Source: Calculated from Table no 6.20 using excel)

Out of the selected 30 companies, 18 companies show no change under Ind AS and AS. While 8 companies show an increase, and 4 companies show a decrease. IT companies have generally shown a downward trend culminating in a 25% fall. In the pharma sector, it is a mixed trend. Half of the companies show a downward trend and the rest an upward trend resulting in 0% in the sector. In the auto sector it is a clear upward trend. Most of the companies report a higher value under Ind AS.

## 6.2 Testing of significance

This section deals with the testing of significance for the changes between Ind AS values and AS values. T-test (Paired) is used here. Two tailed test is used to test the hypotheses that values under Ind AS and those under AS are same. That is there is no difference between the values under both the standards. The results of the two-tailed test are tabulated below.

### 6.2.1 Paired T-test

$t = x\,(diff) / (s\,diff/\sqrt{n})$

where:

xdiff: sample mean of the differences.

s diff: sample standard deviation of the differences.

n: sample size (i.e. number of pairs)

Hypotheses: $\mu1=\mu2$

$\mu1$ = Mean of Selected Financial Variables under Ind AS.

$\mu2$ = Mean of Selected Financial Variables under AS.

### 6.2.2 Inference

The formulated hypotheses are tested at 95% of significance. If the P-value is less than 0.05, the hypotheses are rejected and when the P-value is greater than 0.05, the hypotheses are accepted. Rejected hypotheses means that there are significant differences in the means of both samples and here it would indicate that the means under Ind AS and AS have statistically significant differences which would further imply that the changes brought in by Ind AS have had significant impact on the financial variables of the company.

When a hypothesis is accepted, it would mean that there is no significant difference between the means under Ind AS and AS which would further imply that the changes brought in by Ind AS had no significant impact on the financial variables of the company. Frequently, the hypotheses might by accepted even if there are differences in the absolute figures of variables under study. This

suggests that the changes incurred as a result of Ind AS implementation are valid, but it is not statistically significant.

**Table No 6.21 Results of Test of Hypotheses**

| One-Tailed Test | | | | |
|---|---|---|---|---|
| **Sl. No.** | **ITEMS** | **P-Value** | **Hypotheses** | **Result** |
| 1 | Revenue | 0.426 | μ1 = μ2 | Accepted |
| 2 | COG | 0.123 | μ1 = μ2 | Accepted |
| **3** | **Employee Benefits** | **0.049** | **μ1 = μ2** | **Rejected** |
| 4 | Depreciation | 0.072 | μ1 = μ2 | Accepted |
| 5 | Amortisation | 0.166 | μ1 = μ2 | Accepted |
| 6 | Provision for Financial Assets | 0.056 | μ1 = μ2 | Accepted |
| **7** | **Finance Cost** | **0.035** | **μ1 = μ2** | **Rejected** |
| **8** | **Deferred Tax** | **0.021** | **μ1 = μ2** | **Rejected** |
| 9 | EPS | 0.133 | μ1 = μ2 | Accepted |
| 10 | Total Debt | 0.062 | μ1 = μ2 | Accepted |
| **11** | **Other Equity** | **0.002** | **μ1 = μ2** | **Rejected** |
| **12** | **Current Assets** | **0.035** | **μ1 = μ2** | **Rejected** |
| 13 | Current Liability | 0.395 | μ1 = μ2 | Accepted |
| 14 | Working Capital | 0.474 | μ1 = μ2 | Accepted |
| 15 | PPE | 0.169 | μ1 = μ2 | Accepted |
| 16 | Short Term Financial Asset | 0.457 | μ1 = μ2 | Accepted |
| **17** | **Long Term Financial Asset** | **0.005** | **μ1 = μ2** | **Rejected** |
| 18 | Short Term Financial Liability | 0.107 | μ1 = μ2 | Accepted |
| 19 | Long Term Financial Liability | 0.261 | μ1 = μ2 | Accepted |

(Source: Computed from table no 6.2 to 6.20 using excel)

**Interpretation**

Table No. 6.21 illustrates the result of hypotheses using two tailed t-test. The p-value is lower than 0.05 for the following items: employee benefits, finance cost, deferred tax, other equity, current assets, and long-term financial assets. Hence, the null hypotheses are rejected, and it is concluded that the values of the above elements significantly differ from AS when compared to values of Ind AS and the difference is significant. The introduction of Ind AS has been proven beneficial to the asset side of the balance sheet.

For the rest of the items under study, the p-value is greater than 0.05. Hence, the null hypotheses related to those items are accepted. It is concluded that the values

of such elements do not significantly differ from AS when compared to Ind AS. Most of the items are showing a better performance under AS, but the differences are significant in the case of a few elements.

Even though Ind AS has significant theoretical differences, on a practical basis, the values of the financial statements depict a higher level under AS except for certain items of the balance sheet.

## 6.3 Ratio Analysis

This section analyses various ratios for both Ind AS figures and AS figures. Ratios are classified into four different categories with each of them containing four to five ratios. Liquidity ratios and stability ratios are calculated to understand the short-term liquidity and long-term liquidity of the companies, profitability ratios give a clear understanding of the profit-making capacity of the companies and turnover ratios help us understand the efficiency of the companies.

Ratios for all the thirty sample companies from three industries are calculated. The average ratio of each year is taken as the yard stick and the tables along with their interpretations are given below.

### 6.3.1 Stability Ratios

"Stability ratios are calculated to analyze the company's long-term liquidity. It studies the impact of long-term debt in the company". (I.M, 2015) The following ratios are calculated in this category.

| **Stability Ratios** | **Formula Used** |
|---|---|
| Debt Equity Ratio | Total Debt/Total Equity |
| Debt Ratio | Total Debt/Total Assets |
| Equity Ratio | Total Equity/Total Assets |
| Interest Coverage | EBIT/Interest Amount |
| Capitalisation ratio | Long Term Liabilities/Long Term Assets |

#### 6.3.1.1 Debt Equity Ratio

Debt equity ratio determines the relationship between the debt capital and the owner's fund. Debt capital includes long-term debts and short-term debts. Equity is the total of shareholders' fund. A higher ratio suggests more debt capital in the company.

**Table No 6.22 Debt Equity Ratio of Automobile Companies for the year 2016**

| Name of Company | Ind AS | AS |
|---|---|---|
| Amara Raja Batteries | 0.20 | 0.19 |
| Apollo Tyres | 0.14 | 0.15 |
| Bajaj Automobiles | 0.15 | 0.18 |
| Balkrishna Industries | 0.22 | 0.46 |
| CEAT | 0.31 | 0.31 |
| HERO Motor Corp | 0.03 | 0.04 |
| Motherson Sumi | 0.14 | 0.14 |
| Sundaram Clayton | 0.56 | 0.65 |
| Tata Motors | 0.08 | 0.10 |
| TVS | 1.18 | 1.19 |

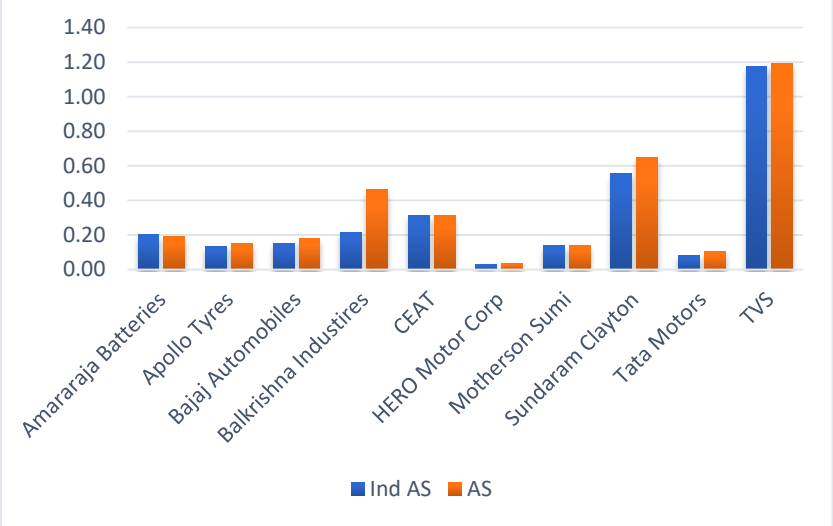
(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Automobile companies show a similar level of debt-equity ratio under AS and Ind AS. Most of the companies report a decrease under Ind AS. The debt equity ratio of Balkrishna Industries is significantly lower under Ind AS. This is because of a decrease in the total debt and equity of the company as is observed from table no 6.11 and 6.12. Companies such as CEAT and Motherson Sumi report the exact same level of ratio under both standards.

Companies like Amara Raja, apollo, HERO and TVS have reported minor differences under both the regimes. This is evident from figure no 6.1.

Table no 6.23 shows that the debt equity ratio of pharma companies. Most of the ratios remains same. Some of them are showing a decreasing trend during transition. When debt level of a company decreases, it reduces leverage. The decline in leverage means less risk and less return of capital for equity shareholders.

**Figure 6.1 Debt Equity Ratio of Automobile Companies**




(Source: created in excel from table no 6.22)

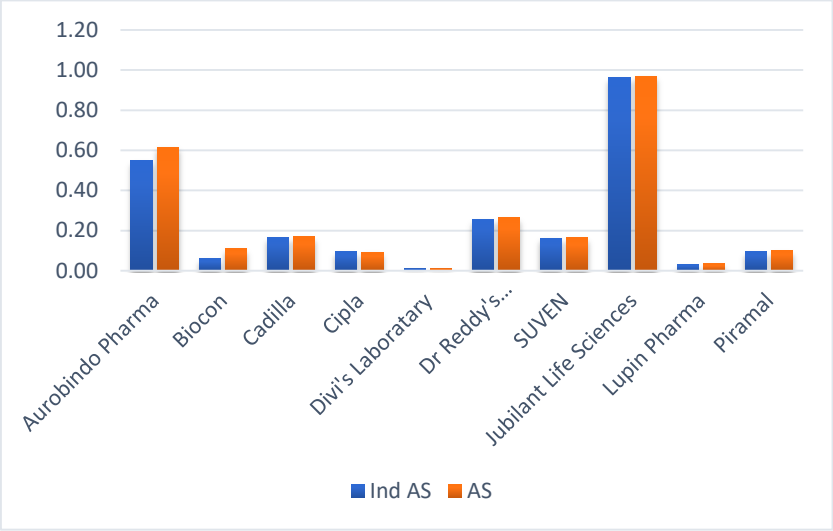
None of the selected companies have reported increased equity and lower debt under Ind AS which could lead to an improved debt equity ratio after transition. The automobile companies have been using less debt after the introduction of Ind AS suggesting that the leverage has reduced under Ind AS.

**Table No 6.23 Debt Equity Ratio of Pharmaceutical Companies for the year 2016**

| Name of Company | Ind AS | AS |
|---|---|---|
| Aurobindo Pharma | 0.55 | 0.62 |
| Biocon | 0.06 | 0.11 |
| Cadilla | 0.16 | 0.17 |
| Cipla | 0.09 | 0.09 |
| Divi's Laboratory | 0.01 | 0.01 |
| Dr Reddy’s Pharmaceuticals | 0.26 | 0.27 |
| SUVEN | 0.16 | 0.16 |
| Jubilant Life Sciences | 0.96 | 0.97 |
| Lupin Pharma | 0.03 | 0.03 |
| Piramal | 0.09 | 0.10 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.2 Debt Equity Ratio of Pharmaceutical Companies**




(Source: created in excel from table no 6.23)

As observed in figure 6.2 Cipla, Divis, SUVEN, and Lupin records the same ratio under both the standards suggesting the changes in debt and equity (Table No 6.11

and 6.12) cancelled each other out. IT sector displays an entirely different scenario from the other industries mentioned above.

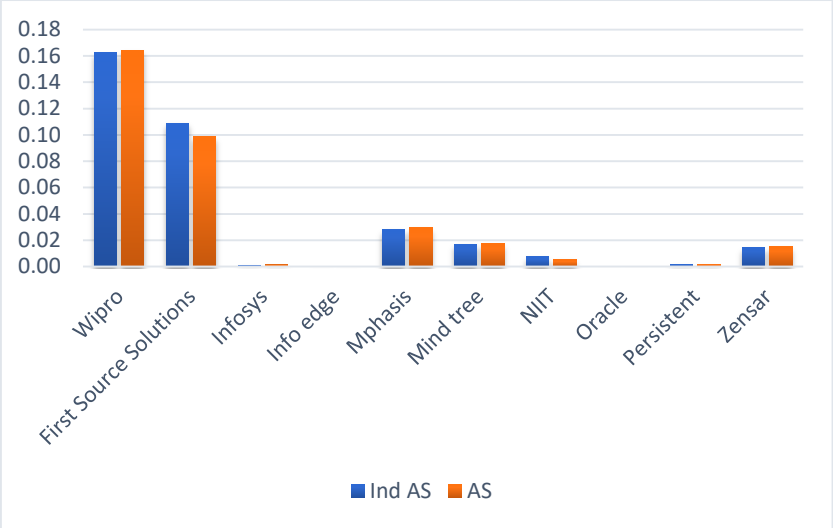
**Table No 6.24 Debt Equity Ratio of IT Companies for the year 2016**

| Name of Company | Ind AS | AS |
|---|---|---|
| Wipro | 0.16 | 0.16 |
| First Source Solutions | 0.11 | 0.10 |
| Infosys | 0.00 | 0.00 |
| Info edge | 0.00 | 0.00 |
| Mphasis | 0.03 | 0.03 |
| Mind tree | 0.02 | 0.02 |
| NIIT | 0.01 | 0.01 |
| Oracle | 0.00 | 0.00 |
| Persistent | 0.00 | 0.00 |
| Zensar | 0.01 | 0.01 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

IT sector has very low level of debt. Hence, in several cases it results in zero debt equity ratio. Zero-debt equity suggests absence of debt capital which is seen in many of the companies in the IT sector. The companies who have debt capital are also very meagre compared to their equity portion. IT companies finance through equity rather than debt.

**Figure 6.3 Debt Equity Ratio of IT Companies**




(Source: created in excel from table no 6.24)

Most of the companies in the sample show a low ratio under AS. Under Ind AS, debt risk is being treated with less conservatism by introducing fair valuation to recognize long-term financial liabilities and to measure the interest paid at the internal return rate. This is why very few companies have a high ratio under Ind AS as the companies feel less motivated to deploy more debt capital as part of their capital structure. This reduces the leverage of the enterprise and brings down the risk for equity shareholders.

#### 6.3.1.2 Debt ratio

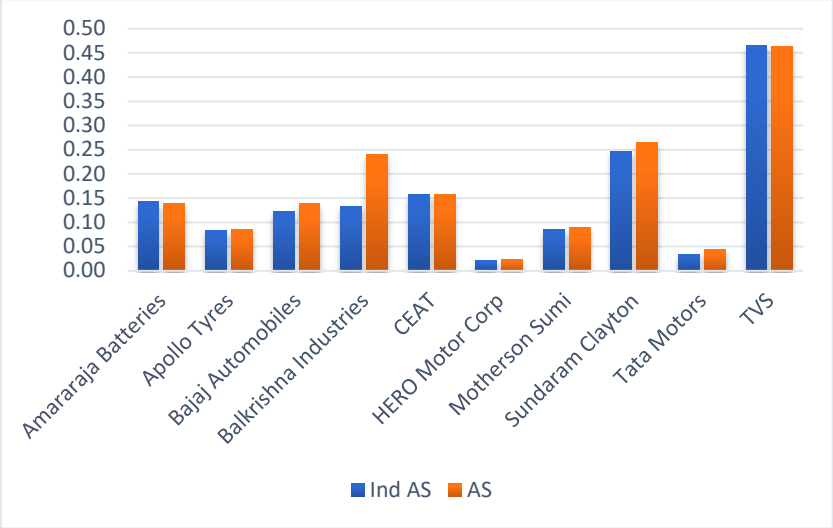
Debt ratio measures the relationship between total debt and total assets. The higher the ratio, the higher the amount of debt in the assets of the company. Debt ratio considers the total debt including current and non-current debt. It helps in understanding the level of leverage in the selected sample companies.

**Table No 6.25 Debt Ratio of Automobile Companies for the year 2016**

| Name of Company | Ind AS | AS |
|---|---|---|
| Amara Raja Batteries | 0.14 | 0.14 |
| Apollo Tyres | 0.08 | 0.09 |
| Bajaj Automobiles | 0.12 | 0.14 |
| Balkrishna Industries | 0.13 | 0.24 |
| CEAT | 0.16 | 0.16 |
| HERO Motor Corp | 0.02 | 0.02 |
| Motherson Sumi | 0.09 | 0.09 |
| Sundaram Clayton | 0.25 | 0.27 |
| Tata Motors | 0.03 | 0.04 |
| TVS | 0.46 | 0.46 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.4 Debt Ratio of Automobile Companies**




(Source: created in excel from table no 6.25)

The automobile sector shows a decreasing shift in the debt ratio of the companies. Among the selected companies, five companies show no change in either ratio, or four companies report a lower ratio under Ind AS. This can be observed from figure no 6.4.

**Table No 6.26 Debt Ratio of Pharmaceutical Companies for the year 2016**

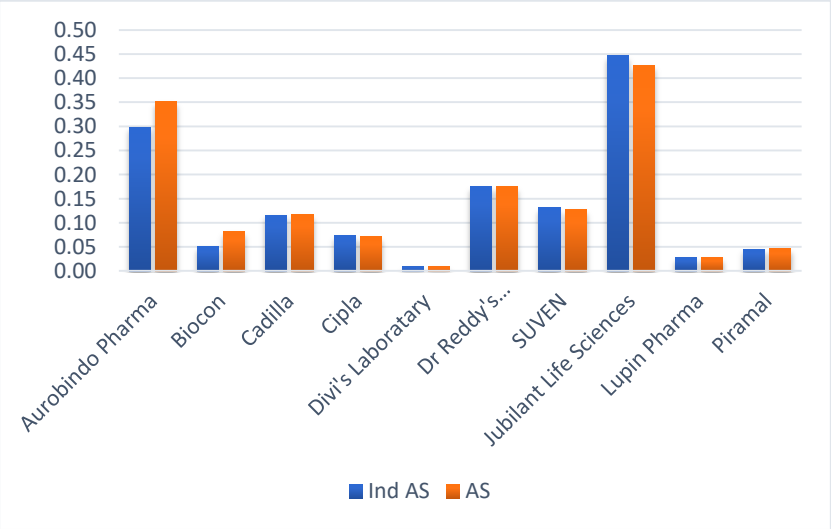
| Name of Company | Ind AS | AS |
|---|---|---|
| Aurobindo Pharma | 0.30 | 0.35 |
| Biocon | 0.05 | 0.08 |
| Cadilla | 0.12 | 0.12 |
| Cipla | 0.07 | 0.07 |
| Divi's Laboratory | 0.01 | 0.01 |
| Dr Reddy’s Pharmaceuticals | 0.18 | 0.18 |
| SUVEN | 0.13 | 0.13 |
| Jubilant Life Sciences | 0.45 | 0.43 |
| Lupin Pharma | 0.03 | 0.03 |
| Piramal | 0.05 | 0.05 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

With reference to pharmaceutical companies, table no 6.26 summarizes the level of debt ratio as per AS and Ind AS. Amidst the selected pharma companies, Jubilant pharma shows an increase in debt ratio after transition towards Ind AS. While Biocon and Aurobindo Pharma show a decrease in the ratio under Ind AS, the rest of the companies continue to perform the same under AS and Ind AS.

As observed from figure no. 6.5, Aurobindo pharma along with Biocon report a remarkable decline in the debt ratio under Ind AS. It is also observed that the rest of the companies show no differences in the ratio under either the accounting standards.

**Figure 6.5 Debt Ratio of Pharmaceutical Companies**




(Source: Created in excel from table no 6.26)

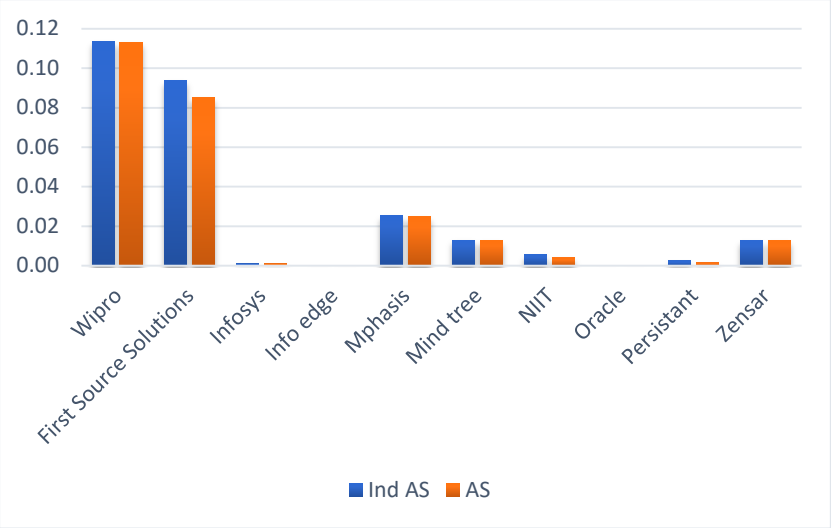
Table no 6.27 portrays the debt ratio under AS and Ind AS for the IT companies. This sector has experienced negligible impact with respect to long-term liquidity during the transition from AS to Ind AS. Infosys, Info Edge, Oracle, Persistent, NIIT show zero debt equity under AS and Ind AS. The impact on the rest of the companies is also insignificant. Either the companies are holding a low level of debt or no debt.

**Table No 6.27 Debt Ratio of IT Companies for the year 2016**

| Name of Company | Ind AS | AS |
|---|---|---|
| Wipro | 0.11 | 0.11 |
| First Source Solutions | 0.09 | 0.08 |
| Infosys | 0.00 | 0.00 |
| Info edge | 0.00 | 0.00 |
| Mphasis | 0.03 | 0.02 |
| Mind tree | 0.01 | 0.01 |
| NIIT | 0.01 | 0.00 |
| Oracle | 0.00 | 0.00 |
| Persistent | 0.00 | 0.00 |
| Zensar | 0.01 | 0.01 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.6 Debt Ratio of IT Companies**




(Source: created in excel from table no 6.27)

From the sample it is evident that debt is almost the same under both the standards. The IT sector has the highest companies showing a neutral attitude towards debt ratio. Ind AS adopts fair valuation in recognition of financial liabilities.

The fair valuation at the time of transition has paved the way to the decrease in total debt under Ind AS particularly in pharmaceutical and automobile industries.

### 6.3.1.3 Equity Ratio

Equity ratio measures the level of investment of shareholders' funds in the assets of the company. The higher the ratio, the greater the utilization of equity in funding assets. It also suggests lower leverage. A company should be able to maximize the shareholders wealth using the optimum utilization of debt capital.

Table no 6.28 depicts the equity ratio of automobile companies according to AS and Ind AS. Auto companies show a slightly higher ratio under Ind AS. Tata motors and Motherson sumi show a decrease in the equity ratio suggesting the leverage has improved under Ind AS. Amara raja and CEAT have utilized same level of as per Ind AS and AS. Rest of the companies has shown an increase in the ratio suggesting that the companies are using more owners fund under Ind AS. It also

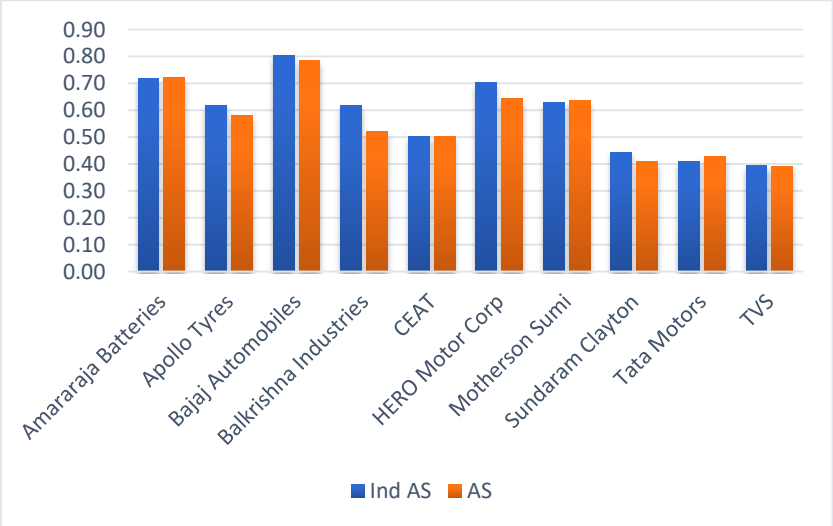
means that fair valuation has brought down the value of debt capital and hence equity ratio is high under Ind AS.

**Table No 6.28 Equity Ratio of Automobile Companies for the year 2016**

| Name of Company | Ind AS | AS |
|---|---|---|
| Amara raja Batteries | 0.72 | 0.72 |
| Apollo Tyres | 0.62 | 0.58 |
| Bajaj Automobiles | 0.80 | 0.78 |
| Balkrishna Industries | 0.62 | 0.52 |
| CEAT | 0.50 | 0.50 |
| HERO Motor Corp | 0.70 | 0.64 |
| Motherson Sumi | 0.63 | 0.64 |
| Sundaram Clayton | 0.44 | 0.41 |
| Tata Motors | 0.41 | 0.43 |
| TVS | 0.40 | 0.39 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.7 Equity Ratio of Automobile Companies**




(Source: created in excel from table no 6.28)

Even though there is an increment in most of the automobile companies, it is perceived that the increase is insubstantial. It is deduced that the changes seen in equity ratio are as a result of the adoption of fair valuation in the recognition of debt components.

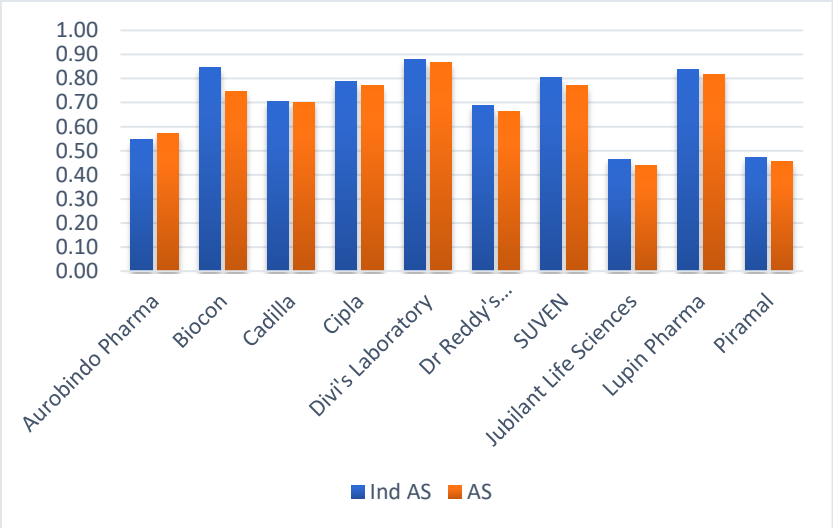
**Table No 6.29 Equity Ratio of Pharmaceutical Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Aurobindo Pharma | 0.55 | 0.57 |
| Biocon | 0.84 | 0.75 |
| Cadilla | 0.70 | 0.70 |
| Cipla | 0.79 | 0.77 |
| Divi's Laboratory | 0.88 | 0.87 |
| Dr Reddy's Pharmaceuticals | 0.69 | 0.66 |
| SUVEN | 0.81 | 0.09 |
| Jubilant Life Sciences | 0.47 | 0.44 |
| Lupin Pharma | 0.84 | 0.82 |
| Piramal | 0.47 | 0.46 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Table no 6.29 shows the summary of equity ratio of pharmaceutical companies as per AS and Ind AS. Cadilla shows the same level of leverage under both standards. Aurobindo Pharma has reported a slightly better ratio under AS. The remaining companies have recorded a higher ratio under Ind AS indicating that the leverage has come down under Ind AS. It also means that the companies are preferring equity capital rather than debt capital.

**Figure 6.8 Equity Ratio of Pharmaceutical Companies**




(Source: created in excel from table no 6.29)

There are changes as observed from figure no. 6.8 is mainly because of the reclassification of financial liabilities has caused the debt component in

the companies to reach a lower level. It can be said that the companies have become more cautious in using debt capital under the regime of Ind AS.

**Table No 6.30 Equity Ratio of IT Companies for the year 2016**

| Name of Company | Ind AS | AS |
|---|---|---|
| Wipro | 0.70 | 0.69 |
| First Source Solutions | 0.86 | 0.86 |
| Infosys | 0.84 | 0.79 |
| Info edge | 0.83 | 0.86 |
| Mphasis | 0.90 | 0.85 |
| Mind tree | 0.76 | 0.74 |
| NIIT | 0.80 | 0.75 |
| Oracle | 0.79 | 0.59 |
| Persistent | 1.40 | 0.87 |
| Zensar | 0.86 | 0.85 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Table no 6.30 illustrates the equity ratio of IT companies under Ind AS and AS. Info edge has reported a slight decrease in the ratio indicating a better leverage under Ind AS.

**Figure 6.9 Equity Ratio of IT Companies**


(Source: created in excel from table no 6.30)

Even though there are minor differences among the equity ratio computed under Ind AS and AS, it is to be observed that the changes are insignificant except in persistent systems. Persistent systems report an increase of approximately 61 % due to an immense decrease in total assets.

This is due to the reclassification of financial liabilities and fair valuation introduced in the recognition of liabilities. The high ratio found in the IT sector suggests that it heavily relies on owners' equity. More and more equity funds have been utilized to find the assets of the company. The automobile sector uses debt capital in an optimum manner. Pharmaceutical uses debt capital more than IT sector companies.

#### 6.3.1.4 Interest Coverage Ratio

Interest coverage ratio is used to test the debt servicing capacity of the company. A higher ratio means less interest burden and lower ratio suggests heavy debt. An extremely high ratio suggests a significantly low level of debt meaning that the company has poor leverage. Table no 6.31 portrays the interest coverage ratio of automobile companies under AS and Ind AS.

**Table No 6.31 Interest Coverage Ratio of Automobile Companies for the year 2016**

| Name of Company | Ind AS | AS |
|---|---|---|
| Amara raja Batteries | 131.68 | 1489.21 |
| Apollo Tyres | 16.69 | 15.24 |
| Bajaj Automobiles | 5284.16 | 11220.13 |
| Balkrishna Industries | 17.85 | 25.69 |
| CEAT | 7.73 | 8.13 |
| HERO Motor Corp | 907.93 | 2045.25 |
| Motherson Sumi | 21.11 | 43.59 |
| Sundaram Clayton | 6.04 | 5.69 |
| Tata Motors | 0.96 | 0.40 |
| TVS | 13.91 | 13.24 |

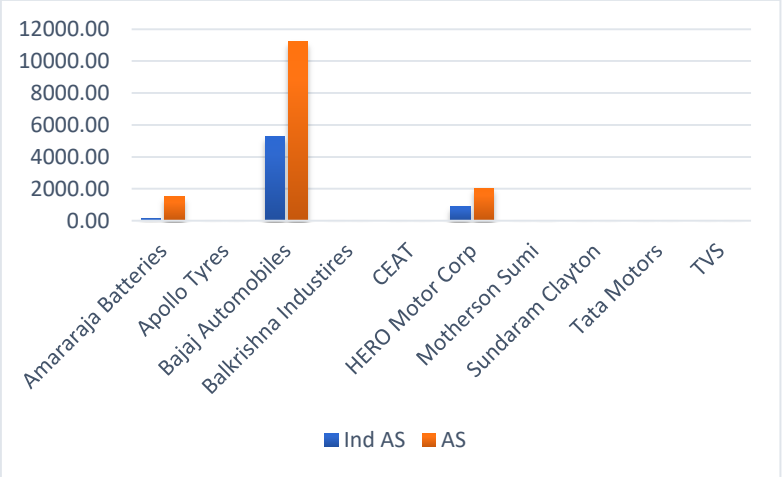
(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

The ratio ranges between 0.40 to 11,220.13. Bajaj, Hero Motor Corp, and Amara raja report extremely high ratio under AS and Ind AS. The finance cost is remarkably less in the companies when it is compared with the level of profit they generate. This is the reason why the interest coverage ratio is equally high under AS and Ind AS.

However, the ratio is comparatively less under Ind AS, especially in Bajaj the ratio has dropped by more than 50% as seen from figure no. 6.10 because of the

change in treatment of sales tax deferral (Table No 6.8) it is also observed that no companies show an increase in the ratio. Hence it can be said that the leverage has improved under Ind AS for automobile companies.

**Figure 6.10 Interest Coverage Ratio for the Automobile Companies**




(Source: created in excel from table no 6.31)

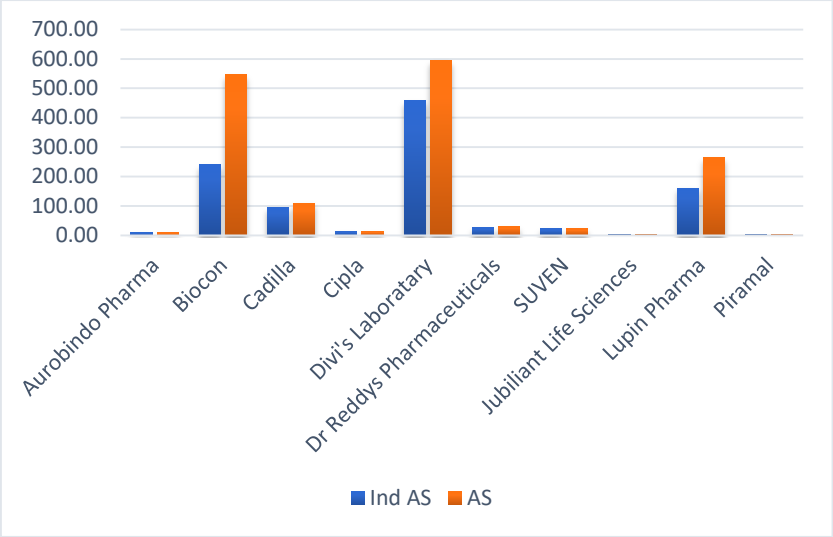
**Table No 6.32 Interest Coverage Ratio of Pharmaceutical Companies for the year 2016**

| Name of Company | Ind AS | AS |
|---|---|---|
| Aurobindo Pharma | 10.37 | 10.33 |
| Biocon | 239.58 | 547.11 |
| Cadilla | 95.84 | 109.64 |
| Cipla | 12.85 | 14.13 |
| Divi's Laboratory | 458.45 | 592.82 |
| Dr Reddy's Pharmaceuticals | 27.16 | 31.36 |
| SUVEN | 22.42 | 23.24 |
| Jubilant Life Sciences | 1.43 | 1.56 |
| Lupin Pharma | 160.44 | 265.25 |
| Piramal | 2.16 | 2.29 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Table no 6.32 represents the interest coverage ratio of pharmaceutical companies under AS and Ind AS. Lupin, Divi's laboratory, and Biocon show extraordinary decrease of interest coverage ratio. It is because of the vast difference between finance cost and the profit earned by the enterprise. Generally, a decreasing trend is seen in the companies.

**Figure 6.11 Interest Coverage Ratio of Pharmaceutical Companies**




(Source: created in excel from table no 6.32)

Majority of the companies report a lower level of interest coverage ratio under Ind AS indicating a better level of leverage under Ind AS. Table No 6.33 shows the interest coverage ratio of IT companies under AS and Ind AS. Infosys and Oracle are companies that have zero debt.

**Table No 6.33 Interest Coverage Ratio of IT Companies for the year 2016**

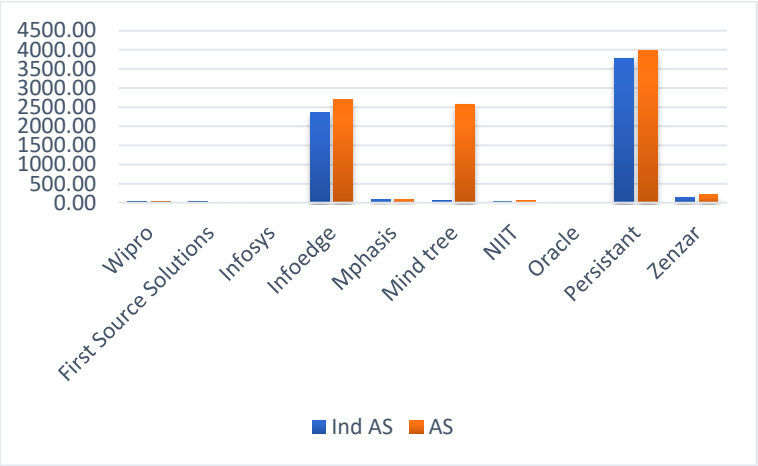
| Name of Company | Ind AS | AS |
|---|---|---|
| Wipro | 20.27 | 20.86 |
| First Source Solutions | 20.71 | 11.72 |
| Infosys | NA | NA |
| Info edge | 2358.61 | 2704.34 |
| Mphasis | 95.47 | 95.77 |
| Mind tree | 48.23 | 2579.33 |
| NIIT | 33.54 | 52.98 |
| Oracle | NA | NA |
| Persistent | 3766.22 | 3977.62 |
| Zensar | 146.09 | 204.70 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Hence their finance costs are zero, this ratio does not apply to them. There has been a remarkable increase of finance cost (Table No 6.8) in Mind tree because of the increase in the finance cost under Ind AS due to change in treatment of the deferred consideration on sale of land is measured at fair value. “Under previous GAAP, such consideration is carried at initial transaction value. Under Ind AS the difference

between initial transaction value and fair value on the date of sale is reduced from profit on sale of land and subsequent change in the fair value of such deferred consideration is recognised as notional interest income in the statement of profit and loss." The remaining companies also show a decreasing trend in the interest coverage ratio suggesting a better leverage under Ind AS.

**Figure 6.12 Interest Coverage Ratio of IT Companies**




(Source: created in excel from table no 6.33)

In the case of automobile and IT companies the interest burden is very less as some of the companies don't even have debt capital. However, most companies show a lower ratio under Ind AS. The introduction of the effective interest rate in the calculation of interest has lowered the burden for the companies, which in turn provided them with better leverage under Ind AS.

### 6.3.1.5 Capitalization ratio

Capitalization ratio measures how much long-term debt is used in funding the assets of the company. It measures the relationship between long-term debt and total assets. capital intensive industries tend to finance their fixed assets using debt capital. Service industries do not own a huge amount of fixed assets; hence they tend to have a low volume of debt.

**Table No 6.34 Capitalization Ratio of Automobile Companies for the year 2016**

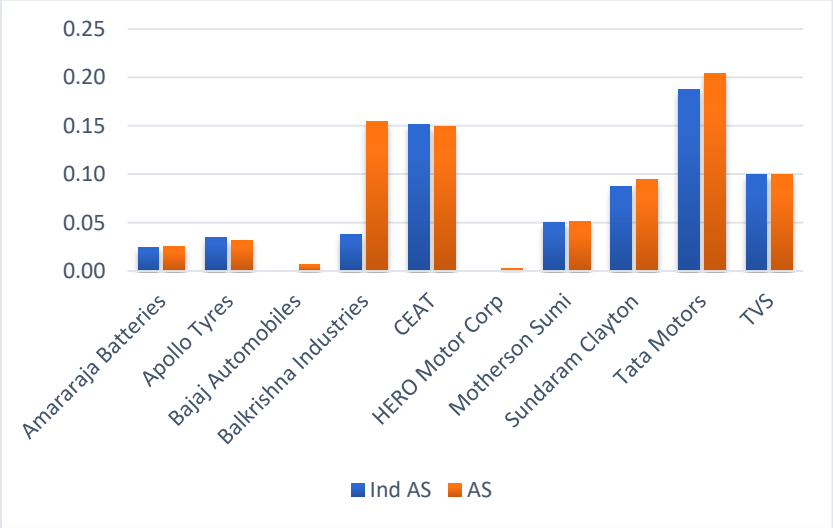
| Name of Company | Ind AS | AS |
|---|---|---|
| Amara raja Batteries | 0.02 | 0.02 |
| Apollo Tyres | 0.03 | 0.03 |

| | | |
|---|---|---|
| Bajaj Automobiles | 0.00 | 0.01 |
| Balkrishna Industries | 0.04 | 0.15 |
| CEAT | 0.15 | 0.15 |
| HERO Motor Corp | 0.00 | 0.00 |
| Motherson Sumi | 0.05 | 0.05 |
| Sundaram Clayton | 0.09 | 0.09 |
| Tata Motors | 0.19 | 0.20 |
| TVS | 0.10 | 0.10 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Table no 6.34 describes the capitalization ratios of automobile companies under AS and Ind AS. Bajaj, Balkrishna, and Tata Motors documents a minimal decrease in the capitalization ratio during transition. The rest of the companies show no change in the ratio suggesting the ratio of debt in financing the assets remains same under both the standards.

**Figure 6.13 Capitalisation Ratio of Automobile Companies**




(Source: created in excel from table no 6.34)

It is observed from figure no 6.13. Balkrishna industries report a significant decline in the ratio under Ind AS. The level of debt in companies is generally less. Companies depend on their owners' equity for financing their assets.

**Table No 6.35 Capitalization Ratio of Pharmaceutical Companies for the year 2016**

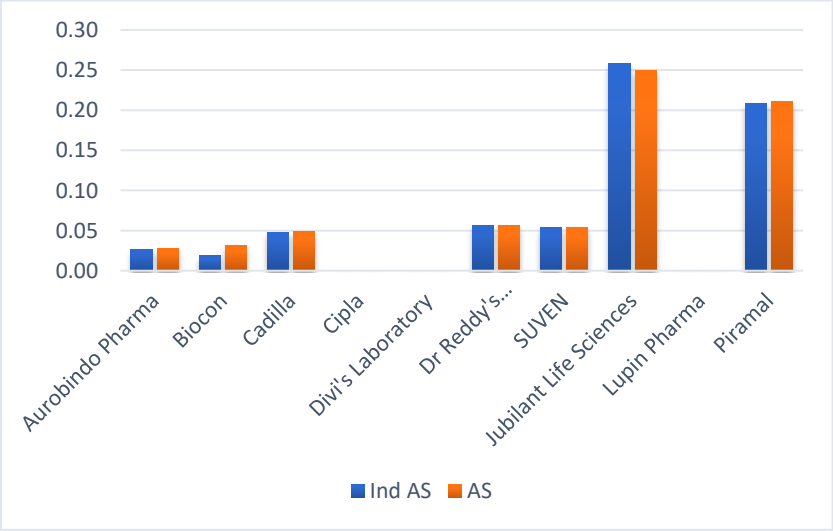
| Name of Company | Ind AS | AS |
|---|---|---|
| Aurobindo Pharma | 0.03 | 0.03 |
| Biocon | 0.02 | 0.03 |
| Cadilla | 0.05 | 0.05 |
| Cipla | 0.00 | 0.00 |
| Divi's Laboratory | 0.00 | 0.00 |
| Dr Reddy's Pharmaceuticals | 0.06 | 0.06 |
| SUVEN | 0.05 | 0.05 |
| Jubilant Life Sciences | 0.26 | 0.25 |
| Lupin Pharma | 0.00 | 0.00 |
| Piramal | 0.21 | 0.21 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Table no 6.35 describes the capitalization ratio of pharmaceutical companies under AS and Ind AS. Pharma companies report a low level of capitalization ratio under both the standards. Cipla, Divis and Lupin demonstrate zero level of capitalization ratio as they use negligible levels of long- term debt in financing their fixed assets.

As perceived from figure 6.14 except for Jubilant and Piramal the companies have less than 10% long-term debt in the fixed assets. Biocon discloses a slight decrease in the capitalization ratio under Ind AS.

**Figure 6.14 Capitalisation Ratio of Pharmaceutical Companies**




(Source: created in excel from table no 6.35)

**Table No 6.36 Capitalization Ratio of IT Companies for the year 2016**

| Name of Company | Ind AS | AS |
|---|---|---|
| Wipro | 0.02 | 0.02 |
| First Source Solutions | 0.06 | 0.06 |
| Infosys | 0.00 | 0.00 |
| Info edge | 0.00 | 0.00 |
| Mphasis | 0.00 | 0.00 |
| Mind tree | 0.00 | 0.00 |
| NIIT | 0.00 | 0.00 |
| Oracle | 0.00 | 0.00 |
| Persistent | 0.00 | 0.00 |
| Zensar | 0.00 | 0.00 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Table no 6.36 describes the capitalization ratio of IT companies as per AS and Ind AS. As most of the IT Companies do not use long-term debt in their capital structure, is evident that most of the companies report zero capitalization ratio indicating a zero long term debt. First source and Wipro report the same level of ratio under AS and Ind AS.

**Figure 6.15 Capitalisation Ratio of IT Companies**


(Source: created in excel from table no 6.36)

IT sector companies hardly have used any debt in their assets. Pharmaceuticals have used debt and have been showing higher ratio under Ind AS.

Automobile doesn't show any changes in ratios under both the ratios except for Balkrishna Industries.

In general, the level of debt in the companies has gone down after the adoption of Ind AS across the selected industries and sample companies. Even though the general level of debt has declined, the debt capital employed in fixed assets has remained the same under both the accounting standards. The decrease in debt capital can be seen as a reduction in leverage which will reduce the risk of equity shareholders along with their return on capital.

### 6.3.2 Liquidity Ratios

Liquidity ratios test the short-term liquidity of the companies. It tests the relationship between the short-term liabilities and the current assets or cash inflow available. Many times, the profit is a book figure and cash returns reflect the actual liquidity position of the company. Hence, the ratio pertains to cash returns is used to understand the cash position of the company. Here cash returns mean the result (increase/decrease) from cash flow statement of the selected company.

The ratios used to measure the short-term liquidity of the company are described below.

| | |
|---|---|
| Current Ratio | Current Assets/Current Liabilities |
| Quick Ratio | (Current Assets – Inventory)/Current Liabilities |
| Cash Returns to Net Assets Ratio | Cash Returns/ (Total Assets- Current Liabilities) |
| Cash Returns to Current Liabilities Ratio | Cash Returns/ Current Liabilities |
| Cash Returns to Total Liabilities Ratio | Cash Returns/ Total Liabilities |

#### 6.3.2.1 Current Ratio

The current ratio shows the short-term liquidity of the companies under study. It is the study of the relationship between current assets and current liabilities. The higher the ratio, the better the liquidity.

**Table No 6.37 Current Ratio of Automobile Companies for the year 2016**

| Name of Company | Ind AS | AS |
|---|---|---|
| Amara raja Batteries | 2.21 | 2.24 |
| Apollo Tyres | 1.16 | 1.07 |
| Bajaj Automobiles | 1.70 | 1.56 |
| Balkrishna Industries | 1.06 | 1.06 |
| CEAT | 1.24 | 1.21 |
| HERO Motor Corp | 1.78 | 1.47 |
| Motherson Sumi | 1.32 | 1.28 |
| Sundaram Clayton | 1.04 | 1.03 |
| Tata Motors | 0.63 | 0.60 |
| TVS | 0.81 | 0.87 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Table no 6.37 depicts the current ratio of automobile companies under AS and Ind AS. Amara raja batteries and TVS reports a slight decrease in the current ratio under Ind AS while Balkrishna Industries reports the same level of ratio under both the standards.

The remaining companies show a minor increase in the current ratio under Ind AS. It is evidence of improved short-term liquidity under the new accounting standard. The fair valuation of short-term financial assets and liabilities has paved the way for the betterment of liquidity in automobile companies.

**Figure 6.16 Current Ratio of Automobile Companies**


(Source: Created from table no 6.37 using Excel)

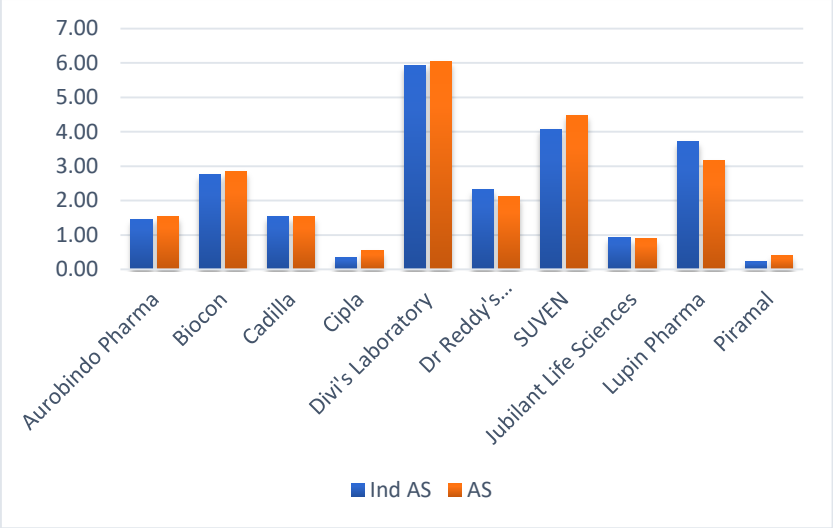
**Table No 6.38 Current Ratio of Pharmaceutical Companies for the year 2016**

| Name of Company | Ind AS | AS |
|---|---|---|
| Aurobindo Pharma | 1.45 | 1.54 |
| Biocon | 2.75 | 2.84 |
| Cadilla | 1.52 | 1.52 |
| Cipla | 0.34 | 0.55 |
| Divi's Laboratory | 5.93 | 6.03 |
| Dr Reddy's Pharmaceuticals | 2.33 | 2.10 |
| SUVEN | 4.08 | 4.48 |
| Jubilant Life Sciences | 0.92 | 0.90 |
| Lupin Pharma | 3.71 | 3.15 |
| Piramal | 0.23 | 0.41 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Table no 6.38 represents the current ratio of pharmaceutical companies under AS and Ind AS. Cadilla shows the same under both the standards, however, Dr. Reddy's and Lupin report a hike in the current ratio. Many of the companies demonstrate a decline in the current ratio indicating that the short-term liquidity of pharmaceutical companies has declined under Ind AS. The fair valuation of current assets and current liabilities have adversely affected the short-term liquidity position of pharma companies.

**Figure 6.17 Current Ratio of Pharmaceutical Companies**




(Source: Created from table no 6.38 using Excel)

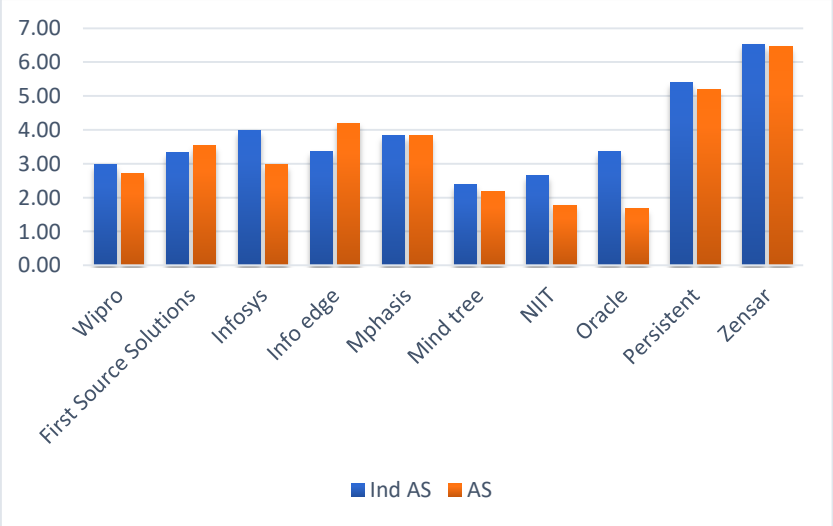
**Table No 6.39 Current Ratio of IT Companies for the year 2016**

| Name of Company | Ind AS | AS |
|---|---|---|
| Wipro | 2.98 | 2.71 |
| First Source Solutions | 3.33 | 3.53 |
| Infosys | 3.98 | 2.97 |
| Info edge | 3.37 | 4.20 |
| Mphasis | 3.84 | 3.82 |
| Mind tree | 2.40 | 2.18 |
| NIIT | 2.64 | 1.79 |
| Oracle | 3.38 | 1.68 |
| Persistent | 5.39 | 5.20 |
| Zensar | 6.53 | 6.45 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Table no 6.39 describes the current ratio of IT companies under Ind AS and AS. First source solutions and Info edge show a decline in the current ratio while remaining companies shows a rise in the liquidity of the companies. It is evident that the IT companies have improved their short-term liquidity during the transition towards Ind AS.

**Figure 6.18 Current Ratio of IT companies**




(Source: Created from table no 6.39 using Excel)

While automobile and IT companies have improved their short-term liquidity, pharmaceutical companies show a mixed reaction under Ind AS. in general, Ind AS has helped the companies to enhance their current ratio. The current assets have depicted increase after the reclassification into financial assets and their

respective fair valuation. This has reflected in the increase in current ratio under Ind AS.

#### 6.3.2.2 Quick Ratio

Quick ratio is also called the acid test ratio for liquidity. It tests the company's efficiency in paying off the short-term liabilities with immediate liquid assets. It is a more severe test for short-term liquidity than the current ratio. It does not include inventories as part of current assets. Ideally the rule of thumb for quick ratio is considered to be 1:1.

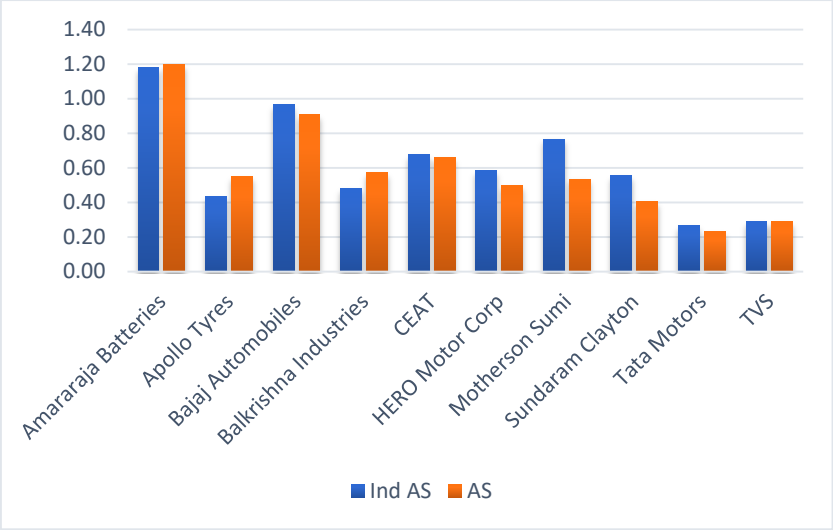
**Table No 6.40 Quick Ratio of Automobile Companies for the year 2016**

| Name of Company | Ind AS | AS |
|---|---|---|
| Amara raja Batteries | 1.18 | 1.20 |
| Apollo Tyres | 0.43 | 0.55 |
| Bajaj Automobiles | 0.97 | 0.91 |
| Balkrishna Industries | 0.48 | 0.57 |
| CEAT | 0.68 | 0.66 |
| HERO Motor Corp | 0.58 | 0.50 |
| Motherson Sumi | 0.76 | 0.53 |
| Sundaram Clayton | 0.55 | 0.41 |
| Tata Motors | 0.27 | 0.23 |
| TVS | 0.29 | 0.29 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Table no 6.40 shows the quick ratio of automobile companies under Ind AS and AS. Amara raja, Apollo, and Balkrishna undergoes a decline in quick ratio under Ind AS while TVS reports the same ratio under both standards. The remaining companies experience an improvement in the short-term liquidity in the automobile sector during transition. As seen from figure 6.19, Motherson sumi experiences an immense increase in liquidity under Ind AS.

**Figure 6.19 Quick Ratio of Automobile Companies**




(Source: Created from table no 6.40 using Excel)

Table no 6.41 describes the quick ratio of selected pharmaceutical companies for the year 2016 under AS and Ind AS. Pharmaceutical companies show a mixed trend in quick ratio during transition.

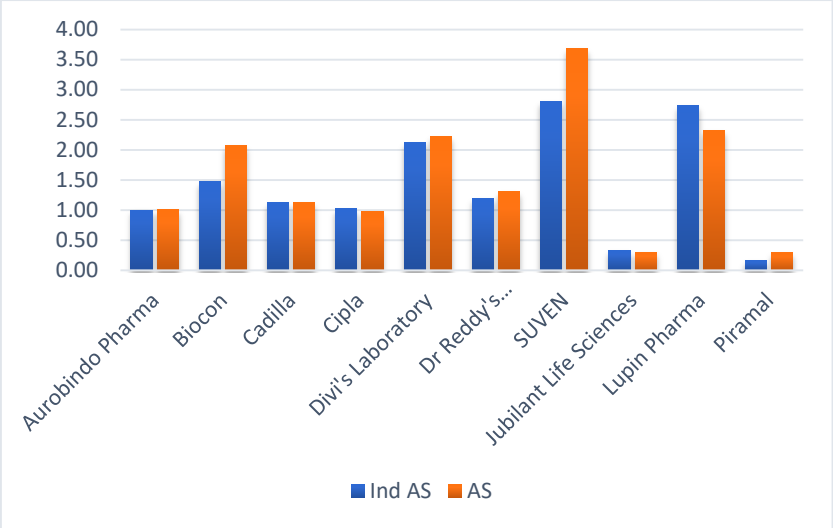
Most of the pharma companies have adequate short-term finance except for Piramal which seems to be struggling with a liquidity crunch. While companies like Aurobindo pharma and Cadilla report the same ratio under both the standards, Cipla, Jubilant, Lupin depict an increment in the ratio. The remaining companies show a decline in liquidity. This can be seen from figure 6.19.

**Table No 6.41 Quick Ratio of Pharmaceutical Companies for the year 2016**

| Name of Company | Ind AS | AS |
|---|---|---|
| Aurobindo Pharma | 1.00 | 1.00 |
| Biocon | 1.47 | 2.08 |
| Cadilla | 1.13 | 1.13 |
| Cipla | 1.02 | 0.98 |
| Divi's Laboratory | 2.12 | 2.22 |
| Dr Reddy's Pharmaceuticals | 1.19 | 1.31 |
| SUVEN | 2.81 | 3.68 |
| Jubilant Life Sciences | 0.33 | 0.30 |
| Lupin Pharma | 2.73 | 2.32 |
| Piramal | 0.16 | 0.29 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.20 Quick Ratio of Pharmaceutical Companies**




(Source: Created from table no 6.41 using Excel)

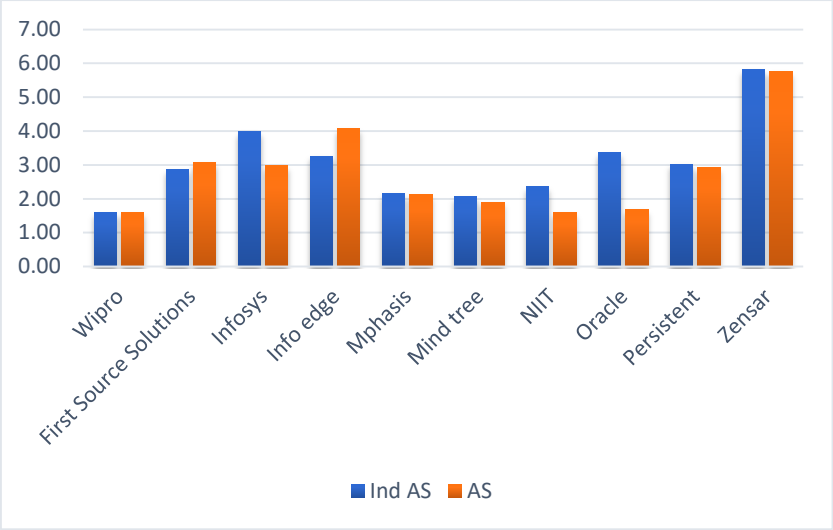
The IT companies have abundant liquid assets to meet their current liability. All the companies have a healthy quick ratio. A larger number of companies shows a better quick ratio under Ind AS. Only a handful of companies like first source and info edge report a minor decline in the ratio. The rest of the companies have improved their short-term liquidity abundantly.

**Table No 6.42 Quick Ratio of IT Companies for the year 2016**

| Name of Company | Ind AS | AS |
|---|---|---|
| Wipro | 1.60 | 1.58 |
| First Source Solutions | 2.86 | 3.06 |
| Infosys | 3.98 | 2.97 |
| Info edge | 3.26 | 4.08 |
| Mphasis | 2.16 | 2.13 |
| Mind tree | 2.07 | 1.90 |
| NIIT | 2.35 | 1.59 |
| Oracle | 3.38 | 1.68 |
| Persistent | 3.02 | 2.92 |
| Zensar | 5.80 | 5.76 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.21 Quick Ratio of IT Companies**




(Source: Created from table no 6.42 using Excel)

Among the selected companies many companies show a higher quick ratio under Ind AS, and some companies show better quick ratio under AS while the others remain neutral to both the standards. The automobile sector and IT sector have many companies which show positive performance under Ind AS while pharmaceutical companies report a better ratio under AS.

### 6.3.2.3 Cash Returns to Net Assets Ratio

**Table No 6.43 Cash Returns to Net Assets Ratio of Automobile Companies for the year 2016**

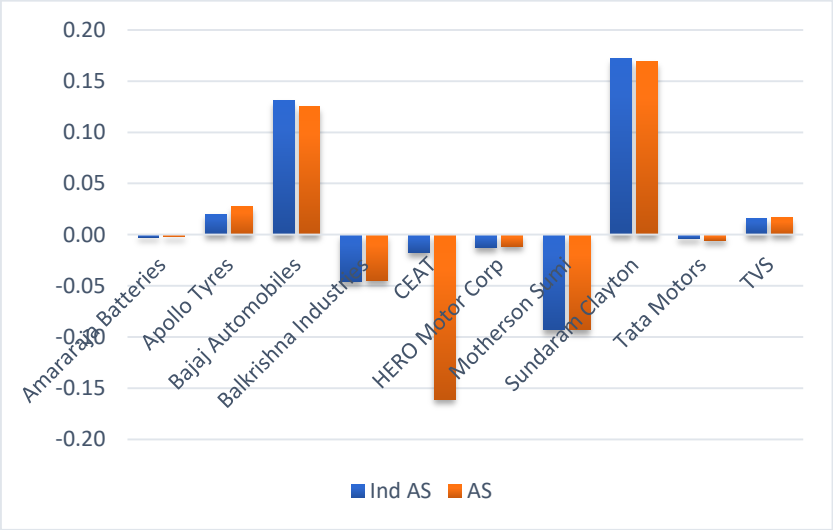
| Name of Company | Ind AS | AS |
|---|---|---|
| Amara raja Batteries | 0.00 | 0.00 |
| Apollo Tyres | 0.02 | 0.03 |
| Bajaj Automobiles | 0.13 | 0.13 |
| Balkrishna Industries | -0.05 | -0.05 |
| CEAT | -0.02 | -0.16 |
| HERO Motor Corp | -0.01 | -0.01 |
| Motherson Sumi | -0.09 | -0.09 |
| Sundaram Clayton | 0.17 | 0.17 |
| Tata Motors | 0.00 | -0.01 |
| TVS | 0.02 | 0.02 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Cash flows are critical in analyzing the short-term liquidity of a company. Often the profit figures may not reflect the liquidity of the company. The

profit can be parked in fixed assets or inventories. Hence, to effectively analyze the short-term liquidity position of a company, cash flow ratios are used.

**Figure 6.22 Cash Returns to Net Assets Ratio of Automobile Companies**




(Source: Created from table no 6.43 using Excel)

The cash returns to net assets ratio measures the relationship between the cash inflows and the net assets. Table no. 6.43 briefly shows the cash returns to net assets ratio of automobile companies under Ind AS and AS. As observed from figure no 6.22 except for CEAT, other automobile companies show a mediocre impact under Ind AS, however, as for CEAT, there is drastic decline in the ratio after the implementation of Ind AS. This is because of the fair valuation of short-term borrowings and trade payable, which subsequently had an impact on the change in short-term borrowings and adjustment of trade payable, which are the crucial components of calculation of cash inflows. Only Apollo Tyres have reported a decrease in the ratio under Ind AS.

In general, the cash flows have improved under Ind AS. It is essential to note that many selected companies have a negative ratio under both standards. This can be an early indication of liquidity crunches the selected companies might face in the near future. Companies like Balkrishna, CEAT, Hero, and Motherson Sumi need to focus on better management of their working capital so that they can avoid short-term liquidity issues soon.

**Table No 6.44 Cash Returns to Net Assets Ratio of Pharmaceutical Companies for the year 2016**

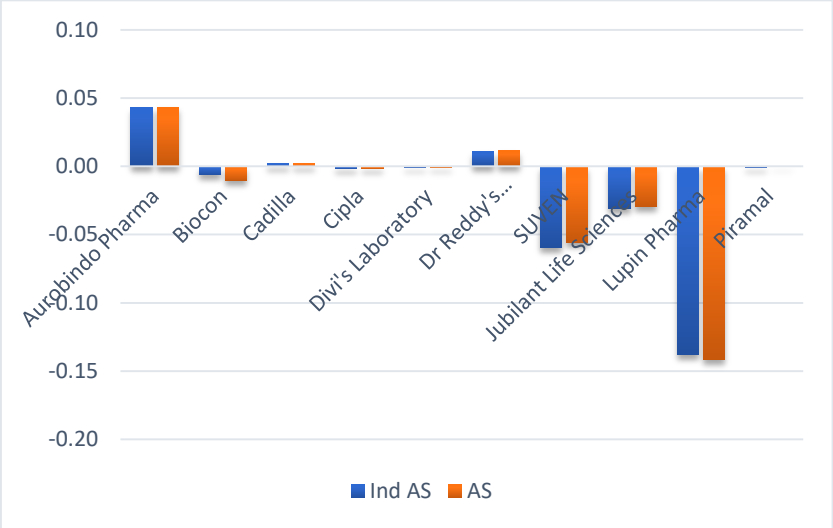
| Name of Company | Ind AS | AS |
|---|---|---|
| Aurobindo Pharma | 0.04 | 0.04 |
| Biocon | -0.01 | -0.01 |
| Cadilla | 0.00 | 0.00 |
| Cipla | 0.00 | 0.00 |
| Divi's Laboratory | 0.00 | 0.00 |
| Dr Reddy's Pharmaceuticals | 0.01 | 0.01 |
| SUVEN | -0.06 | -0.06 |
| Jubilant Life Sciences | -0.03 | -0.03 |
| Lupin Pharma | -0.14 | -0.14 |
| Piramal | 0.00 | 0.00 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Table no. 6.44 describes the cash returns to net assets ratio of pharmaceutical companies for the year 2016 under AS and Ind AS. Here, it's distinctive that Cadilla, Cipla, and Divi's show zero as ratio. This is because the cash flow is negligible, and the ratio is near to zero.

It is not absolutely zero. Companies such as Biocon, SUVEN, Jubilant, and Lupin disclose the ratio in negative figures indicating that these companies are having exceptionally low level of cash inflows and are likely to experience short-term liquidity crisis in the future.

**Figure 6.23 Cash Returns to Net Assets Ratio of Pharmaceutical Companies**




(Source: Created from table no 6.44 using Excel)

**Table No 6.45 Cash Returns to Net Assets Ratio of IT Companies for the year 2016**

| Name of Company | Ind AS | AS |
|---|---|---|
| Wipro | -0.15 | -0.15 |
| First Source Solutions | 0.01 | 0.01 |
| Infosys | 0.02 | 0.03 |
| Info edge | 0.01 | 0.01 |
| Mphasis | -0.01 | -0.01 |
| Mind tree | -0.08 | -0.07 |
| NIIT | 0.05 | 0.05 |
| Oracle | 0.01 | 0.02 |
| Persistent | 0.00 | 0.00 |
| Zensar | 0.03 | 0.04 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Table no 6.45 describes the cash returns to net assets ratio of IT companies for the year 2016 under Ind AS and AS. Companies like Wipro, Mphasis, and Mind Tree show a negative cash flow under both standards. Infosys, Oracle, Mind Tree and Zensar experience a lower ratio under Ind AS.

Most of the companies show the same ratio under both the accounting standards. Overall, the cash returns to net assets ratio shows the same for most of the companies across the industries.

**Figure 6.24 Cash Returns to Net Assets Ratio of IT Companies**


(Source: Created from table no 6.45 using Excel)

### 6.3.2.4 Cash Returns to Current Liabilities Ratio

Table no 6.46 depicts the cash returns to current liabilities ratio of selected automobile companies for the year 2016 under AS and Ind AS. CEAT shows a significant decline in the ratio under Ind AS. This is due to the fair valuation of short-term borrowings and trade payable under Ind AS which subsequently caused to the decline in cash flows in the company.

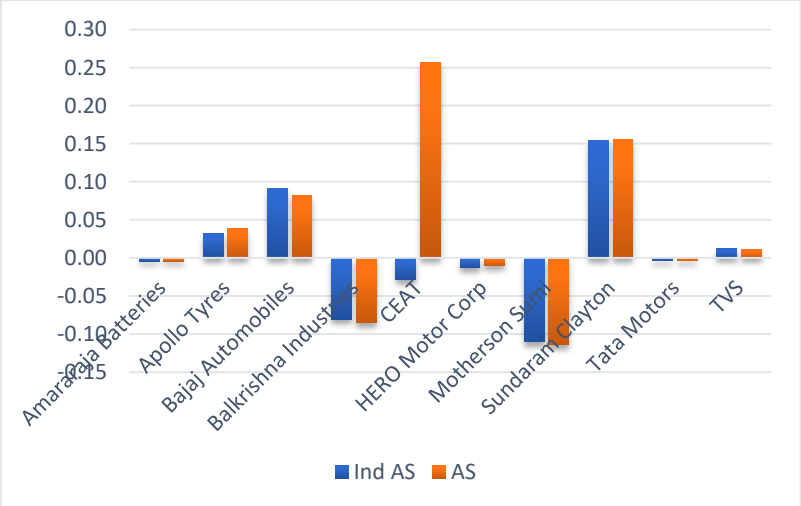
**Table No 6.46 Cash Returns to Current Liabilities Ratio of Automobile Companies for the year 2016**

| Name of Company | Ind AS | AS |
|---|---|---|
| Amara raja Batteries | 0.00 | 0.00 |
| Apollo Tyres | 0.03 | 0.04 |
| Bajaj Automobiles | 0.09 | 0.08 |
| Balkrishna Industries | -0.08 | -0.09 |
| CEAT | -0.03 | 0.26 |
| HERO Motor Corp | -0.01 | -0.01 |
| Motherson Sumi | -0.11 | -0.11 |
| Sundaram Clayton | 0.15 | 0.15 |
| Tata Motors | 0.00 | 0.00 |
| TVS | 0.01 | 0.01 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

The relationship between cash returns and current liabilities is important to analyze the level of short-term liquidity of the company. It is important to have enough liquid cash to settle the immediate current liabilities.

**Figure 6.25 Cash Returns to Current Liabilities Ratio of Automobile Companies**




(Source: Created from table no 6.46 using Excel)

Balkrishna, CEAT, Hero, and Motherson Sumi exhibits negative ratio as an early warning sign of short-term liquidity crisis suggesting that the companies have enough current assets but insufficient cash flow.

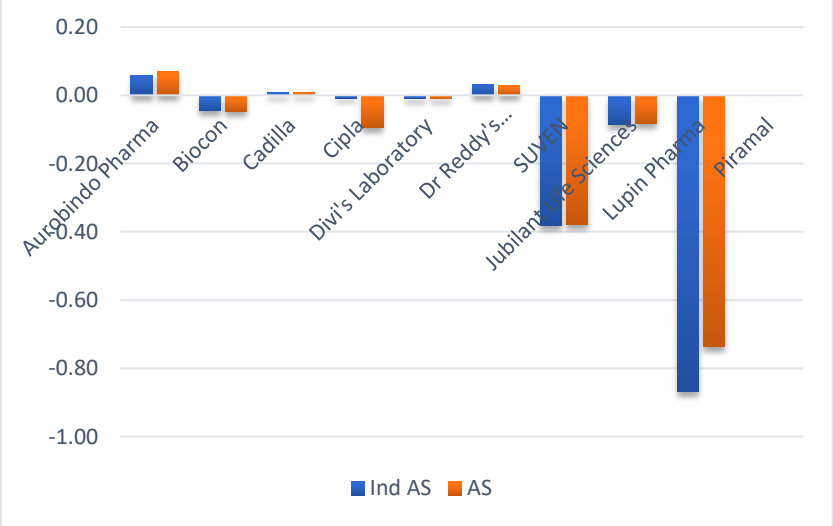
**Table No 6.47 Cash Returns to Current Liabilities Ratio of Pharmaceutical Companies for the year 2016**

| Name of Company | Ind AS | AS |
|---|---|---|
| Aurobindo Pharma | 0.06 | 0.07 |
| Biocon | -0.05 | -0.05 |
| Cadilla | 0.01 | 0.01 |
| Cipla | -0.01 | -0.10 |
| Divi's Laboratory | -0.01 | -0.01 |
| Dr Reddy's Pharmaceuticals | 0.03 | 0.03 |
| SUVEN | -0.38 | -0.38 |
| Jubilant Life Sciences | -0.09 | -0.08 |
| Lupin Pharma | -0.87 | -0.74 |
| Piramal | 0.00 | 0.00 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Table no 6.47 explains the cash returns to current liabilities ratio of pharmaceutical companies for the year 2016 under Ind AS and AS. Most of the companies show a negative cash flow, hence, they experience a negative relationship with current liability. This signals to a liquidity crisis to be faced by the pharmaceutical companies. The companies which report a positive ratio are also extremely low. They are also on the verge of collapsing into a deeper short-term liquidity crunch.

**Figure 6.26 Cash Returns to Current Liabilities Ratio of Pharmaceutical Companies**




(Source: Created from table no 6.47 using Excel)

Table no 6.48 explains the cash returns to current liabilities ratio of IT companies for the year 2016 under Ind AS and AS. Except for Wipro, Mphasis, and Mind Tree, the rest of the companies display a healthy ratio under both the standards.

**Table No 6.48 Cash Returns to Current Liabilities Ratio of IT Companies for the year 2016**

| Name of Company | Ind AS | AS |
|---|---|---|
| Wipro | -0.43 | -0.40 |
| First Source Solutions | 0.07 | 0.07 |
| Infosys | 0.13 | 0.09 |
| Info edge | 0.03 | 0.03 |
| Mphasis | -0.08 | -0.08 |
| Mind tree | -0.29 | -0.23 |
| NIIT | 0.28 | 0.19 |
| Oracle | 0.05 | 0.02 |
| Persistent | 0.01 | 0.01 |
| Zensar | 0.23 | 0.23 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.27 Cash Returns to Current Liabilities Ratio of IT Companies**


(Source: Created from table no 6.48 using Excel)

It is to be observed that several companies have improved their cash returns to current liabilities ratio under Ind AS, for instance NIIT, Infosys and Oracle portray exemplary differences after the implementation of Ind AS.

In general, the service sector shows better ratios under Ind AS. The changes brought in by Ind AS has deeply affected Automobile sector when compared to other sectors. The pharmaceutical sector is also experiencing a liquidity crunch in general.

### 6.3.2.5 Cash Returns to Total Liabilities Ratio

**Table No 6.49 Cash Returns to Total Liabilities Ratio of Automobile Companies for the year 2016**

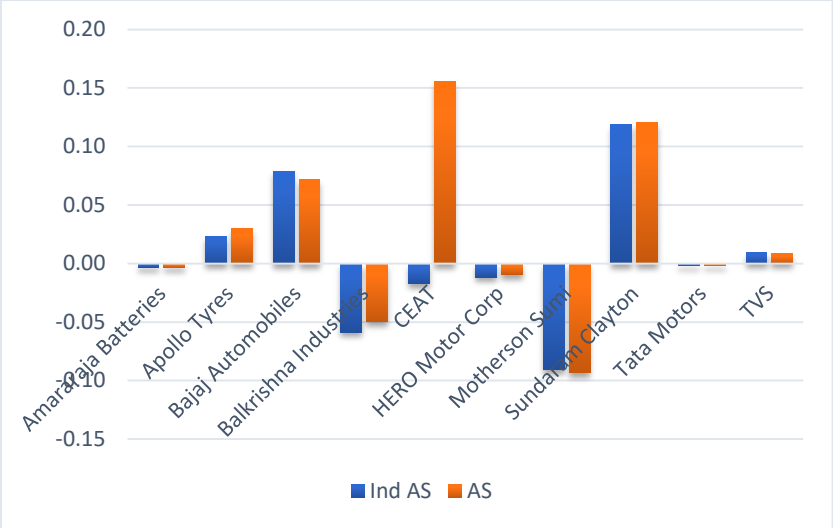
| Name of Company | Ind AS | AS |
|---|---|---|
| Amara raja Batteries | 0.00 | 0.00 |
| Apollo Tyres | 0.02 | 0.03 |
| Bajaj Automobiles | 0.08 | 0.07 |
| Balkrishna Industries | -0.06 | -0.05 |
| CEAT | -0.02 | 0.16 |
| HERO Motor Corp | -0.01 | -0.01 |
| Motherson Sumi | -0.09 | -0.09 |
| Sundaram Clayton | 0.12 | 0.12 |
| Tata Motors | 0.00 | 0.00 |
| TVS | 0.01 | 0.01 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Table no. 6.49 describes the cash returns to total liabilities ratio of the selected companies for the year 2016 under Ind AS and AS. CEAT experience a remarkable decrease in the ratio under Ind AS due to the introduction of fair value in financial assets under Ind AS.

In general, fair valuation has had a significant impact on the valuation of several assets and liabilities. Bajaj shows an increment in the ratio under Ind AS. Companies like Balkrishna, CEAT, Hero, and Motherson Sumi have negative cash flows under both standards suggesting that the liquidity crunches these companies are experiencing is not due to the changes in accounting standards. The remaining companies stay neutral to the changes brought in by Ind AS.

**Figure 6.28 Cash Returns to Total Liabilities Ratio of Automobile Companies**




(Source: Created from table no 6.49 using Excel)

**Table No 6.50 Cash Returns to Total Liabilities Ratio of Pharmaceutical Companies for the year 2016**

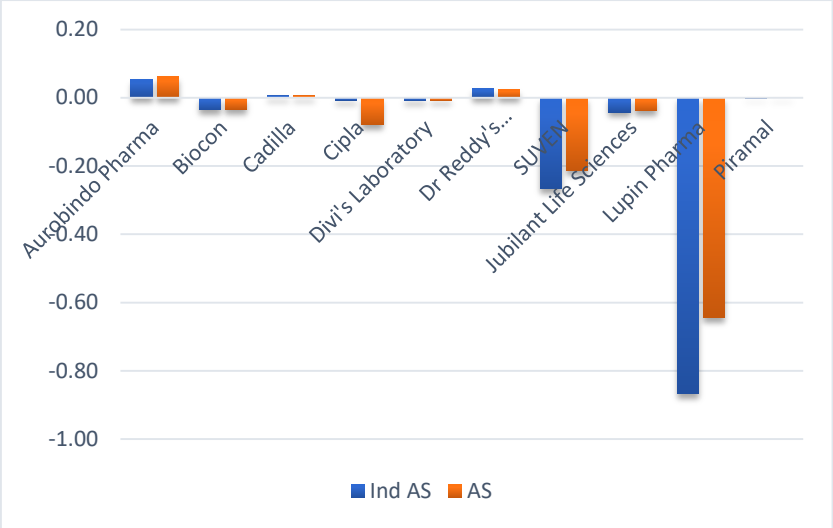
| Name of Company | Ind AS | AS |
|---|---|---|
| Aurobindo Pharma | 0.05 | 0.06 |
| Biocon | -0.04 | -0.03 |
| Cadilla | 0.01 | 0.01 |
| Cipla | -0.01 | -0.08 |
| Divi's Laboratory | -0.01 | -0.01 |
| Dr Reddy's Pharmaceuticals | 0.03 | 0.02 |
| SUVEN | -0.27 | -0.21 |
| Jubilant Life Sciences | -0.04 | -0.04 |
| Lupin Pharma | -0.87 | -0.64 |
| Piramal | 0.00 | 0.00 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Table no 6.50 depicts the cash returns to total liabilities ratio of selected pharmaceutical companies for the year 2016 under Ind AS and AS.

Except for Dr. Reddy's all the companies report a decline in the ratio under Ind AS. The fair valuation and other changes brought in by Ind AS has severely affected pharmaceutical companies.

**Figure 6.29 Cash Returns to Total Liabilities Ratio of Pharmaceutical Companies**




(Source: Created from table no 6.50 using Excel)

Biocon, Cipla, Divi's, SUVEN, Jubilant, and Lupin disclose a negative ratio under both the standards. This indicates that the negative cash flow experienced by these companies is not a result of the implementation of Ind AS.

**Table No 6.51 Cash Returns to Total Liabilities Ratio of IT Companies for the year 2016**

| Name of Company | Ind AS | AS |
|---|---|---|
| Wipro | -0.11 | -0.11 |
| First Source Solutions | 0.01 | 0.01 |
| Infosys | 0.02 | 0.02 |
| Info edge | 0.00 | 0.00 |
| Mphasis | -0.01 | -0.01 |
| Mind tree | -0.06 | -0.05 |
| NIIT | 0.04 | 0.04 |
| Oracle | 0.01 | 0.01 |
| Persistent | 0.00 | 0.00 |
| Zensar | 0.03 | 0.03 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.30 Cash Returns to Total Liabilities Ratio of IT Companies**


(Source: Created from table no 6.51 using Excel)

Table No 6.51 explains the cash returns to total liabilities ratio of selected IT companies for the year 2016 under Ind AS and AS. Companies like Wipro, Mphasis and Mind Tree have reported negative ratio under both the standards. This summarizes the fact that the liquidity crunch experienced by these companies is not because of changes in accounting standards. None of the selected IT companies show an improvement in the ratio under Ind AS.

In general, the IT companies have remained neutral to the changes brought in by Ind AS. The automobile companies have reported a general decline in the ratio and pharmaceutical companies have experienced negative cash returns under both AS and Ind AS.

### 6.3.3 Profitability Ratios

Profitability Ratios measure the efficiency of the company in earning profits. The company should balance its goal of profit making along with its requirements of liquidity for the working capital. If it over invests in fixed assets with the objective of earning more profits, it might be having short-term liquidity issues.

The ratios used in measuring the selected companies' profitability are given below along with the formula used to calculate them.

| | |
|---|---|
| Gross Profit Ratio | Gross Profit/ Net Sales |
| Net Profit Ratio | PAT/ Net Sales |
| Operating Profit ratio | EBIT/ Net Sales |
| ROA | PAT/Average Total Assets |
| ROE | PAT/Average Total Equity |
| ROCE | EBIT/Average total assets – Average current liabilities |

#### 6.3.3.1 Gross Profit Ratio

Gross profit ratio is considered as the basic yardstick to assess the profit-making ability of aa company. Normally, for every rupee of sales, 0.25 rupee of gross profit is expected, however, this is just a rule of thumb. All the automobile companies shown in table no 6.52 are earning more than 25% gross profit over sales under both the standards. They are demonstrating a similar ratio under AS and Ind AS.

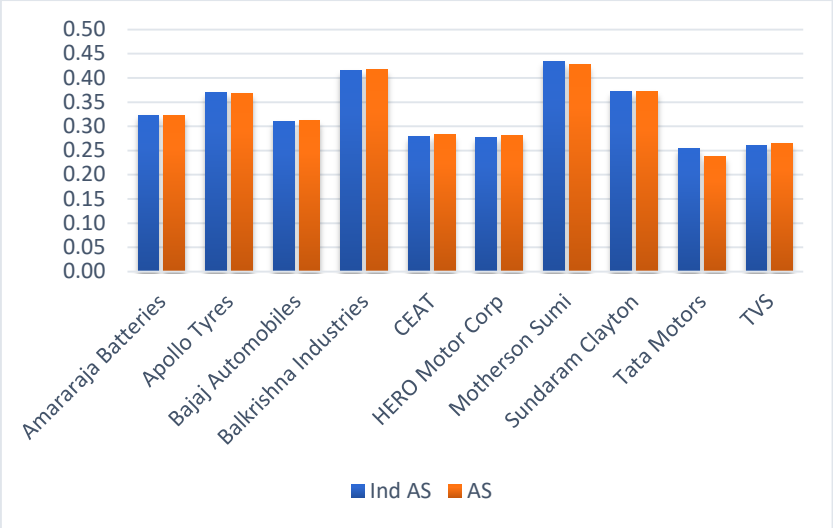
**Table No 6.52 Gross Profit Ratio of Automobile Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Amara raja Batteries | 0.32 | 0.32 |
| Apollo Tyres | 0.37 | 0.37 |
| Bajaj Automobiles | 0.31 | 0.31 |
| Balkrishna Industries | 0.41 | 0.42 |
| CEAT | 0.28 | 0.28 |
| HERO Motor Corp | 0.28 | 0.28 |
| Motherson Sumi | 0.43 | 0.43 |
| Sundaram Clayton | 0.37 | 0.37 |
| Tata Motors | 0.25 | 0.24 |
| TVS | 0.26 | 0.26 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

The transition towards Ind AS has meagerly affected the gross profit ratio of the automobile companies. As observed from figure no 6.31 the ratios are almost similar under both the regimes.

**Figure 6.31 Gross Profit Ratio of Automobile Companies**




(Source: Created from table no 6.52 using Excel)

While the pharmaceutical companies are considered, many of the companies report the same level of GP ratio under AS and Ind AS except for Dr. Reddy's which also has a negligible decline in GP ratio under Ind AS.

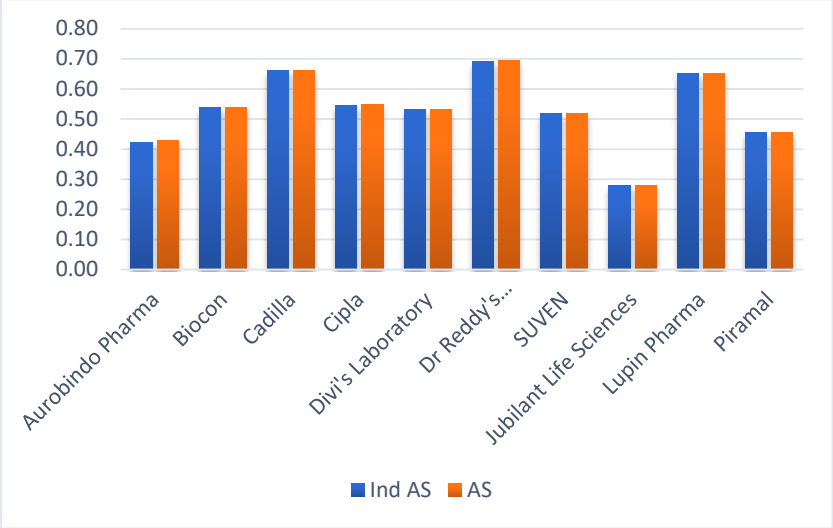
All the selected pharmaceutical companies depict a healthy G P Ratio under both standards. All of them report more than 25% GP over sales.

**Table No 6.53 Gross Profit Ratio of Pharmaceutical Companies for the year 2016**

| Name of Company | Ind AS | AS |
|---|---|---|
| Aurobindo Pharma | 0.42 | 0.43 |
| Biocon | 0.54 | 0.54 |
| Cadilla | 0.66 | 0.66 |
| Cipla | 0.55 | 0.55 |
| Divi's Laboratory | 0.53 | 0.53 |
| Dr Reddy's Pharmaceuticals | 0.69 | 0.70 |
| SUVEN | 0.52 | 0.52 |
| Jubilant Life Sciences | 0.28 | 0.28 |
| Lupin Pharma | 0.65 | 0.65 |
| Piramal | 0.45 | 0.45 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.32 Gross Profit Ratio of Pharmaceutical Companies**




(Source: Created from table no 6.53 using Excel)

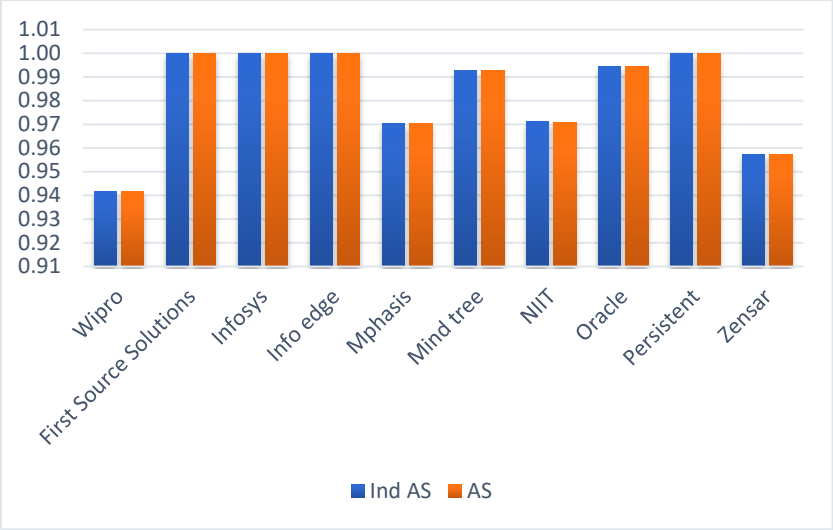
In table 6.54 most of the IT companies show 100% gross profit because of their low investment in production. The cost of production in IT companies is closer to zero. As IT sector belongs to a service industry, they do not own any form of inventory. It is observed from figure no 6.33 the selected companies perform evenly under both standards. It is assumed that the introduction of Ind AS has not affected the IT industry at all.

**Table No 6.54 Gross Profit Ratio of IT Companies for the year 2016**

| Name of Company | Ind AS | AS |
|---|---|---|
| Wipro | 0.94 | 0.94 |
| First Source Solutions | 1.00 | 1.00 |
| Infosys | 1.00 | 1.00 |
| Info edge | 1.00 | 1.00 |
| Mphasis | 0.97 | 0.97 |
| Mind tree | 0.99 | 0.99 |
| NIIT | 0.97 | 0.97 |
| Oracle | 0.99 | 0.99 |
| Persistent | 1.00 | 1.00 |
| Zensar | 0.96 | 0.96 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.33 Gross Profit ratio of IT Companies**




(Source: Created from table no 6.54 using Excel)

The selected companies across different industries show a healthy gross profit ratio under Ind AS and AS. Very few companies report a mild difference in the ratio. The revenue of the selected companies (table no 6.2) and cost of goods sold (table no 6.3) also show a meagre change during the transition period. This has culminated in the portrayal of the same G P Ratio under both standards. When the components of the ratio depict no change, it is evident that the ratio remains the same.

### 6.3.3.2 Net Profit Ratio

The Net Profit ratio represents the relationship between Profit after tax (PAT) and the revenue of the company. It is to measure how much is the share of profit in the total sales of the company. The automobile companies like Amara raja, Apollo, Bajaj, and Motherson Sumi show a slightly better ratio under Ind AS. Tata Motors was incurring loss under AS has shown a 0% of NP Ratio under Ind AS suggesting that the company reached its break-even point of no profit no loss. As illustrated in figure no 6.34 Balkrishna and CEAT have diminished their N P Ratio under Ind AS.

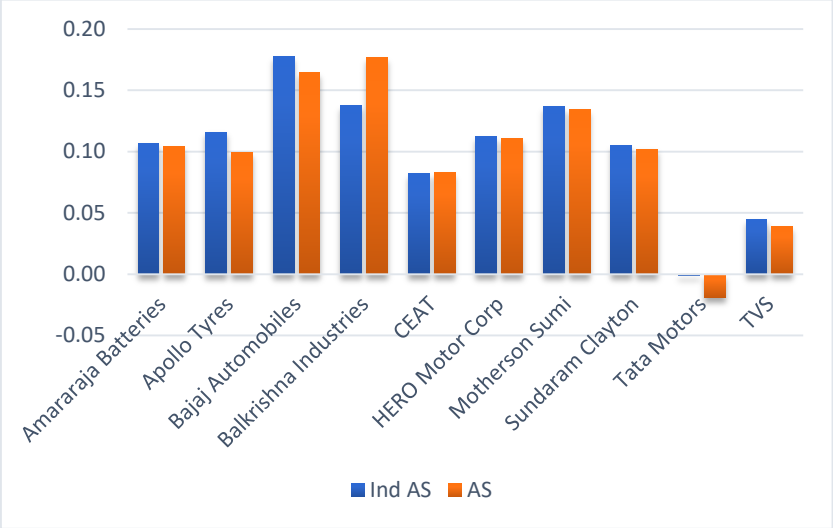
**Table No 6.55 Net Profit Ratio of Automobile Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Amara raja Batteries | 0.11 | 0.10 |
| Apollo Tyres | 0.12 | 0.10 |

| | | |
|---|---|---|
| Bajaj Automobiles | 0.18 | 0.16 |
| Balkrishna Industries | 0.14 | 0.18 |
| CEAT | 0.08 | 0.08 |
| HERO Motor Corp | 0.11 | 0.11 |
| Motherson Sumi | 0.14 | 0.13 |
| Sundaram Clayton | 0.11 | 0.10 |
| Tata Motors | 0.00 | -0.02 |
| TVS | 0.04 | 0.04 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.34 Net Profit Ratio of Automobile Companies**




(Source: Created from table no 6.55 using Excel)

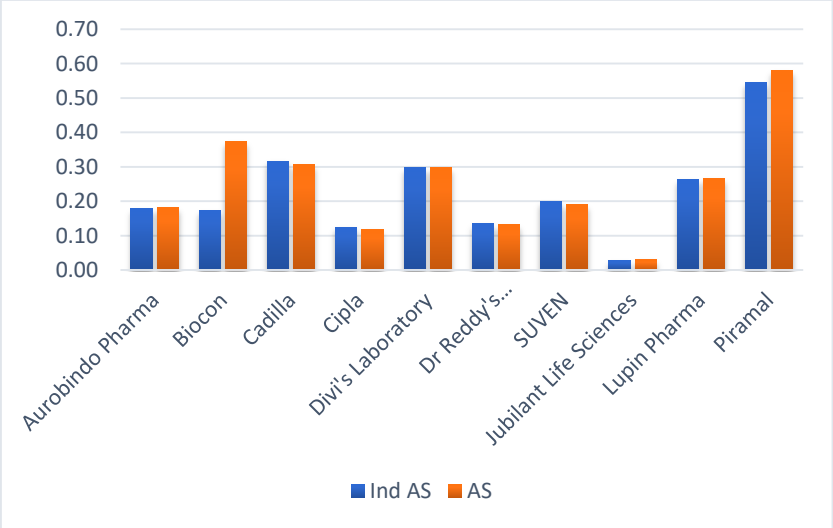
**Table No 6.56 Net Profit Ratio of Pharmaceutical Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Aurobindo Pharma | 0.18 | 0.18 |
| Biocon | 0.17 | 0.37 |
| Cadilla | 0.32 | 0.31 |
| Cipla | 0.13 | 0.12 |
| Divi's Laboratory | 0.30 | 0.30 |
| Dr Reddy's Pharmaceuticals | 0.13 | 0.13 |
| SUVEN | 0.20 | 0.19 |
| Jubilant Life Sciences | 0.03 | 0.03 |
| Lupin Pharma | 0.26 | 0.27 |
| Piramal | 0.54 | 0.58 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Table no 6.56 portrays the net profit ratio of pharmaceutical companies under both the regimes. There is a minor increase visible in companies such as Cadilla and SUVEN. It is remarkable to observe that Biocon has reported drastic decline under Ind AS. The reduction of profit is because of the different treatment of profit on sale of Syngene shares, which is a subsidiary company of Biocon. The fair valuation of investment in Syngene on the Ind AS transition date is treated as deemed cost.

**Figure 6.35 Net Profit Ratio of Pharmaceutical Companies**




(Source: Created from table no 6.56 using Excel)

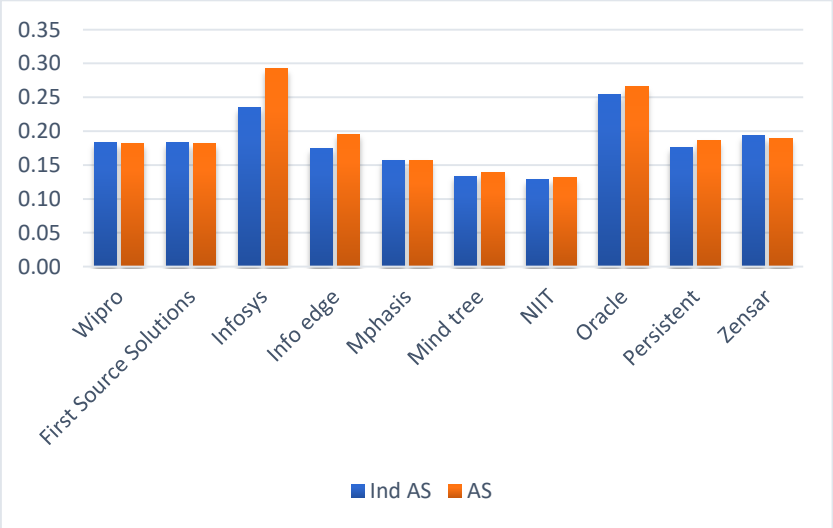
**Table No 6.57 Net Profit Ratio of IT Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Wipro | 0.18 | 0.18 |
| First Source Solutions | 0.18 | 0.18 |
| Infosys | 0.24 | 0.29 |
| Info edge | 0.17 | 0.20 |
| Mphasis | 0.16 | 0.16 |
| Mind tree | 0.13 | 0.14 |
| NIIT | 0.13 | 0.13 |
| Oracle | 0.25 | 0.27 |
| Persistent | 0.18 | 0.19 |
| Zensar | 0.19 | 0.19 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Table no 6.57 depicts the net profit of IT companies under Ind AS and AS. Half of the selected IT companies show a decline in the ratio under Ind AS while the rest of the companies report the same ratio under AS and Ind AS. The automobile sector shows a positive attitude towards Ind AS with respect to Net Profit Ratio as most of the companies have a higher ratio under Ind AS. In the pharmaceutical sector, the impact is mostly neutral with an exceptional case of Biocon. In the case of the IT sector, the companies have shown a decline in profit under Ind AS.

**Figure 6.36 Net Profit Ratio of IT Companies**




(Source: Created from table no 6.57 using Excel)

### 6.3.3.3 Operating profit ratio

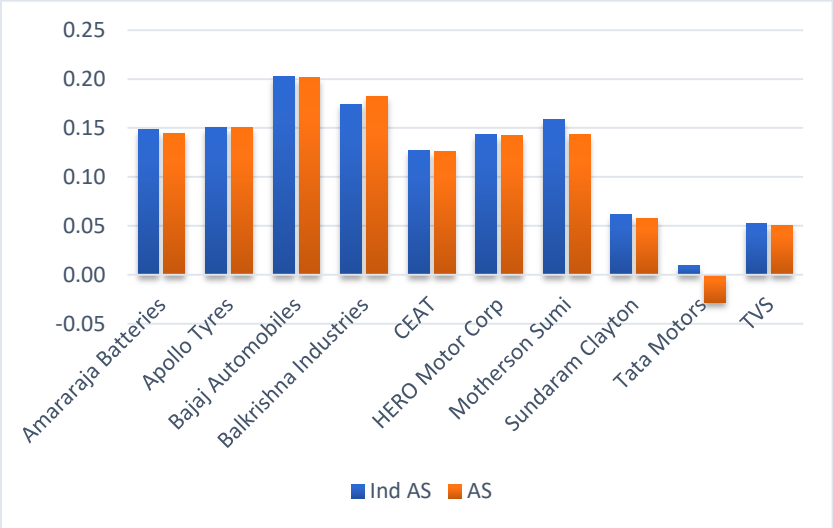
**Table No 6.58 Operating Profit Ratio of Automobile Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Amara raja Batteries | 0.15 | 0.14 |
| Apollo Tyres | 0.15 | 0.15 |
| Bajaj Automobiles | 0.20 | 0.20 |
| Balkrishna Industries | 0.17 | 0.18 |
| CEAT | 0.13 | 0.13 |
| HERO Motor Corp | 0.14 | 0.14 |
| Motherson Sumi | 0.16 | 0.14 |
| Sundaram Clayton | 0.06 | 0.06 |
| Tata Motors | 0.01 | -0.03 |
| TVS | 0.05 | 0.05 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Table no 6.58 shows the operating profit of automobile companies under Ind AS and AS. Operating profit represents that profit the company earned using its day-to-day operations. Amara raja, Motherson sumi, Tata Motors reports a higher operating profit under Ind AS while, Balkrishna has experienced a decline during transition. Remaining companies have the same ratio under both standards.

**Figure 6.37 Operating Profit Ratio of Automobile Companies**




(Source: Created from table no 6.58 using Excel)

**Table No 6.59 Operating Profit Ratio of Pharmaceutical Companies for the year 2016**

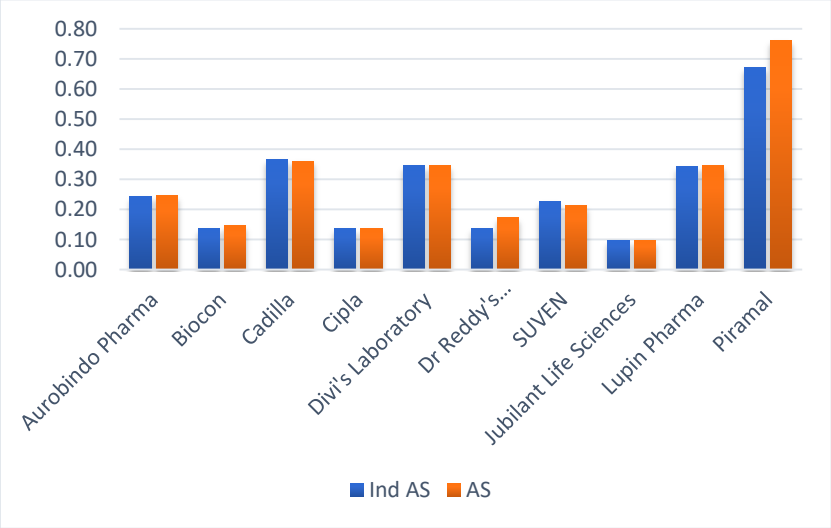
| Name of the Company | Ind AS | AS |
|---|---|---|
| Aurobindo Pharma | 0.24 | 0.25 |
| Biocon | 0.14 | 0.15 |
| Cadilla | 0.37 | 0.36 |
| Cipla | 0.14 | 0.14 |
| Divi's Laboratory | 0.35 | 0.34 |
| Dr Reddy's Pharmaceuticals | 0.14 | 0.17 |
| SUVEN | 0.23 | 0.21 |
| Jubilant Life Sciences | 0.10 | 0.10 |
| Lupin Pharma | 0.34 | 0.35 |
| Piramal | 0.67 | 0.76 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Table no 6.59 displays the operating ratio of pharmaceutical companies. Aurobindo pharma, Biocon, Dr. Reddy's, Lupin and Piramal report a

decline in the ratio during transition. Cadilla, Divi's and SUVEN have experienced an increase in the ratio during transition from AS to Ind AS. Jubilant and Cipla maintain the same level of operating ratio under AS and Ind AS. Pharmaceutical companies experienced a general trend of decline in operating ratio during transition.

**Figure 6.38 Operating Profit of Pharmaceutical Companies**




(Source: Created from table no 6.59 using Excel)

Table no 6.60 represents the operating ratio of IT companies under Ind AS and AS. Wipro, Oracle have increased their operating ratio during transition while companies such as Info edge, Mind tree, Persistent, and NIIT reported a decline in the ratio during transition.

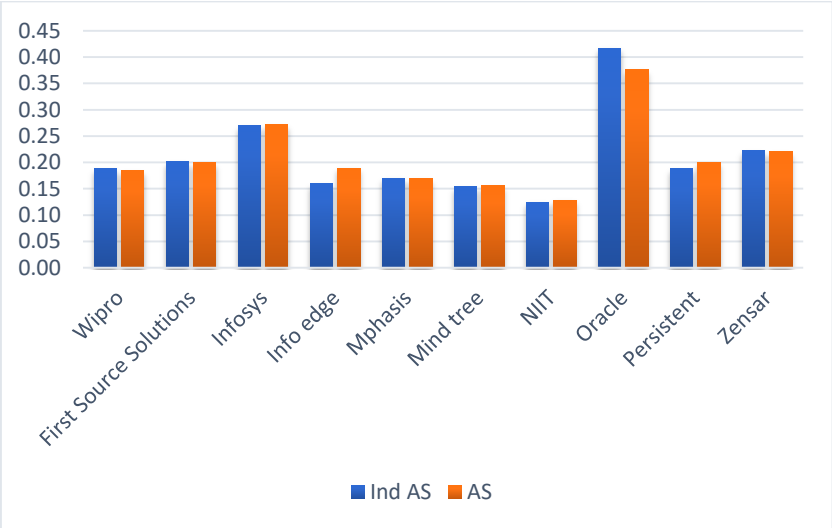
The remaining companies like first source solutions, Mphasis, Zensar maintained the ratio at the same level during the implementation of Ind AS standards. In general, the operating ratio experienced a negative impact during the transition from Ind AS to AS. Most of the selected companies have experienced a decline or the same level of ratio. Very few companies have undergone an increase in the operating ratio.

**Table No 6.60 Operating Profit Ratio of IT Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Wipro | 0.19 | 0.18 |
| First Source Solutions | 0.20 | 0.20 |
| Infosys | 0.27 | 0.27 |
| Info edge | 0.16 | 0.19 |
| Mphasis | 0.17 | 0.17 |
| Mind tree | 0.15 | 0.16 |
| NIIT | 0.12 | 0.13 |
| Oracle | 0.42 | 0.38 |
| Persistent | 0.19 | 0.20 |
| Zensar | 0.22 | 0.22 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.39 Operating Profit Ratio of IT Companies**




(Source: Created from table no 6.60 using Excel)

### 6.3.3.4 ROA

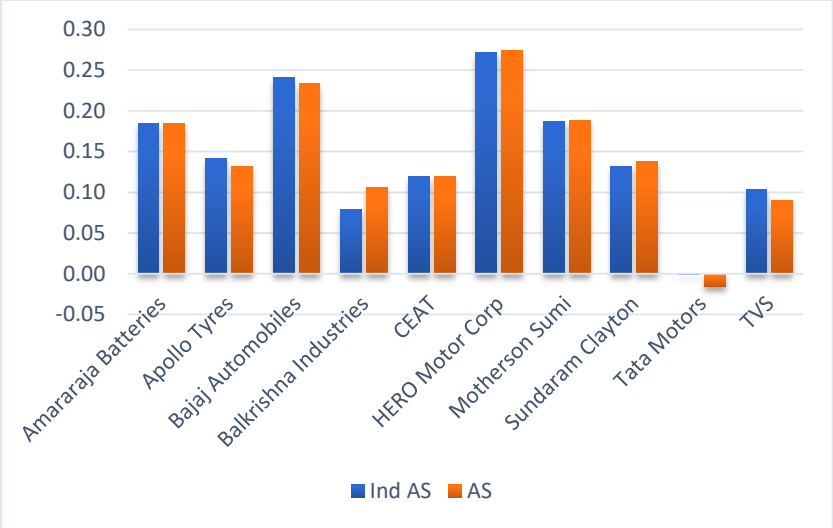
Return on Assets measures the relationship between Profit after Tax (PAT) and the Total Assets of the selected sample companies. Table no 6.61 explains the ROA of automobile companies under AS and Ind AS. Apollo, Bajaj and TVS show improvement during the transition period while companies such as Balkrishna and Sundaram Clayton experiences a slight decline in the ratio. Tata Motors have been displaying a negative ROA under AS has been displaying a zero ratio under Ind AS. during the transition the company have reached a no profit no loss point.

**Table No 6.61 ROA of Automobiles Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Amara raja Batteries | 0.18 | 0.18 |
| Apollo Tyres | 0.14 | 0.13 |
| Bajaj Automobiles | 0.24 | 0.23 |
| Balkrishna Industries | 0.08 | 0.11 |
| CEAT | 0.12 | 0.12 |
| HERO Motor Corp | 0.27 | 0.27 |
| Motherson Sumi | 0.19 | 0.19 |
| Sundaram Clayton | 0.13 | 0.14 |
| Tata Motors | 0.00 | -0.02 |
| TVS | 0.10 | 0.09 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.40 ROA of Automobile Companies**




(Source: Created from table no 6.61 using Excel)

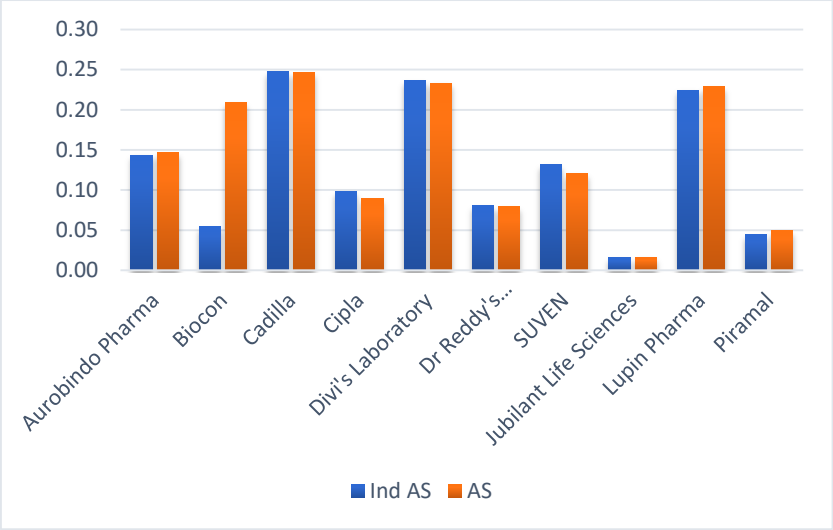
Table no 6.62 illustrates the ROA of pharmaceutical companies under Ind AS and AS. Biocon has displayed a significant decline in the ratio under Ind AS due to the treatment of shares in its subsidiary company. Fair valuation of shares has caused the decline under Ind AS.

**Table No 6.62 ROA of Pharmaceutical Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Aurobindo Pharma | 0.14 | 0.15 |
| Biocon | 0.05 | 0.21 |
| Cadilla | 0.25 | 0.25 |
| Cipla | 0.10 | 0.09 |
| Divi's Laboratory | 0.24 | 0.23 |
| Dr Reddy's Pharmaceuticals | 0.08 | 0.08 |
| SUVEN | 0.13 | 0.12 |
| Jubilant Life Sciences | 0.02 | 0.02 |
| Lupin Pharma | 0.22 | 0.23 |
| Piramal | 0.04 | 0.05 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.41 ROA of Pharmaceutical Companies**




(Source: Created from table no 6.62 using Excel)

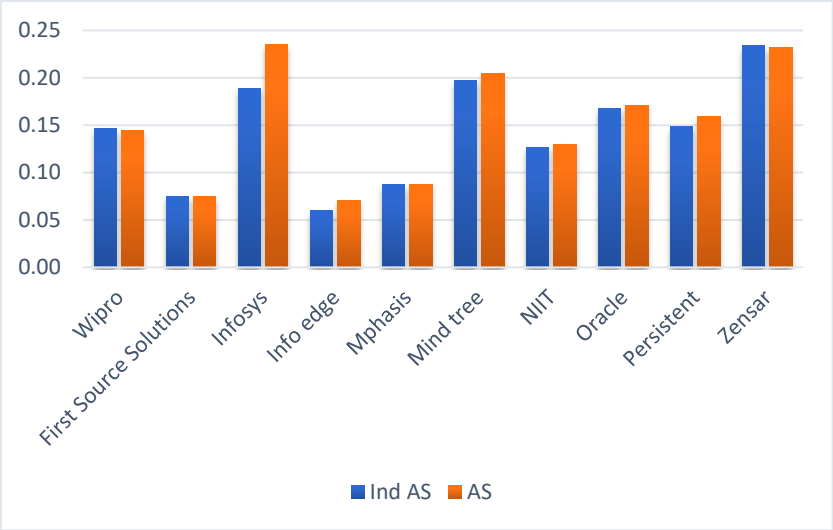
Despite from Biocon, Aurobindo Pharma, Lupin Pharma and Piramal also suffered a decrease in the ratio under Ind AS. This is, however, is a negligible decline. Companies like Jubilant, Dr. Reddy's and Cadilla managed to perform the same under both the regimes. The remaining companies experienced a slight increase in performance during the transition.

**Table No 6.63 ROA of IT Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Wipro | 0.15 | 0.14 |
| First Source Solutions | 0.08 | 0.07 |
| Infosys | 0.19 | 0.23 |
| Info edge | 0.06 | 0.07 |
| Mphasis | 0.09 | 0.09 |
| Mind tree | 0.20 | 0.20 |
| NIIT | 0.13 | 0.13 |
| Oracle | 0.17 | 0.17 |
| Persistent | 0.15 | 0.16 |
| Zensar | 0.23 | 0.23 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.42 ROA of IT Companies**




(Source: Created from table no 6.63 using Excel)

Table no 6.63 explains the ROA of selected IT companies under Ind AS and AS. Majority of the companies remain neutral during the transition period. Wipro, and First Source displayed an increase while Infosys and Info Edge shows a decline. Infosys displays a remarkable decrease of four points in ratio due to the decline in both profit and net assets.

In case of ROA, most of the companies remain unaffected by the adoption of Ind AS. It is evident from the above figures that automobile companies showed a better performance under Ind AS, pharmaceutical companies and IT companies show a better performance under AS.

### 6.3.3.5 ROE

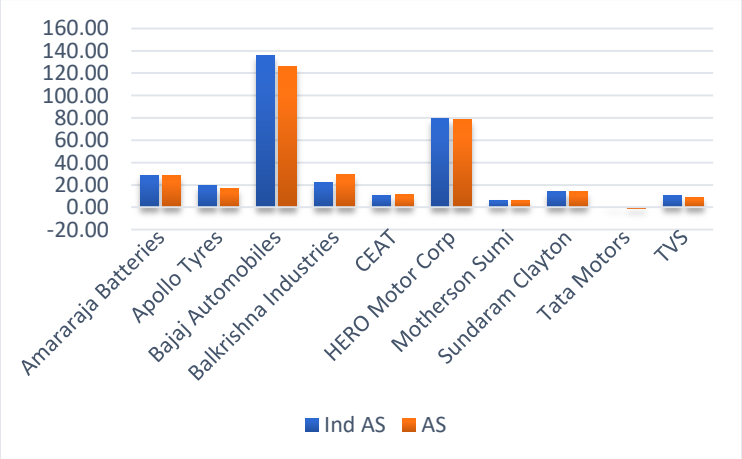
Return on Equity (ROE) explores the relationship between PAT and Average Equity. Table no 6.64 displays the ROE of automobile companies under Ind AS and AS. The range of the ratio is huge from -0.09 in case of Tata motors to 135.8 in case of Bajaj. Bajaj has experienced a significant hike in case of PAT under Ind AS due to the fair valuation in valuation of investments, the reversal of proposed dividend among other reasons. Most of the companies have improved their ROE under Ind AS except Balkrishna and CEAT.

**Table No 6.64 ROE of Automobiles Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Amara raja Batteries | 28.78 | 28.63 |
| Apollo Tyres | 19.68 | 16.75 |
| Bajaj Automobiles | 135.80 | 126.22 |
| Balkrishna Industries | 22.66 | 29.34 |
| CEAT | 11.01 | 11.19 |
| HERO Motor Corp | 79.12 | 78.44 |
| Motherson Sumi | 6.52 | 6.46 |
| Sundaram Clayton | 14.27 | 13.79 |
| Tata Motors | -0.09 | -1.21 |
| TVS | 10.30 | 9.10 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.43 ROE of Automobile Companies**




(Source: Created from table no 6.64 using Excel)

Table no 6.65 depicts the ROE of pharmaceutical companies under Ind AS and AS. The ratio ranges from 3.69 to 36.93. Although most of the companies display a better ratio under Ind AS, Biocon experiences a significant decline in ROE

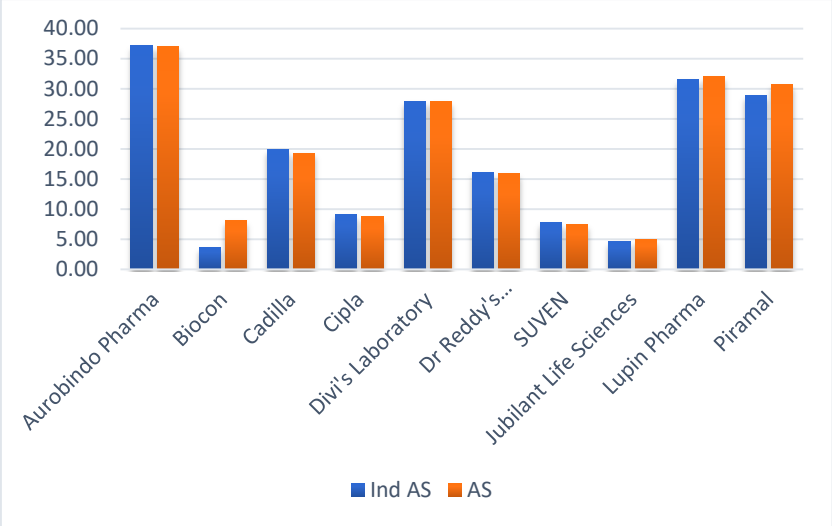
under Ind AS. companies like Jubilant, Lupin and Piramal also shows a decline in the ratio under Ind AS.

**Table No 6.65 ROE of Pharmaceuticals Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Aurobindo Pharma | 37.09 | 36.93 |
| Biocon | 3.69 | 8.09 |
| Cadilla | 19.90 | 19.31 |
| Cipla | 9.10 | 8.70 |
| Divi's Laboratory | 27.88 | 27.82 |
| Dr Reddy's Pharmaceuticals | 16.12 | 15.90 |
| SUVEN | 7.85 | 7.46 |
| Jubilant Life Sciences | 4.58 | 4.97 |
| Lupin Pharma | 31.45 | 32.05 |
| Piramal | 28.85 | 30.75 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.44 ROE of Pharmaceutical Companies**




(Source: Created from table no 6.65 using Excel)

Table no 6.66 illustrates the ROE of selected IT companies under Ind AS and AS. Majority of the companies show decline in ROE during transition. Infosys expresses drastic decline in the ratio due to decrease in PAT. The decrease in PAT is due to the reversal of extraordinary item under Ind AS.

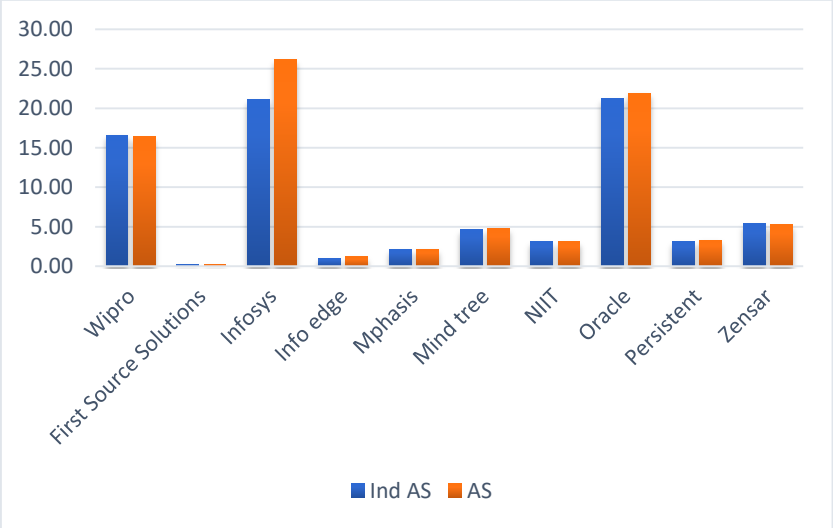
**Table No 6.66 ROE of IT Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Wipro | 16.60 | 16.40 |
| First Source Solutions | 0.23 | 0.22 |
| Infosys | 21.06 | 26.19 |
| Info edge | 1.04 | 1.17 |
| Mphasis | 2.18 | 2.18 |
| Mind tree | 4.62 | 4.81 |
| NIIT | 3.14 | 3.17 |
| Oracle | 21.19 | 21.92 |
| Persistent | 3.12 | 3.32 |
| Zensar | 5.36 | 5.27 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

The profit on transfer of business between entities under common control has been reversed and taken to business transfer account of transition to Ind AS. Wipro, First source and Zensar shows a mild increase in the ratio while rest of the companies report a decline in the ratio during transition.

**Figure 6.45 ROE of IT Companies**




(Source: Created from table no 6.66 using Excel)

In general, automobile, and pharmaceutical companies have performed well under Ind AS. Both the industries display better ROE under Ind AS. However, IT companies show a better ratio under AS.

### 6.3.3.6 ROCE

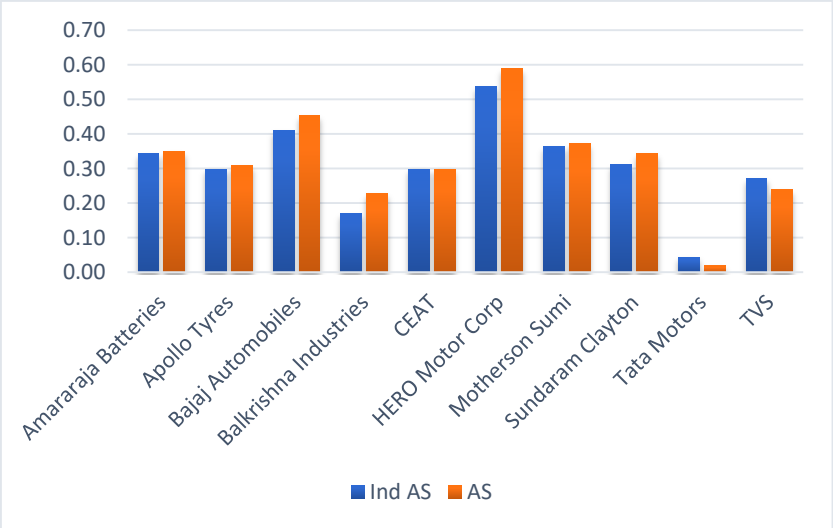
Return on Capital Employed (ROCE) calculates the efficiency of the company to produce returns against the capital invested in them. Table no 6.67 depicts the ROCE of automobile companies under Ind AS and AS. Majority of the companies have displayed a decrease in the ratio during the transition.

**Table No 6.67 ROCE of Automobiles Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Amara raja Batteries | 0.34 | 0.35 |
| Apollo Tyres | 0.30 | 0.31 |
| Bajaj Automobiles | 0.41 | 0.45 |
| Balkrishna Industries | 0.17 | 0.23 |
| CEAT | 0.30 | 0.30 |
| HERO Motor Corp | 0.54 | 0.59 |
| Motherson Sumi | 0.36 | 0.37 |
| Sundaram Clayton | 0.31 | 0.34 |
| Tata Motors | 0.04 | 0.02 |
| TVS | 0.27 | 0.24 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.46 ROCE of Automobile Companies**




(Source: Created from table no 6.67 using Excel)

The changes brought in the provisions with respect to proposed dividend along with the fair valuation of investments have brought down the value of

capital employed under Ind AS. Very few companies like TVS and Tata Motors have accounted for a higher ratio under Ind AS.

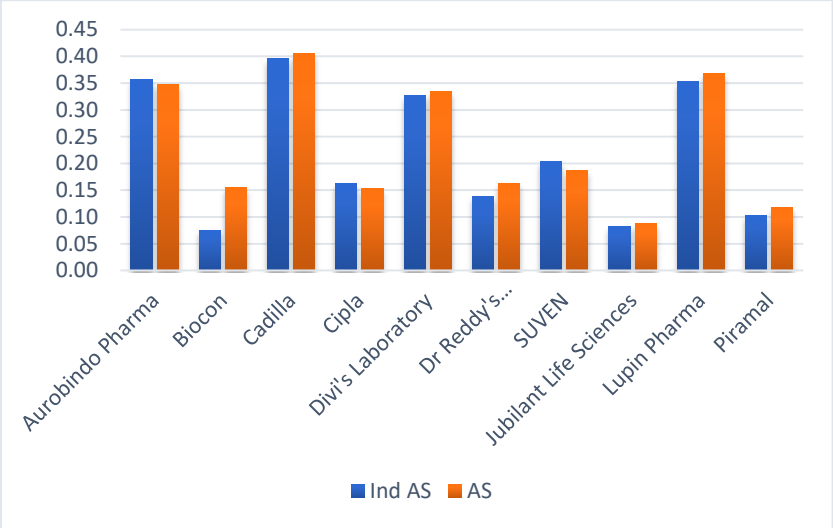
Table No 6.68 shows the level of ROCE of pharmaceutical companies under Ind AS and AS. It is evident that majority of the companies reports a decrease in the ratio during the transition period. Aurobindo pharma and SUVEN are the only selected pharmaceutical companies which have reported an increase in ROCE.

**Table No 6.68 ROCE of Pharmaceutical Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Aurobindo Pharma | 0.36 | 0.35 |
| Biocon | 0.08 | 0.15 |
| Cadilla | 0.40 | 0.40 |
| Cipla | 0.16 | 0.15 |
| Divi's Laboratory | 0.33 | 0.33 |
| Dr Reddy's Pharmaceuticals | 0.14 | 0.16 |
| SUVEN | 0.20 | 0.19 |
| Jubilant Life Sciences | 0.08 | 0.09 |
| Lupin Pharma | 0.35 | 0.37 |
| Piramal | 0.10 | 0.12 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.47 ROCE of Pharmaceutical Companies**




(Source: Created from table no 6.68 using Excel)

Table no 6.69 represents ROCE of IT companies under Ind AS and AS. Persistent, Mphasis and Zensar reports a bigger ratio under Ind AS. Remaining

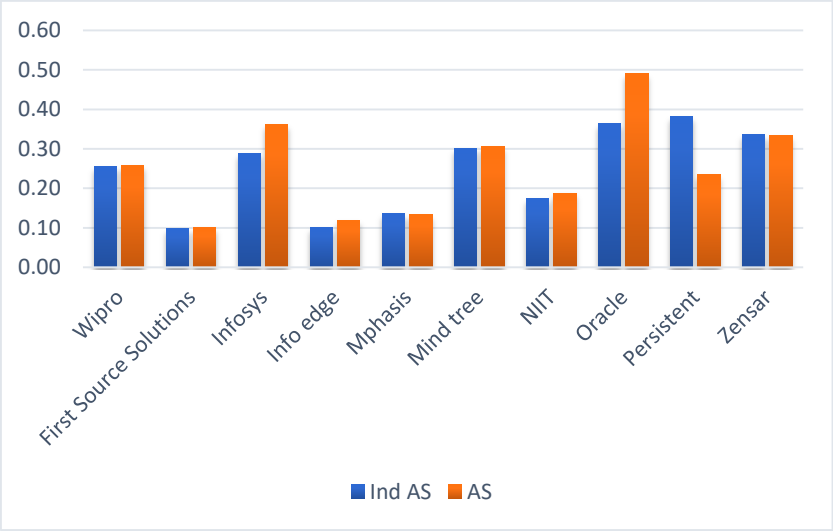
companies account for a decline in the ratio under Ind AS. Fair valuation and reversal of proposed dividend along with other factors have brought down the capital employed of most of the companies. Very few companies seem to have benefited from the introduction of fair valuation. It is safe to assume that most of the companies were over financed using equity capital and hence they suffered from the introduction of fair valuation of assets and liabilities.

**Table No 6.69 ROCE of IT Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Wipro | 0.25 | 0.26 |
| First Source Solutions | 0.10 | 0.10 |
| Infosys | 0.29 | 0.36 |
| Info edge | 0.10 | 0.12 |
| Mphasis | 0.14 | 0.13 |
| Mind tree | 0.30 | 0.31 |
| NIIT | 0.17 | 0.19 |
| Oracle | 0.36 | 0.49 |
| Persistent | 0.38 | 0.23 |
| Zensar | 0.34 | 0.33 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.48 ROCE of IT companies**




(Source: Created from table no 6.69 using Excel)

In general, across the three selected industries, ROCE is lower under Ind AS as compared to ROCE under AS. The changes brought in by Ind AS regarding assets and liabilities have had a greater impact on the valuation of capital

employed under Ind AS. This is the primary reason for the lower ROCE under Ind AS. As discussed in the stability ratios, after the adoption of Ind AS, the level of debt capital has been reduced in the selected companies under the study. The decrease in debt capital reduced the leverage along with the return on capital. When leverage decreases, the return on capital also decreases.

### 6.3.4 Activity Ratios

Activity ratios help to analyze the efficiency in which the assets are utilized of the company. It measures the rate of speed in which the assets and working capital in the company is converted to sales. A high ratio suggests efficiency and vice versa.

| | |
|---|---|
| Working Capital Turnover Ratio | Net sales/ Working Capital |
| Assets Turnover ratio | Net Sales/ Average Total Assets |
| Fixed Assets Turnover ratio | Net Sales / Average Total Fixed Assets |
| Inventory Turnover Ratio | Net Sales/ Average Inventory |

#### 6.3.4.1 Working Capital Turnover Ratio

The working capital turnover ratio determines the efficiency of the company in utilizing its working capital. Higher ratio means how fast the company can complete the operating cycle. It is the relationship between sales and working capital.

Under previous GAAP, revenue was recognised net of trade discounts, rebates, sales tax, and excise duties. Under Ind AS, "The revenue is acknowledged at the fair value of the payment received or due, after subtracting any trade discounts, volume rebates, and any taxes or duties gathered on behalf of the government, such as sales tax and value added tax, with the exception of excise duty.".(*Ind_AS18.Pdf*, n.d.) Discounts given include rebates, price reductions and incentives given to customers (including through free issues of traded batteries).

**Table No 6.70 Working Capital Turnover Ratio of Automobile Companies for the year 2016**

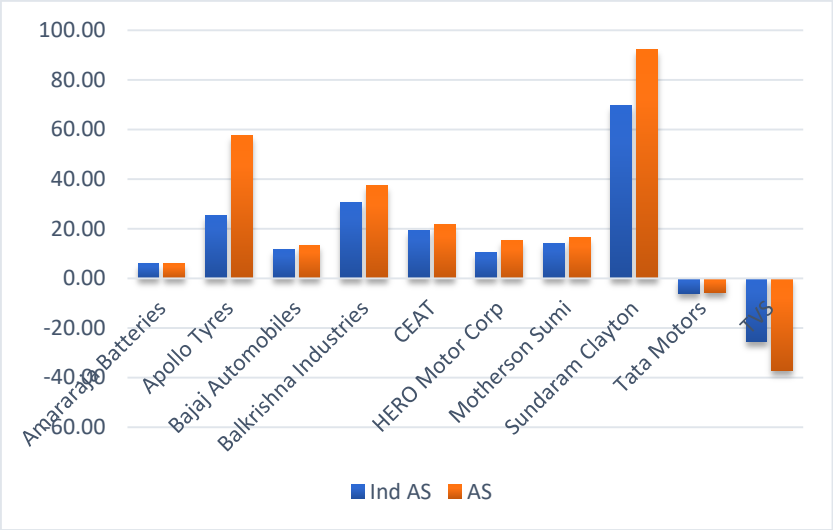
| Name of the Company | Ind AS | AS |
|---|---|---|
| Amara raja Batteries | 5.99 | 6.02 |

| | | |
|---|---|---|
| Apollo Tyres | 25.25 | 57.58 |
| Bajaj Automobiles | 11.39 | 13.36 |
| Balkrishna Industries | 30.60 | 37.36 |
| CEAT | 19.33 | 21.48 |
| HERO Motor Corp | 10.43 | 15.03 |
| Motherson Sumi | 13.81 | 16.33 |
| Sundaram Clayton | 69.46 | 92.10 |
| Tata Motors | -6.19 | -5.95 |
| TVS | -25.53 | -37.23 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Table no 6.70 represents the working capital turnover ratio of automobile companies under Ind AS and AS. All the selected companies unanimously display a lower ratio under Ind AS. This is primarily due to the changes in revenue brought in by Ind AS. working capital under AS and Ind AS also shows difference, but it is negligible.

**Figure 6.49 Working Capital Turnover Ratio of Automobile Companies**




(Source: Created from table no 6.70 using Excel)

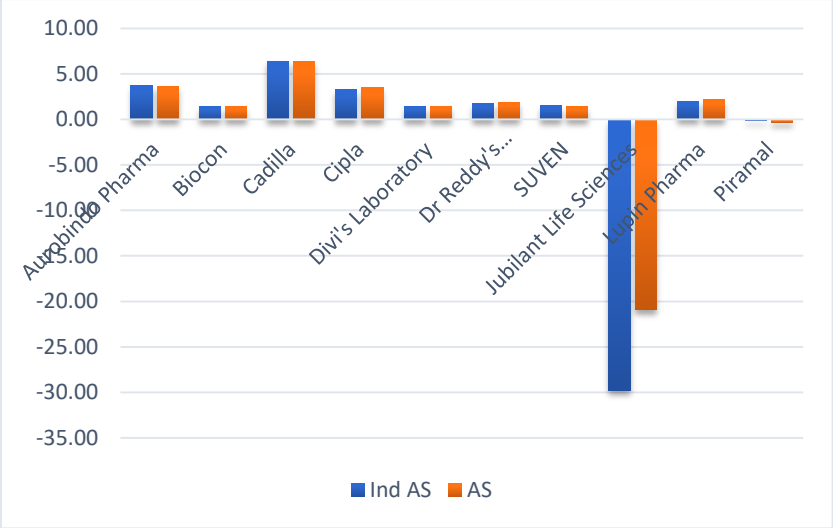
Table no 6.71 shows the working capital turnover ratio of selected pharmaceutical companies under Ind AS and AS. Apart from SUVEN, the rest of the companies show a declining trend in the ratio during the transition. The main cause for this is the decline in the working capital due to the introduction of fair valuation in financial assets.

**Table No 6.71 Working Capital Turnover Ratio of Pharmaceutical Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Aurobindo Pharma | 3.73 | 3.65 |
| Biocon | 1.41 | 1.45 |
| Cadilla | 6.42 | 6.42 |
| Cipla | 3.32 | 3.48 |
| Divi's Laboratory | 1.46 | 1.43 |
| Dr Reddy's Pharmaceuticals | 1.76 | 1.92 |
| SUVEN | 1.55 | 1.38 |
| Jubilant Life Sciences | -29.75 | -20.86 |
| Lupin Pharma | 2.03 | 2.19 |
| Piramal | -0.17 | -0.36 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.50 Working Capital Turnover Ratio of Pharmaceutical Companies**




(Source: Created from table no 6.71 using Excel)

Almost all the companies report a lower level of working capital under Ind AS. Divi's Laboratory also managed to produce a better ratio under Ind AS. Cadilla has shown the same ratio under both the regimes.

**Table No 6.72 Working Capital Turnover Ratio of IT Companies for the year 2016**

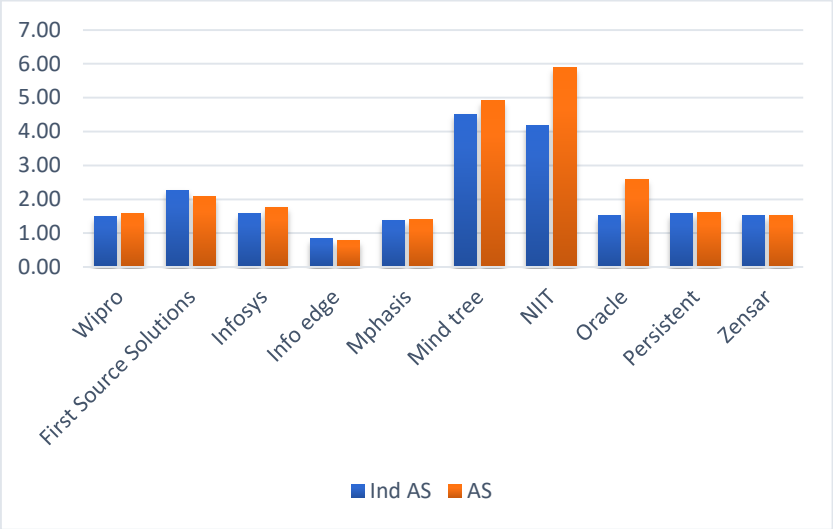
| Name of the Company | Ind AS | AS |
|---|---|---|
| Wipro | 1.49 | 1.57 |
| First Source Solutions | 2.27 | 2.07 |
| Infosys | 1.56 | 1.77 |

| | | |
|---|---|---|
| Info edge | 0.85 | 0.79 |
| Mphasis | 1.37 | 1.39 |
| Mind tree | 4.51 | 4.92 |
| NIIT | 4.17 | 5.89 |
| Oracle | 1.51 | 2.59 |
| Persistent | 1.56 | 1.60 |
| Zensar | 1.51 | 1.53 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Table No 6.72 represents the working capital turnover ratio of IT companies under Ind AS and AS. Most of the selected IT companies have experienced a diminishing value of ratio under Ind AS. First source and Info edge have a better ratio under Ind AS. All the remaining companies have a decline in their working capital turnover ratio during transition.

**Figure 6.51 Working Capital Turnover Ratio of IT Companies**




(Source: Created from table no 6.72 using Excel)

In general, across all the selected three industries, the companies display a lower level of working capital turnover ratio under Ind AS. The changes in revenue along with the fair valuation of financial assets and liabilities have had a huge negative impact on the working capital turnover of the companies.

### 6.3.4.2 Assets Turnover Ratio

The assets turnover ratio shows the efficiency in which the assets of the company are used in generating revenue. A higher ratio suggests better utilization

of assets and vice versa. This ratio explores the relationship of revenue with the average total assets of the company.

Along with the changes discussed in revenue introduced by Ind AS in table no 6.2, under the description of the working capital turnover ratio, this ratio is influenced by the changes in total assets. Total assets include fixed assets and current assets. The fair valuation of investments and financial assets have a significant impact in the determination of this ratio under Ind AS.

**Table No 6.73 Assets Turnover Ratio of Automobile Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Amara raja Batteries | 1.73 | 1.77 |
| Apollo Tyres | 1.22 | 1.33 |
| Bajaj Automobiles | 1.36 | 1.42 |
| Balkrishna Industries | 0.57 | 0.60 |
| CEAT | 1.45 | 1.44 |
| HERO Motor Corp | 2.42 | 2.48 |
| Motherson Sumi | 1.36 | 1.40 |
| Sundaram Clayton | 1.26 | 1.35 |
| Tata Motors | 0.77 | 0.82 |
| TVS | 2.31 | 2.32 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Table no 6.73 discusses the assets turnover ratio of the selected automobile companies under Ind AS and AS. Except from a mild increase displayed by CEAT, rest of the companies illustrate a decline in the ratio under Ind AS.

**Figure 6.52 Assets Turnover Ratio of Automobile Companies**


(Source: Created from table no 6.73 using Excel)

Fair valuation of investments and financial assets have had a significant impact on the decline of the asset's turnover ratio under Ind AS.

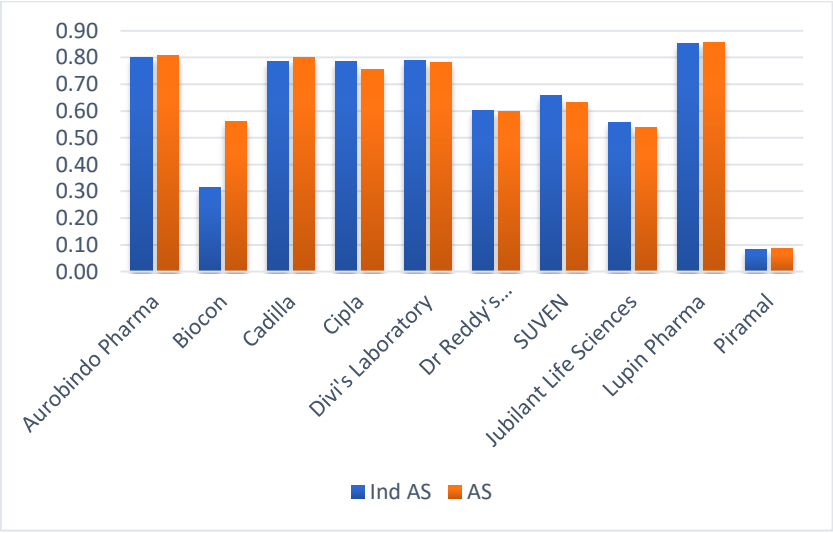
Table no 6.74 depicts the assets turnover ratio of pharmaceutical companies under Ind AS and AS. Cipla, Divi's, SUVEN, Jubilant, and Lupin have shown a better ratio under Ind AS. This indicates that fair valuation has been a positive change for pharmaceutical companies. Very few companies like Aurobindo pharma, Biocon and Cadilla have reported a lower ratio under Ind AS.

**Table No 6.74 Assets Turnover Ratio of Pharmaceutical Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Aurobindo Pharma | 0.80 | 0.81 |
| Biocon | 0.31 | 0.56 |
| Cadilla | 0.78 | 0.80 |
| Cipla | 0.78 | 0.75 |
| Divi's Laboratory | 0.79 | 0.78 |
| Dr Reddy's Pharmaceuticals | 0.60 | 0.60 |
| SUVEN | 0.66 | 0.63 |
| Jubilant Life Sciences | 0.56 | 0.54 |
| Lupin Pharma | 0.85 | 0.86 |
| Piramal | 0.08 | 0.08 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.53 Assets Turnover Ratio of Pharmaceutical Companies**




(Source: Created from table no 6.74 using Excel)

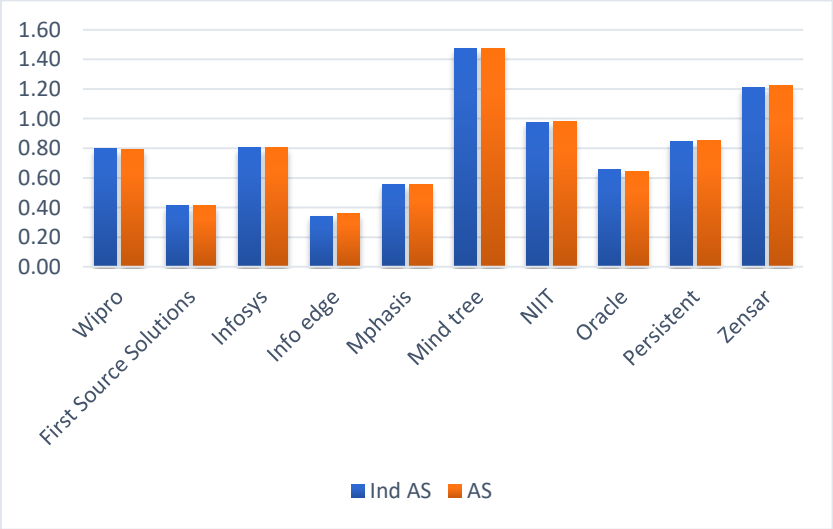
Table no 6.75 depicts the assets turnover ratio of IT companies under Ind AS and AS. Majority of the companies remain neutral during the transition period. They report the same ratio under Ind AS and AS. The companies which reported a decrease have accounted only for a minor change in their ratios. It suggests that fair valuation doesn't have much impact on the IT companies.

**Table No 6.75 Assets Turnover Ratio of IT Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Wipro | 0.80 | 0.79 |
| First Source Solutions | 0.41 | 0.41 |
| Infosys | 0.80 | 0.80 |
| Info edge | 0.34 | 0.36 |
| Mphasis | 0.56 | 0.56 |
| Mind tree | 1.47 | 1.47 |
| NIIT | 0.98 | 0.98 |
| Oracle | 0.66 | 0.64 |
| Persistent | 0.85 | 0.85 |
| Zensar | 1.21 | 1.22 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.54 Assets Turnover Ratio of IT Companies**




(Source: Created from table no 6.75 using Excel)

In general, the automobile sector is highly impacted by the implementation of Ind AS. Pharma sector shows mixed results while IT sector has majority of companies unaffected by the change in standards. It can be assumed that

automobiles have the worst impact pharma has mild impact and IT sector remains neutral.

### 6.3.4.3 Fixed Assets Turnover Ratio

Fixed assets contribute to revenue generation of the company in the long run. The fixed assets turn over ratios help to figure out the efficiency in which the fixed assets are used in the company. Higher the ratio, it is better management of fixed assets. Fixed assets consist of PPE and Investments including long term financial assets.

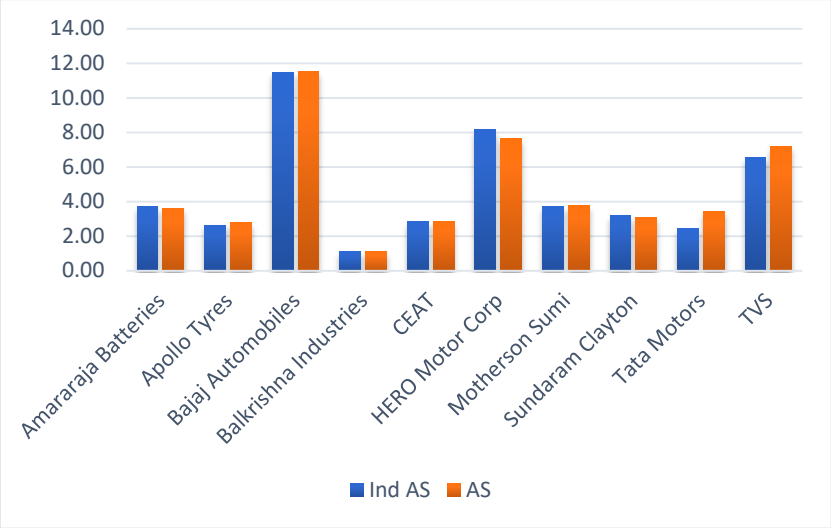
Ind AS has introduced fair valuation in the recognition and measurement of financial assets including investments. Also, in case of PPE, the decommissioning liability is created at a discounted rate under Ind AS. under certain circumstances leasehold land which was recognized under non-current assets as per AS is now treated as operating lease assets. These changes in standards have been reflected in the accounting figures during the transition period.

**Table No 6.76 Fixed Assets Turnover Ratio of Automobile Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Amara raja Batteries | 3.70 | 3.57 |
| Apollo Tyres | 2.63 | 2.79 |
| Bajaj Automobiles | 11.44 | 11.49 |
| Balkrishna Industries | 1.12 | 1.13 |
| CEAT | 2.83 | 2.87 |
| HERO Motor Corp | 8.14 | 7.63 |
| Motherson Sumi | 3.72 | 3.77 |
| Sundaram Clayton | 3.17 | 3.09 |
| Tata Motors | 2.41 | 3.42 |
| TVS | 6.56 | 7.18 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.55 Fixed Assets Turnover Ratio of Automobile Companies**




(Source: Created from table no 6.76 using Excel)

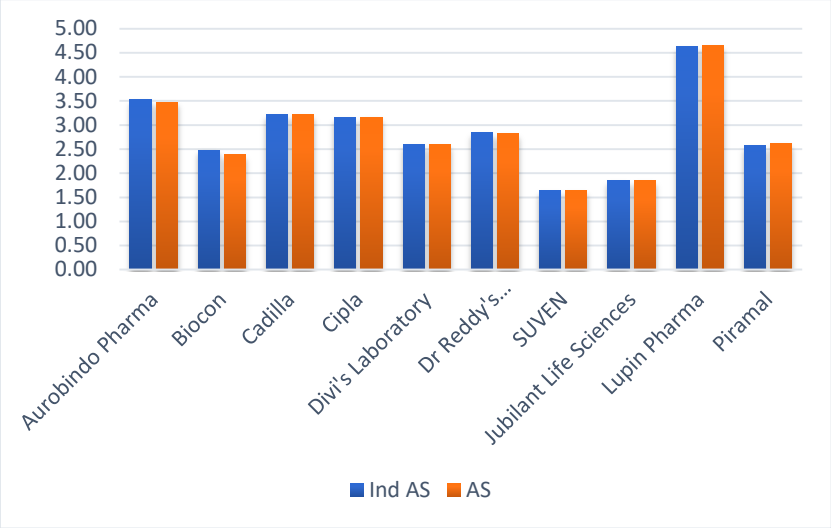
Table no 6.76 represents the fixed assets turnover ratio under Ind AS and AS of automobile companies. Most of the automobile companies under the study show a decrease under Ind AS. Amara raja, CEAT, and Hero show a growth in the ratio during transition towards Ind AS. Fixed assets have decreased due to fair valuation in financial assets. Ind AS has brought down the efficiency in which fixed assets were used by the company.

**Table No 6.77 Fixed Assets Turnover Ratio of Pharmaceutical Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Aurobindo Pharma | 3.54 | 3.47 |
| Biocon | 2.48 | 2.39 |
| Cadilla | 3.22 | 3.22 |
| Cipla | 3.15 | 3.16 |
| Divi's Laboratory | 2.59 | 2.59 |
| Dr Reddy's Pharmaceuticals | 2.85 | 2.82 |
| SUVEN | 1.64 | 1.64 |
| Jubilant Life Sciences | 1.85 | 1.85 |
| Lupin Pharma | 4.62 | 4.64 |
| Piramal | 2.56 | 2.61 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.56 Fixed Assets Turnover Ratio of Pharmaceutical Companies**




(Source: Created from table no 6.77 using Excel)

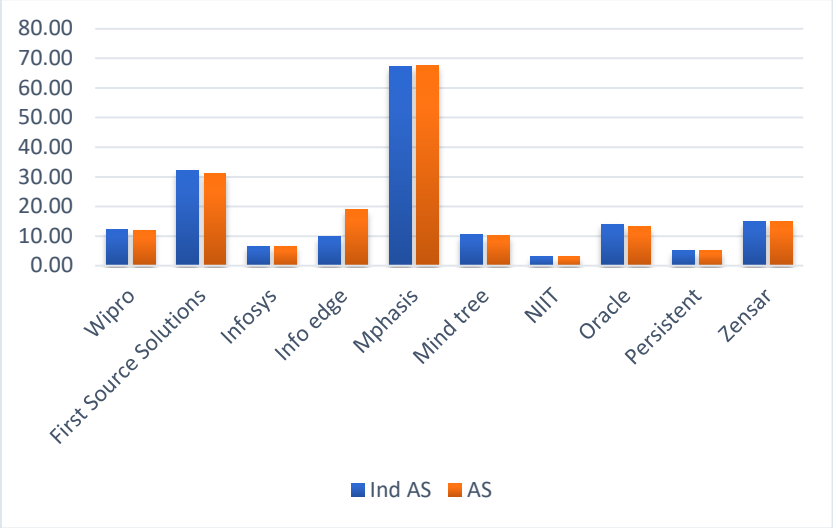
Table no 6.77 shows the fixed assets turnover ratio of pharmaceutical companies under Ind AS and AS. Most of the selected pharmaceutical companies remain neutral to the changes in the accounting standards. The ratio is the same for Cadilla, Divi's, SUVEN, and Jubilant. Companies like Aurobindo, Biocon, Dr Reddy's have shown improvement in the fixed assets turnover ratio under Ind AS while Piramal, Lupin and Cipla display a minor decrease in the ratio under Ind AS.

**Table No 6.78 Fixed Assets Turnover Ratio of IT Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Wipro | 12.27 | 11.99 |
| First Source Solutions | 32.20 | 31.12 |
| Infosys | 6.54 | 6.54 |
| Info edge | 9.89 | 19.04 |
| Mphasis | 67.33 | 67.40 |
| Mind tree | 10.56 | 10.12 |
| NIIT | 3.16 | 3.13 |
| Oracle | 14.04 | 13.33 |
| Persistent | 5.13 | 5.06 |
| Zensar | 15.03 | 15.03 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.57 Fixed Assets Turnover Ratio of IT Companies**




(Source: Created from table no 6.78 using Excel)

Table no 6.78 depicts the fixed assets turnover ratio of the selected IT companies under Ind AS and AS. IT companies show better ratio under Ind AS indicating that fair valuation and other changes brought in by Ind AS have been successful for IT companies. The changes have helped the IT industry to improve the efficiency utilizing the fixed assets in them.

In general, most of the selected companies in the automobile industry show poor results under Ind AS. The selected pharmaceutical companies stay neutral to the changes in standard. The IT sector has more positive changes regarding Ind AS.

### 6.3.4.4 Inventory Turnover Ratio

Inventory turnover ratio tests the efficiency in which the companies are using the inventory. A low ratio indicates weak sales and therefore excess inventory, and a high ratio suggests high sales and suggests inadequate inventory stocking. Table no 6.79 explains the inventory turnover ratio of automobile companies for the year 2016 under Ind AS and AS.

**Table No 6.79 Inventory Turnover Ratio of Automobile Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Amara raja Batteries | 9.09 | 9.26 |

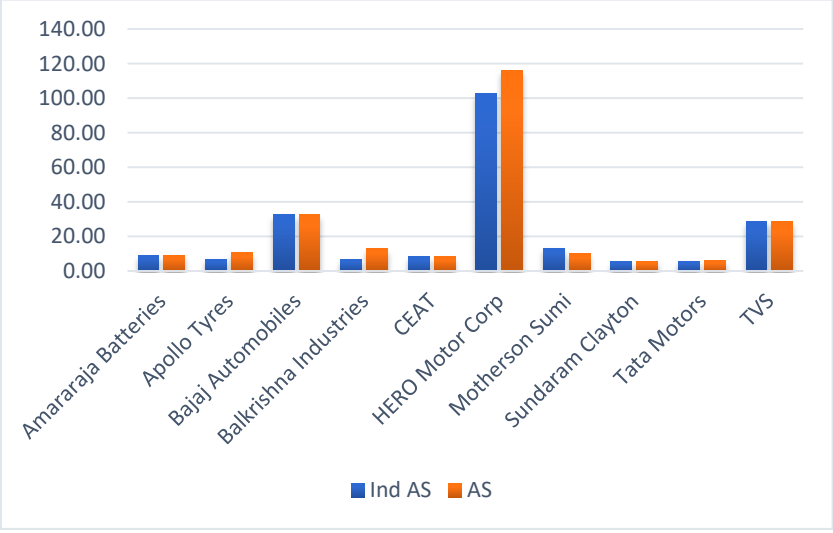
| | | |
|---|---|---|
| Apollo Tyres | 6.86 | 10.62 |
| Bajaj Automobiles | 32.83 | 32.83 |
| Balkrishna Industries | 6.74 | 12.92 |
| CEAT | 8.13 | 8.13 |
| HERO Motor Corp | 102.77 | 116.21 |
| Motherson Sumi | 13.33 | 9.97 |
| Sundaram Clayton | 5.63 | 5.71 |
| Tata Motors | 5.74 | 6.10 |
| TVS | 28.46 | 28.63 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Except for Motherson Sumi, all the companies report a lower ratio under Ind AS. This indicates that after the implementation of Ind AS, there have been changes in the cost of sales and inventory. In Apollo and Balkrishna, the inventory has significantly decreased causing the ratio to come down under Ind AS.

Hero experiences a hike in the ratio due to the increase in the level of inventory under Ind AS. The cost of goods sold has not changed much under Ind AS. Inventory has shown fluctuations in most of the companies and have been the reason for the ratio to be volatile under Ind AS.

**Figure 6.58 Inventory Turnover Ratio of Automobile Companies**




(Source: Created from table no 6.79 using Excel)

**Table No 6.80 Inventory Turnover Ratio of Pharmaceutical Companies for the year 2016**

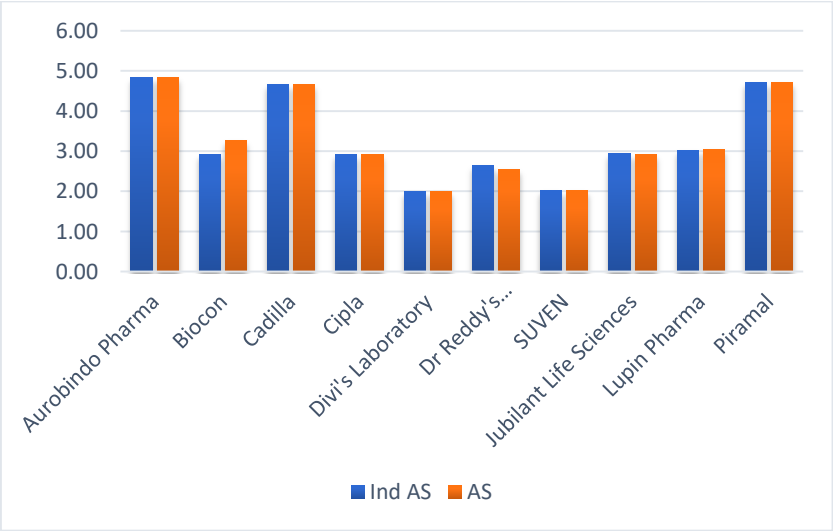
| Name of the Company | Ind AS | AS |
|---|---|---|
| Aurobindo Pharma | 4.82 | 4.82 |
| Biocon | 2.93 | 3.27 |
| Cadilla | 4.65 | 4.65 |
| Cipla | 2.92 | 2.92 |
| Divi's Laboratory | 1.99 | 1.99 |
| Dr Reddy's Pharmaceuticals | 2.63 | 2.55 |
| SUVEN | 2.01 | 2.01 |
| Jubilant Life Sciences | 2.94 | 2.93 |
| Lupin Pharma | 3.03 | 3.04 |
| Piramal | 4.71 | 4.71 |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

Table no 6.80 describes the inventory turnover ratio of selected pharmaceutical companies for the year 2016 under Ind AS and AS. Aurobindo Pharma, Cadilla, Cipla, Divi's, SUVEN, Piramal have recorded the same ratio under Ind AS and AS suggesting that for these companies neither the cost of goods sold, nor the inventory has changed under Ind AS.

Jubilant and Dr. Reddy's report a slightly higher ratio under Ind AS because cost of goods sold has increased in case of Dr. Reddy and inventory has decreased in case of Jubilant. Biocon and Lupin report a slightly lower ratio under Ind AS. The reason for this is the decline in the cost of goods sold in both the companies.

**Figure 6.59 Inventory Turnover Ratio of Pharmaceutical Companies**




(Source: Created from table no 6.80 using Excel)

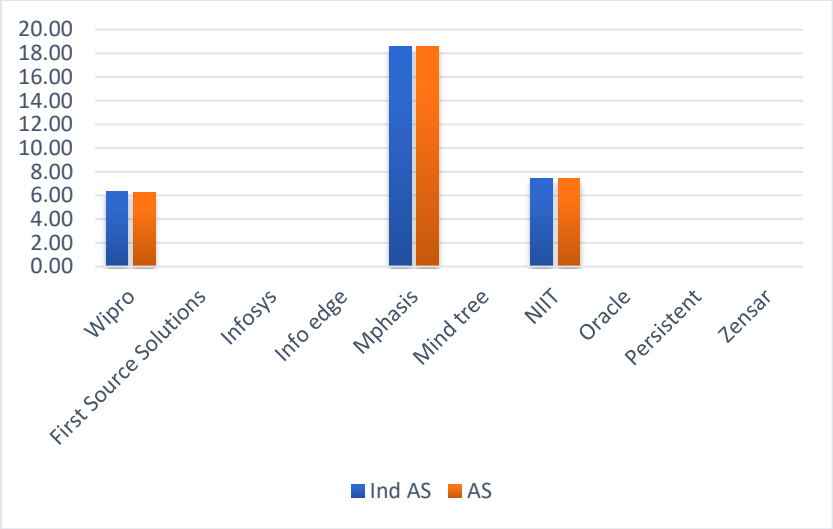
Table No 6.81 explains the inventory turnover ratio of selected IT companies for the year 2016 under Ind AS and AS. As the IT industry is from the service sector, most of the companies do not have inventory in them. Such companies have not reported the inventory turnover ratio. Of the IT companies which have inventory, Mphasis and NIIT have reported the same ratio under Ind AS and AS indicating that the cost of goods sold, and inventory remain same for these companies under both Ind AS and AS. Wipro has recorded a slight increase in the ratio due to decrease in the inventory under Ind AS.

**Table No 6.81 Inventory Turnover Ratio of IT Companies for the year 2016**

| Name of the Company | Ind AS | AS |
|---|---|---|
| Wipro | 6.31 | 6.23 |
| First Source Solutions | | |
| Infosys | | |
| Info edge | | |
| Mphasis | 18.57 | 18.57 |
| Mind tree | | |
| NIIT | 7.44 | 7.44 |
| Oracle | | |
| Persistent | | |
| Zensar | | |

(Source: Compiled & calculated from Annual Reports of selected companies for the year 2015-16 and 2016-17)

**Figure 6.60 Inventory Turnover Ratio of IT Companies**




(Source: Created from table no 6.81 using Excel)

In general, the inventory turnover ratio has been the same under Ind AS and AS. The automobile industry seemed to have higher impact when compared to pharma and IT. IT companies have experienced the least level of impact from the changes brought in by Ind AS. Pharmaceutical companies have had certain level of impact but less than automobile companies.

## 6.4 Testing of Significance

The formulated hypotheses are tested to identify their statistical significance. The sample selected need to be tested for the differences in mean under Ind AS regime and AS regime. Hence, Paired T-test is used to test the hypotheses. "A paired t-test determines whether the mean change for these pairs is significantly different from zero." Two tailed test is performed to reach the results.

### 6.4.1 Paired T-test

$t = x\,(diff) / (s\,diff/\sqrt{n})$

where:

xdiff: sample mean of the differences.

s diff: sample standard deviation of the differences.

n: sample size (i.e. number of pairs)

Hypotheses: $\mu 1=\mu 2$

$\mu 1$ = Mean of Selected Financial Variables under Ind AS.

$\mu 2$ = Mean of Selected Financial Variables under AS.

### 6.4.2 Inference

The formulated hypotheses are tested at 95% of significance. If the P-value is less than 0.05, the hypotheses are rejected and when the P-value is greater than 0.05, the hypotheses are accepted. Rejected hypotheses means that there are significant differences in the means of both samples and here it would indicate that the means under Ind AS and AS have statistically significant differences which would

further imply that the changes brought in by Ind AS have had significant impact on the financial variables of the company.

When a hypothesis is accepted, it would mean that there is no significant difference between the means under Ind AS and AS which would further imply that the changes brought in by Ind AS had no significant impact on the financial variables of the company.

**Table No 6.82 Results to Paired T-test**

| **95 % confidence** | | | | |
|---|---|---|---|---|
| **Sl. No.** | **ITEMS** | **P-Value** | **Hypotheses** | **Result** |
| 1 | Debt Equity Ratio | 0.36 | µ1 = µ2 | Accepted |
| 2 | Debt Ratio | 0.24 | µ1 = µ2 | Accepted |
| **3** | **Equity Ratio** | **0.03** | **µ1 = µ2** | **Rejected** |
| 4 | Interest Coverage | 0.06 | µ1 = µ2 | Accepted |
| 5 | Capitalisation ratio | 0.41 | µ1 = µ2 | Accepted |
| 6 | Current Ratio | 0.44 | µ1 = µ2 | Accepted |
| 7 | Quick Ratio | 0.45 | µ1 = µ2 | Accepted |
| 8 | Cash returns to net assets | 0.29 | µ1 = µ2 | Accepted |
| 9 | Cash returns to current liabilities | 0.41 | µ1 = µ2 | Accepted |
| 10 | Cash returns to total liabilities | 0.17 | µ1 = µ2 | Accepted |
| 11 | Gross Profit Ratio | 0.47 | µ1 = µ2 | Accepted |
| 12 | Net Profit Ratio | 0.18 | µ1 = µ2 | Accepted |
| 13 | Operating profit ratio | 0.59 | µ1 = µ2 | Accepted |
| 14 | ROA | 0.21 | µ1 = µ2 | Accepted |
| 15 | ROE | 0.78 | µ1 = µ2 | Accepted |
| 16 | ROCE | 0.92 | µ1 = µ2 | Accepted |
| 17 | Working capital turnover ratio | 0.09 | µ1 = µ2 | Accepted |
| **18** | **Assets turnover ratio** | **0.02** | **µ1 = µ2** | **Rejected** |
| 19 | Fixed assets turnover ratio | 0.41 | µ1 = µ2 | Accepted |
| 20 | Inventory turnover ratio | 0.18 | µ1 = µ2 | Accepted |

(Source: Computed from table no 6.22 to 6.81 using excel)

**Interpretation**

Table no 6.82 describes the result of testing of significance using t-test for the above-mentioned hypotheses. Except for assets turnover ratio and equity ratio, all other hypotheses are accepted. This means that there is a significant difference between the Ind AS figures and AS figures of assets turnover ratio and equity ratio. This is strong evidence that the introduction of Ind AS has had a huge impact on balance sheet items when compared to other variables.

Remaining hypotheses have been accepted indicating that the changes observed in the actual ratios are not statistically significant. This means that even though there are visible quantitative changes in most of the variables, those changes are not statistically significant.

## Part II: Analysis using Indices

Financial reports of companies are used by various stakeholders for decision making regarding investment, risk and return of business, strategies of management and much more. Hence the companies must keep the quality of their reports to the best. In other words, these financial reports are the main communication channel between company and its stakeholders. With the convergence of accounting standards, it was expected to improve the quality of reporting.

One of the main reasons for converging with IFRS and adopting Ind AS was to bring relevance to the accounting data."Convergence to IFRS is expected to improve the relevance, reliability, and comparability of financial reports"(Desai, 2016). The fair value method increases the relevance of the financial statements which theoretically should reduce conservatism. Gray's Index is used to measure conservatism in financial statements. The higher conservatism, the lower the relevance. Ind AS tries to make balance between conservatism and relevance and provide the users of financial reports with true and fair view.

The Part II of chapter 6 is an enquiry to understand whether introduction of Ind AS any impact on quality of financial reporting had, is divided into three sections. The first section is the study of degree of conservatism in the new accounting standards and compares it with old regime. Gray's conservatism Index is used for the same. Second part of the chapter deals with the harmonisation level brought in by the convergence procedure and finally the chapter ends with the measurement of disclosure quality of reporting brought in by the convergence.

## 6.5 Section 1: Study of conservatism in accounting standards

The US Financial Reporting Standard Board defines conservatism as "a prudent reaction to uncertainty to try to ensure that uncertainty and risks inherent in business situations are adequately considered".(*IFRS - Home*, n.d.)

Bliss (1924) also defines "accounting conservatism as the anticipation of all losses but no profit." The prudent convention in Indian Generally Accepted Accounting Principles (GAAP) also follows the same idea in laying the foundation of Mercantile accounting. The idea is to account for all the possible losses and not gains. That is the reason why provision for doubtful debts is created and appreciation of fixed assets like land is not being considered while preparing financial statements.

### 6.5.1 Conservatism Index

In 1987, S J Gray formulated an index based on various financial ratios to compare companies that follow different types of accounting methods and practices. This Index later came to be known as Gray's Index and it is widely used in measuring the degree of conservatism between various accounting standards. Gray stated "- Profits-measurement behaviour, which is the net outcome of the set of accounting practices employed, can thus be assessed along a continuum of conservatism".(Gray, 1980)

The following formula is used by Gray in his paper "The Impact of International Accounting Differences from a Security Analysis Perspective: Some European Evidence".

$$1 - \frac{(Ra - Rd)}{|Ra|}$$

It has been modified and used by Costal Istrate, (2013) Alexandro Ioan Cuza University, Romania, Dr. Bhanu Achalapati, (2015) Osmania University and many others to study the impact of International Financial Accounting Standards (IFRS) and domestic accounting standards.

The modified Index is as follows:

$$\frac{Ratio\ under\ \ AS - Ratio\ under\ Ind\ \ AS}{Ratio\ under\ AS}$$

Gray (1980) describes "- ratios have been classified into nine categories from the highly conservative or pessimistic category of <0.50 to the less conservative or optimistic category of >1.50. In addition, three subgroups have been identified which are labelled pessimistic, neutral, and optimistic. The pessimistic grouping is for conservatism ratios of <0.95, whereas the optimistic grouping is for ratios of >1.05. While a strictly neutral ratio would be unity, it seems appropriate to allow some measure of tolerance-hence the neutral grouping for ratios of 0.95-1.05." In other words, it can be interpreted as follows.

**GIC>1** implies that "the new standard values are greater than the previous standard values. Hence, the new standard is less prudent and conservative than the previous standard. New standard is more ***optimistic*** in approach".(Gray, 1980)

**GIC<1** means that "the previous standard values are more than values of the new standard. It implies that, the new standard is more conservative and prudent than previous standard. New standard is more ***pessimistic*** in approach".(Gray, 1980)

**GIC=1** means that "both the accounting standards gives the same value. That is prudence is equal and conservatism is equal among the standards. Both standards are ***neutral*** in approach".(Gray, 1980)

The same ratios used in ratio analysis are being used here also.

### 6.5.2 Data Analysis

Gray's index values are calculated for all companies under study, and it is calculated individually for every ratio. The ratios under study are basically divided into four categories: Stability Ratios, Liquidity Ratios, Profitability Ratios and Activity Ratios.

Ratios under Indian GAAP and Ind AS are calculated separately and then Gray's Index is used for calculation. Data for the same is collected from annual reports of 2017 and 2016 respectively for the purpose of deriving data of the year, 2015-16 under both AS and Ind AS. Initially, Gray's Index is calculated for all 30 companies and later it is classified into different industries to study the industry wise impact. The list of ratios are as follows.

| Stability Ratios | Liquidity Ratios | Profitability Ratios | Turnover Ratios |
|---|---|---|---|
| Debt- Equity Ratio | Current Ratio | Gross Profit Ratio | Working Capital Turnover Ratio |
| Debt Ratio | Quick Ratio | Net Profit Ratio | Assets Turnover Ratio |
| Equity Ratio | Cash Returns to Net Assets Ratio | Operating Profit Ratio | Fixed Assets Turnover Ratio |
| Interest Coverage Ratio | Cash Returns to Current liability Ratio | ROA | Inventory Turnover Ratio |
| Capitalisation Ratio | Cash Returns to Total Liabilities Ratio | ROE | |
| | | ROCE | |

### 6.5.3 Results of Gray's Index for Stability Ratios

**Table No 6.83 Gray's Index of Debt Equity Ratio**

| Range | Gray's Index of conservatism | Number of Companies | | |
|---|---|---|---|---|
| | | AUTO | PHARMA | IT |
| Pessimistic | GIC < 1 | 7 | 6 | 7 |
| Neutral | GIC = 1 | 0 | 1 | 0 |
| Optimistic | GIC > 1 | 3 | 3 | 3 |
| **Total number of companies** | | **10** | **10** | **10** |

(Source: Compiled from annual reports of selected companies for the year 2016 under AS and Ind AS and computed using Excel)

**Interpretation**

Table No. 6.83 describes the results of Gray's Index of Conservatism for the Debt Equity Ratio of the selected companies across different industries. GIC is computed and the companies have been classified into three categories: pessimistic, neutral, and optimistic.

In the automobile sector, 7 companies display a pessimistic attitude, and none of the companies remain neutral towards the implementation of Ind AS suggesting that automobile companies still follow conservative accounting principles when it comes to the calculation of debt ratio. Only 3 companies follow progressive style of accounting practices.

In the pharmaceutical sector, 1 company show neutral attitude while 6 companies display pessimistic and 3 portray optimistic attitude towards the Ind AS implementation. This suggests that the pharmaceutical companies remain unaffected by the changes introduced by Ind AS.

In the IT sector, 7 companies show pessimistic attitude towards the implementation Ind AS. A meagre portion of 3 companies display optimistic attitude while none of the companies reveal a pessimistic trend. Here, the sector seems to be unaffected by the introduction of Ind AS.

In general, most of the companies across various industries display a neutral stand towards the implementation of Ind AS indicating that Ind AS doesn't play any role in in the calculation of debt equity ratio of the companies from the selected industries.

**Table No 6.84 Gray's Index of Debt Ratio**

| Range | Gray's Index of conservatism | Number of Companies | | |
|---|---|---|---|---|
| | | AUTO | PHARMA | IT |
| Pessimistic | GIC < 1 | 6 | 2 | 3 |
| Neutral | GIC = 1 | 2 | 2 | 2 |
| Optimistic | GIC > 1 | 2 | 6 | 5 |
| **Total number of companies** | | **10** | **10** | **10** |

(Source: Compiled from annual reports of selected companies for the year 2016 under AS and Ind AS and computed using Excel)

**Interpretation**

Table No. 6.84 describes the results of Gray's Index of Conservatism for the Debt Equity Ratio of the selected companies across different industries. GIC is computed and the companies have been classified into three categories: pessimistic, neutral, and optimistic.

In the automobile sector, majority of the companies belong to the pessimistic range of GIC. Two companies remain neutral to the implementation of Ind AS while 2 companies display optimistic trend.

The Pharmaceutical and IT companies have shown a remarkable positive reaction towards the implementation of Ind AS. 6 companies in pharmaceutical sector and 5 companies in IT industry illustrates a GIC higher than 1 indicating that they are adopting more progressive and aggressive methods in the accounting practices. 2 companies in each industry remain neutral while the remaining companies are still following conservative terms.

In general, pharmaceutical and IT industry embraces the less conservative methods of accounting practices while automobile industry remains conservative with respect to debt ratio. This can also mean that Ind AS is promoting short term debts rather than long term debts within a company.

**Table No 6.85 Gray's Index of Equity Ratio**

| Range | Gray's Index of conservatism | Number of Companies | | |
|---|---|---|---|---|
| | | AUTO | PHARMA | IT |
| Pessimistic | GIC < 1 | 3 | 1 | 1 |
| Neutral | GIC = 1 | 1 | 1 | 1 |
| Optimistic | GIC > 1 | 6 | 8 | 8 |
| **Total number of companies** | | **10** | **10** | **10** |

(Source: Compiled from annual reports of selected companies for the year 2016 under AS and Ind AS and computed using Excel)

**Interpretation**

Table No. 6.85 describes the results of Gray's Index of Conservatism for the Equity Ratio of the selected companies across different industries. GIC is computed and the companies have been classified into three categories: pessimistic, neutral, and optimistic.

In automobile industry, more than 50% of the selected sample companies belong to the optimistic range. The same is reflected in pharmaceutical and IT sectors as well. It is a clear indication that the companies are following progressive accounting techniques when it comes to equity and asset related decisions.

This can also mean that the implementation of Ind AS have influenced the companies to adopt fewer conservative methods in the accounting treatment of equity and assets.

**Table No 6.86 Gray's Index of Interest Coverage Ratio**

| Range | Gray's Index of conservatism | Number of Companies | | |
|---|---|---|---|---|
| | | AUTO | PHARMA | IT |
| Pessimistic | GIC < 1 | 6 | 9 | 7 |
| Neutral | GIC = 1 | 0 | 1 | 1 |
| Optimistic | GIC > 1 | 4 | 0 | 2 |
| **Total number of companies** | | **10** | **10** | **10** |

(Source: Compiled from annual reports of selected companies for the year 2016 under AS and Ind AS and computed using Excel)

**Interpretation**

Table No. 6.86 describes the results of Gray's Index of Conservatism for the Interest Coverage Ratio of the selected companies across different industries. GIC is computed and the companies have been classified into three categories: pessimistic, neutral, and optimistic.

In automobile industry, more than 50% of the companies belong to a pessimistic range of GIC. A similar trend is witnessed in pharmaceutical and IT industries also. This is strong evidence that even though the changes brought in by Ind AS have helped the selected companies to follow less conservative accounting methods in the treatment of short-term debt, equity, assets, but regarding finance costs, the standard seems to follow a conservative approach.

In general, the implementation of Ind AS, does not have any impact regarding the accounting treatment of finance cost.

**Table No 6.87 Gray's Index of Capitalisation Ratio**

| Range | Gray's Index of conservatism | Number of Companies | | |
|---|---|---|---|---|
| | | **AUTO** | **PHARMA** | **IT** |
| Pessimistic | GIC < 1 | 7 | 4 | 3 |
| Neutral | GIC = 1 | 1 | 2 | 3 |
| Optimistic | GIC > 1 | 2 | 4 | 4 |
| **Total number of companies** | | **10** | **10** | **10** |

(Source: Compiled from annual reports of selected companies for the year 2016 under AS and Ind AS and computed using Excel)

**Interpretation**

Table No. 6.87 describes the results of Gray's Index of Conservatism for the Capitalisation Ratio of the selected companies across different industries. GIC is computed and the companies have been classified into three categories: pessimistic, neutral, and optimistic.

In automobile industry, more than 50% of the companies belong to a pessimistic range of GIC. Only 2 companies in the automobile sector display an optimistic approach after the implementation of Ind AS. The pharmaceutical and IT industries display a mixed approach towards the implementation of Ind AS. There are similar numbers of companies in pessimistic range and optimistic range in these industries. This indicates that the implementation of Ind AS has had company specific impact rather than an industry specific impact like automobiles regarding the capitalisation ratio.

Stability ratios in general have a neutral impact from adoption of Ind AS. Except for equity ratio which capsulates the majority number of companies in optimistic range, debt- equity and debt ratios along with interest coverage ratios remains highly conservative even after the implementation of Ind AS. The level of equity has increased after the implementation of Ind AS. This is evident from the analysis of Part I. The same is reflected in the Gray's index analysis. Equity ratio is optimistic while, debt-based ratios remain conservative.

### 6.5.4 Results of Gray's Index for Liquidity Ratios

**Table No 6.88 Gray's Index of Current Ratio**

| Range | Gray's Index of conservatism | Number of Companies | | |
|---|---|---|---|---|
| | | AUTO | PHARMA | IT |
| Pessimistic | GIC < 1 | 2 | 6 | 2 |
| Neutral | GIC = 1 | 0 | 1 | 1 |
| Optimistic | GIC > 1 | 8 | 3 | 7 |
| **Total number of companies** | | **10** | **10** | **10** |

(Source: Compiled from annual reports of selected companies for the year 2016 under AS and Ind AS and computed using Excel)

**Interpretation**

Table No. 6.88 describes the results of Gray's Index of Conservatism for the Current Ratio of the selected companies across different industries. GIC is computed and the companies have been classified into three categories: pessimistic, neutral, and optimistic.

In automobile industry, more than 50% of the companies belong to an optimistic range of GIC. A similar trend is observed in IT industry. With the implementation of Ind AS, it is evident that the automobile and IT industries have adopted less conservative accounting practices for the accounting treatment of current assets and current liabilities. However, the pharmaceutical sector remains fairly conservative regarding the treatment of current assets and current liabilities. The adoption of less conservative practices is as a result of the introduction of fair valuation of financial assets and liabilities which form a part of current assets and liabilities.

**Table No 6.89 Gray's Index of Quick Ratio**

| Range | Gray's Index of conservatism | Number of Companies | | |
|---|---|---|---|---|
| | | AUTO | PHARMA | IT |
| Pessimistic | GIC < 1 | 3 | 6 | 2 |
| Neutral | GIC = 1 | 1 | 2 | 0 |
| Optimistic | GIC > 1 | 6 | 2 | 8 |
| **Total number of companies** | | **10** | **10** | **10** |

(Source: Compiled from annual reports of selected companies for the year 2016 under AS and Ind AS and computed using Excel)

**Interpretation**

Table No. 6.89 describes the results of Gray's Index of Conservatism for the Quick Ratio of the selected companies across different industries. GIC is computed and the companies have been divided into three categories: pessimistic, neutral, and optimistic.

The automobile sector displays an immense level of optimism regarding the quick ratio. The sector involves more than 50% of selected companies belonging to the optimistic range.

There is a similar trend witnessed in the IT sector. A huge section of IT companies falls in the optimistic range. It is observed that after the implementation of Ind AS, the automobile and IT companies have become less conservative regarding the accounting treatment of its quick assets and working capital components including current liabilities. The pharmaceutical sector remains conservative in the treatment of quick assets and current liabilities as many of the pharmaceutical companies belong to the pessimistic range.

In general, the implementation of Ind AS has had a positive effect on automobile and IT companies as compared to pharmaceutical companies.

**Table No 6.90 Gray's Index of Cash returns to Net Assets Ratio**

| Range | Gray's Index of conservatism | Number of Companies | | |
|---|---|---|---|---|
| | | AUTO | PHARMA | IT |
| Pessimistic | GIC < 1 | 6 | 7 | 7 |
| Neutral | GIC = 1 | 1 | 1 | 1 |
| Optimistic | GIC > 1 | 3 | 2 | 2 |
| **Total number of companies** | | **10** | **10** | **10** |

(Source: Compiled from annual reports of selected companies for the year 2016 under AS and Ind AS and computed using Excel)

**Interpretation**

Table No. 6.90 describes the results of Gray's Index of Conservatism for the Cash returns to Net Assets Ratio of the selected companies across different industries. GIC is computed and the companies have been divided into three categories: pessimistic, neutral, and optimistic.

Most of the selected companies across various industries belong to pessimistic range indicating that after the implementation of Ind AS, the companies remain

conservative in the accounting treatment of cash returns as well as net assets. Very few companies have become less conservative after Ind AS.

In general, it can be identified that the implementation of Ind AS does not bear any impact in improving the level of conservatism in the cash returns to net assets ratio.

**Table No 6.91 Gray's Index of Cash returns to Current Liabilities Ratio**

| Range | Gray's Index of conservatism | Number of Companies | | |
|---|---|---|---|---|
| | | AUTO | PHARMA | IT |
| Pessimistic | GIC < 1 | 4 | 4 | 3 |
| Neutral | GIC = 1 | 0 | 2 | 1 |
| Optimistic | GIC > 1 | 6 | 4 | 6 |
| **Total number of companies** | | **10** | **10** | **10** |

(Source: Compiled from annual reports of selected companies for the year 2016 under AS and Ind AS and computed using Excel)

**Interpretation**

Table No. 6.91 describes the results of Gray's Index of Conservatism for the Cash Returns to Current Liabilities Ratio of the selected companies across different industries. GIC is computed and the companies have been divided into three categories: pessimistic, neutral, and optimistic.

Majority of the selected companies in the automobile and IT sector falls into optimistic range indicating that the implementation of Ind AS have decreased the level of conservatism with respect to cash returns to current liabilities ratio. However, in the pharmaceutical sector, a mixed trend is seen. Majority of the selected pharmaceutical companies belong to pessimistic-neutral range.

In general, it can be said that the implementation of Ind AS has reduced conservatism in automobile and IT companies while pharmaceutical companies remain highly conservative.

**Table No 6.92 Gray's Index of Cash returns to Total Liabilities Ratio**

| Range | Gray's Index of conservatism | Number of Companies | | |
|---|---|---|---|---|
| | | AUTO | PHARMA | IT |
| Pessimistic | GIC < 1 | 5 | 7 | 6 |
| Neutral | GIC = 1 | 0 | 0 | 2 |
| Optimistic | GIC > 1 | 5 | 3 | 2 |
| **Total number of companies** | | **10** | **10** | **10** |

(Source: Compiled from annual reports of selected companies for the year 2016 under AS and Ind AS and computed using Excel)

**Interpretation**

Table No. 6.92 describes the results of Gray's Index of Conservatism for the Cash returns to total Liabilities Ratio of the selected companies across different industries. GIC is computed and the companies have been classified into three categories: pessimistic, neutral, and optimistic.

Most of the selected companies in pharmaceutical and IT industries remain in the pessimistic range suggesting that the implementation of Ind AS does not have any significant impact in improving the level of conservatism in these industries. However, in the automobile industry, a mixed trend is observed. While 50% of selected automobile companies display optimistic attitude, the remaining 50% show pessimistic attitude.

In general, the implementation of Ind AS does not have caused any impact in improving the level of conservatism in the cash returns to net assets ratio except for certain companies belonging to automobile industry.

Current ratio and quick ratio have undergone significant changes with the implementation of Ind AS while cash returns ratio remains conservative. This means with the adoption of Ind AS, the elements of liquidity ratios have been changed their conservative approach to a more aggressive and optimistic approach. Liquidity Ratios shows a combination of neutral and optimistic impact of the adoption of new standard. Even though liquidity has increased, the level of cash flows remains conservative. This is reflected in the Gray's ratio of liquidity analysis.

### 6.5.5 Results of Gray's Index for Profitability Ratios

**Table No 6.93 Gray's Index of Gross Profit Ratio**

| Range | Gray's Index of conservatism | Number of Companies | | |
|---|---|---|---|---|
| | | AUTO | PHARMA | IT |
| Pessimistic | GIC < 1 | 4 | 5 | 0 |
| Neutral | GIC = 1 | 2 | 5 | 10 |
| Optimistic | GIC > 1 | 4 | 0 | 0 |
| **Total number of companies** | | **10** | **10** | **10** |

(Source: Compiled from annual reports of selected companies for the year 2016 under AS and Ind AS and computed using Excel)

**Interpretation**

Table No. 6.93 describes the results of Gray's Index of Conservatism for the Gross Profit Ratio of the selected companies across different industries. GIC is computed and the companies have been divided into three categories: pessimistic, neutral, and optimistic.

The IT sector remains entirely neutral towards the implementation of Ind AS regarding the Gross Profit Ratio as the industry belongs to service sector and many companies doesn't incur any production related costs. The pharmaceutical sector remains pessimistic and neutral while the automobile sector shows a slightly optimistic approach as 40% of the selected automobile companies fall into optimistic range. At the same time rest of the auto companies belong to pessimistic and neutral range.

In general, it can be assumed that the implementation of Ind AS doesn't have an impact regarding gross profit. The accounting practices related to the gross profit remains highly conservative. Only automobile industry displays a slight level of optimism.

**Table No 6.94 Gray's Index of Net Profit Ratio**

| Range | Gray's Index of conservatism | Number of Companies | | |
|---|---|---|---|---|
| | | AUTO | PHARMA | IT |
| Pessimistic | GIC < 1 | 2 | 5 | 6 |
| Neutral | GIC = 1 | 0 | 1 | 1 |
| Optimistic | GIC > 1 | 8 | 4 | 3 |
| **Total number of companies** | | **10** | **10** | **10** |

(Source: Compiled from annual reports of selected companies for the year 2016 under AS and Ind AS and computed using Excel)

**Interpretation**

Table No. 6.94 describes the results of Gray's Index of Conservatism for the Net Profit Ratio of the selected companies across different industries. GIC is computed and the companies have been divided into three categories: pessimistic, neutral, and optimistic.

The automobile sector has 80% of the selected companies comprising to optimistic range of GIC regarding the net profit ratio. However, the same level of optimism is not visible in the pharmaceutical and IT sector. Both these industries display a high level of conservatism when it comes to the accounting practices related

to net profit. In other words, while automobile sector has become less conservative after the implementation of Ind AS, the pharmaceutical and IT sector remains conservative.

In general, the implementation of Ind AS has had a positive effect in the automobile sector while the same didn't have any impact on the remaining sectors.

**Table No 6.95 Gray's Index of Operating Profit Ratio**

| Range | Gray's Index of conservatism | Number of Companies | | |
|---|---|---|---|---|
| | | AUTO | PHARMA | IT |
| Pessimistic | GIC < 1 | 1 | 5 | 4 |
| Neutral | GIC = 1 | 2 | 2 | 1 |
| Optimistic | GIC > 1 | 7 | 3 | 5 |
| **Total number of companies** | | **10** | **10** | **10** |

(Source: Compiled from annual reports of selected companies for the year 2016 under AS and Ind AS and computed using Excel)

**Interpretation**

Table No. 6.95 describes the results of Gray's Index of Conservatism for the Operating Ratio of the selected companies across different industries. GIC is computed and the companies have been divided into three categories: pessimistic, neutral, and optimistic.

The automobile sector displays low level of conservatism after the implementation of Ind AS as 70% of the selected companies in the respected sector belongs to optimistic range. IT industry also shows an identical trend after the implementation of Ind AS. Majority of the selected companies in this sector falls in optimistic range of GIC. The pharmaceutical sector remains highly conservative even after implementation of Ind AS.

In general, the introduction of Ind AS has been favourable to automobile and IT industries while the pharmaceutical sector is prevailing highly conservative.

**Table No 6.96 Gray's Index of Returns to Assets (ROA)**

| Range | Gray's Index of conservatism | Number of Companies | | |
|---|---|---|---|---|
| | | AUTO | PHARMA | IT |
| Pessimistic | GIC < 1 | 4 | 5 | 6 |
| Neutral | GIC = 1 | 2 | 0 | 1 |
| Optimistic | GIC > 1 | 4 | 5 | 3 |
| **Total number of companies** | | **10** | **10** | **10** |

(Source: Compiled from annual reports of selected companies for the year 2016 under AS and Ind AS and computed using Excel)

**Interpretation**

Table No. 6.96 describes the results of Gray's Index of Conservatism for the Return to Assets (ROA) for the selected companies across different industries. GIC is computed and the companies have been classified into three categories: pessimistic, neutral, and optimistic.

Returns to Assets ratio remains highly conservative across various industries after the introduction of Ind AS. The automobile industry has majority of its companies in the pessimistic and neutral range. It is similar in IT sector also. IT sector has 60% of the selected companies in pessimistic range. The pharmaceutical sector reveals a contradicting set of results, while 50% of pharmaceuticals companies belong to pessimistic range, the remaining falls into optimistic range of GIC.

In general, the ROA seems not to be affected by the introduction of Ind AS except for the pharmaceutical industry. It is observed that under Ind AS, pharmaceutical industry have become less conservative in their accounting policies related to assets and income.

**Table No 6.97 Gray's Index of Returns to Equity (ROE)**

| Range | Gray's Index of conservatism | Number of Companies | | |
|---|---|---|---|---|
| | | AUTO | PHARMA | IT |
| Pessimistic | GIC < 1 | 2 | 3 | 3 |
| Neutral | GIC = 1 | 0 | 2 | 5 |
| Optimistic | GIC > 1 | 8 | 5 | 2 |
| **Total number of companies** | | **10** | **10** | **10** |

(Source: Compiled from annual reports of selected companies for the year 2016 under AS and Ind AS and computed using Excel)

**Interpretation**

Table No. 6.97 describes the results of Gray's Index of Conservatism for the Returns to Equity for the selected companies across different industries. GIC is computed and the companies have been divided into three categories: pessimistic, neutral, and optimistic.

The returns to equity display optimistic attitude in the automobile and pharmaceutical sector. This means that with the implementation of Ind AS, the automobile and pharmaceutical industry have become less conservative regarding ROE. However, the IT sector remains highly neutral suggesting that Ind AS doesn't have any impact on ROE in IT industry.

In general, with the introduction of Ind AS, the automobile and pharmaceutical industries have become less conservative when compared to IT industry.

**Table No 6.98 Gray's Index of Returns to Capital Employed (ROCE)**

| Range | Gray's Index of conservatism | Number of Companies | | |
|---|---|---|---|---|
| | | AUTO | PHARMA | IT |
| Pessimistic | GIC < 1 | 7 | 7 | 7 |
| Neutral | GIC = 1 | 1 | 0 | 0 |
| Optimistic | GIC > 1 | 2 | 3 | 3 |
| **Total number of companies** | | **10** | **10** | **10** |

(Source: Compiled from annual reports of selected companies for the year 2016 under AS and Ind AS and computed using Excel)

**Interpretation**

Table No. 6.98 describes the results of Gray's Index of Conservatism for the Returns to Capital Employed for the selected companies across different industries. GIC is computed and the companies have been divided into three categories: pessimistic, neutral, and optimistic.

The returns to capital employed shows high level of conservatism in all the selected industries. More than 50% of the selected companies across the different sectors are belonging to pessimistic range of GIC. This indicates that the implementation of Ind AS does not have any impact on ROCE.

It is evident that there is no significant impact on gross profit ratio due to the implementation of Ind AS. Also, the Net Profit Ratio and Operating Profit Ratio display a neutral attitude towards the implementation of Ind AS except for automobile sector.

ROCE displays a pessimistic and neutral approach towards the implementation of Ind AS. This is because of the reduced leverage as a result of heavy investment of equity instead of debt capital, which subsequently paved way to reduced ROCE. While ROA remains neutral, ROE shows an optimistic attitude and has become less conservative after the implementation of Ind AS.

### 6.5.6 Results of Gray's Index for Activity Ratios

**Table No 6.99 Gray's Index of Working Capital Turnover Ratio**

| Range | Gray's Index of conservatism | Number of Companies | | |
|---|---|---|---|---|
| | | AUTO | PHARMA | IT |
| Pessimistic | GIC < 1 | 9 | 4 | 8 |
| Neutral | GIC = 1 | 0 | 1 | 0 |
| Optimistic | GIC > 1 | 1 | 5 | 2 |
| **Total number of companies** | | **10** | **10** | **10** |

(Source: Compiled from annual reports of selected companies for the year 2016 under AS and Ind AS and computed using Excel)

**Interpretation**

Table No. 6.99 describes the results of Gray's Index of Conservatism for the Working Capital Turnover Ratio of the selected companies across different industries. GIC is computed and the companies have been divided into three categories: pessimistic, neutral, and optimistic.

In the automobile sector, most of the selected companies belongs to pessimistic range suggesting that the automobile industry continues to be conservative after the implementation of Ind AS. An identical scenario is observed in the IT sector where 80% of the selected companies are falling into the pessimistic range. The pharmaceutical sector has become less conservative in the accounting practices related to working capital as 50% of the selected pharmaceutical companies belong to optimistic range.

It can be said that the implementation of Ind AS does not have a significant impact on the level of conservatism maintained by the selected companies regarding working capital. Only a few selected pharmaceutical companies have become less conservative with the adoption of Ind AS. Hence, the impact of Ind AS is more in pharmaceutical sector regarding the working capital.

**Table No 6.100 Gray's Index of Assets Turnover Ratio**

| Range | Gray's Index of conservatism | Number of Companies | | |
|---|---|---|---|---|
| | | AUTO | PHARMA | IT |
| Pessimistic | GIC < 1 | 9 | 4 | 4 |
| Neutral | GIC = 1 | 0 | 1 | 4 |
| Optimistic | GIC > 1 | 1 | 5 | 2 |
| **Total number of companies** | | **10** | **10** | **10** |

(Source: Compiled from annual reports of selected companies for the year 2016 under AS and Ind AS and computed using Excel)

**Interpretation**

Table No. 6.100 describes the results of Gray's Index of Conservatism for the Assets Turnover Ratio of the selected companies across different industries. GIC is computed and the companies have been divided into three categories: pessimistic, neutral, and optimistic.

The automobile sector remains highly conservative as 90% of the selected companies falls into the pessimistic range of GIC. Majority of IT and pharmaceutical companies belong to neutral range while certain pharmaceutical companies display a optimistic attitude after the implementation of Ind AS.

It is observed that the accounting treatment of assets remain conservative across various industries after the implementation of Ind AS and the new accounting standards have no impact on improving the level of conservatism. Although certain companies in pharmaceutical sector have become less conservative suggesting the impact made by the Ind AS is ignorable.

**Table No 6.101 Gray's Index of Fixed Assets Turnover Ratio**

| Range | Gray's Index of conservatism | Number of Companies | | |
|---|---|---|---|---|
| | | AUTO | PHARMA | IT |
| Pessimistic | GIC < 1 | 6 | 1 | 1 |
| Neutral | GIC = 1 | 1 | 6 | 3 |
| Optimistic | GIC > 1 | 3 | 3 | 6 |
| **Total number of companies** | | **10** | **10** | **10** |

(Source: Compiled from annual reports of selected companies for the year 2016 under AS and Ind AS and computed using Excel)

**Interpretation**

Table No. 6.101 describes the results of Gray's Index of Conservatism for the Fixed Assets Turnover Ratio of the selected companies across different industries. GIC is computed and the companies have been divided into three categories: pessimistic, neutral, and optimistic.

The automobile sector relies heavily on fixed assets as compared to pharmaceutical and TI industries. IT industry, being a service provider uses a low level of fixed assets in them. This can be reflected in the level of GIC in these sectors. The sectors involving heavy fixed assets remain conservative after the implementation of Ind AS while service industry has become less conservative.

Most of the selected companies in automobile and pharmaceutical sector belongs to pessimistic and neutral range while the selected companies of IT sector fall into optimistic range indicating that Ind AS has made the service sector less conservative while the production sector continues to be highly conservative.

**Table No 6.102 Gray's Index of Inventory Turnover Ratio**

| Range | Gray's Index of conservatism | Number of Companies | | |
|---|---|---|---|---|
| | | AUTO | PHARMA | IT |
| Pessimistic | GIC < 1 | 7 | 1 | - |
| Neutral | GIC = 1 | 2 | 7 | 3 |
| Optimistic | GIC > 1 | 1 | 2 | 1 |
| **Total number of companies** | | **10** | **10** | **10** |

(Source: Compiled from annual reports of selected companies for the year 2016 under AS and Ind AS and computed using Excel)

**Interpretation**

Table No. 6.102 describes the results of Gray's Index of Conservatism for the Inventory Turnover Ratio of the selected companies across different industries. GIC is computed and the companies have been divided into three categories: pessimistic, neutral, and optimistic.

The automobile sector remains highly pessimistic with respect to inventory turnover ratio while pharmaceutical sector and IT sector remains neutral. In other words, there is no impact of the implementation of Ind AS on inventory turnover ratio. Majority of the selected companies across industries remain conservative.

It suggests Ind AS is more conservative than AS when it comes to management of assets. Only working capital turnover ratio is slightly optimistic because it is based on current assets and liabilities. Even the inventory turnover ratio is highly neutral suggesting the fact that Ind AS is not encouragingly optimistic when it comes to the efficiency of the company. The management of assets is a crucial and the converged new standard is also conservative as the old accounting standard. There are 7 companies in IT sector which didn't have inventory and hence have been ignored while tabulation.

## 6.6 Section II: Study of Harmonization of Accounting Policies

India's journey towards convergence with IFRS has been slow and almost took a decade to achieve its goal. It is possible to trace out the history of IFRS being introduced in India in a concept paper by ICAI in 2007-08. However, the accounting structure of India was not equipped for such a drastic change. in a manner, the convergence has been smoothly introduced to avoid sudden changes in reporting. Before new standards were introduced, the new companies act was implemented to ease the quantum jump towards new standards.

The new standard is meant to provide better transparency and comparability of financial statements. "will help to harmonize company financial information, improve the transparency of accounting, and ensure that investors receive more accurate and consistent reports"(Vinayagamoorthy.Pdf, n.d.)Comparability increases when a business entity which chooses among alternative accounting methods becomes concentrated in one method or a limited number of accounting methods. This should come from the harmonization of accounting practices. Hence when a country converges to a new and international accounting standard, it will improve the harmonization aspect of the standard.

"Harmonization is a process of increasing the compatibility of accounting practices by fixing the limits to their degree of variation. Harmonization carries a wider meaning than standardization although it is sometimes being used inter changeably."("Harmonisation of Accounting," 2015) Harmonization can be traced at two levels; harmonization of accounting standards and harmonization of accounting practices.

When a country implements new accounting standards it is of utmost importance to analyse the extent to which the new standards cater to the harmonization of accounting practices. This section intends to identify the extent to which adoption of Ind AS has affected the harmonization of accounting practices followed in different companies by comparing the accounting practices with respect to the assets and liabilities of sample companies.

For measuring the harmonization Index, the researcher has chosen 4 time points which are influential during convergence towards Ind AS in 2016-17.

The selected years and the justification are listed below.

a) **2017-16:** Being the initial year of adoption of Ind AS.

b) **2014-13**: Being the year of adoption of new companies act.

c) **2012-11**: Being the year in which schedule VI has been revised.

d) **2007-06:** Being the year in which IFRS is introduced as a concept paper introduced by ICAI.

It is noted that except for the year 2016-17, Indian companies were following AS. Hence, while analysing the theoretical difference, only AS and Ind AS will be discussed. However, index is computed for all the four years to see the change in the journey towards Ind AS.

### 6.6.1 C index- A concept

De facto Harmonization is the process of harmonization which aims at bringing diverse financial reporting practices within a country to a common platform. It is also called material harmonization. When the companies in a country use similar accounting practices, it enhances comparability between the financial statements and eventually leads to better quality financial statements.

Harmonization can be measured using different indices.

1. H index for measuring harmonization within the country, it is the index of concentration.
2. C index for measuring the harmonization within the country with multiple reporting systems
3. I index for measuring international harmonization.

"C Index is not the index of concentration, but the ratio calculated as the quotient of the number of comparable pairs of financial statements and the total number of pairs of the financial report which confirm the non-existence of the problems in the application, the usual statistical tests of significance."(Tas, 1988)

### 6.6.2 Advantages of C index

(a) De facto harmonization takes into consideration all the intricate notes of different accounting standards, which will help the different users to comprehend the information.

(b) It is possible to apply various statistical tools to the C index to test the empirical nature of the result.

The present study analyses the harmonization level of Indian GAAP and Ind AS, the two accounting standards used within India. Hence, the tool applicable here shall be the c index. It is the ratio calculated as the quotient of the number of comparable pairs of the financial report. This paper uses c index prescribed by Van der tas (1988) in his paper.

The c index can be calculated using the following formula.

$$\frac{\sum_k \binom{n}{k} \left(n_k(n_k - 1)\right)}{\left(Nx(N-1)\right)}$$

Where,

$n_k$ represents number of business entities with method n till k.

N represents total number of business entities

Interval boundaries for c index, according to van der tas (Tas, 1988)range from 0 (disharmony with infinite number of alternative methods) to 1 (harmonization where all business entities use the same method.

### 6.6.3 Theoretical perspective

This section analyses the selected accounting practices followed by the companies. However, it is important to know the theoretical framework regarding the selected accounting practices.

Accounting standards provide the guidance in which the assets and liabilities of the company must be recognized, measured, and disclosed in financial statements. Ind AS has made certain significant alterations to these aspects which affect the policy making process of the financial statements' preparers. The table below analyses what are these changes with respect to selected different items of the Balance sheet. It summarizes the treatment under AS and Ind AS.

The table below shows the standard wise prescription for each of the accounting practices under study.

**Table No 6.103 Theoretical differences relating to selected accounting practices under AS and Ind AS**

| **Accounting practice** | **AS** | **Ind AS** |
|---|---|---|
| Fixed Asset | "Fixed assets are recognized at cost and in some cases cost less depreciation" (*AS10_16012018.Pdf*, n.d.) | "Fixed assets are recognized at deemed cost or at fair value method on the transition date. Subsequently, they are valued at cost less depreciation and impairment"(*22IndAS16_2017_.Pdf*, n.d.) |
| Borrowing Cost | Borrowings consists of the following:<br>(a) Interest expense<br>(b) Finance charges<br>(c) Exchange differences<br>(d) Other costs related to borrowings.<br>Borrowing cost related to qualifying asset is capitalized. | Borrowing cost consists of the following:<br>(a) "Interest expense calculated using the effective-interest method.<br>(b) Finance charges under finance leases<br>(c) Exchange rate differences from foreign currency borrowings"(*28IndAS23_2017_.Pdf*, n.d.)<br>Borrowing cost related to qualifying asset is capitalized. |
| Depreciation | "Management of a business selects the most appropriate method(s) based on various important factors".(*AS10_16012018.Pdf*, n.d., p. 10) | "A variety of depreciation methods can be used to allocate the depreciable amount of an asset on a systematic basis over its useful life. These methods include:<br>The straight-line method<br>The diminishing balance method and<br>The units of production method".(*22IndAS16_2017_.Pdf*, n.d., p. 16) |
| Amortisation | Amortisation cannot be charged for more than ten years. (General assumption) | "Intangible assets with definite life are amortized over its life, however, intangible assets with indefinite life are tested for impairment periodically and the change is charged to the statement of profit and loss". (*38IndAS38_2017_.Pdf*, n.d.) |
| Intangible Assets | It is a non-monetary asset without physical existence. Goodwill and other intangible assets belong to same category. | Intangible assets are divided into,<br>(a) "Those with definite lives<br>(b) Those with indefinite lives<br>(c) Internally generated<br>Internally generated intangible assets are shown separately along with goodwill"(*IndAS38_2019.Pdf*, n.d.). |
| Value in use | The present value of future | The present value of future cash |

| | | |
|---|---|---|
| (Intangible Assets) | cash flows discounted at available market rates/ rate determined by management | flows discounted at pre-tax rate/weighted average cost of capital/ other market borrowing rates |
| Research Expenses | Research expenses are never to be capitalized | Research expenses are never to be capitalized |
| Development expenses | Same conditions as Ind AS | (a) "The technical feasibility of completing the intangible asset so that it will be available for use or sale.<br>(b) Its intention to complete the intangible asset and use or sell it.<br>(c) Its ability to use or sell intangible assets.<br>(d) How the intangible asset will generate probable future economic benefits. Among other things, the entity can demonstrate the existence of a market for the output of the intangible asset or the intangible asset itself or, if it is to be used internally, the usefulness of the intangible asset.<br>(e) The availability of adequate technical, financial, and other resources to complete the development and to use or sell the intangible asset.<br>(f) Its ability to measure reliably the expenditure attributable to the intangible asset during its development".(*IndAS38_2019.Pdf*, n.d.) |
| Finance lease | Finance charges are treated as period cost | Finance charges are treated as finance cost (substance over form principle) |
| Operating lease | Treated as rentals and charged to P & L | Treated as rentals and charged to P & L |
| Inventories | • Specific identification basis<br>• FIFO<br>• Weighted average basis.<br>"The formula used should reflect the fairest possible approximation to the cost incurred in bringing the items of inventory to their present location and condition."(*Getdocument.P* | • Specific identification basis<br>• FIFO<br>• Weighted average basis.<br>"An entity shall use the same cost formula for all inventories having a similar nature and use to the entity. For inventories with a different nature or use, different cost formulas may be justified".(*Ind_AS.Pdf*, n.d., p. 2) |

| | | |
|---|---|---|
| | *df*, n.d.) | |
| Non-current investment | Cost less diminution | Investments are classified into three categories based on their recognition.<br>(a) Amortized cost<br>(b) Fair value through profit and loss<br>(c) Fair value through other comprehensive income |
| Current investment | Cost or market price (fair value) whichever is less | |
| Provision for Financial Assets | Best estimate based on previous experience | Expected credit loss model |
| Foreign currency Transactions | Recognized at closing rate at the date of transaction and changes are transferred to profit and loss account | Recognized at spot rate at the date of transaction and changes are transferred to profit and loss account |
| Hedge Accounting | No pertaining accounting standards | Classified into fair value hedge and cashflow hedge.<br>For fair value hedge, the change in hedging instrument is charged to OCI or profit and loss account and with respect to hedging item, the changes are transferred to profit and loss account unless it is recognized under fair value.<br>For cashflow hedges, gain or loss is transferred to profit and loss account whereas the change in fair value is divided into effective portion and ineffective portion. The effective portion to be transferred to OCI and the rest to profit and loss account. |
| Derivatives | Treated as part of investments | Recognized at fair value and gain and loss to be transferred to profit and loss |
| Asset/Liability-Overseas | Recognised at the rate at date of transaction | Recognized at the closing rate at the date of balance sheet |
| Monetary Assets/Liabilities | Recognized at the closing rate at the date of balance sheet | Recognized at the closing rate at the date of balance sheet |
| Non-monetary assets/liabilities | Items recognized at historical cost, at the rate at date of transaction. | Items recognized at historical cost, at the rate at date of transaction.<br>Items recognized at fair value, at the rate at the date of fair value. |

(Source: Compiled from the relevant accounting standards issued by the Ministry of Corporate Affairs)

The following table shows the results of the C Index from the year 2006-07 to 2016-17. It also shows the percentage change between both the periods.

### 6.6.4 Summary of result of C- Index

**Table No 6.104 result of C- Index from 2006-07 to 2016-17**

| Sl No | Items | N | 2016-17 | N | 2014-13 | N | 2012-11 | N | 2007-06 | % change |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | Fixed Assets | 30 | 1 | 30 | 0.70 | 30 | 0.69 | 30 | 0.66 | **51** |
| 2 | Borrowing Cost | 29 | 1 | 28 | 0.44 | 25 | 0.67 | 14 | 1 | **0** |
| 3 | Depreciation | 30 | 1 | 30 | 0.93 | 30 | 1 | 30 | 1 | **0** |
| 4 | Amortisation | 27 | 1 | 27 | 0.38 | 25 | 1 | 22 | 1 | **0** |
| 5 | Intangible Assets | 27 | 1 | 27 | 0.41 | 27 | 0.86 | 14 | 0.72 | **39** |
| 6 | Value in use of Intangible assets | 27 | 1 | 27 | 1 | 27 | 0.73 | 10 | 0.2 | **400** |
| 7 | Research & Development | 27 | 0.52 | 27 | 0.29 | 22 | 0.35 | 19 | 0.39 | **32** |
| 8 | Operating Lease | 29 | 1 | 27 | 1 | 26 | 1 | 22 | 1 | **0** |
| 9 | Finance Lease | 23 | 1 | 19 | 1 | 17 | 1 | 16 | 1 | **0** |
| 10 | Non-Current Investments | 30 | 0.41 | 30 | 0.87 | 28 | 1 | 29 | 0.81 | **-49** |
| 11 | Current Investments | 30 | 0.54 | 30 | 0.40 | 28 | 0.51 | 19 | 0.57 | **-3** |
| 12 | Inventory | 23 | 0.39 | 20 | 0.31 | 23 | 0.33 | 21 | 0.19 | **115** |
| 13 | Provisions | 30 | 1 | 30 | 1 | 30 | 1 | 22 | 1 | **0** |
| 14 | Hedge Accounting | 23 | 0.64 | 19 | 0.54 | 8 | 0.25 | 8 | 0.39 | **65** |
| 15 | Premium or Discount on Forwards | 23 | 1 | 23 | 1 | 21 | 1 | 22 | 1 | **0** |
| 16 | Foreign currency Transactions | 27 | 1 | 30 | 0.93 | 28 | 0.93 | 27 | 0.79 | **26** |
| 17 | Asset/Liability Overseas | 29 | 1 | 11 | 1 | 15 | 0.75 | 18 | 0.79 | **26** |
| 18 | Monetary Assets/Liability | 27 | 1 | 27 | 0.68 | 27 | 0.73 | 16 | 1 | **0** |
| 19 | Non-monetary assets/liabilities | 30 | 1 | 29 | 0.67 | 15 | 0.52 | 16 | 1 | **0** |
| 20 | Derivatives | 27 | 1 | 23 | 0.45 | 21 | 0.53 | 16 | 0.56 | **79** |
| **AVERAGE** | | | **90%** | | **69%** | | **73%** | | **68%** | |

(Source: Annual reports of the selected companies from the years 2007-06, 2011-12. 2013-14, and 2016-17 and computed using Excel)

**Interpretation**

Table no 6.104 depicts the summary result of the C Index analysis of the selected items from the financial statements of the selected companies under study. 'N' stands for the number of companies which have disclosed the accounting

treatment under the study. C index is calculated for four years and displayed in the corresponding year wise column.

In the year 2016-17, the results seem quite uniform. Very few items show a C index less than 1. This means that after the implementation of Ind AS, the companies have begun to use similar accounting practices and there by render better transparency to the financial statements.

It is also observed that even though there is no change in certain accounting practices under both the accounting standards, still the C index has improved. For instance, in case of research expenses, both AS and Ind AS dictates the same treatment, the C index has escalated from 0.39 to 0.52. It has reported an increment of 32% along with the number of companies that disclose the research related expenses. The number of companies increased from 19 in 2007 to 27 in 2017. This suggests that the introduction of Ind AS has encouraged the companies for more disclosure and compliance.

With respect to non-current investments, Ind AS has introduced fair valuation and segregated the investments in a transparent manner for the users of the financial information. This is the reason why C index has reduced over the period under study in case of the non-current investments. A similar trend can be observed in the case of current investments. It decreased from 0.57 to 0.54.

There are items like finance lease where there are theoretical differences brought in by the new standard, still it remains same throughout the period of study. This means that the companies complied with the standards under both the standards and both AS and Ind AS provided limited options for accounting treatment.

Fixed assets display an increase in C index by 51% and after Ind AS, the selected companies show identical treatment of fixed assets. All the selected entities have disclosed the accounting treatment of fixed assets under all the years under study. Hence, it is apparent that the growth observed in the C index is due to the harmony achieved by the selected companies over the period because of changes in the accounting standards.

Borrowing cost, depreciation, and amortisation, display no change in the C index over the study period. However, it is to be noted that apart from depreciation, borrowing cost and amortisation have been disclosed by more companies suggesting an increase in the compliance level due to the changes in accounting standards.

Depreciation seems unaffected because the companies have had achieved perfect harmony in the treatment of depreciation from 2007.

Intangible assets portray a hike in C index by 39% since 2007. The number of companies complied with the accounting standards have also increased at the same time. After the implementation of Ind AS the companies have opted for similar accounting treatments for the recognition of intangible assets indicating that the companies have achieved harmonization regarding Intangible assets. Another financial statement line item related to intangible assets are the 'value in use' of intangible assets. It is observed that the C index of value in use has increased by 400% along with a significant increase in the number of complying companies.

Operating lease depicts a hike in the number of complying companies and no change in the C index. This is because there is little change in the standards regarding the treatment of operating lease rentals.

Inventory displays an increase in C index by 115 %, it is yet to reach harmony. Even after the adoption of Ind AS, the C index reports for only 39% of harmonization. Ind AS has retracted the use of different cost methods for various types of inventories, harmonization is yet to be achieved. The selected companies are using similar methods for accounting of provisions unconditional to the accounting regimes they have been following. Under AS, the companies were using multiple costing techniques for different types of inventories, Ind AS have specifically allowed the usage of different types of inventory costing methods only when necessary. There by Ind AS has brought together the inventory on a common parlance.

Foreign currency transactions form a major part of items in the financial statements. Hence, it is divided into six categories. Monetary asset/liability, non-monetary asset/liability and premium or discount on forward contracts reports a C index of 1 under all the selected years of study. It means that the companies have been using identical accounting treatments for these items. C index of hedge accounting has improved by 65% is remaining to attain perfect harmony. The Ind AS has been a major driving force in the increase in the level of harmony of the treatment of hedges along with the increased compliance among the companies. Overseas asset/liability and derivatives shows an increase in the C index by 26% and 79% before attaining the level of harmonization under Ind AS. Overall the foreign currency transactions have achieved harmony under Ind AS and managed to increase the compliance level.

## 6.7 Testing of Hypothesis

One-way ANOVA is carried out to see whether the means of levels of harmonisation of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = C Index of the selected companies in the year 2007

$\mu_2$ = C Index of the selected companies in the year 2012

$\mu_3$= C Index of the selected companies in the year 2014

$\mu_4$= C Index of the selected companies in the year 2017

**Table No 6.105 Results of One-way ANOVA**

| Source of Variation | SS | df | MS | F | P-value | F crit |
|---|---|---|---|---|---|---|
| **Between Groups** | 0.6095 | 3 | 0.2031 | 2.7350 | ***0.0493*** | 2.7249 |
| **Within Groups** | 5.6454 | 76 | 0.0742 | | | |
| **Total** | 6.2549 | 79 | | | | |

Table no 6. 105 shows the results of one-way ANOVA calculated on the harmonisation index of selected companies for the selected years of study.

The F value is greater than the F critical value and the P value is less than 0.05, indicating that the null hypothesis is rejected. This means that the means of selected years are significantly different, suggesting that the level of harmonisation illustrated by the selected companies under the selected years are statistically different.

## 6.8 Section III: Analysis using Disclosure Index

The introduction of Ind AS has assured better disclosure in the financial reports and correspondingly enhanced the transparency of financial statements for the users of the financial statements. The reports generated under AS either provided too much unnecessary information or not enough relevant information making it ineffective for the communication of the information provided. The IFRS converged Ind AS requires the complying companies to have extensive disclosure requirements to be fulfilled while preparing the financial statements. The introduction of Ind AS assured a better level of quality in the financial statements. As quoted in the research paper by Suchitra Shukla, "lead to an increase in transparency, comparability, and quality of financial reporting, thereby benefitting investors."(Shukla, n.d.)

It is indispensable to study the extend of disclosure and compliance brought in by the implementation of Ind AS while undertaking a study on the impact of Ind AS on Indian financial reporting. For the purpose, the following standards have been chosen. The standards have been selected on the basis on compliance level among the selected companies. The standards which have been complied by all the selected companies are selected; hence it will be helpful in deriving data from the annual reports. As Ind AS 101 is only applicable for the time of initial convergence with Ind AS, it is also ignored during the data collection.

| | | |
|---|---|---|
| Ind AS 1 | Ind AS 19 | Ind AS 38 |
| Ind AS 2 | Ind AS 20 | Ind AS 40 |
| Ind AS 7 | Ind AS 21 | Ind AS 102 |
| Ind AS 10 | Ind AS 23 | Ind AS 105 |
| Ind AS 12 | Ind AS 24 | Ind AS 107 |
| Ind AS 16 | Ind AS 33 | Ind AS 113 |
| Ind AS 17 | Ind AS 36 | |
| Ind AS 18 | Ind AS 37 | |

Despite the disclosures required by the Ind AS, the study also considers certain voluntary disclosures on the basis of literature review conducted. The items selected are given below. The items are selected from paper(Saha & Kabra, 2022)

| | |
|---|---|
| Cash flow ratio | Effects of fluctuating interest rate on results |
| Disclosure of intangible asset valuations (except goodwill and brands) | Cost of capital |
| Index of selling price | Economic value added |
| Advertisement information—qualitative | Fund flow statement |

| | |
|---|---|
| Financial history of 5 years or more | Bankers' details |
| Effect of inflation on assets | Transfer pricing policy |
| Effects of inflation on profits | Market capitalization trend |
| Inflation-adjusted financial statements | Share price trend |
| Volume of shares traded | Forecast of sales |
| Effects of foreign currency fluctuations on future operations | Forecast of market share |
| Foreign currency exposure management description | Assumptions underlying the forecast |
| Debt currency | Expected rate of return on project |
| Forecast of cash flow | Order book or backlog information |
| Forecast of profits | Political influences on future profit |
| Technological influences on future profit | |

The companies that follow Ind AS must disclose the items prescribed by Ind AS, Companies Act and SEBI. Altogether the disclosures in financial statement are governed by all these three. However, under Ind AS, many of disclosures under AS regime is to be continued. Ind AS just contributed additional disclosure requirements. The following are the number of disclosures identified by this study for a company:

1. Disclosures required by AS/Ind AS – 91 items under AS and additional 121 items under Ind AS
2. Disclosures required by SEBI- As companies are listed, only the financial statements – 3 Statements.
3. Disclosures required by Companies Act- 36 items.
4. Voluntary Disclosures- 29 items. (selected from Review of Literature)

Thus, a total of **280** items are recognised under study and annual reports of each selected companies are studied to identify the presence and absence of the items in the years: 2007, 2012, 2014, and 2017. Further the data is compiled into the table given below for all the selected companies and percentage of disclosure is calculated for each year recognised under study.

### 6.8.1 Disclosure Index

A dichotomous index is created for the purpose of measuring the level of disclosure among the selected companies for the years under the study. For every item that is disclosed by the selected company in the given year is marked as '1' and the absence of the item is marked as '0'. This methodology is used in (Dinesh Kumar,

2009). Further the data is tabulated in excel and following tables are formulated for interpretation.

**Percentage of disclosure = Number of companies which disclosed the item/ 30*100**

Where, 30 companies are selected for the study.

As there are four sample years under the study and each sample year contains 30 selected companies, to determine the statistical significance, one way ANOVA is used. The explanation of each item required to be disclosed by each Ind AS and their supporting explanation is given in appendix.

### 6.8.1.1 Disclosure index of Presentation of Financial Statements

**Table No 6.106 Disclosure requirements as per Ind AS 1**

| Ind AS 1 | 2007 | 2012 | 2014 | 2017 |
|---|---|---|---|---|
| Item 1 | 30 (100%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 2 | 30 (100%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 3 | 1 (3.33%) | 7 (23.33%) | 7 (23.33%) | 30 (100%) |
| Item 4 | 30 (100%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 5 | 30 (100%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 6 | 30 (100%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 7 | 30 (100%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 8 | 30 (100%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 9 | 13 (43.33%) | 27 (90%) | 29 (97%) | 30 (100%) |
| Item 10 | 5 (17%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 11 | 6 (30%) | 27 (90%) | 27 (90%) | 30 (100%) |
| Item 12 | 13 (43.33%) | 29 (97%) | 29 (97%) | 30 (100%) |
| Item 13 | 11 (37%) | 25 (83.33%) | 30 (100%) | 30 (100%) |
| Item 14 | 12 (40%) | 16 (53.33%) | 25 (83.33%) | 28 (93.33%) |
| Item 15 | 29 (97%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 16 | 29 (97%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 17 | 27 (90%) | 28 (93.33%) | 29 (97%) | 29 (97%) |
| Item 18 | 25 (83.33%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 19 | 21 (70%) | 25 (83.33%) | 27 (90%) | 27 (90%) |
| Item 20 | 21 (70%) | 25 (83.33%) | 27 (90%) | 29 (97%) |
| Item 21 | 15 (50%) | 17 (57%) | 22 (73.33%) | 24 (80%) |
| Item 22 | 24 (80%) | 27 (90%) | 28 (%) | 29 (97%) |
| Item 23 | 0 (0%) | 0 (0%) | 0 (0%) | 29 (97%) |
| Item 24 | 14 (47%) | 15 (50%) | 22 (73.33%) | 29 (97%) |
| Item 25 | 0 (0%) | 0 (0%) | 3 (10%) | 29 (97%) |
| Item 26 | 0 (0%) | 0 (0%) | 5 (17%) | 29 (97%) |
| Item 27 | 26 (87%) | 26 (87%) | 26 (87%) | 26 (87%) |
| Item 28 | 24 (80%) | 27 (90%) | 29 (97%) | 29 (97%) |
| Item 29 | 2 (7%) | 2 (7%) | 3 (10%) | 20 (67%) |

| | | | | |
|---|---|---|---|---|
| Item 30 | 3 (10%) | 3 (10%) | 3 (10%) | 6 (20%) |
| Item 31 | 30 (100%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 32 | 4 (14) | 5 (17%) | 8 (28%) | 12 (40%) |
| Item 33 | 0 (0%) | 0 (0%) | 0 (0%) | 30 (100%) |
| Item 34 | 0 (0%) | 0 (0%) | 0 (0%) | 30 (100%) |
| Item 35 | 29 (97%) | 29 (97%) | 29 (97%) | 30 (100%) |
| Item 36 | 5 (17%) | 5 (17%) | 5 (17%) | 15 (50%) |
| Item 37 | 4 (14%) | 5 (17%) | 6 (20%) | 26 (87%) |
| Item 38 | 14 (47%) | 17 (57%) | 19 (63%) | 21 (70%) |
| Item 39 | 21 (70%) | 23 (77%) | 25 (83.33%) | 26 (87%) |
| Item 40 | 30 (100%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 41 | 30 (100%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 42 | 30 (100%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 43 | 4 (14%) | 4 (14%) | 6 (20%) | 9 (30%) |
| Item 44 | 27 (90%) | 27 (90%) | 30 (100%) | 30 (100%) |
| Item 45 | 8 (28%) | 8 (28%) | 10 (33%) | 14 (47%) |
| Item 46 | 29 (97%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 47 | 30 (100%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 48 | 30 (100%) | 30 (100%) | 30 (100%) | 30 (100%) |
| **TOTAL** | **18 (60%)** | **21 (70%)** | **22 (73%)** | **27 (90%)** |

(Source: Annual reports of selected companies for the year ending 2007,2012,2014, and 2017)

**Interpretation**

Table no 6.106 depicts the disclosure requirements by Ind AS 1. AS 1 is like Ind AS 1. That is why most of the elements shown in table no 106 have high level of disclosure even in the year 2007. The basic requirements stipulated by AS is continued under the revised accounting standard along with certain new introductions of items related to Ind AS complied financial statements.

Ind AS 1 "prescribes the basis for presentation of general-purpose financial statements to ensure comparability both with the entity's financial statements of previous periods and with the financial statements of other entities. It sets out overall requirements for the presentation of financial statements, guidelines for their structure and minimum requirements for their content."(*15IndAS1_2017_.Pdf*, n.d.)

It is compelling to note that there is significant increase in the basic items that are recommended under AS 1, along with the period. This suggests that the implementation of Ind AS has increased the overall compliance among the companies. The companies measure to 60% disclosure in the year 2007. It increased to 70% in 2012 when the schedule VI was revised, and the growth of disclosure continued to 73% in 2014 after the adoption of new companies act. Also, during this

period, the government has allowed the companies for the voluntary adoption of IFRS. As some of the selected companies chose to report under IFRS it is visible in the elements of disclosure and justifies the increase in disclosure level in 2014. By the implementation of Ind AS in 2017, the level of disclosure among the selected companies rose to 90%.

Apart from the elements which occur unlikely in the companies, like reclassification of financial assets and liabilities, discontinued operations etc. most of the items are being disclosed by the selected companies in the year 2017.

**Table No 6.107 Results of ANOVA**

| Source of Variation | SS | Df | MS | F | P-value | F crit |
|---|---|---|---|---|---|---|
| **Between Groups** | 2121.85 | 3 | 707.28 | 6.55 | 0.0003 | 2.65 |
| **Within Groups** | 20298.13 | 188 | 107.96 | | | |
| **Total** | 22419.98 | 191 | | | | |

(Source: Calculated in excel from the figures derived from table no 6.106)

Table no 6.107 shows the results of one-way ANOVA calculated on the disclosure elements of Ind AS 1. One-way ANOVA is carried out to see whether the means of levels of disclosure of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = Mean of number of selected companies with disclosures as per Ind AS 1 in the year 2007

$\mu_2$ = Mean of number of selected companies with disclosures as per Ind AS 1 in the year 2012

$\mu_3$= Mean of number of selected companies with disclosures as per Ind AS 1 in the year 2014

$\mu_4$= Mean of number of selected companies with disclosures as per Ind AS 1 in the year 2017

The F value is greater than the F critical value and the P value is less than 0.05, indicating that the null hypothesis is rejected. This means that the means of selected years are significantly different, suggesting that the disclosure levels illustrated by the selected companies under the selected years are statistically different.

### 6.8.1.2 Disclosure Index of Inventories

**Table No 6.108 Disclosure requirements as per Ind AS 2**

| IND AS 2 | 2007 | 2012 | 2014 | 2017 |
|---|---|---|---|---|
| Item 1 | 22 (100%) | 22 (100%) | 22 (100%) | 22 (100%) |
| Item 2 | 21 (95%) | 22 (100%) | 22 (100%) | 22 (100%) |
| Item 3 | 9 (43%) | 9 (43%) | 21 (95%) | 22 (100%) |
| Item 4 | 7 (32%) | 7 (32%) | 9 (43%) | 10 (33.33%) |
| Item 5 | 0 (0%) | 1 (5%) | 2 (9%) | 4 (18%) |
| Item 6 | 0 (0%) | 1 (5%) | 1 (5%) | 1(5%) |
| Item 7 | 0 (0%) | 0 (0%) | 0(0%) | 0(0%) |
| Item 8 | 2 (9%) | 2 (9%) | 7(32%) | 9(43%) |
| Item 9 | 17 (77%) | 22 (100%) | 22(100%) | 22(100%) |
| **AVERAGE** | **9 (43%)** | **11 (50%)** | **12(54%)** | **12(54%)** |

(Source: Annual reports of selected companies for the year ending 2007,2012,2014, and 2017)

**Interpretation**

"The objective of Ind as 2 is to prescribe the accounting treatment for inventories. A primary issue in accounting for inventories is the amount of cost to be recognised as an asset and carried forward until the related revenues are recognised. This Standard deals with the determination of cost and its subsequent recognition as an expense, including any write-down to net realisable value. It also provides guidance on the cost formulas that are used to assign costs to inventories."(*INDAS2.Pdf*, n.d.)

Table no 6.108 depicts the level of disclosure required by Ind AS 2. Ind AS 2 is much more comprehensive than AS 2 even though both the standards deal with Inventories. As the selected companies include companies from service industry, certain companies work without inventories. Hence, here, the total number of companies is revised to be *22*.

Accounting policies related to inventories and the carrying amount of the inventories are disclosed by all the selected companies under all the selected years. However, certain infrequent items such as inventories pledged as liabilities,

inventories recognised as expense and the reversal within have significantly less level of disclosure. Overall, the level of disclosure has increased from 43% to 54%.

**Table No 6.109 Results of ANOVA**

| Source of Variation | SS | Df | MS | F | P-value | F crit |
|---|---|---|---|---|---|---|
| **Between Groups** | 86.55 | 3 | 28.85 | 0.31 | **0.8164** | 2.90 |
| **Within Groups** | 2958 | 32 | 92.43 | | | |
| **Total** | 3044.55 | 35 | | | | |

(Source: Calculated in excel from the figures derived from table no 6.108)

Table no 6.109 shows the results of one-way ANOVA calculated on the disclosure elements of Ind AS 2. One-way ANOVA is carried out to see whether the means of levels of disclosure of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = Mean of number of selected companies with disclosures as per Ind AS 2 in the year 2007

$\mu_2$ = Mean of number of selected companies with disclosures as per Ind AS 2 in the year 2012

$\mu_3$= Mean of number of selected companies with disclosures as per Ind AS 2 in the year 2014

$\mu_4$= Mean of number of selected companies with disclosures as per Ind AS 2 in the year 2017

The F value is less than the F critical value and the P value is greater than 0.05, indicating that the null hypothesis is accepted. This means that the means of selected years are not significantly different, suggesting that the disclosure levels illustrated by the selected companies under the selected years are not statistically different.

The 9% increase in level of disclosure from 2007 to 2017 as observed from table no 6.108 is valid but the statistical significance is not achieved as the result of testing. It can be concluded that the changes in the disclosure level of Ind AS 2 is valid but statistically insignificant.

### 6.8.1.3 Disclosure Index of Cash Flow Statements

**Table no 6.110 Disclosure requirements as per Ind AS 7**

| IND AS 7 | 2007 | 2012 | 2014 | 2017 |
|---|---|---|---|---|
| Item 1 | 5 (17%) | 5 (17%) | 6 (20%) | 8 (27%) |
| Item 2 | 27 (90%) | 27 (90%) | 28 (93%) | 30 (100%) |
| Item 3 | 1 (3%) | 1 (3%) | 1 (3%) | 3 (10%) |
| **AVERAGE** | **11 (37%)** | **11 (37%)** | **12 (40%)** | **14 (47%)** |

(Source: Annual reports of selected companies for the year ending 2007,2012,2014, and 2017)

**Interpretation**

Ind AS 7, alike AS 3 deals with the cash flow statements issued by the companies. The standard requires the companies to issue cash flow statement in indirect method only. It stipulates the companies to show investing, financing, and operating activities separately. All the selected companies have prepared cash flow statements in indirect way and have disclosed the financing, investing, and operating activities separately. Apart from these disclosures, certain additional disclosures have been mandated by the standard. The table no.110 describes the additional disclosures required by the standard.

The "information about the cash flows of an entity is useful in providing users of financial statements with a basis to assess the ability of the entity to generate cash and cash equivalents and the needs of the entity to utilise those cash flows. The economic decisions that are taken by users require an evaluation of the ability of an entity to generate cash and cash equivalents and the timing and certainty of their generation." (*Getdocument.Pdf*, n.d.) It also required companies to disclose the extraordinary items separately in the cash flow statements. Ind AS has removed extraordinary items from being reported separately.

"The objective of Ind AS 7 is to require the provision on investing, about the historical changes in cash and cash equivalents of an entity by means of a statement of cash flows which classifies cash flows during the period from operating, investing and financing activities." (*17IndAS7_2017_.Pdf*, n.d.)

Table no 6.110 shows the level of discourse of Ind AS 7 by the selected companies in the study. All the selected companies have disclosed the cash flow statement by the year 2017. However, not all the additional requirements are compiled by certain companies. There is a 10% increase in the disclosure of additional elements

by the selected sample companies. This can be either because the elements under the study can be infrequent in nature or that element can be particular to certain companies only.

**Table No 6.111 Results of one-way ANOVA**

| Source of Variation | SS | Df | MS | F | P-value | F crit |
|---|---|---|---|---|---|---|
| **Between Groups** | 10.91 | 3 | 3.63 | 0.02 | **0.9963** | 4.06 |
| **Within Groups** | 1577.33 | 8 | 197.16 | | | |
| **Total** | 1588.25 | 11 | | | | |

(Source: Calculated in excel from the figures derived from table no 6.110)

Table no 6.111 shows the results of one-way ANOVA calculated on the disclosure elements of Ind AS 7. One-way ANOVA is carried out to see whether the means of levels of disclosure of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = Mean of number of selected companies with additional disclosures as per Ind AS 7 in the year 2007

$\mu_2$ = Mean of number of selected companies with additional disclosures as per Ind AS 7 in the year 2012

$\mu_3$= Mean of number of selected companies with additional disclosures as per Ind AS 7 in the year 2014

$\mu_4$= Mean of number of selected companies with additional disclosures as per Ind AS 7 in the year 2017

The F value is less than the F critical value and the P value is greater than 0.05, indicating that the null hypothesis is accepted. This means that the means of selected years are not significantly different, suggesting that the disclosure levels illustrated by the selected companies under the selected years are not statistically different.

The 10% increase in level of disclosure from 2007 to 2017 as observed from table no 6.110 is valid but the statistical significance is not achieved as the result of testing. It can be deduced that the changes in the disclosure level of Ind AS 7 is valid but statistically insignificant.

### 6.8.1.4 Disclosure Index of Events After Reporting Period

**Table No 6.112 Disclosure requirements as per Ind AS 10**

| IND AS 10 | 2007 | 2012 | 2014 | 2017 |
|---|---|---|---|---|
| Item 1 | 30 (100%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 2 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| **AVERAGE** | **15 (50%)** | **15 (50%)** | **15 (50%)** | **15 (50%)** |

(Source: Annual reports of selected companies for the year ending 2007,2012,2014, and 2017)

**Interpretation**

Table No 6.112 describes the level of disclosure under Ind AS 10 by the selected companies under the study. The level of disclosure is stagnant at 50% since 2007. There is no change in the disclosure level because of the implementation of Ind AS.

Ind AS 10 deals with the events after the accounting period and their treatment. "The "objective of Ind AS 10 is to prescribe: (a) When an entity should adjust its financial statements for events after the reporting period; and (b) the disclosures that an entity should give about the date when the financial statements were approved for issue and about events after the reporting period." (*19IndAS10_2017_.Pdf*, n.d.)

One of the major changes brought in by Ind AS is regarding the treatment of proposed dividend. Earlier under AS, proposed dividend was an event within the financial year, and provision was made for the same. Under Ind AS, it is considered under events after the reporting period hence no provision is created. The changes are witnessed under quantitative analysis part of the study.

All the selected companies disclose the opening and closing amount of dividend payable. As no company is issuing dividend in asset form, the disclosure related to the same remains at 0%.

**Table no 6.113 Results of one-way ANOVA**

| Source of Variation | SS | Df | MS | F | P-value | F crit |
|---|---|---|---|---|---|---|
| **Between Groups** | 0 | 3 | 0 | 0 | 1 | 6.591382 |
| **Within Groups** | 1800 | 4 | 450 | | | |
| **Total** | 1800 | 7 | | | | |

(Source: Calculated in excel from the figures derived from table no 6.112)

Table no. 113 shows the results of one-way ANOVA calculated on the disclosure elements of Ind AS 10. One-way ANOVA is carried out to see whether the means of levels of disclosure of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = Mean of number of selected companies with disclosures as per Ind AS 10 in the year 2007

$\mu_2$ = Mean of number of selected companies with disclosures as per Ind AS 10 in the year 2012

$\mu_3$= Mean of number of selected companies with disclosures as per Ind AS 10 in the year 2014

$\mu_4$= Mean of number of selected companies with disclosures as per Ind AS 10 in the year 2017

The F value is less than the F critical value and the P value is greater than 0.05, indicating that the null hypothesis is accepted. This means that the means of selected years are not significantly different, suggesting that the disclosure levels illustrated by the selected companies under the selected years are not statistically different.

### 6.8.1.5 Disclosure Index of Income Tax

**Table No 6.114 Disclosure requirements as per Ind AS 12**

| IND AS 12 | 2007 | 2012 | 2014 | 2017 |
|---|---|---|---|---|
| Item 1 | 30 (100%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 2 | 30 (100%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 3 | 29 (97%) | 29 (97%) | 30 (100%) | 30 (100%) |
| Item 4 | 30 (100%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 5 | 12 (40%) | 12 (40%) | 15 (50%) | 16 (53%) |
| Item 6 | 5 (17%) | 6 (20%) | 7 (23%) | 9 (30%) |
| Item 7 | 2 (7%) | 3 (10%) | 5 (17%) | 6 (20%) |
| Item 8 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Item 9 | 8 (27%) | 8 (27%) | 13 (43%) | 27 (90%) |
| Item 10 | 1 (3%) | 1 (3%) | 1 (3%) | 30 (100%) |
| Item 11 | 3 (10%) | 22 (73%) | 28 (93%) | 30 (100%) |
| Item 12 | 1 (3%) | 1 (3%) | 3 (10%) | 5 (17%) |
| Item 13 | 2 (7%) | 2 (7%) | 3 (10%) | 5 (17%) |
| Item 14 | 25 (83%) | 27 (90%) | 29 (97%) | 29 (97%) |
| Item 15 | 7 (23%) | 9 (30%) | 10 (33%) | 13 (43%) |
| Item 16 | 6 (20%) | 7 (23%) | 8 (27%) | 11 (37%) |
| Item 17 | 6 (20%) | 8 (27%) | 8 (27%) | 12 (40%) |
| Item 18 | 0 (0%) | 0 (0%) | 0 (0%) | 3 (10%) |
| **AVERAGE** | **10 (33%)** | **12 (40%)** | **13 (43%)** | **17 (57%)** |

(Source: Annual reports of selected companies for the year ending 2007,2012,2014, and 2017)

**Interpretation**

"The objective of Ind AS 12 is to prescribe the accounting treatment for income taxes. Ind AS 12 also deals with the recognition of deferred tax assets arising from unused tax losses or unused tax credits, the presentation of income taxes in the financial statements and the disclosure of information relating to income taxes" (*21IndAS12_2017_.Pdf*, n.d.). Ind AS 12 mandates the companies to calculate the deferred tax using balance sheet approach only. Earlier under AS, the companies were able to calculate deferred tax using balance sheet approach as well as the profit and loss approach.

Table no 6.114 describes the level of disclosure of Ind AS 12 by the selected companies for the selected years under the study. Ind AS 12 is an extension to AS 22. This is why many of the basic disclosure requirements are already fulfilled by the selected companies since 2007. The in-depth level of disclosure is brought in by Ind AS in 2017. As we move along the study period, it can be observed that the disclosure has increased by 10% between 2007 and 2014. However, in 2017, the level of disclosure rose to 57%. Apart from the infrequent items of financial statements, all other information is disclosed by the selected companies.

There is an overall increase of 24% in disclosure levels of the selected companies under the study.

**Table No 6.115 Results of one-way ANOVA**

| Source of Variation | SS | Df | MS | F | P-value | F crit |
|---|---|---|---|---|---|---|
| **Between Groups** | 430.78 | 3 | 143.59 | 1.02 | **0.39** | 2.74 |
| **Within Groups** | 9533.67 | 68 | 140.20 | | | |
| **Total** | 9964.44 | 71 | | | | |

(Source: Calculated in excel from the figures derived from table no 6.114)

Table no 6.115 shows the results of one-way ANOVA calculated on the disclosure elements of Ind AS 12. One-way ANOVA is carried out to see whether the means of levels of disclosure of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = Mean of number of selected companies with disclosures as per Ind AS 12 in the year 2007

$\mu_2$ = Mean of number of selected companies with disclosures as per Ind AS 12 in the year 2012

$\mu_3$= Mean of number of selected companies with disclosures as per Ind AS 12 in the year 2014

$\mu_4$= Mean of number of selected companies with disclosures as per Ind AS 12 in the year 2017

The F value is less than the F critical value and the P value is greater than 0.05, indicating that the null hypothesis is accepted. This means that the means of selected years are not significantly different, suggesting that the disclosure levels illustrated by the selected companies under the selected years are not statistically different.

The 24% increase in level of disclosure from 2007 to 2017 as observed from table no 6.114 is valid but the statistical significance is not achieved as the result of testing. It can be said that the changes in the disclosure level of Ind AS 12 is valid but statistically insignificant.

### 6.8.1.6 Disclosure Index on Property, Plant and Equipment

**Table No 6.116 Disclosure requirements as per Ind AS 16**

| IND AS 16 | 2007 | 2012 | 2014 | 2017 |
|---|---|---|---|---|
| Item 1 | 29 (97%) | 29 (97%) | 29 (97%) | 29 (97%) |
| Item 2 | 29 (97%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 3 | 30 (100%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 4 | 30 (100%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 5 | 30 (100%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 6 | 4 (14%) | 4 (14%) | 10 (33%) | 12 (40%) |
| Item 7 | 2 (7%) | 6 (20%) | 8 (27%) | 10 (33%) |
| Item 8 | 0 (0%) | 2 (7%) | 4 (14%) | 6 (20%) |
| Item 9 | 0 (0%) | 1 (3%) | 2 (7%) | 3 (10%) |
| Item 10 | 28 (93%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 11 | 30 (100%) | 30 (100%) | 30 (100%) | 30 (100%) |
| **AVERAGE** | **18 (61%)** | **19 (64%)** | **20 (68%)** | **21 (70%)** |

(Source: Annual reports of selected companies for the year ending 2007,2012,2014, and 2017)

**Interpretation**

Table no 6.116 depicts the level of disclosure of Ind AS 16 in the selected companies for the selected years under the study. Ind AS 16 is similar to AS 8 and AS 10 combined. This standard provides guidance with the recognition and measurement of property, plant and equipment and depreciation charged to them along with the guidance related to treatment of impairment losses, derecognition of fixed assets.

Disclosures related to fixed assets were given importance from earlier period also. It can be observed that the basic disclosure requirements are met by the selected companies from 2007. Ind AS has made the disclosure requirements more comprehensive. That is why there is no material change seen in the disclosure level of Ind AS 16.

There is 61% disclosure related to Ind AS 16 in 2007. It is observed that there is a minor increase in the disclosure level in 2012 when the schedule VI was revised. Following the new companies act, the disclosure level further increased to 68% and after implementation of Ind AS in 2017, the disclosure level has reached to 71%. Here it is crucial to observe that apart from the infrequent items, most of the disclosure requirements are met by all the selected companies for the all the years under the study.

**Table No 6.117 Results of one-way ANOVA**

| Source of Variation | SS | Df | MS | F | P-value | F crit |
|---|---|---|---|---|---|---|
| **Between Groups** | 41.34 | 3 | 13.78 | 0.083 | **0.968** | 2.83 |
| **Within Groups** | 6601.09 | 40 | 165.03 | | | |
| **Total** | 6642.43 | 43 | | | | |

(Source: Calculated in excel from the figures derived from table no 6.116)

Table no 6.117 shows the results of one-way ANOVA calculated on the disclosure elements of Ind AS 16. One-way ANOVA is carried out to see whether the means of levels of disclosure of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = Mean of number of selected companies with disclosures as per Ind AS 16 in the year 2007

$\mu_2$ = Mean of number of selected companies with disclosures as per Ind AS 16 in the year 2012

$\mu_3$= Mean of number of selected companies with disclosures as per Ind AS 16 in the year 2014

$\mu_4$= Mean of number of selected companies with disclosures as per Ind AS 16 in the year 2017

The F value is less than the F critical value and the P value is greater than 0.05, indicating that the null hypothesis is accepted. This means that the means of selected years are not significantly different, suggesting that the disclosure levels illustrated by the selected companies under the selected years are not statistically different.

The 9% increase in level of disclosure from 2007 to 2017 as observed from table no 6.116 is valid but the statistical significance is not achieved as the result of testing. It can be concluded that the changes in the disclosure level of Ind AS 16 is valid but statistically insignificant.

### 6.8.1.7 Disclosure Index on Leases

**Table No 6.118 Disclosure requirements as per Ind AS 17**

| **IND AS 17** | **2007** | **2012** | **2014** | **2017** |
|---|---|---|---|---|
| Item 1 | 25 (83%) | 25 (83%) | 28 (93%) | 29 (97%) |
| Item 2 | 15 (50%) | 22 (73%) | 26 (87%) | 29 (97%) |
| Item 3 | 10 (33%) | 15 (50%) | 23 (77%) | 29 (97%) |
| Item 4 | 22 (73%) | 24 (80%) | 27 (90%) | 29 (97%) |
| Item 5 | 9 (30%) | 15 (50%) | 22 (73%) | 26 (87%) |
| Item 6 | 10 (33%) | 14 (47%) | 22 (73%) | 27 (90%) |
| Item 7 | 5 (17%) | 8 (27%) | 13 (43%) | 20 (67%) |
| Item 8 | 0 (0%) | 2 (7%) | 3 (10%) | 9 (30%) |
| Item 9 | 4 (13%) | 9 (30%) | 11 (37%) | 17 (57%) |
| Item 10 | 10 (33%) | 14 (47%) | 17 (57%) | 18 (60%) |
| Item 11 | 17 (57%) | 23 (77%) | 28 (93%) | 29 (97%) |
| **AVERAGE** | **12 (38%)** | **16 (62%)** | **20 (67%)** | **24 (79%)** |

(Source: Annual reports of selected companies for the year ending 2007,2012,2014, and 2017)

**Interpretation**

Table no 6.118 describes the level of disclosure of Ind AS 17 by the selected companies under the selected years of the study. “The objective of Ind AS 17 is to

prescribe, for lessees and lessors, the appropriate accounting policies and disclosure to apply in relation to leases."(*23IndAS17_2017_.Pdf*, n.d.) There is a remarkable increase in the level of disclosure since 2007 with respect to leases. As seen from table no 6.118 elements such as present value not less than one-year, unearned finance income has shown significant increase along with the introduction of Ind AS. Information related to reconciliation, contingent rent, general description etc, have also portrayed a significant rise in the level of disclosure by the selected companies.

The level of disclosure under Ind AS 17 was 38% in 2007. It rose to 62% during the revision of schedule VI and further increased 67% during the adoption of companies act and finally after the implementation of Ind AS, the level of disclosure reached at 79%. Still, it has not attained a 100% disclosure, but the growth shown by the selected companies is commendable.

Overall, there is an increase of 41% in the last decade.

**Table No 6.119 Results of one-way ANOVA**

| **Source of Variation** | **SS** | **Df** | **MS** | **F** | **P-value** | **F crit** |
|---|---|---|---|---|---|---|
| **Between Groups** | 937.63 | 3 | 312.55 | 5.56 | **0.0027** | 2.83 |
| **Within Groups** | 2247.09 | 40 | 56.18 | | | |
| **Total** | 3184.72 | 43 | | | | |

(Source: Calculated in excel from the figures derived from table no 6.118)

Table no 6.119 shows the results of one-way ANOVA calculated on the disclosure elements of Ind AS 17. One-way ANOVA is carried out to see whether the means of levels of disclosure of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = Mean of number of selected companies with disclosures as per Ind AS 17 in the year 2007

$\mu_2$ = Mean of number of selected companies with disclosures as per Ind AS 17in the year 2012

$\mu_3$= Mean of number of selected companies with disclosures as per Ind AS 17 in the year 2014

$\mu_4$= Mean of number of selected companies with disclosures as per Ind AS 17 in the year 2017

The F value is greater than the F critical value and the P value is less than 0.05, indicating that the null hypothesis is rejected. This means that the means of selected years are significantly different, suggesting that the disclosure levels illustrated by the selected companies under the selected years are statistically different.

**6.8.1.8 Disclosure Index on Revenue**

**Table No 6.120 Disclosure requirements as per Ind AS 18**

| IND AS 18 | 2007 | 2012 | 2014 | 2017 |
|---|---|---|---|---|
| Item 1 | 27 (90%) | 29 (97%) | 29 (97%) | 30 (100%) |
| Item 2 | 24 (80%) | 29 (97%) | 29 (97%) | 30 (100%) |
| Item 3 | 24 (80%) | 28 (93%) | 28 (93%) | 30 (100%) |
| **AVERAGE** | **25 (83%)** | **29 (97%)** | **29 (97%)** | **30 (100%)** |

(Source: Annual reports of selected companies for the year ending 2007,2012,2014, and 2017)

**Interpretation**

Table no 6.120 shows the level of disclosure of Ind AS 18 by the selected companies under the years of study. The level of disclosure has displayed a massive increase from 2007 to 2017. After the implementation of Ind AS, the selected companies have achieved 100% disclosure. "Most of the companies have already been complying with the disclosure requirements under the reign of AS. Revenue is considered a powerful information for the users of the financial reports".(*24IndAS18_2017_.Pdf,* n.d.) Hence, majority of the companies were providing detailed information.

The disclosure level was at 83% during 2007 and it increased to 97% during the revision of schedule VI, the same level of disclosure was maintained till 2014 when the companies act was revised. After the adoption of Ind AS, the companies achieved 100% disclosure requirements, mandated as per Ind AS.

**Table No 6.121 Results of one-way ANOVA**

| Source of Variation | SS | Df | MS | F | P-value | F crit |
|---|---|---|---|---|---|---|
| **Between Groups** | 41.58 | 3 | 13.86 | 15.12 | **0.0011** | 4.06 |
| **Within Groups** | 7.33 | 8 | 0.92 | | | |
| **Total** | 48.92 | 11 | | | | |

(Source: Calculated in excel from the figures derived from table no 6.120)

Table no 6.121 shows the results of one-way ANOVA calculated on the disclosure elements of Ind AS 18. One-way ANOVA is carried out to see whether the means of levels of disclosure of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = Mean of number of selected companies with disclosures as per Ind AS 18 in the year 2007

$\mu_2$ = Mean of number of selected companies with disclosures as per Ind AS 18 in the year 2012

$\mu_3$= Mean of number of selected companies with disclosures as per Ind AS 18 in the year 2014

$\mu_4$= Mean of number of selected companies with disclosures as per Ind AS 18 in the year 2017

The F value is greater than the F critical value and the P value is less than 0.05, indicating that the null hypothesis is rejected. This means that the means of selected years are significantly different, suggesting that the disclosure levels illustrated by the selected companies under the selected years are statistically different.

### 6.8.1.9 Disclosure Index of Employee Benefits

**Table No 6.122 Disclosure requirements as per Ind AS 19**

| IND AS 19 | 2007 | 2012 | 2014 | 2017 |
|---|---|---|---|---|
| Item 1 | 19 (63%) | 28 (93%) | 29 (97%) | 30 (100%) |
| Item 2 | 30 (100%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 3 | 20 (67%) | 25 (83%) | 27 (90%) | 29 (97%) |
| Item 4 | 9 (30%) | 15 (50%) | 22 (73%) | 28 (93%) |
| Item 5 | 9 (30%) | 16 (53%) | 22 (73%) | 27 (90%) |
| Item 6 | 0 (0%) | 2 (7%) | 7 (23%) | 18 (60%) |
| **AVERAGE** | **15 (50%)** | **19 (63%)** | **23 (77%)** | **27 (90%)** |

(Source: Annual reports of selected companies for the year ending 2007,2012,2014, and 2017)

**Interpretation**

Table no 6.122 depicts the level of disclosure of Ind AS 19 by the selected companies for the selected years under study. “Ind AS 19 is similar to Ind AS 15 except for certain aspects related to defined benefit obligations and the actuarial valuation. Ind AS 19 prescribes the accounting and disclosure for the employee

benefit expenses".(*Ministry Of Corporate Affairs - Indian Accounting Standards*, n.d.) This includes both long term and short-term benefits provided for the employees.

The level of disclosure was 50% during 2007 and after revision of schedule VI, it grew to 63% and further increased to 77% by the introduction of new companies act. By the adoption of Ind AS, the disclosure level has been at 90%. There has been an overall growth of 40% during this period.

The basic elements required by Ind AS 19, has been disclosed by the selected companies since 2007. However, information related to defined benefit plans and related items have been disclosed in a better

**Table No 6.123 Results of one-way ANOVA**

| **Source of Variation** | **SS** | **Df** | **MS** | **F** | **P-value** | **F crit** |
|---|---|---|---|---|---|---|
| **Between Groups** | 506.16 | 3 | 168.72 | 2.14 | **0.1268** | 3.09 |
| **Within Groups** | 1575.66 | 20 | 78.78 | | | |
| **Total** | 2081.83 | 23 | | | | |

Source: Calculated in excel from the figures derived from table no.122)

Table no 6.123 shows the results of one-way ANOVA calculated on the disclosure elements of Ind AS 19. One-way ANOVA is carried out to see whether the means of levels of disclosure of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = Mean of number of selected companies with disclosures as per Ind AS 19 in the year 2007

$\mu_2$ = Mean of number of selected companies with disclosures as per Ind AS 19 in the year 2012

$\mu_3$= Mean of number of selected companies with disclosures as per Ind AS 19 in the year 2014

$\mu_4$= Mean of number of selected companies with disclosures as per Ind AS 19 in the year 2017

The F value is less than the F critical value and the P value is greater than 0.05, indicating that the null hypothesis is accepted. This means that the means of selected years are not significantly different, suggesting that the disclosure levels

illustrated by the selected companies under the selected years are not statistically different.

The 40% increase in level of disclosure from 2007 to 2017 as observed from table no 6.122 is valid but the statistical significance is not achieved as the result of testing. It can be concluded that the changes in the disclosure level of Ind AS 19 is valid but statistically insignificant.

### 6.8.1.10 Disclosure Index of Government Grant

**Table No 6.124 Disclosure requirements as per Ind AS 20**

| IND AS 20 | 2007 | 2012 | 2014 | 2017 |
|---|---|---|---|---|
| Item 1 | 4 (13%) | 13 (43%) | 16 (53%) | 23 (77%) |
| Item 2 | 2 (7%) | 7 (23%) | 12 (40%) | 21 (70%) |
| Item 3 | 0 (0%) | 1 (3%) | 1 (3%) | 4 (13%) |
| **AVERAGE** | **2 (7%)** | **7 (23%)** | **10 (33%)** | **16 (53%)** |

(Source: Annual reports of selected companies for the year ending 2007, 2012,2014, and 2017)

**Interpretation**

Table no 6.124 describes the level of disclosure of Ind AS 20 for the selected companies under the selected years of study. Ind AS 20 provides guidance with the accounting and disclosure of government grants. The scope of accounting standard related to government grant has been drastically redefined under Ind AS. AS 12 has much lesser scope when compared to Ind AS 20. Hence, it is noted that there is phenomenal increase in the level of disclosure after the implementation of Ind AS.

There was only 7% disclosure related to government grants in 2007. It rose to 23% after the revision of schedule VI. Again, the level of disclosure grew to 33% by 2014 and during the implementation of Ind AS, the disclosure levels related to government grants were 53%. The selected companies have yet to achieve a lot with respect to disclosure of government grants. But the growth has been incredible. There has been a growth of 43% during the study period.

**Table No 6.125 Results of one-way ANOVA**

| Source of Variation | SS | Df | MS | F | P-value | F crit |
|---|---|---|---|---|---|---|
| **Between Groups** | 306 | 3 | 102 | 1.94 | **0.2003** | 4.06 |
| **Within Groups** | 418.66 | 8 | 52.33 | | | |
| **Total** | 724.66 | 11 | | | | |

Source: Calculated in excel from the figures derived from table no 6.124)

Table no 6.125 shows the results of one-way ANOVA calculated on the disclosure elements of Ind AS 20. One-way ANOVA is carried out to see whether the means of levels of disclosure of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = Mean of number of selected companies with disclosures as per Ind AS 20 in the year 2007

$\mu_2$ = Mean of number of selected companies with disclosures as per Ind AS 20 in the year 2012

$\mu_3$= Mean of number of selected companies with disclosures as per Ind AS 20 in the year 2014

$\mu_4$= Mean of number of selected companies with disclosures as per Ind AS 20 in the year 2017

The F value is less than the F critical value and the P value is greater than 0.05, indicating that the null hypothesis is accepted. This means that the means of selected years are not significantly different, suggesting that the disclosure levels illustrated by the selected companies under the selected years are not statistically different.

The 9% increase in level of disclosure from 2007 to 2017 as observed from table no 6.124 is valid but the statistical significance is not achieved as the result of testing. It can be concluded that the changes in the disclosure level of Ind AS 16 is valid but statistically insignificant.

### 6.8.1.11 Disclosure Index of changes in foreign exchange rate

**Table No 6.126 Disclosure requirements as per Ind AS 21**

| **IND AS 21** | **2007** | **2012** | **2014** | **2017** |
|---|---|---|---|---|
| Item 1 | 24 (80%) | 25 (83%) | 26 (87%) | 30 (100%) |
| Item 2 | 23 (77%) | 24 (80%) | 24 (80%) | 29 (97%) |
| Item 3 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| **AVERAGE** | **16 (53%)** | **16 (53%)** | **17 (57%)** | **20 (67%)** |

(Source: Annual reports of selected companies for the year ending 2007,2012,2014, and 2017)

**Interpretation**

Table no 6.126 shows the level of disclosure related to effects of changes in foreign currency rate. Majority of the companies have been complying with the disclosure requirements as information related to foreign currency transactions are used by the stake holders of the company for various purposes. The rationale for low disclosure level is because of none of the selected companies have changed their

functional currency in the selected period of study. If the functional currency criterion is ignored for the calculation of disclosure level, then, the selected companies are disclosing 100% of the mandated criteria required by the Ind AS in 2017.

The level of disclosure as per all the criteria suggested by Ind AS is 53% during 2007. It remained the same till the adoption of new companies act when it increased to 57%. After the implementation of Ind AS, the level of disclosure increased to 67%. There is an overall growth of 14% during the study period.

**Table No 6.127 Results of one-way ANOVA**

| **Source of Variation** | **SS** | **Df** | **MS** | **F** | **P-value** | **F crit** |
|---|---|---|---|---|---|---|
| **Between Groups** | 33.66 | 3 | 11.22 | 0.05 | **0.9832** | 4.06 |
| **Within Groups** | 1730 | 8 | 216.25 | | | |
| **Total** | 1763.66 | 11 | | | | |

Source: Calculated in excel from the figures derived from table no 6.126)

Table no 6.127 shows the results of one-way ANOVA calculated on the disclosure elements of Ind AS 21. One-way ANOVA is carried out to see whether the means of levels of disclosure of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = Mean of number of selected companies with disclosures as per Ind AS 21 in the year 2007

$\mu_2$ = Mean of number of selected companies with disclosures as per Ind AS 21 in the year 2012

$\mu_3$= Mean of number of selected companies with disclosures as per Ind AS 21 in the year 2014

$\mu_4$= Mean of number of selected companies with disclosures as per Ind AS 21 in the year 2017

The F value is less than the F critical value and the P value is greater than 0.05, indicating that the null hypothesis is accepted. This means that the means of selected years are not significantly different, suggesting that the disclosure levels illustrated by the selected companies under the selected years are not statistically different.

The 14% increase in level of disclosure from 2007 to 2017 as observed from table no 6.126 is valid but the statistical significance is not achieved because of testing. It can be concluded that the changes in the disclosure level of Ind AS 21 is valid but statistically insignificant.

### 6.8.1.12 Disclosure Index of Borrowing Cost

**Table No 6.128 Disclosure requirements as per Ind AS 23**

| IND AS 23 | 2007 | 2012 | 2014 | 2017 |
|---|---|---|---|---|
| Item 1 | 27 (90%) | 28 (93%) | 28 (93%) | 28 (93%) |
| Item 2 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| **AVERAGE** | **14 (47%)** | **14 (47%)** | **14 (47%)** | **14 (47%)** |

(Source: Annual reports of selected companies for the year ending 2007,2012,2014, and 2017)

**Interpretation**

Table no 6.128 depicts the level of disclosure requirements by Ind AS 23 for the selected companies under the selected period of study. Ind AS 23 deals with the accounting of borrowing cost. It considers "borrowing costs that are directly attributable to the acquisition, construction, or production of a qualifying asset form part of the cost of that asset. Other borrowing costs are recognised as an expense."(*28IndAS23_2017_.Pdf*, n.d.)

It is important to note that the selected companies have not disclosed the capitalisation rate in any of the selected years under the study. "It is assumed that the companies are using the bank interest rate as capitalisation rate, and hence, it is not disclosed separately. The level of disclosure is stagnant over the period of years. Majority of the companies have been abiding by the disclosure requirements mandated by Ind AS 23 since 2007". (*28IndAS23_2017_.Pdf*, n.d.)The absence of capitalisation rate disclosure is the sole reason for the weak level of disclosure over the study period.

The companies report a 47% of disclosure level since 2007 till the adoption of Ind AS in 2017. There is no change in the % of disclosure. The consistency in the level of disclosure is remarkable.

**Table No 6.129 Results of one-way ANOVA**

| Source of Variation | SS | Df | MS | F | P-value | F crit |
|---|---|---|---|---|---|---|
| **Between Groups** | 0.375 | 3 | 0.13 | 0.0003 | **0.9999** | 6.59 |
| **Within Groups** | 1540.5 | 4 | 385.13 | | | |
| **Total** | 1540.87 | 7 | | | | |

Source: Calculated in excel from the figures derived from table no 6.128)

Table no 6.129 shows the results of one-way ANOVA calculated on the disclosure elements of Ind AS 23. One-way ANOVA is carried out to see whether the means of levels of disclosure of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = Mean of number of selected companies with disclosures as per Ind AS 23 in the year 2007

$\mu_2$ = Mean of number of selected companies with disclosures as per Ind AS 23 in the year 2012

$\mu_3$= Mean of number of selected companies with disclosures as per Ind AS 23 in the year 2014

$\mu_4$= Mean of number of selected companies with disclosures as per Ind AS 23 in the year 2017

The F value is less than the F critical value and the P value is greater than 0.05, indicating that the null hypothesis is accepted. This means that the means of selected years are not significantly different, suggesting that the disclosure levels illustrated by the selected companies under the selected years are not statistically different.

The consistency in the level of disclosure from 2007 to 2017 as observed from table no 6.128 is valid but the statistical significance is not achieved as the result of testing. It can be concluded that the consistency in the disclosure level of Ind AS 23 is valid but statistically insignificant.

**6.8.1.13 Disclosure Index of Related Party Disclosures**

**Table No 6.130 Disclosure requirements as per Ind AS 24**

| IND AS 24 | 2007 | 2012 | 2014 | 2017 |
|---|---|---|---|---|
| Item 1 | 29 (97%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 2 | 27 (90%) | 29 (97%) | 30 (100%) | 30 (100%) |
| Item 3 | 24 (80%) | 28 (93%) | 30 (100%) | 30 (100%) |
| **AVERAGE** | **27 (90%)** | **29 (97%)** | **30 (100%)** | **30 (100%)** |

(Source: Annual reports of selected companies for the year ending 2007,2012,2014, and 2017)

**Interpretation**

Table no 6.130 describes the level of disclosure of Ind AS 24 for the selected companies under the selected period of study. "The objective of Ind AS 24 is to ensure that an entity's financial statements contain the disclosures necessary to draw attention to the possibility that its financial position and profit or loss may have been affected by the existence of related parties and by transactions and outstanding balances, including commitments, with such parties."(*Ministry Of Corporate Affairs - Indian Accounting Standards*, n.d.)

Related party disclosures are considered a crucial element of financial reports are it has various legal ramifications. This is the reason why most of the companies are found complying with the Ind AS 24 disclosure requirements even since 2007. It is important to note that the companies display a 100% level of disclosure since the implementation of new companies act in 2014. The same level of disclosure is continued till 2017 when Ind AS was introduced.

Overall, there is an improvement in the level of disclosure since 2007 till 2017 by 3%. It is one of the few standards where all the companies have completely fulfilled the necessary disclosure requirements.

**Table No 6.131 Results of one-way ANOVA**

| Source of Variation | SS | Df | MS | F | P-value | F crit |
|---|---|---|---|---|---|---|
| **Between Groups** | 22.25 | 3 | 7.41 | 4.04 | **0.0505** | 4.06 |
| **Within Groups** | 14.66 | 8 | 1.83 | | | |
| **Total** | 36.91 | 11 | | | | |

Source: Calculated in excel from the figures derived from table no 6.130)

Table no 6.131 shows the results of one-way ANOVA calculated on the disclosure elements of Ind AS 24. One-way ANOVA is carried out to see whether the means of levels of disclosure of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = Mean of number of selected companies with disclosures as per Ind AS 24 in the year 2007

$\mu_2$ = Mean of number of selected companies with disclosures as per Ind AS 24 in the year 2012

$\mu_3$= Mean of number of selected companies with disclosures as per Ind AS 24 in the year 2014

$\mu_4$= Mean of number of selected companies with disclosures as per Ind AS 24 in the year 2017

The F value is less than the F critical value and the P value is greater than 0.05, indicating that the null hypothesis is accepted. This means that the means of selected years are not significantly different, suggesting that the disclosure levels illustrated by the selected companies under the selected years are not statistically different.

The 3% increase in level of disclosure from 2007 to 2017 as observed from table no 6.130 is valid but the statistical significance is not achieved as the result of testing. It can be concluded that the changes in the disclosure level of Ind AS 24 is valid but statistically insignificant.

### 6.8.1.14 Disclosure Index of Earnings per Share

**Table No 6.132 Disclosure requirements as per Ind AS 33**

| IND AS 33 | 2007 | 2012 | 2014 | 2017 |
|---|---|---|---|---|
| Item 1 | 25 (83%) | 28 (93%) | 30 (100%) | 30 (100%) |
| Item 2 | 15 (50%) | 22 (73%) | 29 (97%) | 30 (100%) |
| Item 3 | 12 (40%) | 14 (47%) | 20 (67%) | 28 (93%) |
| Item 4 | 0 (0%) | 1 (3%) | 2 (7%) | 10 (33%) |
| **AVERAGE** | **13 (43%)** | **16 (53%)** | **20 (67%)** | **25 (83%)** |

(Source: Annual reports of selected companies for the year ending 2007,2012,2014, and 2017)

**Interpretation**

Table no 6.132 depicts the level of disclosure of Ind AS 33 by the selected companies for the selected years under the study. "The objective of this Ind AS 33 is to prescribe principles for the determination and presentation of earnings per share, so as to improve performance comparisons between different entities in the same reporting period and between different reporting periods for the same entity. Even though earnings per share data have limitations because of the different accounting policies that may be used for determining 'earnings', a consistently determined denominator enhances financial reporting. The focus of this Ind AS 33 is on the denominator of the earnings per share calculation".(*34IndAS33_2017_.Pdf*, n.d.)

Earnings per share are important information for the shareholders of the company. Hence, the selected companies have complied with the disclosure requirements since 2007. It is observed that Ind AS introduced comprehensive details as part of the disclosure requirements. The information related to potential ordinary share transactions have shown a remarkable increase of 33% since 2007.

Overall, there is an increase in the level of disclosure of Ind AS 33 by 40% during the period of study.

**Table No 6.133 Results of one-way ANOVA**

| Source of Variation | SS | Df | MS | F | P-value | F crit |
|---|---|---|---|---|---|---|
| **Between Groups** | 297.5 | 3 | 99.16 | 0.78 | **0.52** | 3.49 |
| **Within Groups** | 1514.5 | 12 | 126.20 | | | |
| **Total** | 1812 | 15 | | | | |

Source: Calculated in excel from the figures derived from table no 6.132)

Table no 6.133 shows the results of one-way ANOVA calculated on the disclosure elements of Ind AS 33. One-way ANOVA is carried out to see whether the means of levels of disclosure of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = Mean of number of selected companies with disclosures as per Ind AS 33 in the year 2007

$\mu_2$ = Mean of number of selected companies with disclosures as per Ind AS 33 in the year 2012

$\mu_3$= Mean of number of selected companies with disclosures as per Ind AS 33 in the year 2014

$\mu_4$= Mean of number of selected companies with disclosures as per Ind AS 33 in the year 2017

The F value is less than the F critical value and the P value is greater than 0.05, indicating that the null hypothesis is accepted. This means that the means of selected years are not significantly different, suggesting that the disclosure levels illustrated by the selected companies under the selected years are not statistically different.

The 40% increase in level of disclosure from 2007 to 2017 as observed from table no 6.132 is valid but the statistical significance is not achieved as the result of testing. It can be concluded that the alterations in the disclosure level of Ind AS 33 is valid but statistically insignificant.

### 6.8.1.15 Disclosure of Impairment of Assets

**Table No 6.134 Disclosure requirements as per Ind AS 36**

| IND AS 36 | 2007 | 2012 | 2014 | 2017 |
|---|---|---|---|---|
| Item 1 | 22 (73%) | 27 (90%) | 28 (93%) | 30 (100%) |
| Item 2 | 1 (3%) | 3 (10%) | 7 (23%) | 9 (30%) |
| Item 3 | 0 (0%) | 1 (3%) | 2 (7%) | 24 (80%) |
| Item 4 | 0 (0%) | 0 (0%) | 1 (3%) | 15 (50%) |
| Item 5 | 0 (0%) | 0 (0%) | 1 (3%) | 3 (10%) |
| Item 6 | 0 (0%) | 0 (0%) | 3 (10%) | 7 (23%) |
| Item 7 | 4 (13%) | 13 (43%) | 20 (67%) | 26 (87%) |
| Item 8 | 7 (23%) | 9 (30%) | 18 (60%) | 23 (77%) |
| Item 9 | 3 (10%) | 5 (17%) | 9 (30%) | 25 (83%) |
| Item 10 | 4 (13%) | 5 (17%) | 8 (27%) | 15 (50%) |
| Item 11 | 6 (20%) | 6 (20%) | 8 (27%) | 26 (87%) |
| Item 12 | 6 (20%) | 7 (23%) | 10 (33%) | 26 (87%) |
| **AVERAGE** | **4 (13%)** | **6 (20%)** | **10 (33%)** | **19 (63%)** |

(Source: Annual reports of selected companies for the year ending 2007, 2012,2014, and 2017)

**Interpretation**

Table no 6.134 describes the level of disclosure of Ind AS 36 by the selected companies for the selected period under the study. Ind AS 36 provides a comprehensive list of disclosure requirements to be followed by the complying companies. Earlier the companies were only needed to provide the information related to the amount of impairment loss or profit only. Now the list includes the recovering amount, revalued amount and so on.

"The objective of Ind AS 36 is to prescribe the procedures that an entity applies to ensure that its assets are carried at no more than their recoverable amount. An asset is carried at more than its recoverable amount if the carrying amount exceeds the amount to be recovered through use or sale of the asset. If this is the case, the asset is described as impaired, and Ind AS 36 requires the entity to recognise an impairment loss. It also specifies when an entity should reverse an impairment loss and prescribes disclosures."(*Ministry Of Corporate Affairs - Indian Accounting Standards*, n.d.)

The level of disclosure related to Ind AS 36 stood at a mere 13% during 2007. It rose to 20% during the revision of schedule VI and further increased to 33% when the new companies act was implemented. There is observed a remarkable increase in the level of disclosure after the implementation of Ind AS. The disclosure level increased by 30% and reached 63% in 2017.

**Table No 6.135 Results of one-way ANOVA**

| Source of Variation | SS | Df | MS | F | P-value | F crit |
|---|---|---|---|---|---|---|
| **Between Groups** | 1526.56 | 3 | 508.85 | 8.25 | **0.0001** | 2.81 |
| **Within Groups** | 2711.41 | 44 | 61.62 | | | |
| **Total** | 4237.97 | 47 | | | | |

(Source: Calculated in excel from the figures derived from table no 6.134)

Table no 6.135 shows the results of one-way ANOVA calculated on the disclosure elements of Ind AS 36. One-way ANOVA is carried out to see whether the means of levels of disclosure of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = Mean of number of selected companies with disclosures as per Ind AS 36 in the year 2007

$\mu_2$ = Mean of number of selected companies with disclosures as per Ind AS 36 in the year 2012

$\mu_3$= Mean of number of selected companies with disclosures as per Ind AS 36 in the year 2014

$\mu_4$= Mean of number of selected companies with disclosures as per Ind AS 36 in the year 2017

The F value is greater than the F critical value and the P value is less than 0.05, indicating that the null hypothesis is rejected. This means that the means of selected years are significantly different, suggesting that the disclosure levels illustrated by the selected companies under the selected years are statistically different.

### 6.8.1.16 Disclosure Index of Provisions, Contingent Liabilities and Assets

**Table No 6.136 Disclosure requirements as per Ind AS 37**

| IND AS 37 | 2007 | 2012 | 2014 | 2017 |
|---|---|---|---|---|
| Item 1 | 29 (97%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 2 | 23 (77%) | 25 (83%) | 25 (83%) | 30 (100%) |
| Item 3 | 10 (33%) | 11 (37%) | 18 (60%) | 23 (77%) |
| Item 4 | 2 (7%) | 2 (7%) | 4 (13%) | 14 (47%) |
| Item 5 | 29 (97%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 6 | 0 (0%) | 0 (0%) | 0 (0%) | 26 (87%) |
| **AVERAGE** | **16 (53%)** | **16 (53%)** | **18 (60%)** | **26 (87%)** |

(Source: Annual reports of selected companies for the year ending 2007,2012,2014, and 2017)

**Interpretation**

Table no 6.136 depicts the level of disclosure of Ind AS 37 by the selected companies for the selected period under the study. Apart from the description of nature of contingent assets, most of the disclosure criteria is followed by the companies since 2007. Ind AS has introduced present valuation for the calculation of provisions. The quantitative impact related to the same is discussed in the related chapter of analysis.

"The objective of Ind AS 37 is to provide guidance with respect to the appropriate recognition criteria and measurement bases are applied to provisions, contingent liabilities and contingent assets and that sufficient information is disclosed in the notes to enable users to understand their nature, timing and amount."

Overall, the level of disclosure of Ind AS 37 has increased 34% during the period of study.

**Table No 6.137 Results of one-way ANOVA**

| Source of Variation | SS | Df | MS | F | P-value | F crit |
|---|---|---|---|---|---|---|
| **Between Groups** | 376.79 | 3 | 125.59 | 0.87 | **0.4718** | 3.09 |
| **Within Groups** | 2879.16 | 20 | 143.95 | | | |
| **Total** | 3255.95 | 23 | | | | |

Source: Calculated in excel from the figures derived from table no 6.136)

Table no 6.137 shows the results of one-way ANOVA calculated on the disclosure elements of Ind AS 37. One-way ANOVA is carried out to see whether the means of levels of disclosure of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = Mean of number of selected companies with disclosures as per Ind AS 37 in the year 2007

$\mu_2$ = Mean of number of selected companies with disclosures as per Ind AS 37 in the year 2012

$\mu_3$= Mean of number of selected companies with disclosures as per Ind AS 37 in the year 2014

$\mu_4$= Mean of number of selected companies with disclosures as per Ind AS 37 in the year 2017

The F value is less than the F critical value and the P value is greater than 0.05, indicating that the null hypothesis is accepted. This means that the means of selected years are not significantly different, suggesting that the disclosure levels illustrated by the selected companies under the selected years are not statistically different.

The 34% increase in level of disclosure from 2007 to 2017 as observed from table no 6.136 is valid but the statistical significance is not achieved as the result of testing. It can be concluded that the changes in the disclosure level of Ind AS 37 is valid but statistically insignificant.

### 6.8.1.17 Disclosure Index of Intangible Assets

**Table No 6.138 Disclosure requirements as per Ind AS 38**

| IND AS 38 | 2007 | 2012 | 2014 | 2017 |
|---|---|---|---|---|
| Item 1 | 26 (87%) | 29 (97%) | 29 (97%) | 30 (100%) |
| Item 2 | 26 (87%) | 29 (97%) | 29 (97%) | 30 (100%) |
| Item 3 | 25 (83%) | 28 (93%) | 28 (93%) | 30 (100%) |
| Item 4 | 24 (80%) | 28 (93%) | 28 (93%) | 30 (100%) |
| Item 5 | 23 (77%) | 26 (87%) | 27 (90%) | 30 (100%) |
| Item 6 | 21 (70%) | 24 (80%) | 26 (87%) | 28 (93%) |
| Item 7 | 1 (3%) | 3 (10%) | 4 (13%) | 6 (20%) |
| Item 8 | 5 (17%) | 5 (17%) | 7 (23%) | 14 (47%) |
| Item 9 | 5 (17%) | 5 (17%) | 6 (20%) | 12 (40%) |
| Item 10 | 23 (77%) | 26 (87%) | 26 (87%) | 29 (97%) |
| **AVERAGE** | **18 (60%)** | **20 (67%)** | **21 (70%)** | **24 (80%)** |

(Source: Annual reports of selected companies for the year ending 2007,2012,2014, and 2017)

**Interpretation**

Table no 6.138 depicts the level of disclosure of Ind AS 38 by the selected companies for the selected period under the study. Intangible asset is one of the most valuable assets of the company. Hence the companies are found disclosing most of the disclosure requirement elements related to intangible assets since 2007.

"The objective of this Standard is to prescribe the accounting treatment for intangible assets that are not dealt with specifically in another Standard. This Standard requires an entity to recognise an intangible asset if, and only if, specified criteria are met. The Standard also specifies how to measure the carrying amount of intangible assets and requires specified disclosures about intangible assets." (*Ministry Of Corporate Affairs - Indian Accounting Standards*, n.d.)

The level of disclosure related to Ind AS 38 was reported to be 60% in the year 2007. It increased to 67% during the revision of schedule VI of old companies act. When the new companies act was introduced, the level of disclosure of intangible assets improved to 70%. After implementation of Ind AS in 2017, the level of disclosure was disclosed to be 80%. The intangible assets have witnessed a growth of 20% with respect to the disclosure requirements mandated by Ind AS 38.

**Table No 6.139 Results of one-way ANOVA**

| Source of Variation | SS | Df | MS | F | P-value | F crit |
|---|---|---|---|---|---|---|
| **Between Groups** | **183.07** | **3** | **61.03** | **0.57** | **0.6356** | **2.86** |
| **Within Groups** | **3825.9** | **36** | **106.27** | | | |
| **Total** | **4008.97** | **39** | | | | |

Source: Calculated in excel from the figures derived from table no 6.138)

Table no 6.139 shows the results of one-way ANOVA calculated on the disclosure elements of Ind AS 38. One-way ANOVA is carried out to see whether the means of levels of disclosure of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = Mean of number of selected companies with disclosures as per Ind AS 38 in the year 2007

$\mu_2$ = Mean of number of selected companies with disclosures as per Ind AS 38 in the year 2012

$\mu_3$= Mean of number of selected companies with disclosures as per Ind AS 38 in the year 2014

$\mu_4$= Mean of number of selected companies with disclosures as per Ind AS 38 in the year 2017

The F value is less than the F critical value and the P value is greater than 0.05, indicating that the null hypothesis is accepted. This means that the means of selected years are not significantly different, suggesting that the disclosure levels illustrated by the selected companies under the selected years are not statistically different.

The 20% increase in level of disclosure from 2007 to 2017 as observed from table no 6.138 is valid but the statistical significance is not achieved because of testing. It can be concluded that the alterations in the disclosure level of Ind AS 38 is valid but statistically insignificant.

### 6.8.1.18 Disclosure Index of Investment Property

**Table No 6.140 Disclosure requirements as per Ind AS 40**

| IND AS 40 | 2007 | 2012 | 2014 | 2017 |
|---|---|---|---|---|
| Item 1 | 8 (27%) | 8 (27%) | 8 (27%) | 13 (43%) |
| Item 2 | 3 (10%) | 5 (17%) | 6 (20%) | 10 (33%) |
| Item 3 | 3 (10%) | 3 (10%) | 3 (10%) | 9 (30%) |
| Item 4 | 1 (37%) | 1 (37%) | 1 (37%) | 4 (13%) |
| Item 5 | 0 (0%) | 0 (0%) | 1 (37%) | 2 (7%) |
| Item 6 | 3 (10%) | 3 (10%) | 4 (13%) | 12 (40%) |
| Item 7 | 5 (17%) | 5 (17%) | 6 (20%) | 12 (40%) |
| **AVERAGE** | **18 (60%)** | **20 (67%)** | **21 (70%)** | **24 (80%)** |

(Source: Annual reports of selected companies for the year ending 2007,2012,2014, and 2017)

**Interpretation**

Table no 6.140 depicts the level of disclosure of Ind AS 40 by the selected companies during the selected period of study. "The objective of Ind AS 40 is to prescribe the accounting treatment for investment property and related disclosure requirements."(*39IndAS40_2017_.Pdf*, n.d.) Prior to Ind AS 40, there was no specific accounting standard for the accounting of Investment property. It was a part of fixed assets and governed by the related accounting standards.

The introduction of Ind AS 40 not only made the accounting and reporting of investment property precise, but also helped in improving the level of compliance among the selected companies. The level of compliance of Ind AS stood at 60% in the year 2007. It increased to 67% in 2012 along with the revision of schedule VI and further increased to 70% when the new companies act was adopted in 2014. After the

implementation of Ind AS in 2017, the level of disclosure grew to 80%. There is an overall growth of 20% in the level of disclosure.

**Table No 6.141 Results of one-way ANOVA**

| Source of Variation | SS | Df | MS | F | P-value | F crit |
|---|---|---|---|---|---|---|
| **Between Groups** | 144.11 | 3 | 48.03 | 4.86 | **0.008** | 3.01 |
| **Within Groups** | 236.85 | 24 | 9.86 | | | |
| **Total** | 380.96 | 27 | | | | |

(Source: Calculated in excel from the figures derived from table no 6.140)

Table no 6.141 shows the results of one-way ANOVA calculated on the disclosure elements of Ind AS 40. One-way ANOVA is carried out to see whether the means of levels of disclosure of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = Mean of number of selected companies with disclosures as per Ind AS 40 in the year 2007

$\mu_2$ = Mean of number of selected companies with disclosures as per Ind AS 40 in the year 2012

$\mu_3$= Mean of number of selected companies with disclosures as per Ind AS 40 in the year 2014

$\mu_4$= Mean of number of selected companies with disclosures as per Ind AS 40 in the year 2017

The F value is greater than the F critical value and the P value is less than 0.05, indicating that the null hypothesis is rejected. This means that the means of selected years are significantly different, suggesting that the disclosure levels illustrated by the selected companies under the selected years are statistically different.

### 6.8.1.19 Disclosure Index of Share Based Payments

**Table No 6.142 Disclosure requirements as per Ind AS 102**

| IND AS 102 | 2007 | 2012 | 2014 | 2017 |
|---|---|---|---|---|
| Item 1 | 19 (63%) | 20 (67%) | 22 (73%) | 24 (80%) |
| Item 2 | 18 (60%) | 18 (60%) | 19 (63%) | 23 (77%) |
| Item 3 | 2 (7%) | 2 (7%) | 3 (10%) | 4 (13%) |
| Item 4 | 17 (57%) | 18 (60%) | 19 (63%) | 23 (77%) |
| **AVERAGE** | **14 (47%)** | **15 (50%)** | **16 (53%)** | **18 (60%)** |

(Source: Annual reports of selected companies for the year ending 2007,2012,2014, and 2017)

**Interpretation**

Table no 6.142 depicts the level of disclosure of Ind AS 102 by the selected companies during the selected period under study. "The objective of Ind AS 102 is to specify the financial reporting by an entity when it undertakes a share-based payment transaction. It requires an entity to reflect in its profit or loss and financial position the effects of share-based payment transactions, including expenses associated with transactions in which share options are granted to employees." (*2IndAS102_2017_.Pdf*, n.d.)

India did not have a dedicated accounting standard for the same prior to Ind AS. There was a guidance issued by ICAI for the accounting and reporting for the same. Apart from certain accounting changes introduced by Ind AS, the disclosure fairly remains same as the earlier mentioned guidance note. That is the reason why most of the companies have already been disclosing the necessary elements since 2007.

The level of disclosure stood at 47% in 2007 and it increased to 50% during the revision of schedule VI of old companies act. The disclosure level further improved to 53% after the new companies act and it reached 60% after the implementation of Ind AS in 2017.

**Table No 6.143 Results of one-way ANOVA**

| Source of Variation | SS | Df | MS | F | P-value | F crit |
|---|---|---|---|---|---|---|
| **Between Groups** | 48.68 | 3 | 16.23 | 0.21 | **0.8845** | 3.49 |
| **Within Groups** | 908.75 | 12 | 75.73 | | | |
| **Total** | 957.43 | 15 | | | | |

Source: Calculated in excel from the figures derived from table no 6.142)

Table no 6.143 shows the results of one-way ANOVA calculated on the disclosure elements of Ind AS 102. One-way ANOVA is carried out to see whether the means of levels of disclosure of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = Mean of number of selected companies with disclosures as per Ind AS 102 in the year 2007

$\mu_2$ = Mean of number of selected companies with disclosures as per Ind AS 102 in the year 2012

$\mu_3$= Mean of number of selected companies with disclosures as per Ind AS 102 in the year 2014

$\mu_4$= Mean of number of selected companies with disclosures as per Ind AS 102 in the year 2017

The F value is less than the F critical value and the P value is greater than 0.05, indicating that the null hypothesis is accepted. This means that the means of selected years are not significantly different, suggesting that the disclosure levels illustrated by the selected companies under the selected years are not statistically different.

The 13% increase in level of disclosure from 2007 to 2017 as observed from table no 6.142 is valid but the statistical significance is not achieved because of testing. It can be concluded that the changes in the disclosure level of Ind AS 102 is valid but statistically insignificant.

### 6.8.1.20 Disclosure Index of Assets Held for Sale

**Table No 6.144 Disclosure requirements as per Ind AS 105**

| **IND AS 105** | **2007** | **2012** | **2014** | **2017** |
|---|---|---|---|---|
| Item 1 | 3 (10%) | 5 (17%) | 6 (20%) | 11 (37%) |
| Item 2 | 1 (3%) | 1 (3%) | 1 (3%) | 8 (27%) |
| Item 3 | 3 (10%) | 6 (20%) | 6 (20%) | 12 (40%) |
| Item 4 | 1 (3%) | 1 (3%) | 2 (7%) | 5 (17%) |
| Item 5 | 3 (10%) | 3 (10%) | 4 (13%) | 9 (30%) |
| Item 6 | 3 (10%) | 3 (10%) | 3 (10%) | 7 (23%) |
| Item 7 | 3 (10%) | 3 (10%) | 3 (10%) | 7 (23%) |
| Item 8 | 2 (7%) | 2 (7%) | 3 (10%) | 6 (20%) |
| **AVERAGE** | **2 (7%)** | **3 (10%)** | **4 (13%)** | **8 (27%)** |

(Source: Annual reports of selected companies for the year ending 2007,2012,2014, and 2017)

**Interpretation**

Table no 6.144 describes the level of disclosure by the selected companies under the selected years of study. "The objective of this Indian Accounting Standard (Ind AS) is to specify the accounting for assets held for sale, and the presentation and disclosure of discontinued operations." (*5IndAS105_2017_.Pdf*, n.d.)

Under AS the non-current assets held for sale was a part of discontinued operations and thus did not have a separate accounting standard. The introduction of Ind AS 105 has helped the Indian companies to manage their assets in a better way. Ind AS has brought clarity regarding the discontinued operations and discontinuing operations also set the time period for the recognition of discontinued operations.

The introduction of Ind AS has increased the level of disclosure among the selected companies by 20%. The level of disclosure was merely 7% in 2007 but it gradually increased to 10% in 2012 and further grew to 13% in 2014. After the implementation of Ind AS, the level of disclosure stands at 27%.

**Table No 6.145 Results of one-way ANOVA**

| Source of Variation | SS | Df | MS | F | P-value | F crit |
|---|---|---|---|---|---|---|
| **Between Groups** | 165.25 | 3 | 55.08 | 16.99 | **1.75E-06** | 2.94 |
| **Within Groups** | 90.75 | 28 | 3.24 | | | |
| **Total** | 256 | 31 | | | | |

(Source: Calculated in excel from the figures derived from table no 6.144)

Table no 6.145 shows the results of one-way ANOVA calculated on the disclosure elements of Ind AS 1. One-way ANOVA is carried out to see whether the means of levels of disclosure of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = Mean of number of selected companies with disclosures as per Ind AS 1 in the year 2007

$\mu_2$ = Mean of number of selected companies with disclosures as per Ind AS 1 in the year 2012

$\mu_3$= Mean of number of selected companies with disclosures as per Ind AS 1 in the year 2014

$\mu_4$= Mean of number of selected companies with disclosures as per Ind AS 1 in the year 2017

The F value is greater than the F critical value and the P value is less than 0.05, indicating that the null hypothesis is rejected. This means that the means of selected years are significantly different, suggesting that the disclosure quality illustrated by the selected companies under the selected years are statistically different.

### 6.8.1.21 Disclosure Index of Fair Value Measurement

**Table No 6.146 Disclosure requirements as per Ind AS 113**

| IND AS 113 | 2007 | 2012 | 2014 | 2017 |
|---|---|---|---|---|
| Item 1 | 30 (100%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 2 | 0 (0%) | 0 (0%) | 0 (0%) | 30 (100%) |
| **AVERAGE** | **15 (50%)** | **15 (50%)** | **15 (50%)** | **30 (100%)** |

(Source: Annual reports of selected companies for the year ending 2007,2012,2014, and 2017)

**Interpretation**

Table no 6.146 portrays the level of disclosure of Ind AS 113 by the selected companies during the selected period of study. "Ind AS 113 defines fair value and sets out a single framework for measuring fair value; and provides the required disclosures about fair value measurements." Ind AS 113 does not have an equivalent accounting standard in AS. However, certain standards like inventories give fundamental guidance with respect to the same.

Ind AS 113 requires extensive disclosure of the related to the measurement of fair value. The second item in the disclosure requirements stipulate the complying companies to disclose the various levels of fair value measurements in a comprehensive manner.

The level of disclosure related to the first element has been followed by the companies since 2007. Like mentioned above even though there was no dedicated accounting standard, certain guidance was available from some of the accounting standards.

After implementation of Ind AS, the disclosure level has attained a 100% with respect to the disclosure requirements mandated by Ind AS. There is a 50% increase in the level of disclosure following the adoption of Ind AS.

**Table No 6.147 Results of one-way ANOVA**

| Source of Variation | SS | Df | MS | F | P-value | F crit |
|---|---|---|---|---|---|---|
| **Between Groups** | 337.5 | 3 | 112.5 | 0.33 | **0.8032** | 6.59 |
| **Within Groups** | 1350 | 4 | 337.5 | | | |
| **Total** | 1687.5 | 7 | | | | |

Source: Calculated in excel from the figures derived from table no 6.146)

Table no 6.147 shows the results of one-way ANOVA calculated on the disclosure elements of Ind AS 113. One-way ANOVA is carried out to see whether the means of levels of disclosure of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = Mean of number of selected companies with disclosures as per Ind AS 113 in the year 2007

$\mu_2$ = Mean of number of selected companies with disclosures as per Ind AS 113 in the year 2012

$\mu_3$= Mean of number of selected companies with disclosures as per Ind AS 113 in the year 2014

$\mu_4$= Mean of number of selected companies with disclosures as per Ind AS 113 in the year 2017

The F value is less than the F critical value and the P value is greater than 0.05, indicating that the null hypothesis is accepted. This means that the means of selected years are not significantly different, suggesting that the disclosure levels illustrated by the selected companies under the selected years are not statistically different.

The 50% increase in level of disclosure from 2007 to 2017 as observed from table no 6.146 is valid but the statistical significance is not achieved as the result of testing. It can be concluded that the changes in the disclosure level of Ind AS 113 is valid but statistically insignificant.

### 6.8.1.22 Disclosure Index of Financial Instruments

**Table No 6.148 Disclosure requirements as per Ind AS 107**

| IND AS 107 | 2007 | 2012 | 2014 | 2017 |
|---|---|---|---|---|
| Item 1 | 0 (0%) | 0 (0%) | 0 (0%) | 30 (100%) |
| Item 2 | 0 (0%) | 0 (0%) | 0 (0%) | 30 (100%) |
| Item 3 | 0 (0%) | 0 (0%) | 0 (0%) | 30 (100%) |
| Item 4 | 0 (0%) | 0 (0%) | 0 (0%) | 18 (60%) |
| Item 5 | 0 (0%) | 0 (0%) | 0 (0%) | 28 (93%) |
| Item 6 | 0 (0%) | 0 (0%) | 0 (0%) | 30 (100%) |
| Item 7 | 0 (0%) | 0 (0%) | 0 (0%) | 26 (87%) |
| Item 8 | 0 (0%) | 0 (0%) | 0 (0%) | 1 (3%) |
| Item 9 | 10 (33%) | 10 (33%) | 11 (37%) | 28 (93%) |
| Item 10 | 10 (33%) | 16 (53%) | 22 (73%) | 30 (100%) |
| Item 11 | 2 (7%) | 10 (33%) | 20 (67%) | 29 (97%) |
| Item 12 | 3 (10%) | 6 (20%) | 15 (50%) | 29 (97%) |
| Item 13 | 10 (33%) | 18 (60%) | 24 (80%) | 29 (97%) |
| Item 14 | 3 (10%) | 11 (37%) | 24 (80%) | 29 (97%) |
| Item 15 | 4 (13%) | 18 (60%) | 24 (80%) | 29 (97%) |
| Item 16 | 1 (3%) | 3 (10%) | 23 (77%) | 29 (97%) |
| Item 17 | 2 (7%) | 6 (20%) | 25 (83%) | 29 (97%) |
| Item 18 | 1 (3%) | 2 (7%) | 11 (37%) | 30 (100%) |
| Item 19 | 0 (0%) | 0 (0%) | 2 (7%) | 30 (100%) |
| Item 20 | 0 (0%) | 0 (0%) | 1 (3%) | 28 (93%) |
| Item 21 | 0 (0%) | 2 (7%) | 4 (13%) | 29 (97%) |
| Item 22 | 0 (0%) | 1 (3%) | 3 (10%) | 29 (97%) |
| Item 23 | 0 (0%) | 0 (0%) | 1 (3%) | 27 (90%) |
| Item 24 | 0 (0%) | 0 (0%) | 2 (7%) | 27 (90%) |
| Item 25 | 0 (0%) | 0 (0%) | 1 (3%) | 29 (97%) |
| Item 26 | 0 (0%) | 0 (0%) | 1 (3%) | 29 (97%) |
| Item 27 | 0 (0%) | 0 (0%) | 0 (0%) | 25 (83%) |
| Item 28 | 0 (0%) | 0 (0%) | 0 (0%) | 7 (23%) |
| **AVERAGE** | **2 (7%)** | **4 (13%)** | **8 (27%)** | **27 (90%)** |

(Source: Annual reports of selected companies for the year ending 2007,2012,2014, and 2017)

**Interpretation**

Table no 6.148 depicts the level of disclosure of Ind AS by the selected companies during the selected period of study. Prior to the implementation of Ind AS 107, there was no equivalent accounting standard related to the disclosure of financial instruments. As observed from table no 6.148 the companies neither had a framework for disclosing the elements nor they were voluntary disclosing the details of financial instruments issued by them. Ind AS 107 stipulates the companies to have a

comprehensive disclosure related to financial instruments so that the investors of those financial instruments are well informed.

"The objective of Ind AS 107 is to require entities to provide disclosures in their financial statements that enable users to evaluate: (a) the significance of financial instruments for the entity's financial position and performance; and (b) the nature and extent of risks arising from financial instruments to which the entity is exposed during the period and at the end of the reporting period, and how the entity manages those risks."(*ICAI - The Institute of Chartered Accountants of India*, n.d.)

Ind AS 107 impart special focus on the hedging activities of the entities and the disclosure requirements related to them. There has been a distinguished growth in the level of disclosure after the implementation of Ind AS. It has to be taken into account that the adoption of new company's act paved way for the disclosure requirements of financial instruments. As seen from table no 6.148 there has been a immense increase in the level of disclosure during the study period. It is also to be noted that the companies had started to disclose the hedging information after the implementation of new companies act in 2014. Overall, it shows an increase in the level of disclosure by 83%.

**Table No 6.149 Results of one-way ANOVA**

| Source of Variation | SS | Df | MS | F | P-value | F crit |
|---|---|---|---|---|---|---|
| **Between Groups** | 10917.67 | 3 | 3639.223 | 76.97804 | **1.04E-26** | 2.688691 |
| **Within Groups** | 5105.821 | 108 | 47.27612 | | | |
| **Total** | 16023.49 | 111 | | | | |

(Source: Calculated in excel from the figures derived from table no 6.148)

Table no 6.149 shows the results of one-way ANOVA calculated on the disclosure elements of Ind AS 107. One-way ANOVA is carried out to see whether the means of levels of disclosure of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = Mean of number of selected companies with disclosures as per Ind AS 107 in the year 2007

$\mu_2$ = Mean of number of selected companies with disclosures as per Ind AS 107 in the year 2012

$\mu_3$= Mean of number of selected companies with disclosures as per Ind AS 107 in the year 2014

$\mu_4$= Mean of number of selected companies with disclosures as per Ind AS 107 in the year 2017

The F value is greater than the F critical value and the P value is less than 0.05, indicating that the null hypothesis is rejected. This means that the means of selected years are significantly different, suggesting that the disclosure levels illustrated by the selected companies under the selected years are statistically different.

### 6.8.1.23 Disclosure Index of Selected Voluntary Disclosures

**Table No 6.150 Disclosure requirements as per voluntary disclosures**

| Voluntary Disclosures | 2007 | 2012 | 2014 | 2017 |
|---|---|---|---|---|
| Item 1 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Item 2 | 25 (83%) | 28 (93%) | 28 (93%) | 29 (97%) |
| Item 3 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Item 4 | 2 (7%) | 3 (10%) | 5 (17%) | 9 (30%) |
| Item 5 | 19 (63%) | 23 (77%) | 24 (80%) | 26 (87%) |
| Item 6 | 0 (0%) | 0 (0%) | 1 (3%) | 4 (13%) |
| Item 7 | 4 (13%) | 4 (13%) | 4 (13%) | 8 (27%) |
| Item 8 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Item 9 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Item 10 | 6 (20%) | 7 (23%) | 7 (23%) | 7 (23%) |
| Item 11 | 8 (27%) | 9 (30%) | 9 (30%) | 9 (30%) |
| Item 12 | 1 (3%) | 2 (7%) | 2 (7%) | 2 (7%) |
| Item 13 | 30 (100%) | 30 (100%) | 30 (100%) | 30 (100%) |
| Item 14 | 0 (0%) | 0 (0%) | 0 (0%) | 2 (7%) |
| Item 15 | 11 (37%) | 12 (40%) | 13 (43%) | 14 (47%) |
| Item 16 | 17 (57%) | 18 (60%) | 20 (67%) | 22 (73%) |
| Item 17 | 25 (83%) | 27 (90%) | 30 (100%) | 30 (100%) |
| Item 18 | 18 (60%) | 18 (60%) | 20 (67%) | 20 (67%) |
| Item 19 | 25 (83%) | 26 (87%) | 28 (93%) | 29 (97%) |
| Item 20 | 21 (70%) | 21 (70%) | 22 (73%) | 22 (73%) |
| Item 21 | 1 (3%) | 2 (7%) | 3 (10%) | 4 (13%) |
| Item 22 | 1(3%) | 2 (7%) | 6 (20%) | 8 (27%) |
| Item 23 | 2 (7%) | 3 (10%) | 6 (20%) | 9 (30%) |
| Item 24 | 0 (0%) | 0 (0%) | 1 (3%) | 2 (7%) |

| | | | | |
|---|---|---|---|---|
| Item 25 | 2 (7%) | 2 (7%) | 2 (7%) | 2 (7%) |
| Item 26 | 0 (0%) | 0 (0%) | 1 (3%) | 2 (7%) |
| Item 27 | 5 (17%) | 5 (17%) | 6 (20%) | 6 (20%) |
| Item 28 | 0 (0%) | 1 (3%) | 6 (20%) | 18 (60%) |
| Item 29 | 4 (13%) | 12 (40%) | 22 (73%) | 24 (80%) |
| Item 30 | 11 (37%) | 18 (60%) | 22 (73%) | 24 (80%) |
| **AVERAGE** | **8 (27%)** | **9 (30%)** | **11 (37%)** | **12 (40%)** |

(Source: Annual reports of selected companies for the year ending 2007,2012,2014, and 2017)

**Interpretation**

Table no 6.150 depicts the level of disclosure of voluntary disclosure items selected from the research paper (Saha & Kabra, 2022). These are items which are not mandated by any accounting standards or any other acts governing the companies. The above-mentioned items of disclosure are voluntary disclosed by the entity as part of improving the investor relations.

The level of disclosure prevailed at 27% during the year 2007. It increased to 30% after the revision of schedule VI of old companies act. After the adoption of new companies' act 2014, the disclosure increased to 37%. After the implementation of Ind AS, the disclosure level reached at 40%.

There is an overall increase in the disclosure level of voluntary items by 13%

**Table No 6.151 Results of one-way ANOVA**

| **Source of Variation** | **SS** | **Df** | **MS** | **F** | **P-value** | **F crit** |
|---|---|---|---|---|---|---|
| **Between Groups** | 290.69 | 3 | 96.89 | 0.90 | **0.441** | 2.68 |
| **Within Groups** | 12423.63 | 116 | 107.10 | | | |
| **Total** | 12714.33 | 119 | | | | |

Source: Calculated in excel from the figures derived from table no 6.150)

Table no 6.151 shows the results of one-way ANOVA calculated on the voluntary disclosure elements. One-way ANOVA is carried out to see whether the means of levels of disclosure of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = Mean of number of selected companies with disclosures as per voluntary disclosures in the year 2007

$\mu_2$ = Mean of number of selected companies with disclosures as per voluntary disclosures in the year 2012

$\mu_3$= Mean of number of selected companies with disclosures as per voluntary disclosures in the year 2014

$\mu_4$= Mean of number of selected companies with disclosures as per voluntary disclosures in the year 2017

The F value is less than the F critical value and the P value is greater than 0.05, indicating that the null hypothesis is accepted. This means that the means of selected years are not significantly different, suggesting that the disclosure levels illustrated by the selected companies under the selected years are not statistically different.

The 13% increase in level of disclosure from 2007 to 2017 as observed from table no 6.150 is valid but the statistical significance is not achieved as the result of testing. It can be concluded that the changes in the disclosure level of voluntary disclosures is valid but statistically insignificant.

### 6.8.1.24 Disclosure Index of Schedule III of Companies Act

**Table No 6.152 Disclosure requirements as per schedule III of companies act**

| Disclosure with respect to Schedule III of companies act | 2007 | 2012 | 2014 | 2017 |
|---|---|---|---|---|
| Item 1 | 22 (73%) | 26 (87%) | 29 (97%) | 30 (100%) |
| Item 2 | 21 (70%) | 24 (80%) | 28 (93%) | 29 (97%) |
| Item 3 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Item 4 | 26 (87%) | 26 (87%) | 26 (87%) | 26 (87%) |
| Item 5 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Item 6 | 4 (13%) | 5 (17%) | 5 (17%) | 6 (20%) |
| Item 7 | 13 (43%) | 16 (53%) | 18 (60%) | 19 (63%) |
| Item 8 | 0 (0%) | 3 (10%) | 7 (23%) | 10 (33%) |
| Item 9 | 10 (33%) | 13 (43%) | 15 (50%) | 16 (53%) |
| Item 10 | 4 (13%) | 5 (17%) | 8 (27%) | 8 (27%) |
| Item 11 | 4 (13%) | 4 (13%) | 7 (23%) | 8 (27%) |
| Item 12 | 4 (13%) | 4 (13%) | 7 (23%) | 8 (27%) |
| Item 13 | 6 (20%) | 7 (23%) | 13 (43%) | 15 (50%) |
| Item 14 | 13 (43%) | 15 (50%) | 18 (60%) | 19 (63%) |
| Item 15 | 11 (37%) | 14 (47%) | 16 (53%) | 18 (60%) |
| Item 16 | 10 (33%) | 10 (33%) | 13 (43%) | 16 (53%) |
| Item 17 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Item 18 | 0 (0%) | 1 (3%) | 1 (3%) | 1 (3%) |
| Item 19 | 0 (0%) | 2 (7%) | 4 (13%) | 4 (13%) |

| | | | | |
|---|---|---|---|---|
| Item 20 | 3 (10%) | 5 (17%) | 29 (97%) | 30 (100%) |
| Item 21 | 0 (0%) | 0 (0%) | 2 (7%) | 3 (10%) |
| Item 22 | 0 (0%) | 0 (0%) | 1 (3%) | 1 (3%) |
| Item 23 | 0 (0%) | 0 (0%) | 2 (7%) | 2 (7%) |
| Item 24 | 11 (37%) | 16 (53%) | 29 (97%) | 30 (100%) |
| Item 25 | 0 (0%) | 1 (3%) | 8 (27%) | 10 (33%) |
| Item 26 | 0 (0%) | 0 (0%) | 2 (7%) | 4 (13%) |
| Item 27 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Item 28 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Item 29 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Item 30 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Item 31 | 0 (0%) | 3 (10%) | 6 (20%) | 8 (27%) |
| Item 32 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Item 33 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Item 34 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Item 35 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| Item 36 | 0 (0%) | 0 (0%) | 0 (0%) | 0 (0%) |
| **AVERAGE** | **5 (17%)** | **6 (20%)** | **8 (27%)** | **10 (33%)** |

(Source: Annual reports of selected companies for the year ending 2007,2012,2014, and 2017)

**Interpretation**

Table no 6.152 depicts the level of disclosure of elements required by schedule III of companies act. These are items which are mandated by schedule III of the companies' act 2014. Companies' act 1956 also mandated certain disclosure requirements by the companies; however, those were minimal and less comprehensive. The list of disclosure requirements required by companies' act 2014 is common for financial companies and non-financial companies.

The level of disclosure prevailed at 17% during the year 2007. It increased to 20% after the revision of schedule VI of old companies act. After the adoption of new companies' act 2014, the disclosure increased to 27%. After the implementation of Ind AS, the disclosure level reached at 33%.

It is to be noted that even though the disclosure requirements are mandated by companies act, 2014, the compliance has increased after the implementation of Ind AS.

**Table No 6.153 Results of one-way ANOVA**

| Source of Variation | SS | Df | MS | F | P-value | F crit |
|---|---|---|---|---|---|---|
| **Between Groups** | 507.64 | 3 | 169.21 | 2.17 | **0.094** | 2.67 |
| **Within Groups** | 10907 | 140 | 77.91 | | | |
| **Total** | 11414.64 | 143 | | | | |

Source: Calculated in excel from the figures derived from table no 6.152)

Table no 6.153 shows the results of one-way ANOVA calculated on the disclosure elements required by the schedule III of companies' act 2014. One-way ANOVA is carried out to see whether the means of levels of disclosure of selected years under study differ on a statistical basis.

Hypothesis = $\mu_1 = \mu_2 = \mu_3 = \mu_4$

$\mu_1$ = Mean of number of selected companies with disclosures required by the schedule III of companies act 2014, in the year 2007

$\mu_2$ = Mean of number of selected companies with disclosures required by the schedule III of companies act 2014. in the year 2012

$\mu_3$= Mean of number of selected companies with disclosures required by the schedule III of companies act 2014. in the year 2014

$\mu_4$= Mean of number of selected companies with disclosures required by the schedule III of companies act 2014. in the year 2017

The F value is less than the F critical value and the P value is greater than 0.05, indicating that the null hypothesis is accepted. This means that the means of selected years are not significantly different, suggesting that the disclosure levels illustrated by the selected companies under the selected years are not statistically different.

The 16% increase in level of disclosure from 2007 to 2017 as observed from table no 6.152 is valid but the statistical significance is not achieved as the result of testing. It can be concluded that the changes in the disclosure required by the schedule III of companies' act 2014 is valid but statistically insignificant.

# Part III: Financial Analysis of the Period - Pre Ind-AS and Post Ind AS

Ind AS allows the adopting companies several mandatory and optional exemptions during the initial year of adoption. The initial exemptions allowed by Ind AS are believed to be levelled after the first year of adoption. That is why a pre and post study related to Ind AS is undertaken. It is assumed that in the following years of Ind AS implementation, the companies have adjusted themselves to the new standard, and hence, an accurate analysis can be ascertained during the following years regarding the impact of Ind AS on financial reporting.

India has converged its accounting standards with IFRS in 2016. This part of analysis enquires into the pre-Ind AS period and a post Ind AS period. Four years before and after adoption are considered for this purpose.

## 6.9 Ratio Analysis

Ratios for all the thirty sample companies from three industries are calculated. The average (mean) of each ratio of each year is taken as the yard stick and the tables along with their interpretations are given below.

### 6.9.1 Stability Ratios

In this section of analysis, the same set of ratios are calculated as in the previous section, however, here the researcher is analyzing the pre and post effects of adoption of Ind AS on various ratios.

| **Stability Ratios** | **Formula Used** |
|---|---|
| Debt Equity Ratio | Total Debt/Total Equity |
| Debt Ratio | Total Debt/Total Assets |
| Equity Ratio | Total Equity/Total Assets |
| Interest Coverage | EBIT/Interest Amount |
| Capitalisation ratio | Long Term Liabilities/Long Term Assets |

### 6.9.1.1 Debt Equity Ratio

**Table No 6.154 Debt Equity Ratio from 2013 to 2019**

| | Year | AUTO | PHARMA | IT | SAMPLE |
|---|---|---|---|---|---|
| Post-Ind AS | 2019 | 0.70 | 0.31 | 0.12 | 0.38 |
| | 2018 | 0.72 | 0.33 | 0.13 | 0.39 |
| | 2017 | 0.67 | 0.31 | 0.18 | 0.39 |
| | 2016 | 0.61 | 0.36 | 0.16 | 0.38 |
| Pre-Ind AS | 2016 | 0.61 | 0.36 | 0.15 | 0.37 |
| | 2015 | 0.81 | 0.37 | 0.16 | 0.45 |
| | 2014 | 0.85 | 0.52 | 0.17 | 0.52 |
| | 2013 | 1.03 | 0.56 | 0.26 | 0.62 |

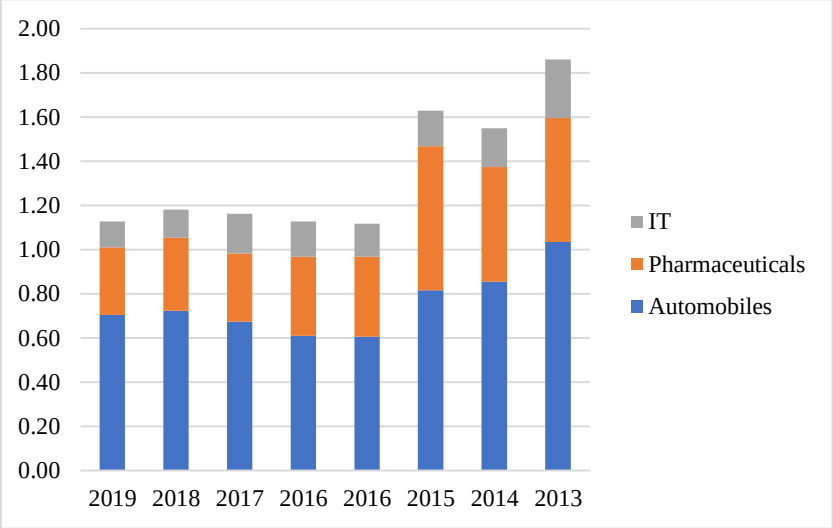
(Source: Computed from the annual reports of the selected sample companies from the year 2013 to 2019)

**Interpretation**

Table No 6.154 shows the debt equity ratio of selected companies during pre-Ind AS and post Ind AS period. The Debt Equity Ratio shows a gradual decrease with time. The sample shows an average of 0.62 in the year 2013 and it is declining from there and reaching an average of 0.38 in 2019. The transition year, however, shows a stable ratio except in IT sector.

The automobile sector prefers debt-based capital structure in contrary to the IT sector which uses minimal debt. Even before the implementation of Ind AS, the pharma and IT companies were reducing the level of debt from their capital structure. Introduction of Ind AS has further pushed the sample companies to use less level of debt in their capital structure.

**Figure 6.61 Debt -Equity Ratio of Selected Industries from 2013 to 2019**




(Source: Created from table no 6.154 using excel)

It is observed from the graph that even though the Auto sector is cutting down its debt, but it tries to use an optimal amount though out the data period.

There is a 33% decrease in the debt of Auto, while it is 43% and 54% in the case of Pharma and IT. Lower debt is a double-edged sword. On the one hand it is safe to assume that the company is debt free and independent of creditors and fluctuating interest rates while on the other hand it also creates higher risk for the shareholders. Debt in comparison to equity should go hand in hand at an optimal range.

### 6.9.1.2 Debt Ratio

**Table No 6.155 Debt Ratio from 2013 to 2019**

| | Year | AUTO | PHARMA | IT | SAMPLE |
|---|---|---|---|---|---|
| Post-Ind AS | 2019 | 0.33 | 0.21 | 0.09 | 0.21 |
| | 2018 | 0.34 | 0.19 | 0.10 | 0.21 |
| | 2017 | 0.33 | 0.17 | 0.18 | 0.23 |
| | 2016 | 0.30 | 0.19 | 0.16 | 0.22 |
| Pre-Ind AS | 2016 | 0.30 | 0.19 | 0.11 | 0.20 |
| | 2015 | 0.34 | 0.18 | 0.11 | 1.30 |
| | 2014 | 0.34 | 0.22 | 0.13 | 0.23 |
| | 2013 | 0.38 | 0.24 | 0.20 | 0.27 |

(Source: Computed from the annual reports of the selected sample companies from the year 2013 to 2019)

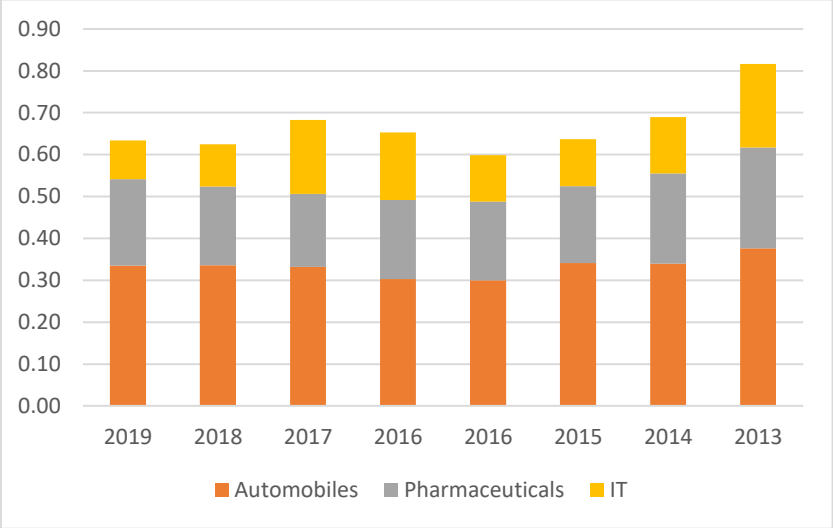
**Interpretation**

Debt ratio measures the proportion of total debts in the organization to the total resources of the organization. It checks the company's ability to pay off debts using all its resources. A lower ratio is better for the company indicating ample number of resources to pay off the debts in future.

As is observed from the table no 6.155 and from figure no 6.62, the ratio is slightly decreasing after the implementation of Ind AS. The IT sector has cut down its debt substantially while automobile and pharma show an increase in the debt component. The primary reason for the increase in debt is the reclassification of preference shares from equity to financial liabilities.

The debt ratio of the sample has decreased from 27% to 21%. IT sector has tailored its debt portion by 11% over the period from 2013 to 2019. There is a 3% change observed in the pharmaceutical sector while automobiles experience 6% decline.

**Figure 6.62 Debt ratio of Selected Industries from 2013 to 2019**




(Source: Created from table no 6.155 using excel)

This indicates that the adoption of Ind AS has primarily forced the IT sector to reduce its debt component as compared to the pharmaceutical sector and automobile sector. The automobile continues to employ the highest level of debt amongst the selected three industries.

### 6.9.1.3 Equity Ratio

**Table No 6.156 Equity Ratio from 2013 to 2019**

| | Year | AUTO | PHARMA | IT | SAMPLE |
|---|---|---|---|---|---|
| Post-Ind AS | 2019 | 0.59 | 0.73 | 0.83 | 0.72 |
| | 2018 | 0.58 | 0.72 | 0.82 | 0.71 |
| | 2017 | 0.58 | 0.70 | 1.09 | 0.79 |
| | 2016 | 0.57 | 0.68 | 1.00 | 0.75 |
| Pre-Ind AS | 2016 | 0.56 | 0.65 | 0.78 | 0.66 |
| | 2015 | 0.50 | 0.64 | 0.75 | 0.63 |
| | 2014 | 0.46 | 0.63 | 0.80 | 0.63 |
| | 2013 | 0.43 | 0.59 | 0.79 | 0.60 |

(Source: Computed from the annual reports of the selected sample companies from the year 2013 to 2019)

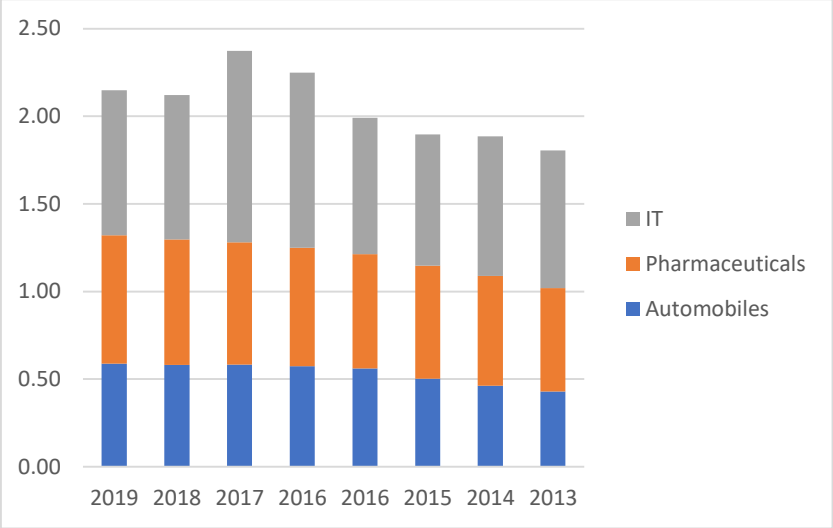
**Interpretation**

Table no 6.156 shows the equity ratio of selected companies for the pre-Ind AS period and post Ind AS period. Equity Ratio is a long-term solvency ratio which measures the proportion of equity finance in the assets of the company. The more the equity, the less risky it is for the shareholders. Although it suggests that the company is not making use of debt capital in maximizing the value of shareholder. As it is observed from the table, Automobile and Pharmaceutical companies are increasing their equity component in their capital structure.

The share of equity in automobile sector was 43% in 2013 and it increased to 59% by 2019. There has been an increase of 16%. In case of pharmaceutical sector, the equity component rose from 59% to 73% by 2019 witnessing a growth of 14%. IT sector had already a major share of equity also increased its share of equity by 4% and reached 83% of equity in its capital structure by 2019.

After 2016, it is evident that companies are choosing equity finance as it is more economical than debt. IT companies which primarily rely on equity finance have started reducing equity capital. The equity component in IT was 100% in 2016. It gradually reduced to 83% by 2019. This is a positive change because the debt-ridden companies are shifting towards equity and debt-free companies have started using debt to improve its shareholder’s wealth.

**Figure 6.63 Equity Ratio of Selected Industries from 2013 to 2019**




(Source: Created from table no 6.156 using excel)

### 6.9.1.4 Interest Coverage Ratio

**Table No 6.157 Interest coverage ratio from 2013 to 2019**

| | Year | AUTO | PHARMA | IT | SAMPLE |
|---|---|---|---|---|---|
| Post-Ind AS | 2019 | 232.90 | 101.14 | 1450.08 | 594.71 |
| | 2018 | 546.83 | 158.00 | 1213.39 | 639.41 |
| | 2017 | 489.33 | 107.66 | 772.44 | 456.48 |
| | 2016 | 641.12 | 93.48 | 664.44 | 466.35 |
| Pre-Ind AS | 2016 | 1486.08 | 150.88 | 980.28 | 872.41 |
| | 2015 | 357.30 | 192.09 | 1079.64 | 543.01 |
| | 2014 | 1051.78 | 134.58 | 903.20 | 696.52 |
| | 2013 | 973.08 | 91.08 | 775.87 | 613.34 |

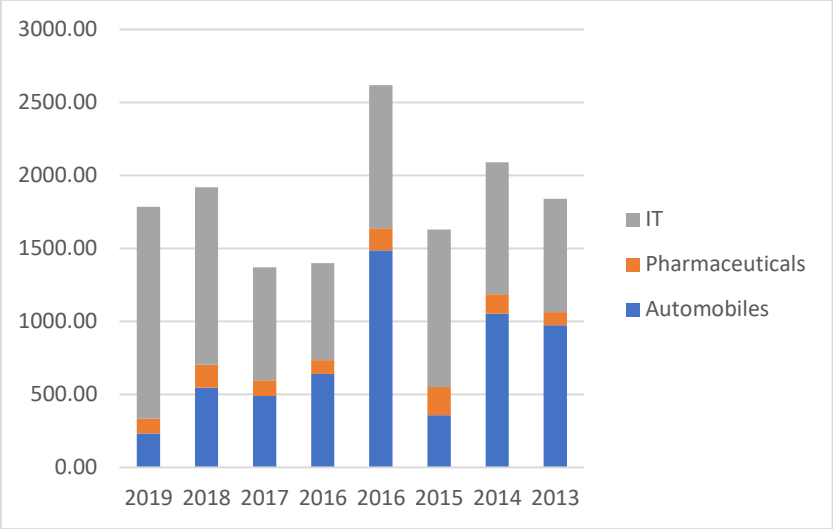
(Source: Computed from the annual reports of the selected sample companies from the year 2013 to 2019)

**Interpretation**

Interest coverage ratio determines the ability of the company to pay the interest due on time. A higher ratio suggests that the company can pay the interest without any defaults and a lower ratio indicates vice versa. Table No 6.157 illustrates the level of interest coverage ratio from 2013 to 2019 for the selected industries of automobile, pharmaceutical and IT.

The automobile sector has an increasing ratio during the pre Ind AS period while after 2016, the ratio has declined remarkably. In the pharmaceutical sector it can be observed that the ratio was increasing during the pre Ind AS period and after Ind AS also it keeps increasing. The adoption of Ind AS has reduced the ratio only for the year 2016. The same trend is seen in the IT sector as well. The ratio increases in the pre Ind AS period and during the transition year, the ratio drops dramatically and the continues to rise after the adoption.

**Figure 6.64 Interest Coverage Ratio of Selected Industries from 2013 to 2019**




(Source: Created from table no 6.157 using excel)

In general, the sample displays a diminishing tendency in the ratio during the study period from 2013 to 2019. The fair valuation of financial liabilities along with the discounting of provisions has brought down the volume of finance costs in the companies. Figure no 6.64 displays the changes effectively.

### 6.9.1.5 Capitalization Ratio

**Table No 6.158 Capitalization Ratio from 2013 to 2019**

| | Year | AUTO | PHARMA | IT | SAMPLE |
|---|---|---|---|---|---|
| Post-Ind AS | 2019 | 0.10 | 0.05 | 0.00 | 0.05 |
| | 2018 | 0.09 | 0.05 | 0.01 | 0.05 |
| | 2017 | 0.09 | 0.06 | 0.01 | 0.05 |
| | 2016 | 0.09 | 0.07 | 0.02 | 0.06 |

| | | | | | |
|---|---|---|---|---|---|
| **Pre-Ind AS** | 2019 | 0.08 | 0.07 | 0.01 | 0.05 |
| | 2018 | 0.10 | 0.07 | 0.01 | 0.06 |
| | 2017 | 0.12 | 0.06 | 0.01 | 0.06 |
| | 2016 | 0.14 | 0.09 | 0.07 | 0.10 |

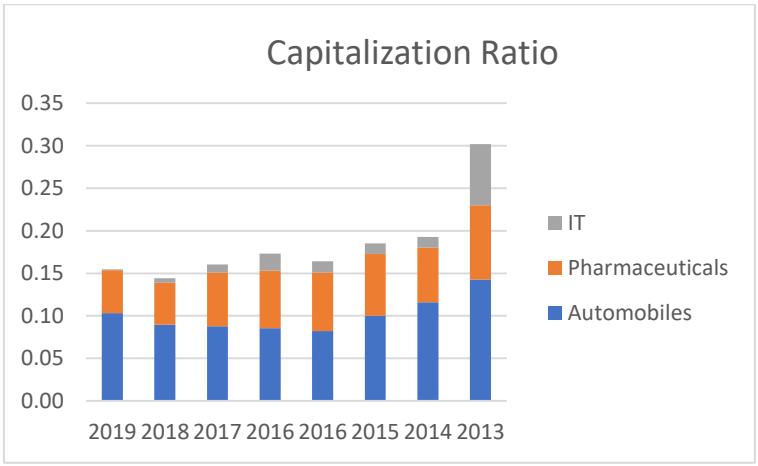
(Source: Computed from the annual reports of the selected sample companies from the year 2013 to 2019)

**Interpretation**

Capitalization ratio measures how much debt is utilized to finance the assets of the company. A higher ratio means that the company is using too much debt fund, and a lower ratio suggests vice versa. Table no 6.158 describes the level of capitalization ratio in the selected industries during AS and Ind AS.

The automobile sector has a higher ratio during pre Ind AS period. In 2013, 14% of assets were financed by debt fund. The ratio is showing a declining trend with time. By 2016, it has reached 8%. After transition to Ind AS the ratio is maintained at 9% for three consecutive years by 2019, it shows a minor increase and reaches 10%.

**Figure 6.65 Capitalization Ratio of Selected Industries from 2013 to 2019**




(Source: Created from table no 6.158 using excel)

The pharmaceutical sector depicts a declining trend during both the pre and post Ind AS period. The IT sector has had a remarkable decline in the ratio Post Ind AS implementation, by the year of 2019, the IT sector has removed all the debt fund from the assets, and it went completely debt free.

In general, the sample shows a declining trend during Pre Ind AS period. During the Post Ind AS period, the decreasing trend seems to be stabilized and

companies have started to keep a fixed level of debt. It is identified that after Ind AS, companies have been showing less fluctuation in the level of capitalization ratio.

**6.9.1.6 Consolidation of Stability Ratios**

**Table No 6.159 Consolidated Stability Ratios of the Sample**

| | Year | Debt - Equity Ratio | Debt Ratio | Equity Ratio | Interest Coverage Ratio | Capitalization Ratio |
|---|---|---|---|---|---|---|
| Post-Ind AS | 2019 | 0.38 | 0.21 | 0.72 | 594.71 | 0.05 |
| | 2018 | 0.39 | 0.21 | 0.71 | 639.41 | 0.05 |
| | 2017 | 0.39 | 0.23 | 0.79 | 456.48 | 0.05 |
| | 2016 | 0.38 | 0.22 | 0.75 | 466.35 | 0.06 |
| Pre-Ind AS | 2016 | 0.37 | 0.20 | 0.66 | 872.41 | 0.05 |
| | 2015 | 2.51 | 1.30 | 0.63 | 543.01 | 0.06 |
| | 2014 | 0.52 | 0.23 | 0.63 | 696.52 | 0.06 |
| | 2013 | 0.62 | 0.27 | 0.60 | 613.34 | 0.10 |

(Source: Computed from the table no 6.154 to table no 6.158 using excel)

**Interpretation**

Table no 6.159 depicts the stability ratios of the selected sample. It is evident that apart from the equity ratio all the stability ratios show a decreasing trend during the post Ind AS period. This is because the companies have been indulging more equity fund in their capital structure and gradually decreasing the debt fund. The companies during the post Ind AS period have become risk averse. IT companies have become near debt free. While a lower debt structure reduces the risk of the equity shareholder, it lowers the rate of return of the equity shareholders as the dividend burden of the company has increased.

**6.9.2 Liquidity Ratios**

| Liquidity Ratios | Formula Used |
|---|---|
| Current Ratio | Current Assets /Current Liabilities |
| Quick Ratio | Quick Assets / Current Liabilities |
| Cash Returns to Net Assets Ratio | Cash Returns/Net Assets |
| Cash Returns to current Liabilities Ratio | Cash Returns/Current Liabilities |
| Cash Returns to Total Liabilities Ratio | Cash Returns/Total Liabilities |

### 6.9.2.1 Current Ratio

**Table No 6.160 Current Ratio of Selected Industries from 2013 to 2019**

| | Year | AUTO | PHARMA | IT | SAMPLE |
|---|---|---|---|---|---|
| Post-Ind AS | 2019 | 1.42 | 2.91 | 4.27 | 2.87 |
| | 2018 | 1.47 | 5.34 | 4.07 | 3.63 |
| | 2017 | 1.47 | 2.59 | 3.92 | 2.66 |
| | 2016 | 1.29 | 2.53 | 3.78 | 2.53 |
| Pre-Ind AS | 2016 | 1.21 | 3.40 | 3.45 | 2.66 |
| | 2015 | 1.29 | 3.85 | 3.17 | 2.74 |
| | 2014 | 1.06 | 1.96 | 3.62 | 2.22 |
| | 2013 | 1.17 | 1.77 | 3.43 | 2.12 |

(Source: Computed from the annual reports of the selected sample companies from the year 2013 to 2019)

**Interpretation**

The current ratio measures the short-term liquidity of the companies. Table No 6.160 shows the level of current ratio during the pre Ind AS period and post Ind AS period. It is observed that there is an increase in the short-term liquidity of the companies during both the pre Ind AS and post Ind AS period.

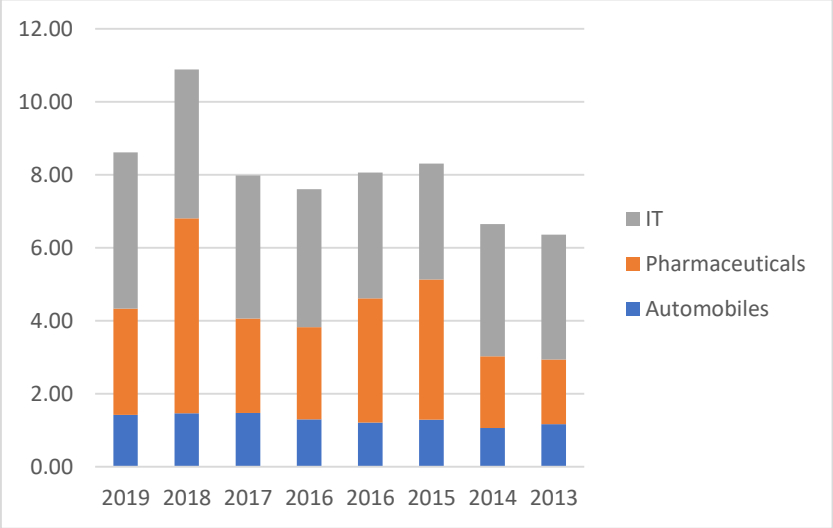
The automobile sector reported 1.17 in 2013 and it fluctuated during pre Ind AS period. After the implementation of Ind AS in 2016, the ratio has improved significantly. From 1.29 in 2016, it reached 1.42 by 2019. Post Ind AS the ratio implies a healthy current ratio suggesting that the companies have enough current assets to meet the short-term liquidity.

The pharmaceutical sector shows a remarkable increase in the ratio post Ind AS. Even though during transition, the ratio declined 3.40 to 2.53 it gradually improved by 2018 and attained 5.34. Such an immensely high ratio suggests the finance being trapped in working capital and current assets rather than being used in the creation of revenue. In 2019, the pharma sector reduced such blocked capital and brought down the ratio 2.91.

The IT sector had a healthy ratio during the pre Ind AS period. During the post Ind AS period, it seems to be increasing. The ratio was 3.43 in 2013 is 4.27 in 2019. Such unusually high ratio is an indication that the companies are hoarding the finance

in current assets instead of using them as investments for the future. When working capital increases beyond a limit, it begins to affect the profitability of the entity. If the IT companies continue to use more current assets, they will soon be facing issues in profitability.

**Figure 6.66 Current Ratio of Selected Industries from 2013 to 2019**




(Source: Created from table no 6.160 using excel)

### 6.9.2.2 Quick Ratio

**Table No 6.161 Quick Ratio of Selected Industries from 2013 to 2019**

| | Year | AUTO | PHARMA | IT | SAMPLE |
|---|---|---|---|---|---|
| Post-Ind AS | 2019 | 0.62 | 1.16 | 2.52 | 1.43 |
| | 2018 | 0.62 | 3.60 | 2.28 | 2.17 |
| | 2017 | 0.44 | 0.87 | 2.03 | 1.12 |
| | 2016 | 0.49 | 1.27 | 2.25 | 1.34 |
| Pre-Ind AS | 2016 | 0.54 | 1.29 | 2.38 | 1.40 |
| | 2015 | 0.63 | 1.24 | 1.79 | 1.21 |
| | 2014 | 0.39 | 0.98 | 2.39 | 1.25 |
| | 2013 | 0.46 | 0.72 | 2.39 | 1.19 |

(Source: Computed from the annual reports of the selected sample companies from the year 2013 to 2019)

**Interpretation**

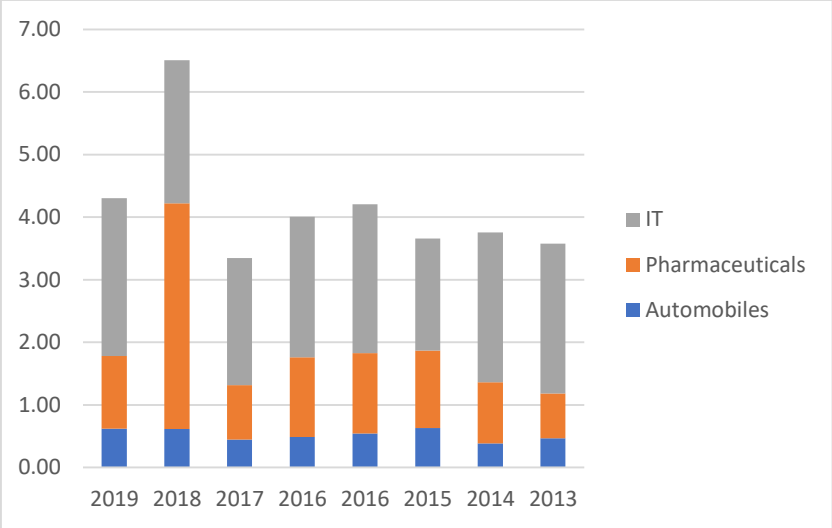
The quick ratio is like current ratio, but it measures the short- term liquidity in a more conservative manner. Inventories are not considered a part of current assets in the calculation of this ratio. Table no 6.161 describes the level of quick ratio in the selected industries during the pre Ind AS period and post Ind AS period.

The automobile sector shows a volatile quick ratio during the pre Ind AS period. During the transition the industry experienced a decline in the ratio from 0.54 to 0.49. However, the sector has managed to improve its short-term liquidity during the post Ind AS period. The ratio stabilized after 2017.

The pharmaceutical sector displays a gradual increase in the ratio during the pre Ind AS. During the post Ind AS period, the sector shows an erratic trend. The quick ratio decreases in 2017 and the display a remarkable increase in 2018 followed by a decline in 2019.

The IT sector shows a volatile trend in the quick ratio during the post Ind AS period. During the pre Ind AS period, the ratio was stable during 2013 and 2014. Then it declined in 2015 before increasing in 2016. During the transition in 2016, the ratio decreased and then the same trend followed in 2017. In 2018, the ratio started improving and by 2019, the ratio reached 2.52.

**Figure 6.67 Quick Ratio of Selected Industries from 2013 to 2019**




(Source: Created from table no 6.161 using excel)

The companies across industries seem to keep huge levels of current assets in the post Ind AS period. This is healthy for meeting the short-term liquidity needs of the entity, however, may cost the companies their profitability in the long run.

### 6.9.2.3 Cash Returns to Net Assets Ratio

**Table No 6.162 Cash Returns to Net Assets Ratio of Selected Industries from 2013 to 2019**

| | Year | AUTO | PHARMA | IT | SAMPLE |
|---|---|---|---|---|---|
| Post-Ind AS | 2019 | 0.01 | -0.01 | 0.03 | 0.01 |
| | 2018 | -0.01 | 0.00 | -0.05 | -0.02 |
| | 2017 | -0.01 | -0.02 | 0.04 | 0.00 |
| | 2016 | 0.00 | -0.02 | -0.01 | -0.01 |
| Pre-Ind AS | 2016 | 0.00 | -0.02 | -0.01 | -0.01 |
| | 2015 | 0.03 | 0.05 | 0.02 | 0.03 |
| | 2014 | 0.01 | 0.01 | 0.02 | 0.01 |
| | 2013 | 0.00 | 0.02 | 0.01 | 0.01 |

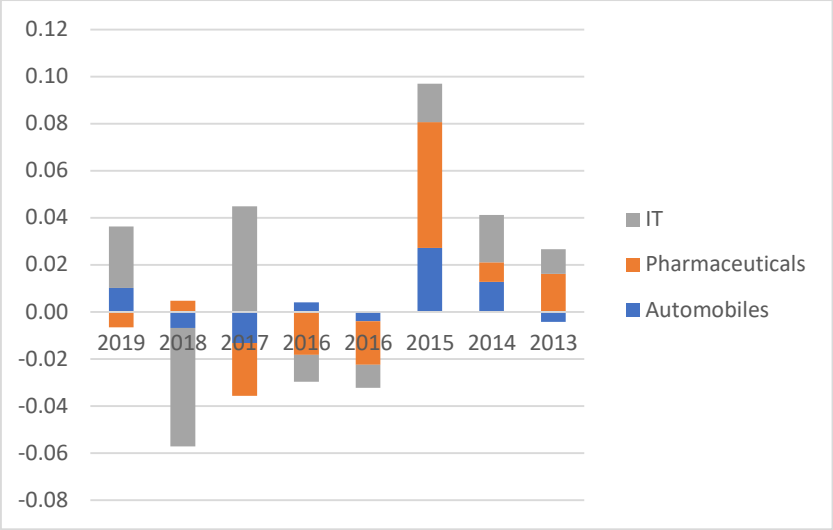
(Source: Computed from the annual reports of the selected sample companies from the year 2013 to 2019)

**Interpretation**

Table No 6.162 depicts the cash returns to net assets ratio of selected companies during the pre Ind AS and post Ind AS period. The conservative liquidity ratios measure the relationship between current assets and liabilities. On numerous occasions, the companies who display a healthy current ratio and quick ratio might not have enough cash flows. Cash flows determine the liquidity position of the company in a fair sense. Cash returns to net assets ratio analyses the relationship between net cash flows and net assets in a company. Table No 6.162 displays the cash returns to net assets ratio during Pre-Ind AS and Post-Ind AS period.

The cash returns to net assets ratio discloses a volatile nature of cash flows among the selected sample companies. In 2015, there is an unusual rise in the ratio in pharmaceutical sector which resulted in the subsequent hike in the average of the sample. This is because of the issue of equity shares at premium by SUVEN. Apart from this the ratio under the Pre- Ind AS period is stable.

**Figure 6.68 Cash Returns to Net Assets Ratio of Selected Industries from 2013 to 2019**




(Source: Created from table no 6.162 using excel)

During the post Ind AS period, a sudden decline in the ratio is observed in the IT sector during the year 2018. The reason behind this is the increase in the current liability of Oracle regarding interim equity dividend payable.

There is a general rise in the ratio during 2015 of the Pre- Ind AS period. However, all the selected industries have reported the same ratio during the year of transition. During the Post-Ind AS period, the automobile and pharmaceutical sectors display signs of recovery.

The pharmaceutical sector reports a negative ratio by the end of 2019 indicating a potential liquidity crisis. The remaining sectors report a positive ratio suggesting that they have successfully adopted the Ind AS and are not experiencing any short-term liquidity issues.

In general, the companies across industries required more than one year to adjust with the new accounting standards and seem to have adapted themselves by 2019.

### 6.9.2.4 Cash Returns to Current Liabilities Ratio

**Table No 6.163 Cash Returns to Current Liabilities Ratio of Selected Industries from 2013 to 2019**

| | Year | AUTO | PHARMA | IT | SAMPLE |
|---|---|---|---|---|---|
| Post-Ind AS | 2019 | 0.02 | 0.00 | 0.12 | 0.05 |
| | 2018 | 0.00 | 0.00 | -0.26 | -0.09 |
| | 2017 | -0.03 | -0.12 | -0.06 | -0.07 |
| | 2016 | 0.00 | -0.13 | 0.00 | -0.04 |
| Pre-Ind AS | 2016 | -0.02 | -0.12 | -0.01 | -0.05 |
| | 2015 | 0.06 | 0.27 | 0.04 | 0.12 |
| | 2014 | 0.00 | 0.01 | 0.07 | 0.03 |
| | 2013 | 0.00 | 0.04 | 0.03 | 0.03 |

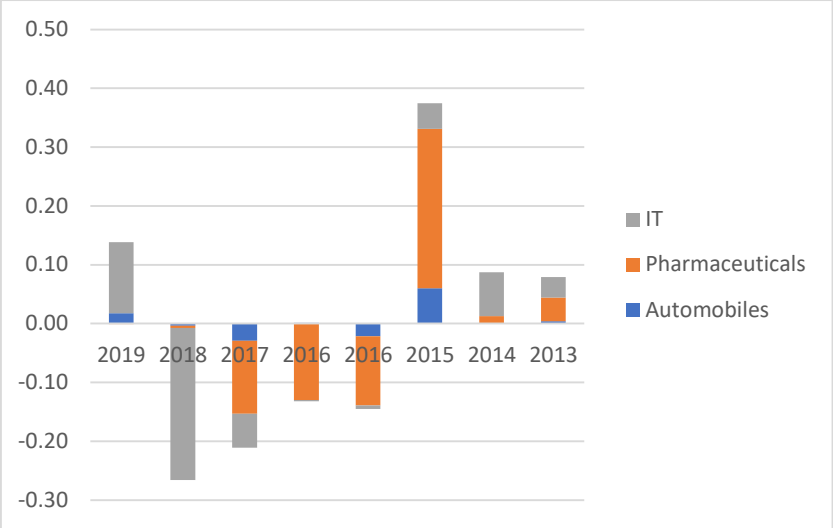
(Source: Computed from the annual reports of the selected sample companies from the year 2013 to 2019)

**Interpretation**

Table No 6.163 shows the cash returns to current liability ratio of selected companies during the pre Ind AS and post Ind AS period. The cash returns to current liability ratio measures the relationship between the cash flows and current liability. It is a more stringent measure of short-term liquidity. Table No 6.163 displays the cash returns to current liability ratio during Pre-Ind AS and Post-Ind AS period. Most of the industries show a healthy ratio during the Pre-Ind AS period. The issue of capital with premium by SUVEN is the reason for an exorbitant ratio in the pharmaceutical industry in the year 2005.

During the transition year, in contrast to the pharmaceutical sector, the automobiles and IT sectors have better ratios under Ind AS. During the Post-Ind AS period, the automobile and pharmaceutical sectors display revival and non- negative ratios. However, in the IT sector, because of the unpaid interim equity dividend in Oracle has increased the current liabilities unreasonably high. This is paid off in the subsequent year and the same effect can be observed in the ratio of the year 2019.

**Figure 6.69 Cash Returns to Current Liabilities Ratio of Selected Industries from 2013 to 2019**




(Source: Created from table no 6.163 using excel)

The automobile sector seems to have adapted itself to the changes brought in by the Ind AS. The pharmaceutical sector also shows signs of stability during the Post-Ind AS period. The IT sector shows a level of volatility after transition into Ind AS, however, it also seems to be stabilized by the year 2019.

### 6.9.2.5 Cash Returns to Total Liabilities Ratio

**Table No 6.164 Cash Returns to Total Liabilities Ratio of Selected Industries from 2013 to 2019**

| | Year | AUTO | PHARMA | IT | SAMPLE |
|---|---|---|---|---|---|
| Post-Ind AS | 2019 | 0.01 | 0.02 | 0.28 | 0.11 |
| | 2018 | 0.11 | -0.16 | -0.25 | -0.10 |
| | 2017 | -0.04 | -0.11 | -0.17 | -0.02 |
| | 2016 | -0.01 | -0.16 | 0.06 | -0.15 |
| Pre-Ind AS | 2016 | -0.02 | -0.15 | 0.04 | -0.16 |
| | 2015 | 0.07 | 0.55 | 0.15 | 0.26 |
| | 2014 | -0.04 | -0.19 | 0.21 | 0.04 |
| | 2013 | 0.04 | 0.18 | 0.12 | 0.11 |

(Source: Computed from the annual reports of the selected sample companies from the year 2013 to 2019)

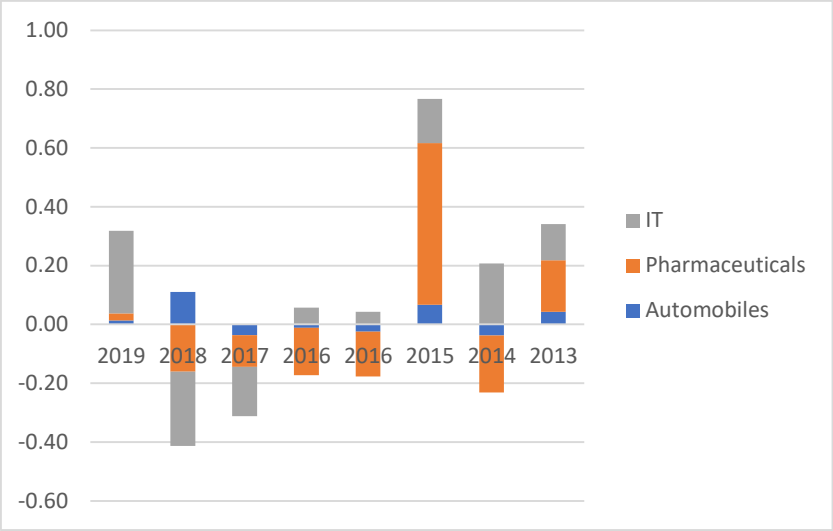
**Interpretation**

The cash returns to total liabilities analyses the capacity of the company to pay off all the liability using the cash inflows. This ratio considers both short-term and long-term liability. Table No 6.164 displays the cash returns to total liabilities ratio during Pre-Ind AS and Post-Ind AS period.

In the automobile sector, there are a lot of ups and downs observed during the Pre-Ind AS period as well as Post-Ind AS period. The ratio increases in one year and goes down in the next year. There is an unprecedented level of uncertainty visible here.

In the pharmaceutical sector, the ratio shows a volatile trend during the Pre-Ind AS and Post-Ind AS period. As a result of the issue of capital with premium in SUVEN in the year 2015, there is a rise in the ratio. The unreasonable hike is reversed in the following year. After the transition to Ind AS, the industry shows a declining trend in the ratio till 2019, when the company is slowly recovering.

**Figure 6.70 Cash Returns to Total Liabilities Ratio of Selected Industries from 2013 to 2019**




(Source: Created from table no 6.164 using excel)

In the IT industry, there is a decreasing trend during the Pre- Ind AS period from 2014. During transition, the ratio is better under Ind AS. But in the subsequent years, the ratio continued to decrease which is mainly due to the unpaid interim equity dividend in Oracle. By 2019, the ratio is displaying a positive figure and indicates a healthy ratio.

### 6.9.2.6 Consolidation of Liquidity Ratios

**Table No 6.165 Consolidated Liquidity Ratios of the Sample**

| | Year | Current Ratio | Quick Ratio | Cash Returns to Net Assets Ratio | Cash Returns to Current Liabilities Ratio | Cash Returns to Total Liabilities Ratio |
|---|---|---|---|---|---|---|
| Post-Ind AS | **2019** | 2.87 | 1.43 | 0.01 | 0.05 | 0.11 |
| | **2018** | 3.63 | 2.17 | -0.02 | -0.09 | -0.10 |
| | **2017** | 2.66 | 1.12 | 0.00 | -0.07 | -0.02 |
| | **2016** | 2.53 | 1.34 | -0.01 | -0.04 | -0.15 |
| Pre- Ind AS | **2016** | 2.66 | 1.40 | -0.01 | -0.05 | -0.16 |
| | **2015** | 2.74 | 1.21 | 0.03 | 0.12 | 1.43 |
| | **2014** | 2.22 | 1.25 | 0.01 | 0.03 | 0.04 |
| | **2013** | 2.12 | 1.19 | 0.01 | 0.03 | 0.11 |

(Source: Computed in Excel from tables 6.160 to 6.164)

**Interpretation**

Table no 6.165 describes the consolidated liquidity ratios of all the selected companies under the study together. The current ratio and quick ratio show an increasing trend across industries during the Post- Ind AS period. The cash returns ratio displays an uneven trend during both the Pre-Ind AS period and Post-Ind AS period. The volatility seems to be decreased by the year 2019. All the liquidity ratios including cash returns ratios report a healthy ratio in 2019.

### 6.9.3 Profitability Ratios

| Profitability Ratios | Formula Used |
|---|---|
| Gross Profit Ratio | Gross Profit/ Net Sales |
| Operating Profit Ratio | EBIT/Net Sales |
| Net Profit Ratio | PAT/ Net Sales |
| ROA | Average total assets/ Net Sales |
| ROE | Average Equity/ Net Sales |
| ROCE | EBIT/ Capital Employed |

### 6.9.3.1 Gross Profit Ratio

**Table No 6.166 Gross Profit Ratio of Selected Industries from 2013 to 2019**

| | Year | AUTO | PHARMA | IT | SAMPLE |
|---|---|---|---|---|---|
| Post-Ind AS | 2019 | 0.25 | 0.52 | 0.99 | 0.59 |
| | 2018 | 0.27 | 0.53 | 0.99 | 0.60 |
| | 2017 | 0.32 | 0.54 | 0.99 | 0.62 |
| | 2016 | 0.33 | 0.53 | 0.98 | 0.62 |
| Pre-Ind AS | 2016 | 0.33 | 0.44 | 0.98 | 0.38 |
| | 2015 | 0.29 | 0.51 | 0.98 | 0.59 |
| | 2014 | 0.30 | 0.53 | 0.98 | 0.60 |
| | 2013 | 0.28 | 0.49 | 0.98 | 0.58 |

(Source: Computed from the annual reports of the selected sample companies from the year 2013 to 2019)

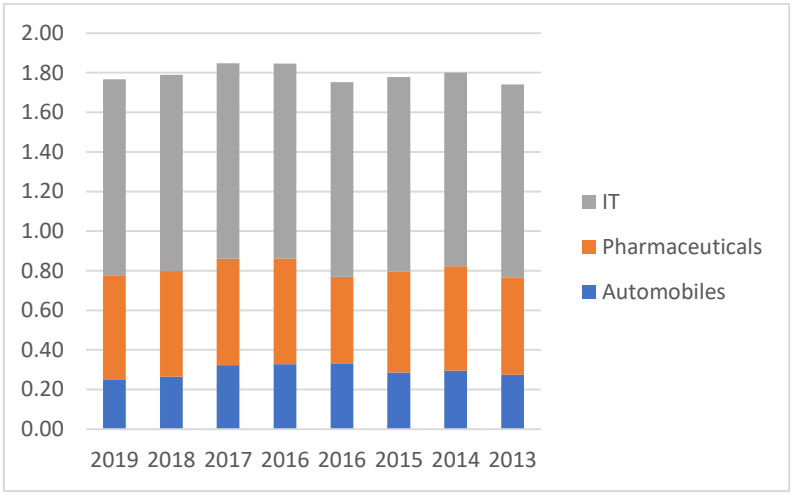
**Interpretation**

Gross profit ratio measures the relationship between sales and gross profit of the company. Gross profit is the result before charging operating expenses and incomes. Table no 6.166 describes the gross profit ratio of the selected industries during pre Ind AS and post Ind AS.

The automobile sector shows an inconsistent trend during the pre Ind AS period. The GP ratio was 28% in 2013 and increased to 30% in 2014. But in 2015, it decreased again to 29% and during transition to Ind AS, the ratio was same under both the standards. After the implementation of Ind AS, GP ratio is consistently showing a diminishing nature. 33% in 2016 has been reduced to 25% in 2019.

The pharmaceutical sector shows a volatile GP ratio during the Ind AS period. The post Ind AS GP ratio displays a declining trend. It is important to note that at the time of transition, the pharma industry, reported 53% under Ind AS while compared to 44% under AS. it is also observed that in the post Ind AS period, the industry has maintained the GP ratio above 50% in all the years under Ind AS.

**Figure 6.71 Gross Profit Ratio of Selected Industries from 2013 to 2019**




(Source: Created from table no 6.166 using excel)

The IT sector does not have cost of goods sold as they don't indulge in services instead of manufacturing. Among the selected companies few of them are involved in production. The remaining companies completely rely on the providing services.

In general, the whole sample portrays volatility in the pre Ind AS period and during the post Ind AS period, it shows a stabilized ratio in a decreasing trend.

### 6.9.3.2 Net Profit Ratio

**Table No 6.167 Net Profit Ratio of Selected Industries from 2013 to 2019**

| | Year | AUTO | PHARMA | IT | SAMPLE |
|---|---|---|---|---|---|
| Post-Ind AS | 2019 | 0.08 | 0.11 | 0.21 | 0.19 |
| | 2018 | 0.08 | 0.16 | 0.20 | 0.18 |
| | 2017 | 0.10 | 0.19 | 0.20 | 0.16 |
| | 2016 | 0.11 | 0.26 | 0.18 | 0.18 |
| Pre-Ind AS | 2016 | 0.11 | 0.25 | 0.19 | 0.18 |
| | 2015 | 0.07 | 0.19 | 0.21 | 0.16 |
| | 2014 | 0.09 | 0.16 | 0.21 | 0.15 |
| | 2013 | 0.07 | 0.11 | 0.19 | 0.13 |

(Source: Computed from the annual reports of the selected sample companies from the year 2013 to 2019)

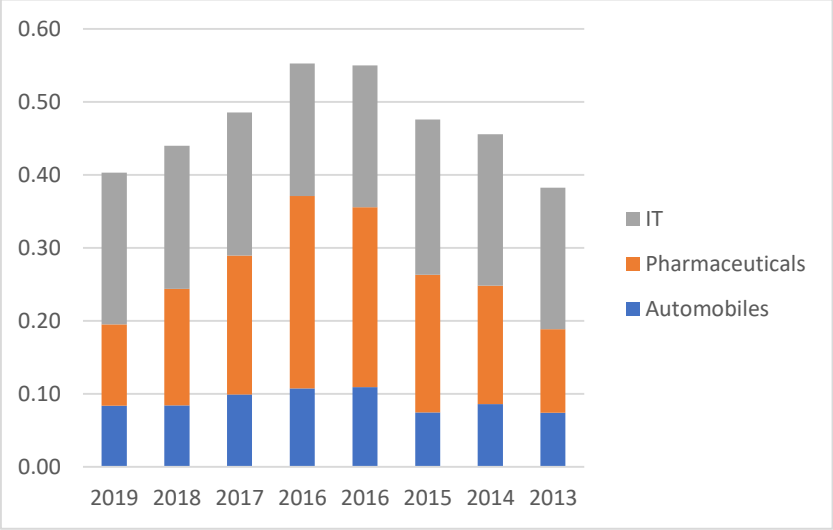
**Interpretation**

Table No 6.167 shows the net profit ratio of selected companies during the pre Ind AS and post Ind AS period. Net profit ratio is the relationship between net sales and profit after tax (PAT). Profit after tax has been changed under Ind AS due to so many reasons like the reversal of proposed dividend, introduction of discounting in provisions and decommission liability. This has had a huge impact on the PAT of companies across the manufacturing sector. In the service industry the changes brought in by Ind AS seem to have a positive impact on the net profit ratio.

The automobile sector shows an increasing trend during the pre Ind AS period and during the transition towards Ind AS, the industry maintained the ratio at 11% and after the implementation, the ratio began to deteriorate. Similar trends can be observed in the pharmaceutical sector also. The ratio was 11% in 2013 and gained 14% during the next four years to reach 25% in 2016. However, after the implementation of Ind AS, it fell consistently and shrunk to 11% in 2019.

The IT industry shows considerable growth during the post Ind AS period unlike the manufacturing sector. During the transition year, the ratio dropped one point, but it elevated in the following years.

**Figure 6.72 Net Profit Ratio of Selected Industries from 2013 to 2019**




(Source: Created from table no 6.167 using excel)

The overall sample has shown remarkable growth in the pre Ind AS era and began to gradually decline after the implementation of Ind AS. The automobile sector

remains more stable during the period from 2013 to 2019. The pharma sector and IT sector have shown more fluctuations during the same period.

### 6.9.3.3 Operating Profit Ratio

**Table No 6.168 Operating Profit Ratio of Selected Industries from 2013 to 2019**

| | Year | AUTO | PHARMA | IT | SAMPLE |
|---|---|---|---|---|---|
| Post-Ind AS | 2019 | 0.19 | 0.19 | 0.46 | 0.28 |
| | 2018 | 0.19 | 0.14 | 0.43 | 0.25 |
| | 2017 | 0.22 | 0.16 | 0.23 | 0.20 |
| | 2016 | 0.29 | 0.24 | 0.23 | 0.25 |
| Pre-Ind AS | 2016 | 0.31 | 0.14 | 0.25 | 0.23 |
| | 2015 | 0.26 | 0.20 | 0.27 | 0.25 |
| | 2014 | 0.28 | 0.28 | 0.26 | 0.27 |
| | 2013 | 0.26 | 0.19 | 0.27 | 0.24 |

(Source: Computed from the annual reports of the selected sample companies from the year 2013 to 2019)

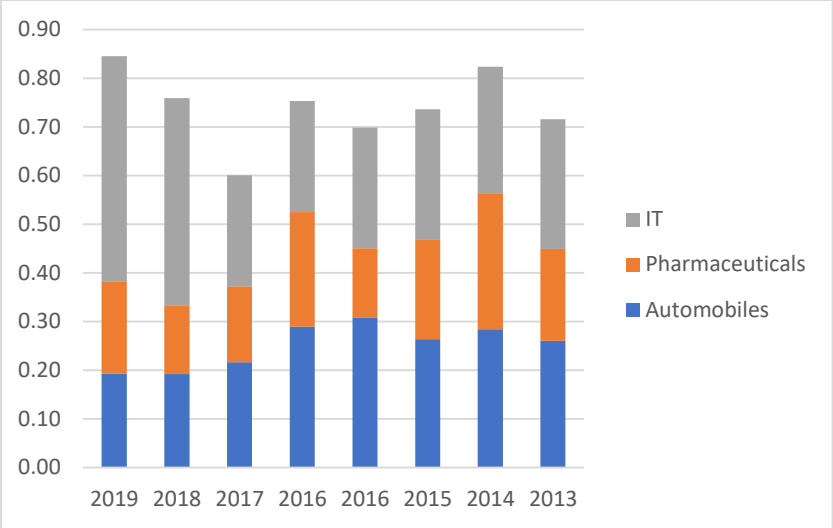
**Interpretation**

Operating profit ratio measures the relationship between net sales and the operating profit. Operating profit is the profit before charging the non-operating income and expenses. It does not include extraordinary items or exceptional items. Table no 6.168 describes the operating profit ratio of the selected industries during the pre Ind AS and post Ind AS period.

The automobile sector was growing during the pre Ind AS period and started diminishing after the implementation of Ind AS. Operating profit was the highest during the transition year at 31%. With time it dropped to 19% in the year 2019.

The pharmaceutical sector displays a mixed trend during both the pre Ind AS and post Ind AS periods. The ratio hiked in the year 2014 and gradually came down in the following years nearing the transition year. During the transition the ratio under Ind AS increased significantly. But in the following years the operating profit ratio plummeted to 14% in 2018. In 2019, it has improved slightly.

**Figure 6.73 Operating Profit Ratio of Selected Industries from 2013 to 2019**




(Source: Created from table no 6.168 using excel)

The IT sector showed an erratic trend during the pre Ind AS period have improved significantly during the post Ind AS period. In 2016, the ratio of IT industry declined by 2% and gradually increased to 46% in the year 2019.

In general, the operating profit ratio displays ups and downs during the whole period under study. After the initial adjustment, the ratio seems to be growing under the Ind AS period.

### 6.9.3.4 Return on Assets (ROA)

**Table No 6.169 ROA of Selected Industries from 2013 to 2019**

| | Year | AUTO | PHARMA | IT | SAMPLE |
|---|---|---|---|---|---|
| Post-Ind AS | 2019 | 0.11 | 0.09 | 0.32 | 0.17 |
| | 2018 | 0.11 | 0.08 | 0.27 | 0.15 |
| | 2017 | 0.14 | 0.10 | 0.19 | 0.14 |
| | 2016 | 0.17 | 0.16 | 0.21 | 0.18 |
| Pre-Ind AS | 2016 | 0.17 | 0.08 | 0.15 | 0.13 |
| | 2015 | 0.14 | 0.13 | 0.16 | 0.14 |
| | 2014 | 0.14 | 0.16 | 0.17 | 0.16 |
| | 2013 | 0.12 | 0.10 | 0.16 | 0.13 |

(Source: Computed from the annual reports of the selected sample companies from the year 2013 to 2019)

**Interpretation**

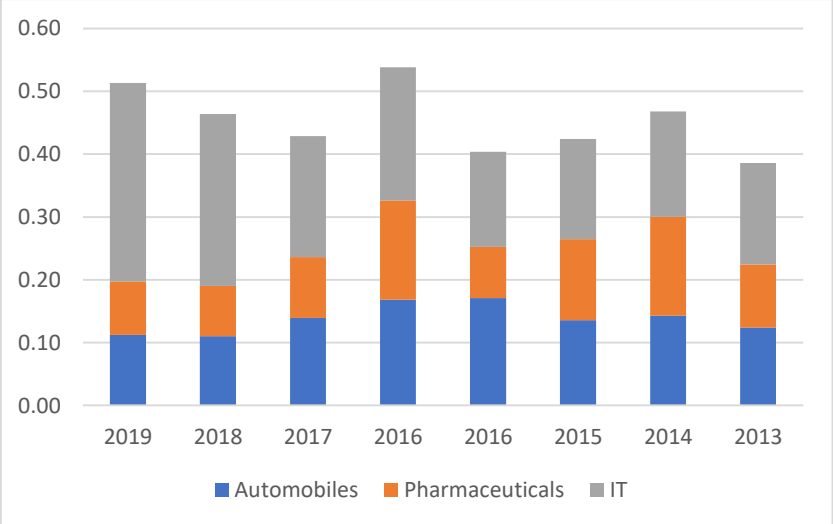
Return on assets is the level of profit earned on the total assets of the company. It helps to understand how much profit is earned from the level of assets invested in the company. A higher ratio means the entity is earning high return against the assets invested in it. When the ratio is less it suggests that the company has invested too much in the assets and it is not earning at par with such investment. It can also suggest over capitalization. Table no 6. 169 describes the ROA of the selected industries during the pre Ind AS and post Ind AS period.

The automobile sector shows considerable increment during the pre Ind AS period. After the adoption of Ind AS, the ratio subsided. This can be interpreted into that the return earned by the company is shrinking with respect to the assets invested in the entity.

The pharmaceutical sector displays a mixed trend in the pre Ind AS period. During the transition, the ratio doubled under Ind AS. Following the initial adjustment to the new accounting standards, the ratio is displaying growth from 2018.

The IT industry performs well under Ind AS. The ROA is shooting up during the post Ind AS period. The changes brought in assets like fair valuation have been beneficial to the IT industry. The changes in recognition of revenue from contracts have also helped the IT industry to boost its ROA under the post Ind AS era.

**Figure 6.74 ROA of Selected Industries from 2013 to 2019**




(Source: Created from table no 6.169 using excel)

In general, the manufacturing industries show a weaker ratio under the post Ind AS era and the service industry are booming during the same period.

### 6.9.3.5 Return on Average Equity (ROE)

**Table No 6.170 ROE of Selected Industries from 2013 to 2019**

| | Year | AUTO | PHARMA | IT | SAMPLE |
|---|---|---|---|---|---|
| Post-Ind AS | 2019 | 19.79 | 10.85 | 12.34 | 14.3 |
| | 2018 | 20.93 | 13.10 | 10.88 | 14.97 |
| | 2017 | 24.11 | 15.25 | 7.73 | 15.69 |
| | 2016 | 23.47 | 20.27 | 7.22 | 16.99 |
| Pre-Ind AS | 2016 | 25.12 | 17.28 | 7.68 | 16.69 |
| | 2015 | 18.84 | 18.39 | 9.40 | 15.54 |
| | 2014 | 17.65 | 14.36 | 10.51 | 14.18 |
| | 2013 | 15.09 | 7.93 | 9.21 | 10.74 |

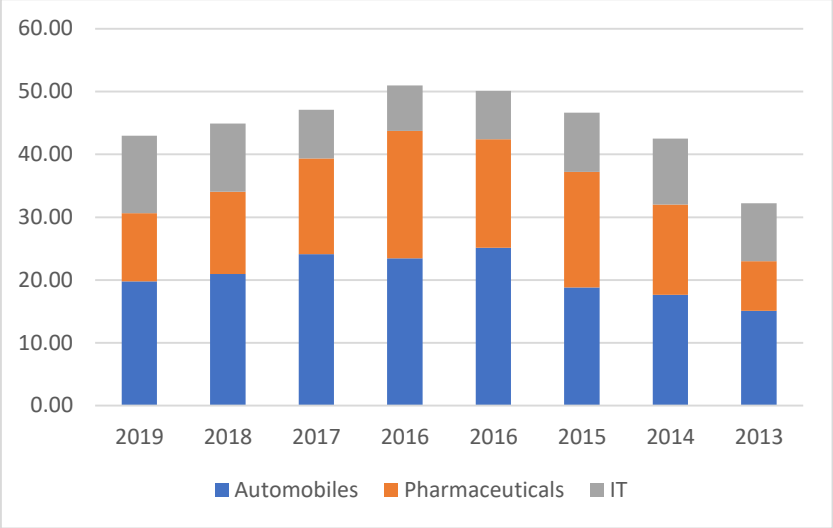
(Source: Computed from the annual reports of the selected sample companies from the year 2013 to 2019)

**Interpretation**

Return on equity is the measure to analyze the level of return earned against the level of equity in the company. Higher return indicates the entity is earning better results with the available level of equity financed in them. A lower ratio suggests the inefficiency in utilizing the shareholders' money. Table no 6.170 shows the ROE of the selected industries during the pre Ind AS and post Ind AS period.

During the pre Ind AS period, the ROE was enhanced considerably in the automobile industry. After the implementation of Ind AS in 2016, the ratio is narrowing, and it has dropped 3 to 4% by 2019. The pharmaceutical sector also shows a similar trend in ROE. After 2016, the ratio has shrunk almost 50% by 2019. Ind AS brought in the changes like perpetual preference share is considered to be part of liability and the reversal of proposed dividend have had significant negative impact in the manufacturing sector.

**Figure 6.75 ROE of Selected Industries from 2013 to 2019**




(Source: Created from table no 6.170 using excel)

On a contrary to the manufacturing industries, IT industry has magnified its ROE after the implementation of Ind AS. During the post Ind AS period the IT industry have accounted for better earning capacity than it earned during the pre Ind AS era.

In other words, the implementation of Ind AS has been favorable to the ROE of service industry as compared to manufacturing industries.

### 6.9.3.6 Return on Capital Employed (ROCE)

**Table No 6.171 ROCE of Selected Industries from 2013 to 2019**

| | Year | AUTO | PHARMA | IT | SAMPLE |
|---|---|---|---|---|---|
| Post-Ind AS | 2019 | 0.19 | 0.19 | 0.46 | 0.28 |
| | 2018 | 0.19 | 0.14 | 0.43 | 0.25 |
| | 2017 | 0.22 | 0.16 | 0.23 | 0.20 |
| | 2016 | 0.29 | 0.24 | 0.23 | 0.25 |
| Pre-Ind AS | 2016 | 0.31 | 0.14 | 0.25 | 0.23 |
| | 2015 | 0.26 | 0.20 | 0.27 | 0.24 |
| | 2014 | 0.28 | 0.28 | 0.26 | 0.27 |
| | 2013 | 0.26 | 0.19 | 0.27 | 0.24 |

(Source: Computed from the annual reports of the selected sample companies from the year 2013 to 2019)

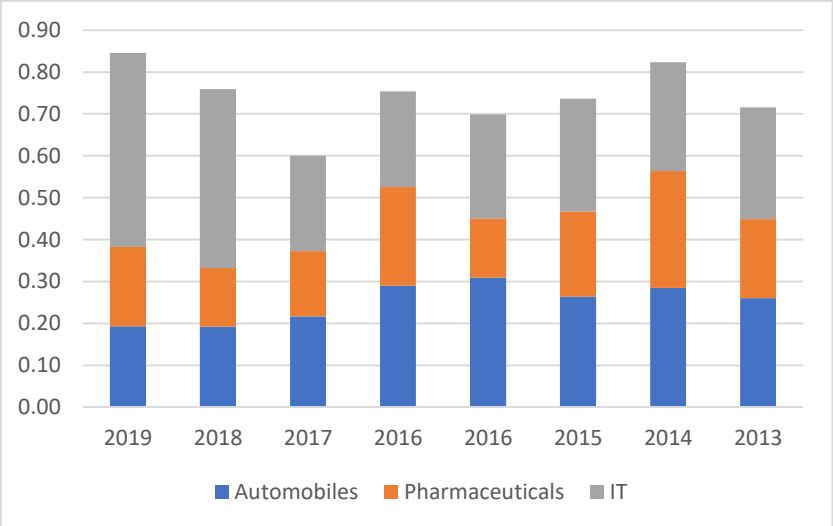
**Interpretation**

Return on capital employed analyses the relationship between the profit before tax (PAT) and the capital employed. A higher ratio indicates better performance and efficient utilization of shareholders' fund. Table no 6.171 depicts the ROCE of the selected industries during the pre Ind AS period and post Ind AS period.

The automobile industry had an upward trend during the pre Ind AS period. During the transition year, the ratio diminished by 2 points and during the later years, it kept on worsening. The ratio decreased by 10 points during the post Ind AS period.

The pharmaceutical industry displays a mixed impact during the pre Ind AS and post Ind AS period. ROCE increased in 2014, then it started plummeting till the transition year. During transition, the ratio climbed up dramatically to 10 points under Ind AS. After 2016, the ratio weakened till 2018. In 2019, the pharma industry has reported an increase.

**Figure 6.76 ROCE of Selected Industries from 2013 to 2019**




(Source: Created from table no 6.171 using excel)

The selected companies of IT sector display mixed trends in the ROCE during the pre Ind AS period. During transition the ratio also weakened. But in the following years of adoption of Ind AS, the IT industry has improved its ROCE in a remarkable fashion.

In general, it can be found out that the changes brought in by the accounting standard had been in favorable to the ROCE of the service industry and unfavorable to the manufacturing industry. The reduction in ROCE is an aftermath of using

excessive equity in the capital structure. When leverage decreases the return on equity also decrease.

### 6.9.3.7 Consolidation of Profitability Ratios

**Table No 6.172 Consolidated Profitability Ratios of the sample**

| | Year | Gross Profit Ratio | Net Profit Ratio | Operating Profit Ratio | ROA | ROE | ROCE |
|---|---|---|---|---|---|---|---|
| **Post-Ind AS** | **2019** | 0.59 | 0.19 | 0.28 | 0.17 | 14.33 | 0.28 |
| | **2018** | 0.60 | 0.18 | 0.25 | 0.15 | 14.97 | 0.25 |
| | **2017** | 0.62 | 0.16 | 0.20 | 0.14 | 15.69 | 0.92 |
| | **2016** | 0.62 | 0.18 | 0.25 | 0.18 | 16.99 | 0.52 |
| **Pre-Ind AS** | **2016** | 0.38 | 0.18 | 0.23 | 0.13 | 16.69 | 0.23 |
| | **2015** | 0.59 | 0.16 | 0.25 | 0.14 | 15.54 | 0.24 |
| | **2014** | 0.60 | 0.15 | 0.27 | 0.16 | 14.18 | 0.27 |
| | **2013** | 0.58 | 0.13 | 0.24 | 0.13 | 10.74 | 0.24 |

(Source: Computed from tables 6.165 to 6.171 using Excel)

**Interpretation**

Table no 6.172 summarizes the profitability ratios of all the selected companies across industries during the Pre-Ind AS and Post -Ind AS period. In general, the ratios show an increasing trend during the Post-Ind AS period. The gross profit ratio declined continuously during the Pre- Ind AS period, started to show incremental increase following the transition. A similar trend is visible in the operating profit ratio, and ROA. The net profit ratio shows an identical trend during both the periods. It has been steadily increasing since 2013. ROE shows an increasing trend during Pre-Ind AS period began to decline after the transition. It can be found out that except for ROE and ROCE, all the profitability ratios have shown growth during the Post – Ind AS period.

### 6.9.4 Activity Ratios

| | |
|---|---|
| Working Capital Turnover Ratio | Net sales/ Working Capital |
| Assets Turnover ratio | Net Sales/ Average Total Assets |
| Fixed Assets Turnover ratio | Net Sales / Average Total Fixed Assets |
| Inventory Turnover Ratio | Net Sales/ Average Inventory |

### 6.9.4.1 Working Capital Turnover Ratio

**Table No 6.173 Working Capital Turnover Ratio of Selected Industries From 2013 to 2019**

| | Year | AUTO | PHARMA | IT | SAMPLE |
|---|---|---|---|---|---|
| Post-Ind AS | 2019 | 18.70 | 18.84 | 3.21 | 11.44 |
| | 2018 | 90.67 | 5.54 | 3.34 | 33.18 |
| | 2017 | 14.30 | 2.13 | 2.08 | 6.17 |
| | 2016 | 20.21 | 0.82 | 2.08 | 7.16 |
| Pre-Ind AS | 2016 | 25.18 | 0.03 | 2.41 | 9.21 |
| | 2015 | 0.24 | 3.15 | 2.29 | 1.73 |
| | 2014 | 6.23 | 2.37 | 5.69 | 0.61 |
| | 2013 | 16.31 | 3.67 | 1.15 | 3.83 |

(Source: Computed from the annual reports of the selected sample companies from the year 2013 to 2019)

**Interpretation**

Working capital turnover ratio analyses how fast the company can complete its working capital cycle. A higher ratio is preferable for the entity. Table no 6.173 describes the working capital turnover ratio of selected industries during the pre Ind AS and post Ind AS period.

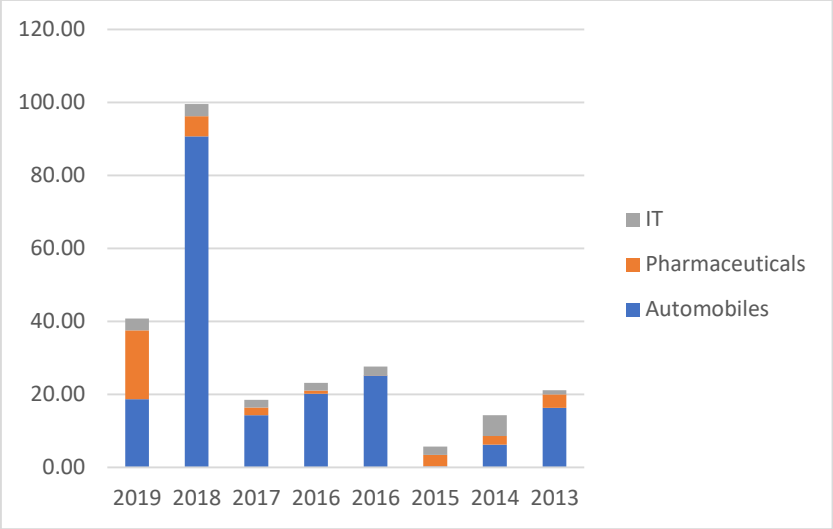
It is to be noted that many companies across industries reported negative working capital or extremely less working capital especially in manufacturing sector. For instance, CEAT has disclosed long term buyers' credit as part of current liabilities in the year 2018. This caused an unpredictable increase in the current liabilities and brought down the working capital. This is the reason why there is an extremely high working capital turnover ratio in the year 2018.

The automobile sector shows an extremly erractic behaviour in the trend of the working capital ratio. It fluctuates between 0 and 90. The changes brought in by the standards in current assets, current liabilities including financial liabilities and revenue have an impact in this ratio. That is why it is displaying such great range. Apart from 2018, it can be observed that during the post Ind AS period, the working capital turnover ratio is diminishing.

A similar trend is visible in the pharmaceutical industries.the pharma sector reports a near zero ratio during the transition period towards Ind AS. Here it can be noted that the ratio is gradually improving with time during the post Ind AS period.

The IT industry responds in a positive way towards to the implementation of Ind AS. The ratio doesn't show much volatility in either pre Ind AS or post Ind AS period. The IT industry has managed to maintain a healthy ratio. During the post Ind AS period, it indicates a more stabilised ratio as compared to pre Ind AS era.

**Figure 6.77 Working Capital Turnover Ratio of Selected Industries from 2013 to 2019**




(Source: Created from table no 6.173 using excel)

In general, the changes in current liabilities, current assets and revenue seems to be negatively impacted in case of manufacturing industry and a postive impact on service industry.

### 6.9.4.2 Assets Turnover Ratio

**Table No 6.174 Assets Capital Turnover Ratio of Selected Industries from 2013 to 2019**

| | Year | AUTO | PHARMA | IT | SAMPLE |
|---|---|---|---|---|---|
| Post-Ind AS | 2019 | 2.34 | 0.54 | 1.67 | 1.52 |
| | 2018 | 1.41 | 0.52 | 1.69 | 1.21 |
| | 2017 | 1.40 | 0.54 | 1.29 | 1.08 |
| | 2016 | 1.56 | 0.62 | 1.33 | 1.17 |

| | | | | | |
|---|---|---|---|---|---|
| **Pre-Ind AS** | 2016 | 1.61 | 0.58 | 0.81 | 1.00 |
| | 2015 | 1.65 | 0.67 | 0.82 | 1.05 |
| | 2014 | 1.63 | 0.74 | 0.86 | 1.08 |
| | 2013 | 1.66 | 0.67 | 0.89 | 1.07 |

(Source: Computed from the annual reports of the selected sample companies from the year 2013 to 2019)

**Interpretation**

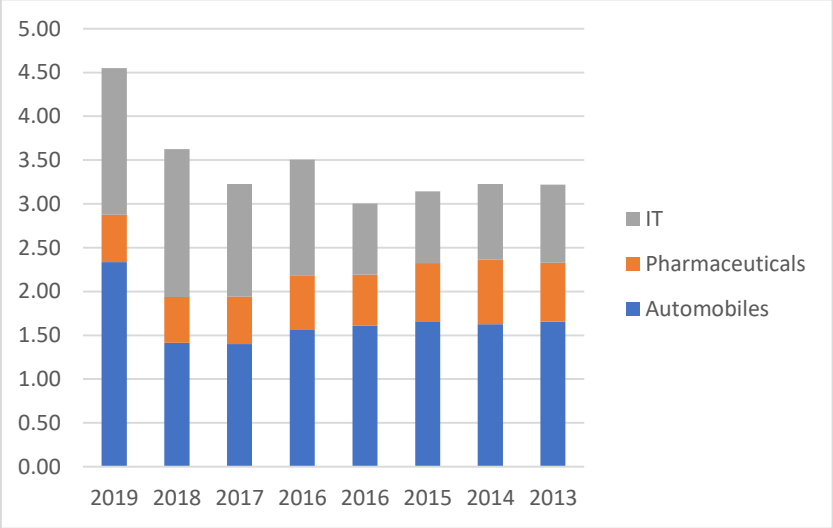
Assets turnover ratio measures the efficiency in which the asset of the entity is used in generating revenue. A higher ratio suggests better utilization of assets and lower ratio indicates vice versa. Table no 6.174 describes the assets turnover ratio of selected industries during the pre Ind AS and post Ind AS period.

The automobile industry shows a declining trend during the pre Ind AS period. During the transition, the ratio dropped under Ind AS, but gradually over time, during the post Ind AS period, it has begun to improve since 2018. It is an indication that after the initial adjustment phase, the automobile sector has improved under the Ind AS regime, and they are utilizing the assets in a efficient and effective manner.

The pharmaceutical sector also shows a similar trend to the automobile sector. The ratio displays a diminishing trend during the pre Ind AS period which continued till 2018. After the transition adjustment, the pharma sector has improved the assets turnover ratio since 2018. This ratio is impacted from the changes introduced in assets including financial assets and revenue.

The IT industry shows a gradual decline in the ratio during the pre Ind AS period. During the transition there is a sudden increase in the ratio under Ind AS. It suggests that the changes brought in by Ind AS have been beneficial to the IT industry and the service sector as well. After transition in the following years the ratio continues to improve, indicating a better utilization of assets in the companies.

**Figure 6.78 Assets Turnover Ratio of Selected Industries from 2013 to 2019**




(Source: Created from table no 6.174 using excel)

As a sample the ratio seems to fluctuate during the pre Ind AS period in the manufacturing industries and they need a certain period of adjusting before stabilizing. In the case of service sector, the ratio seems to be improving in a healthy manner.

### 6.9.4.3 Fixed Assets Turnover Ratio

**Table No 6.175 Fixed Assets Turnover Ratio of Selected Industries From 2013 to 2019**

| | Year | AUTO | PHARMA | IT | SAMPLE |
|---|---|---|---|---|---|
| Post-Ind AS | 2019 | 5.25 | 2.51 | 14.47 | 7.41 |
| | 2018 | 4.83 | 2.25 | 17.19 | 8.09 |
| | 2017 | 4.63 | 2.53 | 16.36 | 7.84 |
| | 2016 | 4.90 | 2.88 | 17.63 | 8.47 |
| Pre-Ind AS | 2016 | 5.06 | 2.69 | 17.19 | 8.31 |
| | 2015 | 5.38 | 2.96 | 14.80 | 7.71 |
| | 2014 | 5.62 | 2.72 | 10.76 | 6.37 |
| | 2013 | 6.03 | 2.36 | 13.13 | 7.17 |

(Source: Computed from the annual reports of the selected sample companies from the year 2013 to 2019)

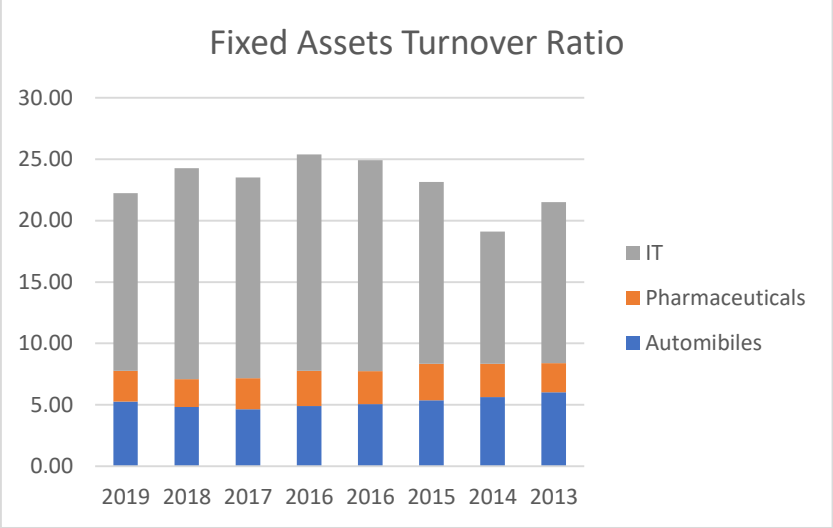
**Interpretation**

Fixed assets turnover ratio analyses the efficiency in which fixed assets are being used in the company. The ratio establishes the relationship between revenue and fixed assets. A higher ratio suggests better use of fixed assets. Table no 6.175 describes the fixed assets turnover ratio during the pre Ind AS and post Ind AS period.

The automobile sector shows a downward trend during the pre Ind AS period. After the implementation of Ind AS in 2016-17, the trend continues till 2018. Then the ratio improves and shows an upward movement. The pharmaceutical sector is more stable during the pre Ind AS and post Ind AS. The ratio ranges between 2.36 and 2.96. It displays minor ups and downs during both the pre Ind AS and post Ind AS period.

The IT sector shows erratic variations in the ratio during the pre Ind AS period. After the transition, the ratio is more stable and ranges between 14 and 17. Even though the range is less, the ratio is showing fluctuations after the adoption of Ind AS. The sample displays a similar tendency. It is volatile during both the pre Ind AS and post Ind AS period. The fair valuation introduced in the financial assets which form a part of fixed assets seems to result in fluctuations in the value of fixed assets and thereby causing variations in the fixed assets turnover ratio.

**Figure 6.79 Fixed Assets Turnover Ratio of Selected Industries from 2013 to 2019**




(Source: Created from table no 6.175 using excel)

### 6.9.4.4 Inventory Turnover Ratio

**Table No 6.176 Inventory Turnover Ratio of Selected Industries from 2013 to 2019**

| | Year | AUTO | PHARMA | IT | SAMPLE |
|---|---|---|---|---|---|
| Post-Ind AS | 2019 | 9.02 | 1.86 | 3.42 | 4.77 |
| | 2018 | 9.66 | 1.75 | 4.70 | 5.37 |
| | 2017 | 9.01 | 1.85 | 3.67 | 4.84 |
| | 2016 | 8.89 | 2.03 | 10.40 | 7.10 |
| Pre-Ind AS | 2016 | 8.91 | 2.04 | 10.39 | 7.12 |
| | 2015 | 9.14 | 2.14 | 10.19 | 7.16 |
| | 2014 | 9.48 | 2.13 | 22.94 | 11.52 |
| | 2013 | 9.55 | 2.00 | 8.54 | 6.70 |

(Source: Computed from the annual reports of the selected sample companies from the year 2013 to 2019)

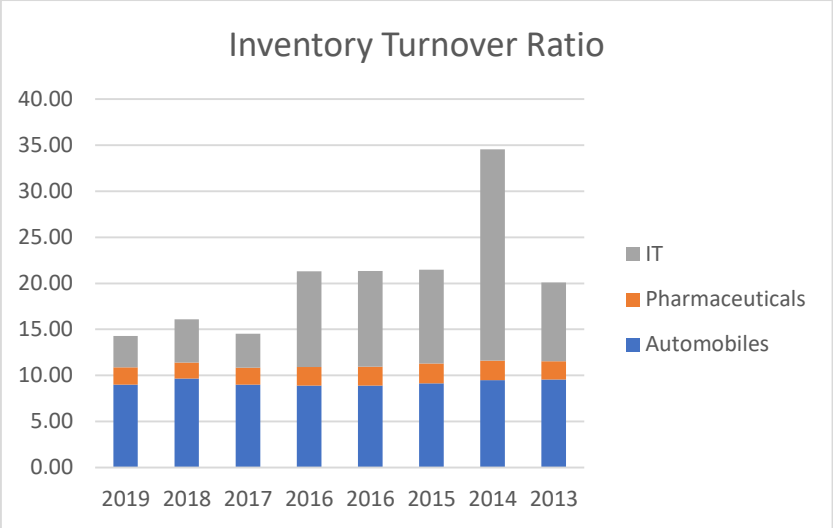
**Interpretation**

Inventory turnover ratio measures the efficiency in which the inventory is being employed by the company. lower ratio indicates weak sales while high ratio indicates vice versa. Also, an extremely high ratio suggests insufficient inventory stocking. Table no 6.176 describes the inventory turnover ratio of the selected industries during the Pre-Ind AS and Post-Ind AS period.

In the automobile sector, the inventory turnover ratio showed a diminishing trend during the Pre-Ind AS period. After the transition, the ratio improves significantly. In pharmaceutical industry, there is a declining trend in the Pre-Ind AS period and after transition also the ratio continues to decrease, suggesting that the efficiency of the pharmaceutical companies to use their inventory has diminished during the study period.

In the IT sector, there is an unexplained rise in the ratio of the year 2014. The reason behind this is that there is a huge level of purchases made by the NIIT in 2014 with respect to hardware and software. During the Post-Ind AS period, the ratio seems to be shrinking rapidly.

**Figure 6.80 Inventory Turnover Ratio of Selected Industries from 2013 to 2019**




(Source: Created from table no 6.176 using excel)

On average, it can be perceived that during the Post-Ind AS period, the inventory turnover ratio is getting worse in the pharmaceutical sector and IT sector. At the same time the automobile sector seems to be embracing the Ind AS successfully.

### 6.9.4.5 Consolidation of Turnover Ratios

**Table No 6.177 Consolidated Turnover Ratios of the Sample**

| | Year | Working Capital Turnover Ratio | Assets Turnover Ratio | Fixed Assets Turnover Ratio | Inventory Turnover Ratio |
|---|---|---|---|---|---|
| **Post-Ind AS** | **2019** | -11.44 | 1.52 | 12.43 | 15.84 |
| | **2018** | 33.18 | 1.21 | 12.58 | 15.28 |
| | **2017** | 6.17 | 1.08 | 7.84 | 5.22 |
| | **2016** | 7.16 | 1.17 | 8.47 | 6.22 |
| **Pre-Ind AS** | **2016** | 9.21 | 1.00 | 8.31 | 6.23 |
| | **2015** | 1.73 | 1.05 | 7.71 | 6.19 |
| | **2014** | 0.61 | 1.08 | 6.37 | 7.86 |
| | **2013** | -3.83 | 1.07 | 7.17 | 6.11 |

(Source: Computed from tables from 6.173 to 6.176 using Excel)

**Interpretation**

Table no 6.177 describes the various turnover ratios of the selected sample. The assets turnover ratio shows a declining trend during the Pre-Ind AS period. After transition, the ratio displays considerable growth. The working capital turnover ratio shows a lot of fluctuations during both the periods. There is an unusual increase in 2018 and it is followed by a negative ratio in 2019. Regarding fixed assets turnover, a similar trend of volatility is witnessed during both the study periods. However, the inventory turnover ratio shows growth after transition towards Ind AS.

## 6.10 Testing of Hypotheses

To understand the significance of ratios calculated under Pre-Ind AS period and Post-Ind AS period, hypotheses are formulated and tested using statistical tools. Both Z-test and T-test are used in testing the hypotheses. Z-test is used to test the hypotheses related to the selected sample. As the selected companies across the three industries form a total of 30 companies, the Z- test is implemented. To test the hypotheses of each industry separately, a T-test is used.

### 6.10.1 Two Sample Z Test

A two-sample z test is used to understand the differences between the means of two samples. The z test statistic formula is given as follows:

$$\frac{(\bar{x}_1 - \bar{x}_2) - (\mu_1 - \mu_2)}{\sqrt{\frac{\sigma_1^2}{n_1} + \frac{\sigma_2^2}{n_2}}}$$

$\bar{x}_1, \mu_1, \sigma_1^2$ are the sample mean, population mean and population variance respectively for the first sample. Similarly sample mean, population mean, and population variance are calculated for the second sample.

Hypotheses: μ1=μ2

μ1 = Mean of Selected Financial Variables during Pre Ind AS period

μ2 = Mean of Selected Financial Variables during Post Ind AS period

**Table No 6.178 Results to Z-test**

| Financial Variables | Hypotheses | PRE | POST | P-value |
|---|---|---|---|---|
| Debt Equity Ratio | μ1 = μ2 | 0.391 | 1.036 | 0.246 |
| Debt Ratio | μ1 = μ2 | 0.216 | 0.499 | 0.310 |
| Equity Ratio | μ1 = μ2 | 0.741 | 0.631 | 0.082 |
| Interest Coverage | μ1 = μ2 | 539.236 | 681.321 | 0.714 |
| Capitalisation ratio | μ1 = μ2 | 0.053 | 0.070 | 0.378 |
| Current Ratio | μ1 = μ2 | 2.923 | 2.448 | 0.312 |
| Quick Ratio | μ1 = μ2 | 1.513 | 1.266 | 0.465 |
| Cash returns to net assets | μ1 = μ2 | -0.001 | 0.011 | 0.166 |
| **Cash returns to current liabilities** | **μ1 = μ2** | **-0.039** | **0.033** | **0.018** |
| Cash returns to total liabilities | μ1 = μ2 | -0.041 | 0.357 | 0.161 |
| Gross Profit Ratio | μ1 = μ2 | 0.604 | 0.539 | 0.511 |
| Net Profit Ratio | μ1 = μ2 | 0.157 | 0.058 | 0.316 |
| Operating profit ratio | μ1 = μ2 | 0.511 | 0.248 | 0.328 |
| ROA | μ1 = μ2 | 0.162 | 0.140 | 0.533 |
| ROE | μ1 = μ2 | 27.389 | 14.288 | 0.423 |
| ROCE | μ1 = μ2 | 0.493 | 0.247 | 0.341 |
| Working capital turnover ratio | μ1 = μ2 | 8.767 | 1.930 | 0.283 |
| Assets turnover ratio | μ1 = μ2 | 1.242 | 1.049 | 0.431 |
| Fixed assets turnover ratio | μ1 = μ2 | 10.330 | 7.390 | 0.426 |
| Inventory turnover ratio | μ1 = μ2 | 10.638 | 6.597 | 0.519 |

(Source: Computed from Table No 6.154 to 6.176 using Excel)

**Interpretation**

Table no 6.178 describes the result of testing for significance using Z-test for the mentioned hypotheses. P-value is used to determine whether to accept hypotheses or reject them. The Z statistic is calculated at 95% significance. When the P-value is less than 0.05, the hypotheses are rejected and thereby it means that there is significant difference between the ratios during Pre-Ind AS period and Post-Ind AS period. Apart from the Cash Returns to Current Liability the rest of the hypotheses are accepted. This indicates that the Cash Returns to Current Liability is significantly different during the Pre-Ind AS and Post-Ind AS period. Remaining ratios also report changes under Post-Ind AS period and Pre-Ind AS period, but they are not statistically significant.

### 6.10.2 T- Test

The formulated hypotheses are tested to identify their statistical significance. The sample selected need to be tested for the differences in mean during Pre-Ind AS period and Post-Ind AS period of the selected industries individually. Hence, Paired T-test is used to test the hypotheses. "A paired t-test determines whether the mean change for these pairs is significantly different from zero." Two tailed test is performed to reach the results.

Hypotheses: $\mu 1=\mu 2$

$\mu 1$ = Mean of Selected Financial Variables during Pre Ind AS period

$\mu 2$ = Mean of Selected Financial Variables during Post Ind AS period

Formula: $t = x\,(diff) / (s\,diff/\sqrt{n})$

where:

xdiff: sample mean of the differences.

s diff: sample standard deviation of the differences.

n: sample size (i.e. number of pairs)

### 6.10.3 Inference

The formulated hypotheses are tested at 95% of significance. If the P-value is less than 0.05, the hypotheses are rejected and when the P-value is greater than 0.05, the hypotheses are accepted. Rejected hypotheses means that there are significant differences in the means of both samples and here it would suggest that the means during Pre-Ind AS period and Post-Ind AS period have statistically significant differences which would further imply that the changes brought in by Ind AS have had significant impact on the financial variables of the company. When a hypothesis is accepted, it would mean that there is no significant difference between the means during Pre-Ind AS period and Post-Ind AS period which would further imply that the changes brought in by Ind AS had no significant impact on the financial variables of the company.

**Table No 6.179 Results to T-test in Automobile Sector**

| Financial Variables | Hypotheses | Pre-Ind AS | Post- Ind AS | P-value |
|---|---|---|---|---|
| Debt Equity Ratio | μ1 = μ2 | 0.678 | 0.827 | 0.261 |
| Debt Ratio | μ1 = μ2 | 0.327 | 0.339 | 0.616 |
| Equity Ratio | μ1 = μ2 | 0.582 | 0.489 | 0.037 |
| Interest Coverage | μ1 = μ2 | 967.059 | 477.549 | 0.200 |
| Capitalisation ratio | μ1 = μ2 | 0.110 | 0.092 | 0.336 |
| **Current Ratio** | **μ1 = μ2** | **1.182** | **1.414** | **0.032** |
| Quick Ratio | μ1 = μ2 | 0.506 | 0.541 | 0.179 |
| Cash returns to net assets | μ1 = μ2 | 0.008 | -0.001 | 0.493 |
| Cash returns to current liabilities | μ1 = μ2 | 0.010 | -0.004 | 0.565 |
| Cash returns to total liabilities | μ1 = μ2 | 0.012 | 0.019 | 0.771 |
| Gross Profit Ratio | μ1 = μ2 | 0.296 | 0.291 | 0.869 |
| Net Profit Ratio | μ1 = μ2 | 0.093 | 0.086 | 0.584 |
| Operating profit ratio | μ1 = μ2 | 0.279 | 0.223 | 0.162 |
| ROA | μ1 = μ2 | 0.143 | 0.133 | 0.653 |
| ROE | μ1 = μ2 | 19.173 | 22.075 | 0.410 |
| **ROCE** | **μ1 = μ2** | **0.223** | **0.279** | **0.033** |
| Working capital turnover ratio | μ1 = μ2 | 26.621 | 0.600 | 0.169 |
| Assets turnover ratio | μ1 = μ2 | 1.677 | 1.636 | 0.891 |
| Fixed assets turnover ratio | μ1 = μ2 | 4.903 | 5.522 | 0.281 |
| Inventory turnover ratio | μ1 = μ2 | 20.174 | 9.271 | 0.356 |

(Source: Computed from Table No6.154 to 6.176 using Excel)

**Interpretation**

Table No 6.179 depicts the results of testing of significance using T-test for the formulated hypotheses. Except for current ratio and ROCE, all the other hypotheses are accepted. This means that there is a significant difference between the current ratio and ROCE in the automobile sector of Pre-Ind AS and Post-Ind AS period. Remaining hypotheses have been accepted indicating that there is no significant difference between those ratios of automobile sector during Pre-Ind AS and Post -Ind AS period. The accepted hypotheses suggest that the changes observed in those respective ratios are not statistically significant.

**Table No 6.180 Results to T-test in Pharmaceutical Sector**

| Financial Variables | Hypotheses | Pre-Ind AS | Post- Ind AS | P-value |
|---|---|---|---|---|
| Debt Equity Ratio | µ1 = µ2 | 0.325 | 2.001 | 0.351 |
| Debt Ratio | µ1 = µ2 | 0.189 | 1.019 | 0.378 |
| **Equity Ratio** | **µ1 = µ2** | **0.705** | **0.628** | **0.000** |
| Interest Coverage | µ1 = µ2 | 142.155 | 115.073 | 0.089 |
| **Capitalisation ratio** | **µ1 = µ2** | **0.073** | **0.058** | **0.048** |
| Current Ratio | µ1 = µ2 | 2.745 | 3.342 | 0.241 |
| Quick Ratio | µ1 = µ2 | 1.055 | 1.729 | 0.334 |
| Cash returns to net assets | µ1 = µ2 | 0.015 | -0.011 | 0.146 |
| Cash returns to current liabilities | µ1 = µ2 | 0.052 | -0.065 | 0.256 |
| Cash returns to total liabilities | µ1 = µ2 | 0.927 | -0.122 | 0.406 |
| Gross Profit Ratio | µ1 = µ2 | 0.340 | 0.532 | 0.329 |
| Net Profit Ratio | µ1 = µ2 | -0.114 | 0.181 | 0.320 |
| Operating profit ratio | µ1 = µ2 | 0.203 | 0.180 | 0.627 |
| ROA | µ1 = µ2 | 0.117 | 0.105 | 0.686 |
| ROE | µ1 = µ2 | 14.491 | 14.868 | 0.936 |
| ROCE | µ1 = µ2 | 0.180 | 0.203 | 0.353 |
| Working capital turnover ratio | µ1 = µ2 | -2.998 | 2.305 | 0.216 |
| **Assets turnover ratio** | **µ1 = µ2** | **0.556** | **0.666** | **0.025** |
| Fixed assets turnover ratio | µ1 = µ2 | 2.543 | 2.681 | 0.227 |
| **Inventory turnover ratio** | **µ1 = µ2** | **1.873** | **2.077** | **0.059** |

(Source: Computed from Table No6.154 to 6.176 using Excel)

**Interpretation**

Table No 6.180 depicts the results of testing of significance using T-test for the formulated hypotheses. Hypotheses for Equity ratio, Capitalization ratio, and Assets Turnover ratio are rejected while all the other hypotheses are accepted. This means that there is a significant difference between the Equity ratio, Capitalization ratio, and Assets Turnover ratio in the pharmaceutical sector of Pre-Ind AS and Post-Ind AS period.

Remaining hypotheses have been accepted indicating that there is no significant difference between those ratios of pharmaceutical sector during Pre-Ind AS and Post -Ind AS period. Inventory turnover ratio is rejected for a very minute

difference in the P-value. The accepted hypotheses suggest that the changes observed in those respective ratios are not statistically significant.

**Table No 6.181 Results to T-test of IT Sector**

| Financial Variables | Hypotheses | Pre-Ind AS | Post- Ind AS | P-value |
|---|---|---|---|---|
| Debt Equity Ratio | µ1 = µ2 | 0.146 | 0.188 | 0.171 |
| Debt Ratio | µ1 = µ2 | 0.133 | 0.139 | 0.749 |
| Equity Ratio | µ1 = µ2 | **0.627** | **0.936** | **0.026** |
| Interest Coverage | µ1 = µ2 | 934.748 | 1025.088 | 0.565 |
| Capitalisation ratio | µ1 = µ2 | 0.027 | 0.009 | 0.203 |
| Current Ratio | µ1 = µ2 | **3.418** | **4.012** | **0.032** |
| Quick Ratio | µ1 = µ2 | 2.238 | 2.270 | 0.871 |
| Cash returns to net assets | µ1 = µ2 | 0.009 | 0.010 | 0.994 |
| **Cash returns to current liabilities** | **µ1 = µ2** | 0.037 | -0.049 | 0.409 |
| Cash returns to total liabilities | µ1 = µ2 | 0.131 | -0.021 | 0.388 |
| Gross Profit Ratio | µ1 = µ2 | **0.980** | **0.988** | **0.002** |
| Net Profit Ratio | µ1 = µ2 | 0.202 | 0.195 | 0.409 |
| Operating profit ratio | µ1 = µ2 | 0.261 | 1.130 | 0.176 |
| ROA | µ1 = µ2 | 0.160 | 0.248 | 0.067 |
| ROE | µ1 = µ2 | 9.201 | 9.541 | 0.855 |
| ROCE | µ1 = µ2 | 1.130 | 0.261 | 0.296 |
| Working capital turnover ratio | µ1 = µ2 | 2.678 | 2.886 | 0.844 |
| Assets turnover ratio | µ1 = µ2 | 1.493 | 0.846 | 0.164 |
| Fixed assets turnover ratio | µ1 = µ2 | 23.543 | 13.968 | 0.224 |
| Inventory turnover ratio | µ1 = µ2 | 5.547 | 13.018 | 0.111 |

(Source: Computed from Table No6.154 to 6.176 using Excel)

**Interpretation**

Table No 6.181 depicts the results of testing of significance using T-test for the formulated hypotheses. Hypotheses for Equity ratio, Current ratio, and Gross Profit ratio are rejected while all the other hypotheses are accepted. This means that there is a significant difference between the Equity ratio, Current ratio, and Gross Profit ratio in the IT sector of Pre-Ind AS and Post-Ind AS period.

Remaining hypotheses have been accepted indicating that there is no significant difference between those ratios of IT sector during Pre-Ind AS and Post - Ind AS period. The accepted hypotheses suggest that the changes observed in those respective ratios are not statistically significant.

## 6.11 Correlation Analysis

The study analyses financial reporting over the period from 2007 to 2019 by using various indices and understands the performance of companies using ratios. The final part of the study is to determine whether the financial performance of the company is depended upon these qualitative aspects of the financial reporting of the companies.

In other words, whether the financial performance of the company is related to the relevance of accounting data, comparability of financial information and transparency of financial reports. For that purpose, correlation technique is used. Pearson's correlation coefficient is calculated to determine the relationship between the Profitability of the company and the qualitative characteristics. To assess the profitability of the company, EBIT is chosen.

**Table No 6.182 Variables used in Correlation Analysis**

| Year | EBIT | C Index | Disclosure Index | Gray's Index |
|---|---|---|---|---|
| **2016-17** | 21071.16 | 0.88 | 0.61 | 0.92 |
| **2014-13** | 17558.27 | 0.68 | 0.43 | 1.09 |
| **2012-11** | 13125.06 | 0.74 | 0.38 | 1.14 |
| **2007-06** | 6877.57 | 0.75 | 0.32 | 1.27 |

(Source: Computed from annual reports of selected companies from 2007-19)

The result of Correlation is tabulated below.

**Table No 6.183 Results of Correlation Analysis**

| | EBIT | C Index | Disclosure Index | Gray's Index |
|---|---|---|---|---|
| **EBIT** | 1 | | | |
| **C Index** | 0.42314 | 1 | | |
| **Disclosure Index** | 0.90882 | 0.75167 | 1 | |
| **Gray's Index** | -0.9655 | -0.6432 | -0.979489733 | 1 |

(Source: Computed from annual reports of selected companies from 2007-19)

It is evident from Table No 6.183 that EBIT has a strong positive correlation between C Index and Disclosure Index and a strong negative correlation with Gray's Index. This suggests that conservatism is inversely related to the profitability. When a company uses conservative methods, the profitability decreases. Conservatism is also inversely related to level of harmonisation as well as disclosure quality. This indicates

that when the company chooses conservative decisions, it poorly reflects on the disclosure quality and level of harmony.

The positive correlation between EBIT with C Index and Disclosure Index means that the profitability of company increases with the harmonisation of accounting practices and improvement of disclosure requirements. When Ind AS introduced fair valuation to Indian financial reporting scenario, it was trying to bring a balance between extreme conservatism and slightly more aggressive methods of accounting and reporting. By this way, Ind AS is giving the financial reports “True and Fair” view, which is incredibly helpful for the investors and other decision makers and users of financial statements.

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