Deep Dive into FDI Investment Trends from 2000-2016

AGENDA

OBJECTIVE
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BACKGROUND
02

KEY FINDINGS
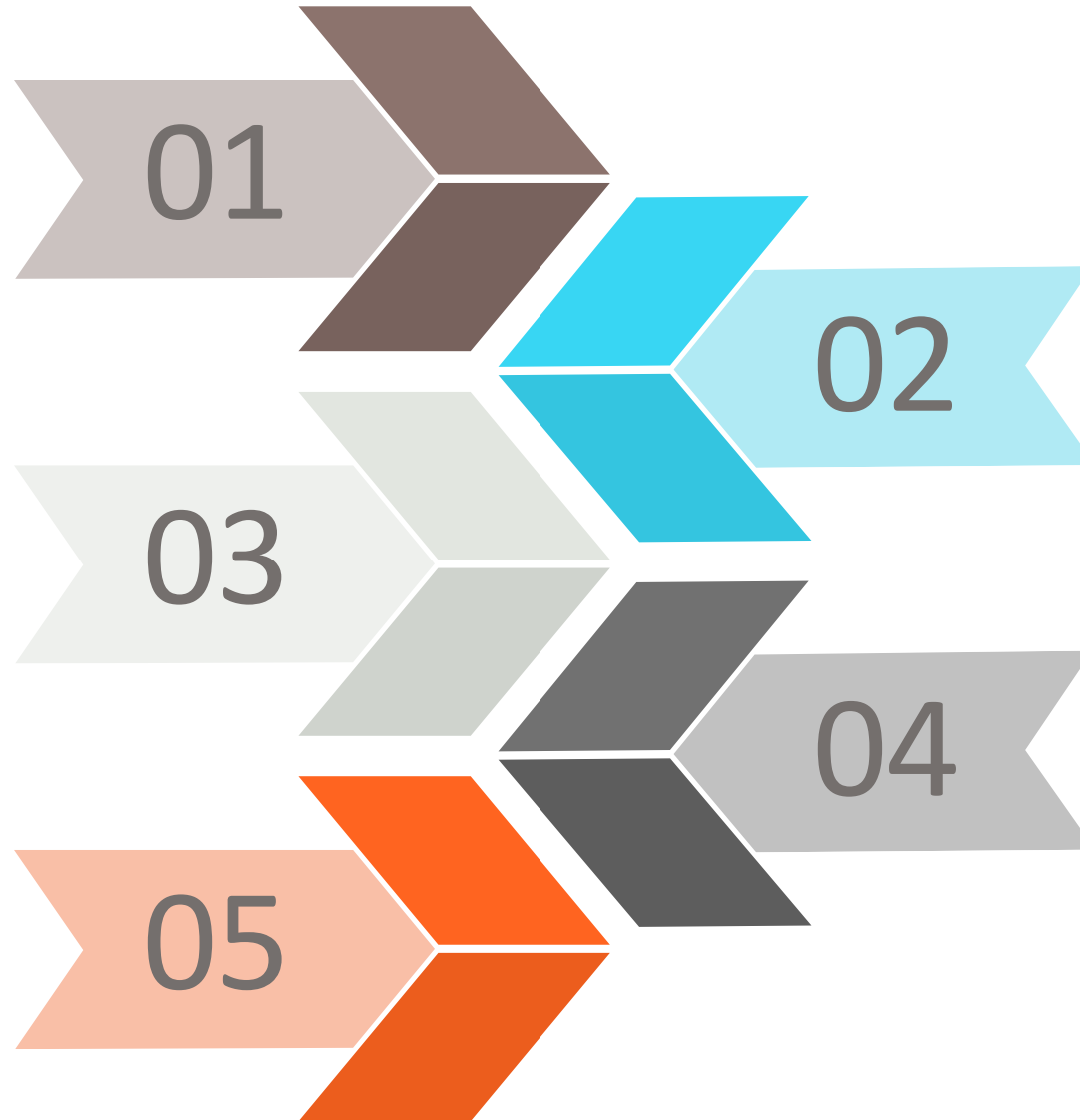03

RECOMMENDATIONS
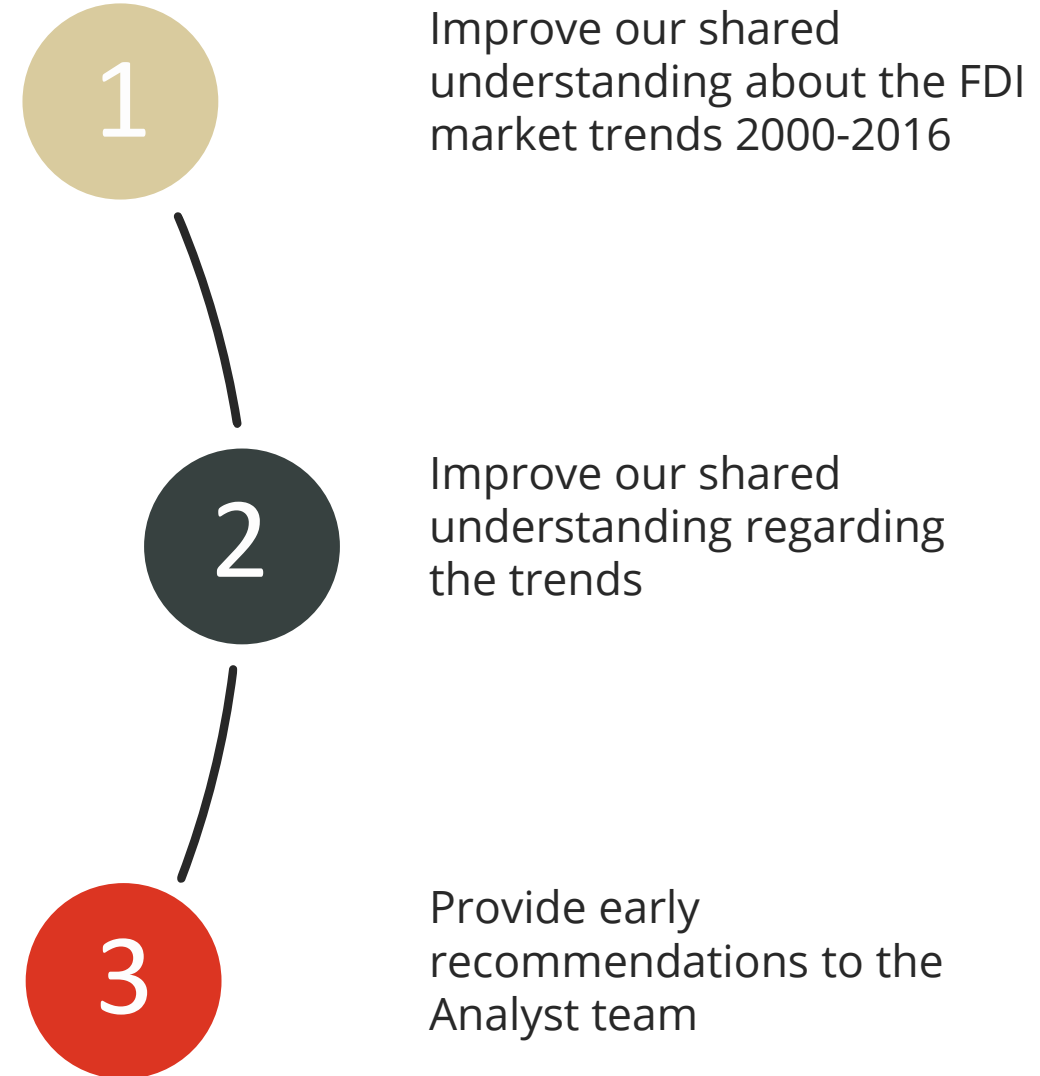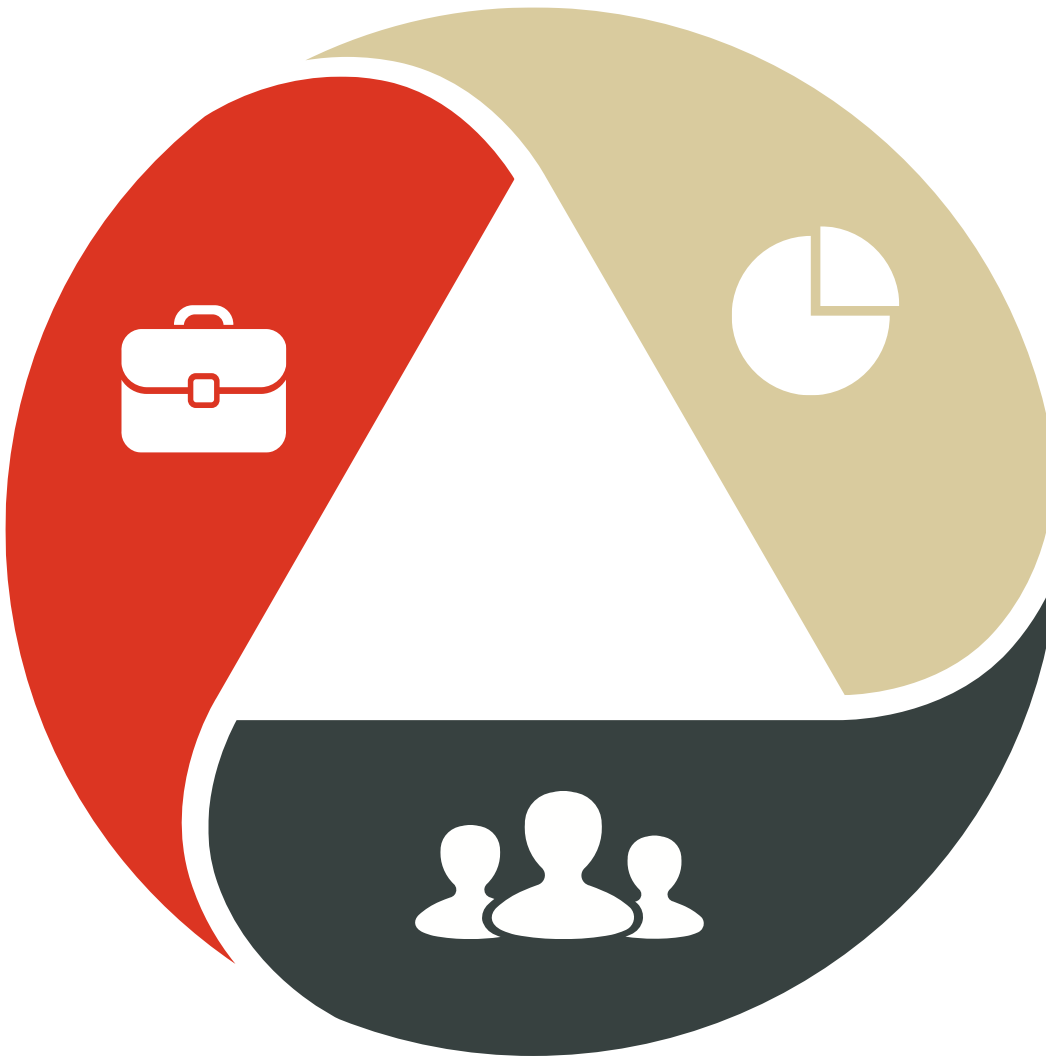04

APPENDIX
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OBJECTIVE

1 — Improve our shared understanding about the FDI market trends 2000-2016

2 — Improve our shared understanding regarding the trends

3 — Provide early recommendations to the Analyst team

BACKGROUND

○ The total FDA was at its peak during the year 2008 (about 1580 units), followed by the year 2010.It was at its lowest in 2004 with 100 units. The FDA seems to be declining the last two years

○ Top 5 industries with highest total FDI: **1.** SERVICES SECTOR (Fin/Business,Outsourcing,R&D,Courier,Tech. Testing and Analysis, Other) **2.** COMPUTER SOFTWARE & HARDWARE **3.** TELECOMMUNICATIONS **4.** CONSTRUCTION DEVELOPMENT: Townships, housing, built-up infrastructure and construction-development projects **5.** AUTOMOBILE INDUSTRY


Total FDI Over the Years
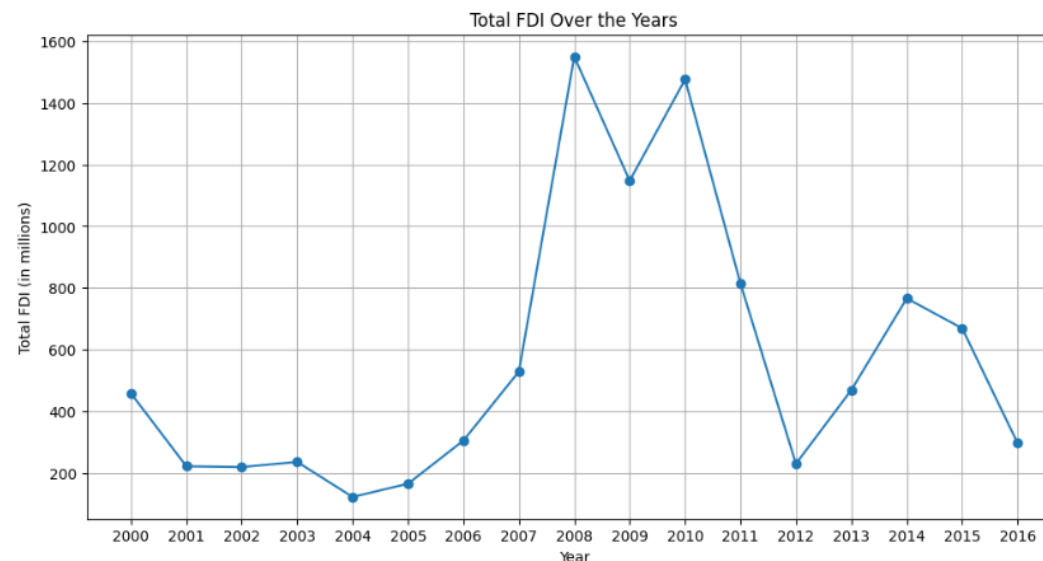
INSIGHTS ON LAST 5 YEARS

- These sectors have the highest cumulative FDI contributions over the last 5 years: 1. SERVICES SECTOR (Fin/Business,Outsourcing,R&D,Courier,Tech. Testing and Analysis, Other 2. COMPUTER SOFTWARE & HARDWARE 3. TELECOMMUNICATIONS 4. TRADING 5. AUTOMOBILE INDUSTRY

- Sectors that have a high trend during the last year ie 2016 VS other years:

- **METTALURGICAL, POWER, PRIME MOVER(OTHER THAN ELECTRIC GENERATOR), ELECTRIC EQUIPMENT, TELECOMMUNICATIONS, INFORMATION & BROADCASTING INCLUDING THE PRINT MEDIA), SEA TRANSPORT, MEDICAL AND SURGICAL APPLIANCES,SCIENTIFIC INSTRUMENTS, TEXTILES(INCLUDING DYED & PRINTED), PAPER & PULP (INCLUDING PAPER PRODUCTS), GLUE & GELATIN, CEMENT & GYPSUM PRODUCTS, SERVICES SECTOR, HOSPITAL & DIAGNOSTIC CENTRES, RETAIL TRADING**

- **Although COMPUTER SOFTWARE & HARDWARE** (2nd highest cumulative FDI, **CONSTRUCTION DEVELOPMENT**(4th highest cumulative FDI) **AUTOMOBILE** (4th highest cumulative FDI) have a high cumulative FDI , **they are not the prime sectors in 2016-2017.**

INSIGHTS ON 2011 vs 2016

- COAL PRODUCTION, COIR, DEFENCE INDUSTRIES have started at 0 value in 2012 and also ended with 0 in the year 2015_16

- COMMERCIAL, OFFICE & HOUSEHOLD EQUIPEMENTS, INDUSTRIAL INSTRUMENTS, LEATHER, LEATHER GOODS AND PICKERS, MISCELLANEOUS INDUSTRIES and TEA AND COFFEE(PROCESSING AND WAREHOUSING COFFEE & RUBBER) have a higher trend in the year 2011 as compared to 2015_16. The rest of the sectors are higher in 2016 than 2000.
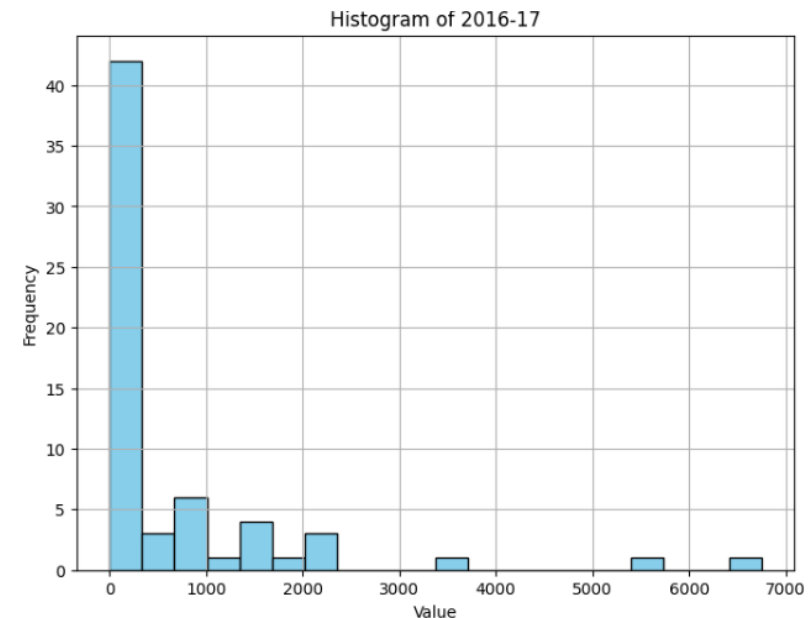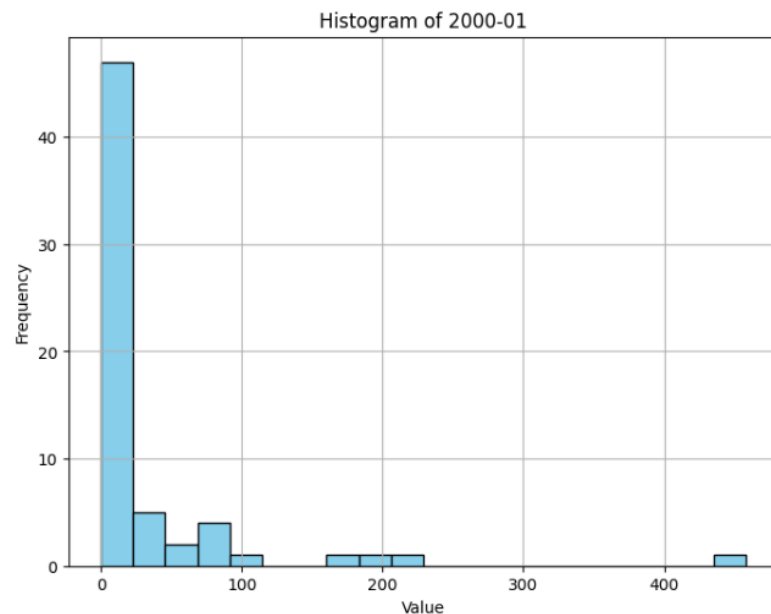
Histogram of 2000-01

Histogram of 2016-17

INSIGHTS ON PREDICTED YEAR 2017_18

○ The lag method was used along with linear regression to train and test the data. The values for the sector in the future year 2017 were predicted.

○ The Following industries had the highest FDI in 2017

- SERVICES SECTOR
- TELECOMMUNICATIONS
- COMPUTER SOFTWARE & HARDWARE
- TRADING
- ELECTRICAL EQUIPMENTS
- CEMENT AND GYPSUM PRODUCTS
- CONSTRUCTION (INFRASTRUCTURE) ACTIVITIES
- AUTOMOBILE INDUSTRY
- INFORMATION & BROADCASTING (INCLUDING PRINT MEDIA)
- CHEMICALS (OTHER THAN FERTILIZERS)

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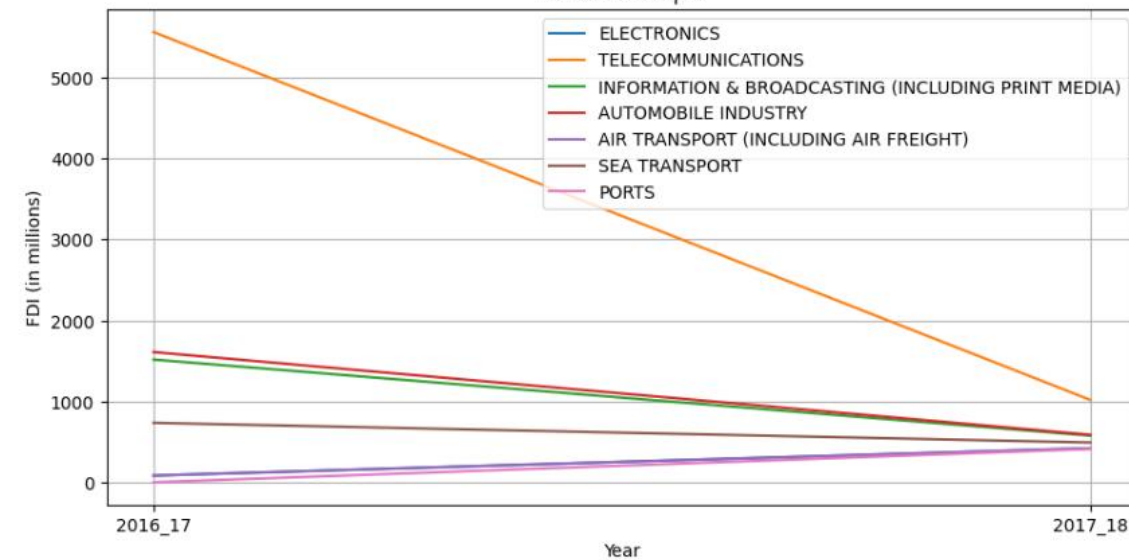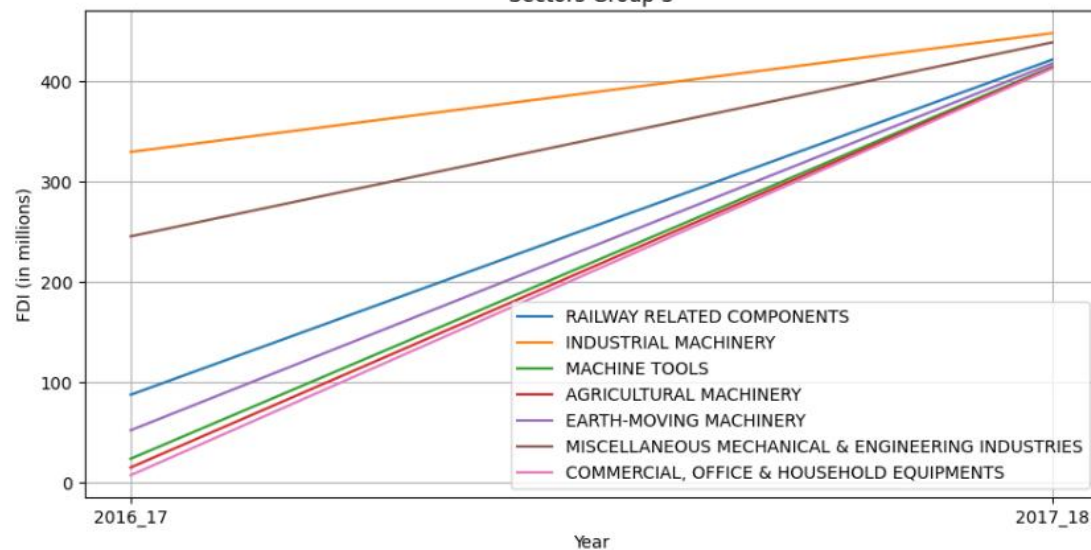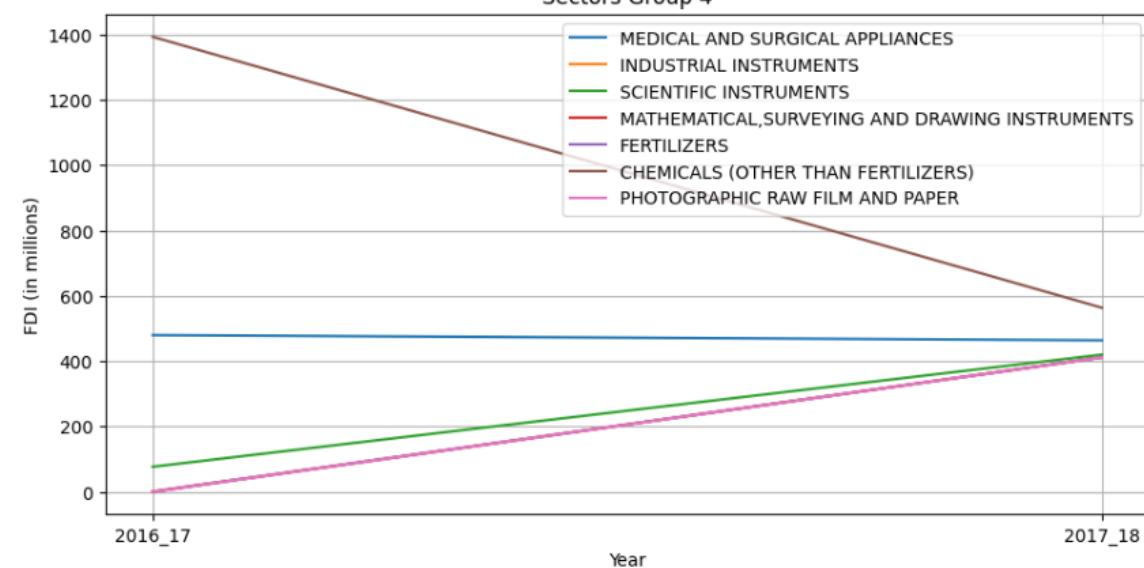- CHEMICALS (OTHER THAN FERTILIZERS)

PREDICTED FDI TRENDS FOR YEAR 2017
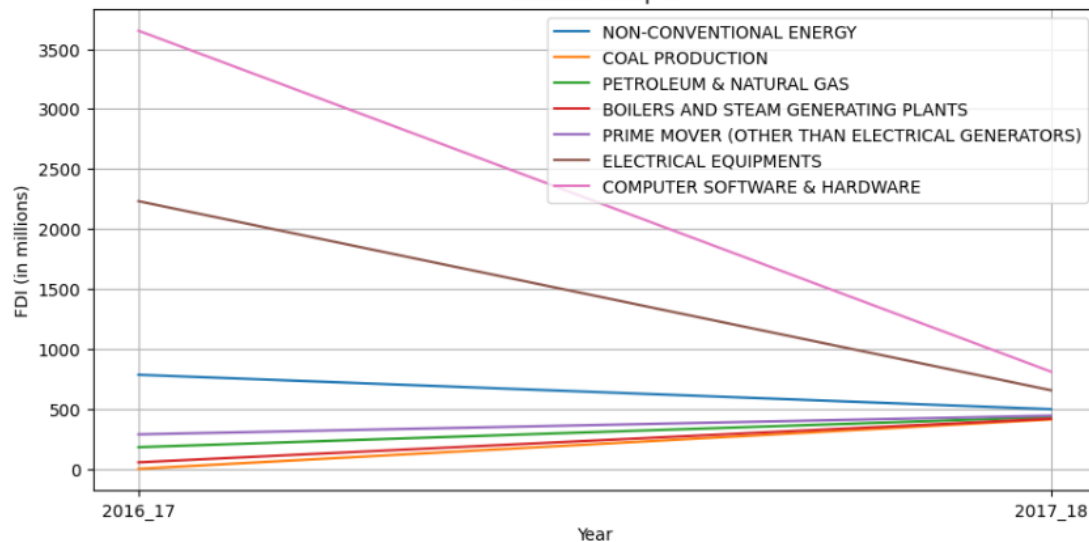
PREDICTED FDI TRENDS FOR FUTURE YEAR 2017
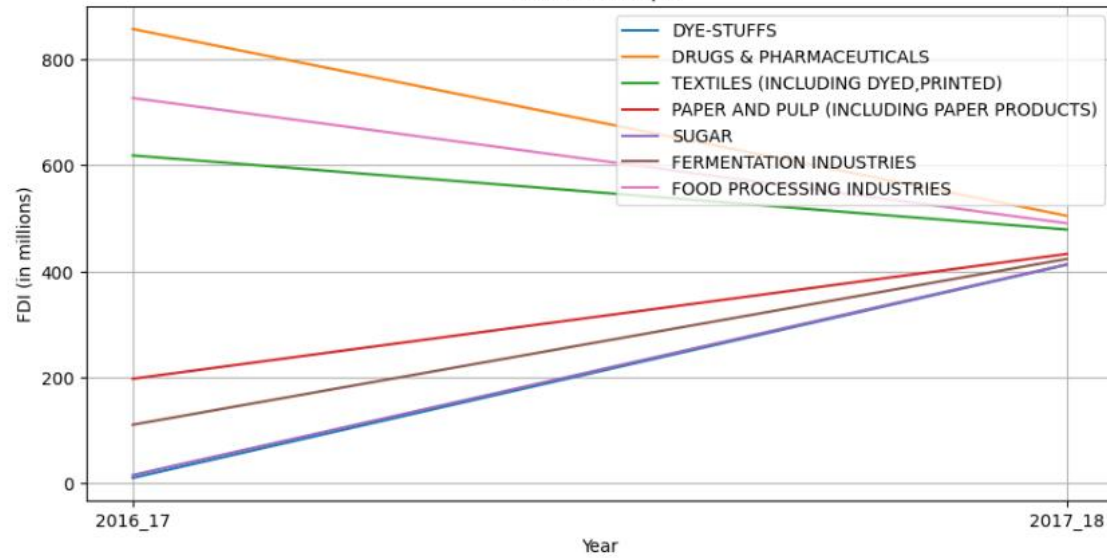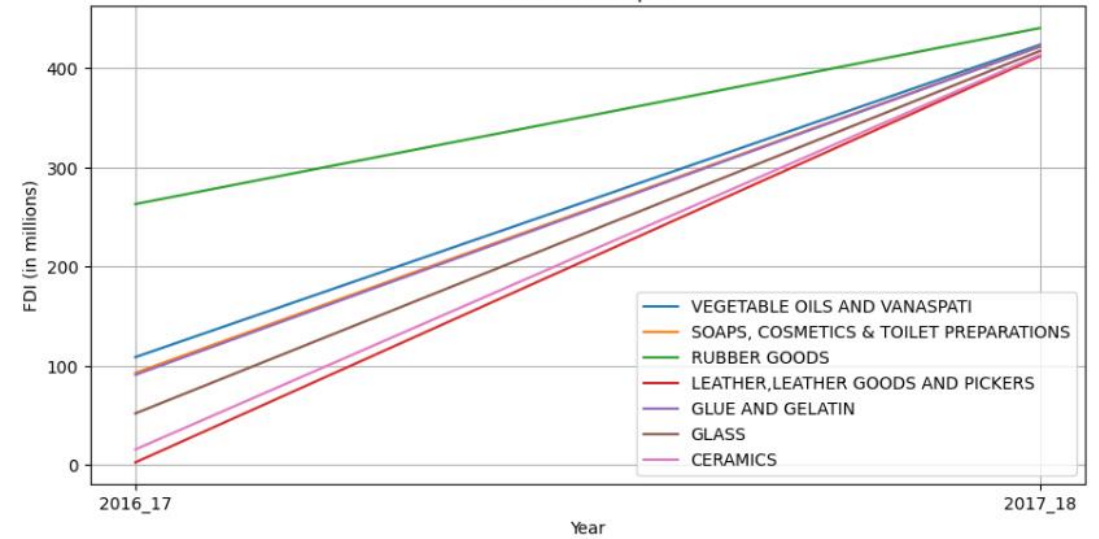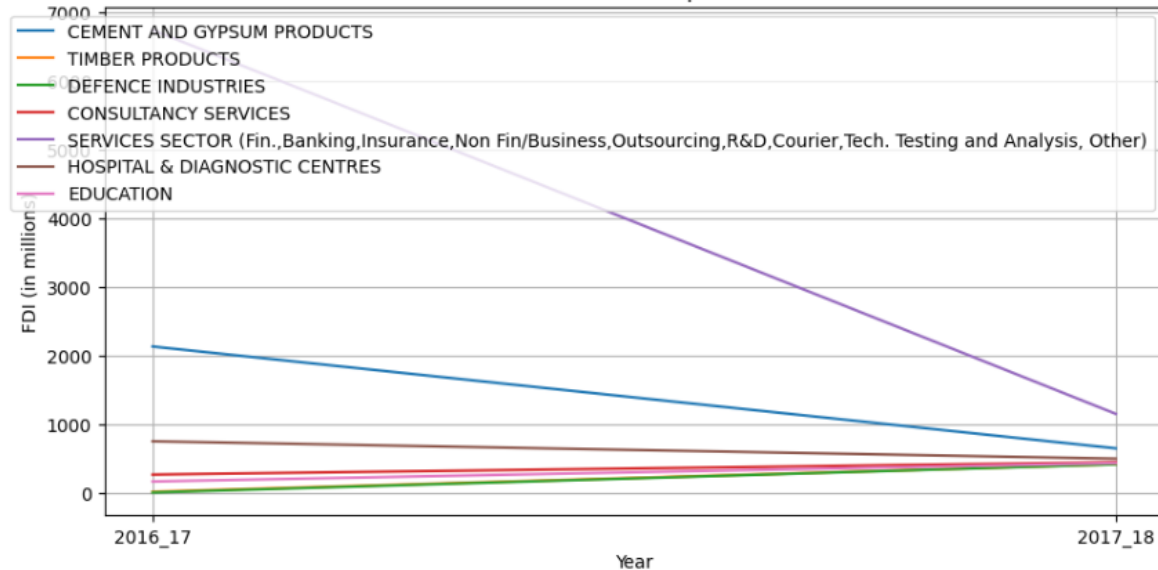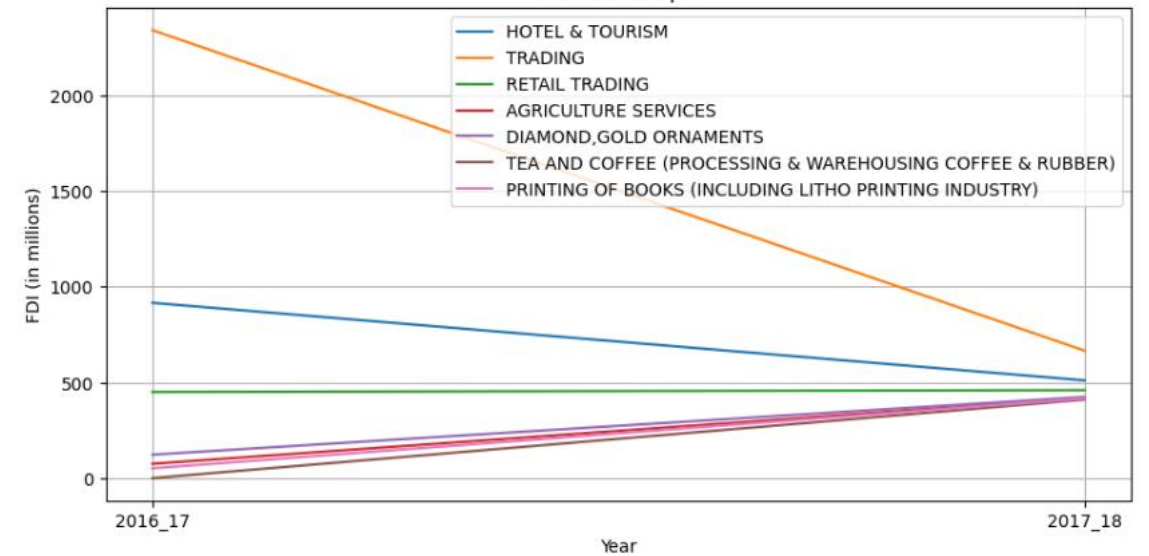
RECOMMENDATIONS

- Focus on the industries that have seen a boom during 2016-2017

- After analyzing the data, study the last 2 years, there are sectors where a peak in the year 2015-2016 is observed, but it is lower in the year 2016_17 . These industries should also be observed: **BOILERS AND STEAM GENERATION PLANTS, COMPUTER SOFTWARE AND HARDWARE, ELECTRONICS, AIR TRANSPORT(INCLUDING AIR FREIGHTS), MACINE TOOLS, EARTH MOVING MACHINERY, COMMERCIAL OFFICE AND HOUSEHOLD EQUIPEMENTS, INDUSTRIAL INSTRUMENTS, CHEMICALS(OTHER THAN FERTILIZERS),SOAP, COSMETICS & TOILET PREPARATIONS, TIMBER PRODUCTS, CONSULTANCY SERVICES, TRADING, PRINTING OF BOOKS(INCLUDING LITHO PRINTING INDUSTRY), CONSTRUCTION(INFRASTRUCTURE ACTIVITIES)**

- On an average, most of the dense distribution for the years falls in the area below **1200 FDI**, the average peak being between **0-200 or 250** units

- Medical industry has flourished in the recent year 2016-2017: **MEDICAL AND SURGICAL APPLIANCES,SCIENTIFIC INSTRUMENTS & HOSPITAL & DIAGNOSTIC CENTRES**

- **The SERVICE SECTOR ranks first in terms of the highest cumulative FDI and TELECOMMUNICATIONS that ranks third are at its peak in the most recent year 2016-2017 if we compare the last 5 years data.**

- **Unfortunately, one does not see a high FDI in NON CONVENTIONAL ENERGY sector to reduce climate change. POWER, SEA TRANSPORT, PAPER INDUSTRY, CEMENT & GYPSUM PRODUCTS still remain at peak in the year 2016-2017**

APPENDIX - DATA METHODOLOGY

- ○ We conducted a thorough analysis of the accommodation market in NY. The process included:
- Cleaning the data and converted the header for columns(years) into readable and concise format. Eg: 2000-2001 to 2000_01 for neat plotting purposes, added and additional column Total FD to ease in plotting certain values
- Almost all the columns had outliers due to the high deviation of variables from the mean. Treated the outliers with the capping method of 99 percentile
- The following relationships were observed between sector and the years. However, no significant relationship or dependency is observed between two sectors.

1. SERVICE SECTOR and the years: 2006-07, 2007-08, 2012-13, 2016-17

2. COMPUTER SOFTWARE AND HARDWARE: 2005-06

3. CONSTRUCTION DEVELOPMENT(townships, housing): 2009-10

4. FOOD PRODUCTION INDUSTRIES: 2013-14

5. MISCELLANEOUS INDUSTRIES: 2000-01

Microsoft Word Document

- ● ***Attached doc for methodology*** -

APPENDIX - DATA ASSUMPTIONS

○ There were certain gaps due to data unavailability as well as dated information.

● We have capped outliers at 99 percentile and thought this was the best method to deal with values with high standard deviation and wide range of numeric values without compromising on the loss of data and accuracy of the dataset

● We have taken the lag function to predict the values with linear regression for the year 2017, which is the next year and tried to plot the charts for all sectors , predicting the FDI value next year.