



UNIFIED MENTOR PVT.LTD

FDI Data Analysis

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01.

INTRODUCTION AND PROJECT OBJECTIVE

INTRODUCTION

- Foreign Direct Investment (FDI) is a critical component of the global economic landscape, signifying the inflow of capital from one country into another to establish or expand business operations.
- FDI involves a long-term strategic interest by a foreign entity in a host country, typically through the acquisition of assets, equity stakes, or the establishment of subsidiaries.
- This form of investment not only bolsters the economic growth of the host nation but also provides the investing country with opportunities for expansion and diversification.
- FDI plays a pivotal role in fostering international economic cooperation, technological transfer, and job creation, shaping the interconnectedness of economies in an era of globalization.
- Data analysis plays a crucial role in determining Foreign Direct Investment (FDI) trends, patterns, and impact on economies. By harnessing various data sources such as economic indicators, industry reports, and investment databases, analysts can uncover valuable insights into the preferences, motivations, and behavior of foreign investors.
- Analyzing historical FDI data helps predict future trends and assess the effectiveness of policies and initiatives aimed at attracting foreign investors.
- By understanding the intricate relationship between economic variables, geopolitical factors, and FDI flows, data analysis provides a robust foundation for informed decision-making, fostering a conducive environment for sustainable economic growth and global business partnerships.





PROBLEM STATEMENT & PROJECT OBJECTIVE

PROBLEM STATEMENT:

- Investment is a game of understanding historic data of investment objects under different events but it is still a game of chances to minimize the risk we apply analytics to find the equilibrium investment.
- To understand the Foreign direct investment in India for the last 17 years from 2000-01 to 2016-17.
- This dataset contains sector and financial year-wise data of FDI in India Sector-wise investment analysis Year-wise investment analysis.
- Find key metrics and factors and show the meaningful relationships between attributes. Do your own research and come up with your findings

PROJECT OBJECTIVE:

- The objective of this project is to analyze historical data to identify past patterns and trends in Foreign Direct Investment (FDI).
- Through systematic data analysis, the project aims to uncover recurring themes, factors, and behaviors that have influenced FDI in a specific context.
- By understanding historical patterns, the project seeks to provide insights into the drivers of FDI, allowing for informed predictions and strategic decision-making.
- The goal is to contribute to a more nuanced comprehension of FDI dynamics, facilitating the development of effective strategies to attract and optimize foreign investments in the future."

02. DATA INFORMATION

DATA INFORMATION

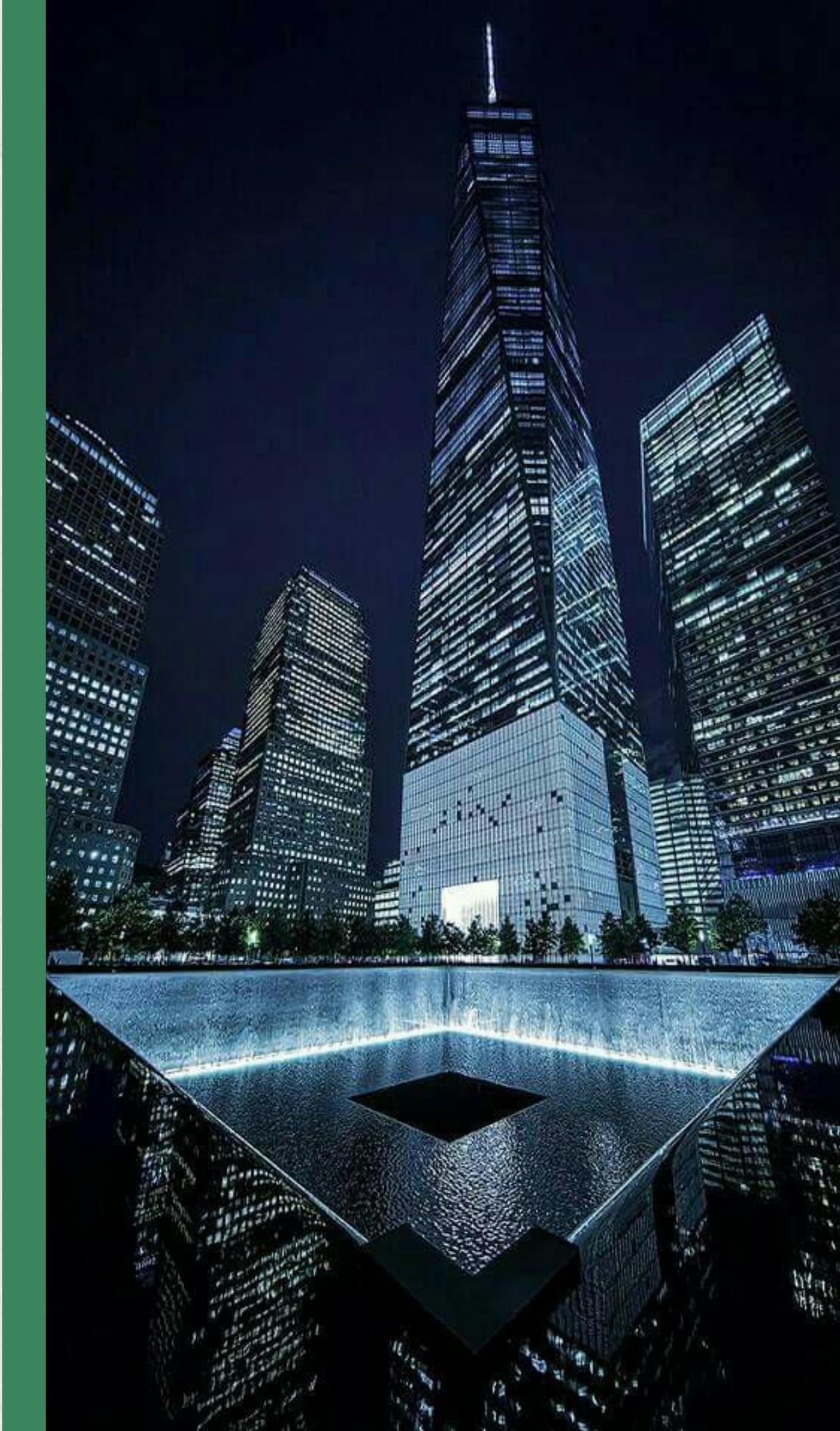
- The Data for the FDI Analysis Project was provided to us by the Unified Mentor Internship team.
- The Dataset consisted of one Categorical column consisting of the Sector names included in the FDI.
- The Numerical Columns spanned across 16 years of data about the FDI for the sectors.
- The target of the project was to find the underlying factor, past trends to determine future growth of FDI's in certain sectors.
- The tool used for Data Analysis is Tableau Data Visualization tool.



03. DATA INSIGHTS

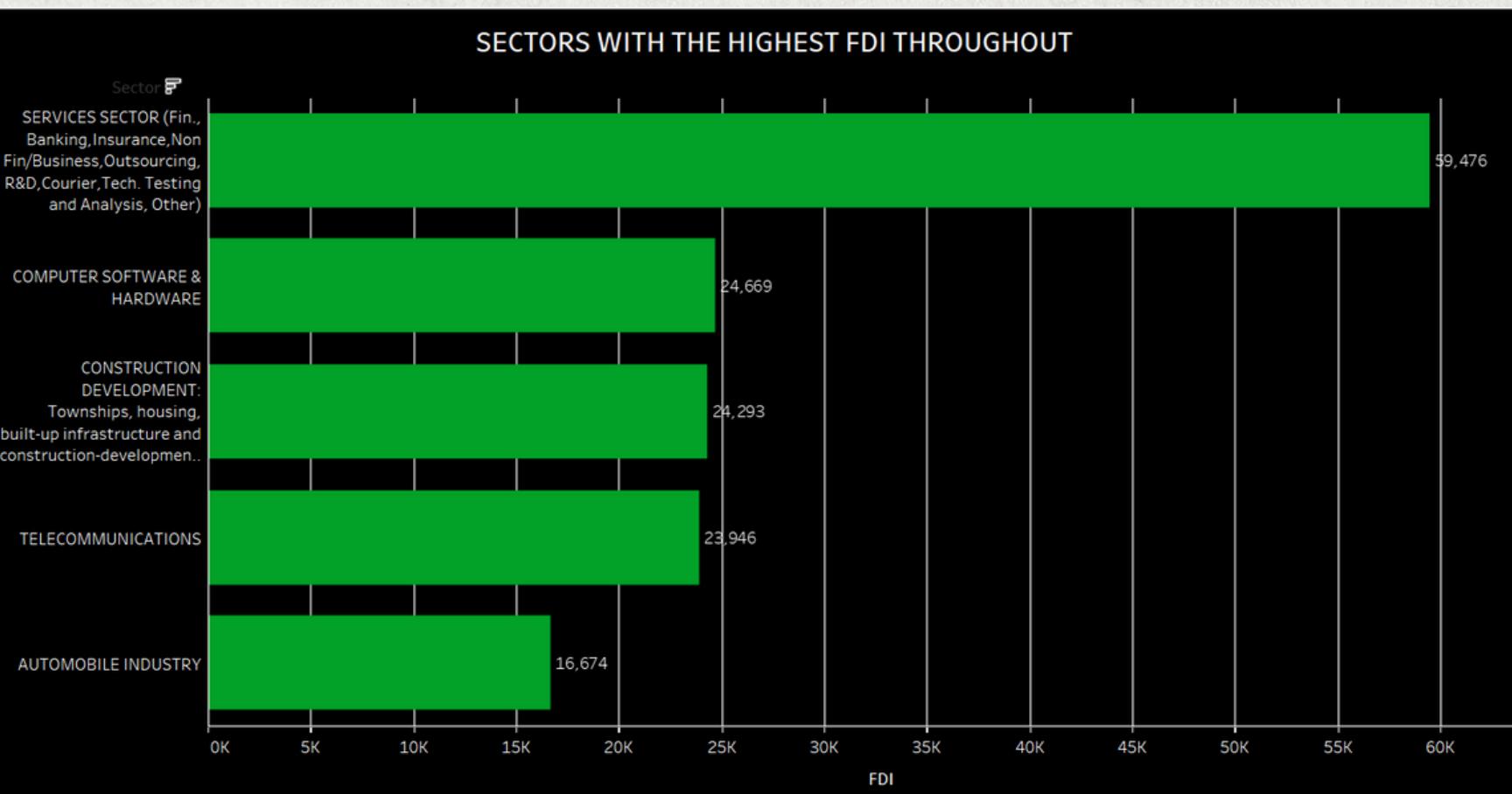
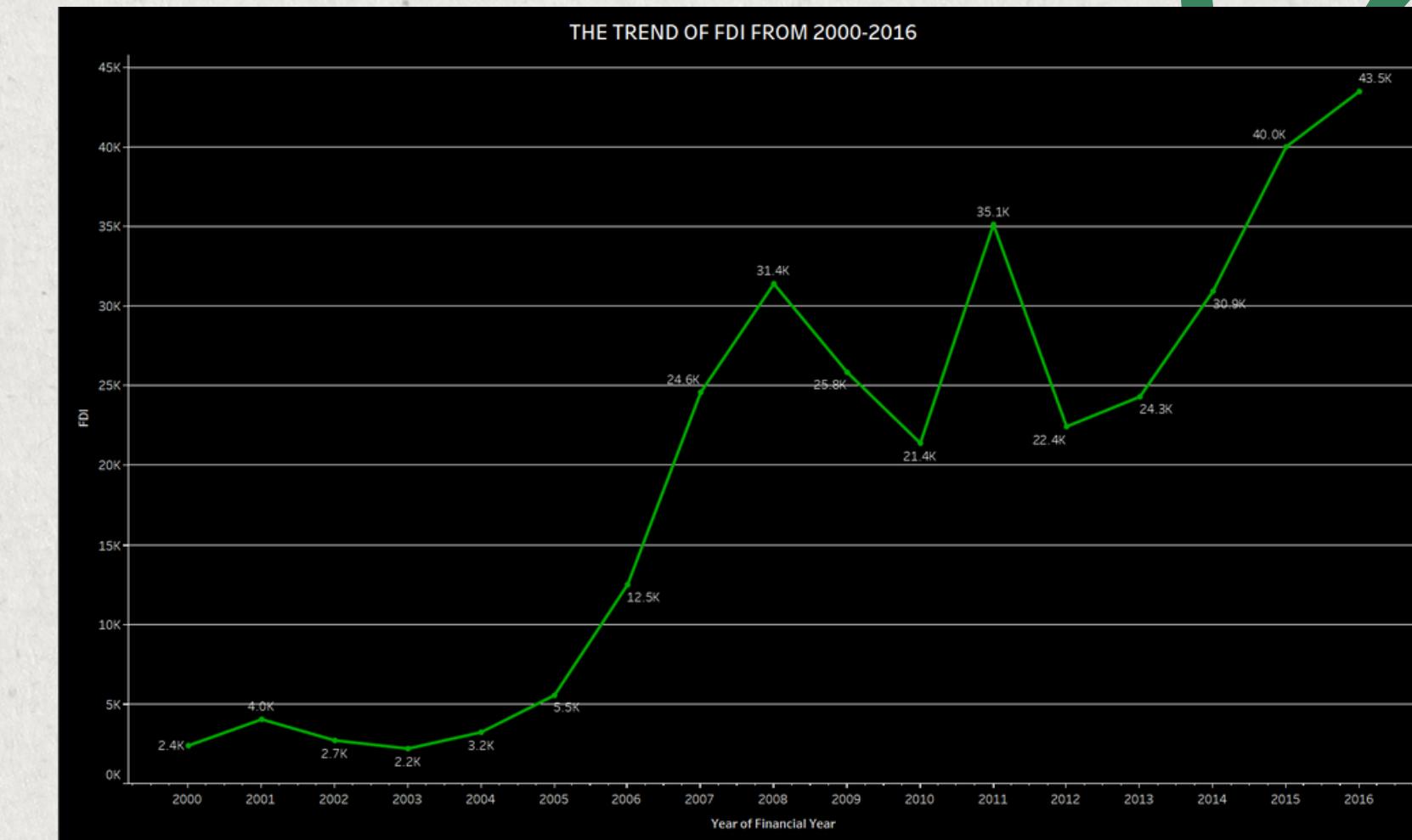
DATA INSIGHTS

- Data insights derived from the analysis of Foreign Direct Investment (FDI) provide a nuanced understanding of the dynamics shaping international investment patterns.
- Through careful examination of FDI data, insights can be gleaned regarding the preferred sectors, geographic regions, and economic conditions that attract foreign capital.
- These insights enable policymakers and businesses to identify opportunities, anticipate trends, and formulate strategies to enhance their competitiveness in the global market.
- By exploring historical FDI data, patterns emerge, shedding light on the impact of geopolitical events, economic policies, and industry shifts on investment decisions.
- Ultimately, leveraging data insights in FDI analysis is instrumental in making informed decisions, shaping robust economic policies, and promoting sustainable economic growth on a global scale.



Trend of FDI from 2000-2016

- As observed, the trend of FDI from 2000 - 2004 observed a very slow growth from 2.4K to 3.3K
- From 2004 onwards, the growth saw an excellent peak till 2008, wherein the growth increased from 2.4K to 31.4K.
- From 2009 - 2010, a huge drop was observed due to the financial crisis, wherein, the FDI dropped from 31.4K in 2008 to 21.4K in 2010.
- 2011 observed an upward trend by the FDI reaching 35.1K.
- In 2012, a drop was observed to 22.4K and the trend gradually picked up and had an upward trend throughout until it reached its peak in 2017 with an FDI of 43.5K.

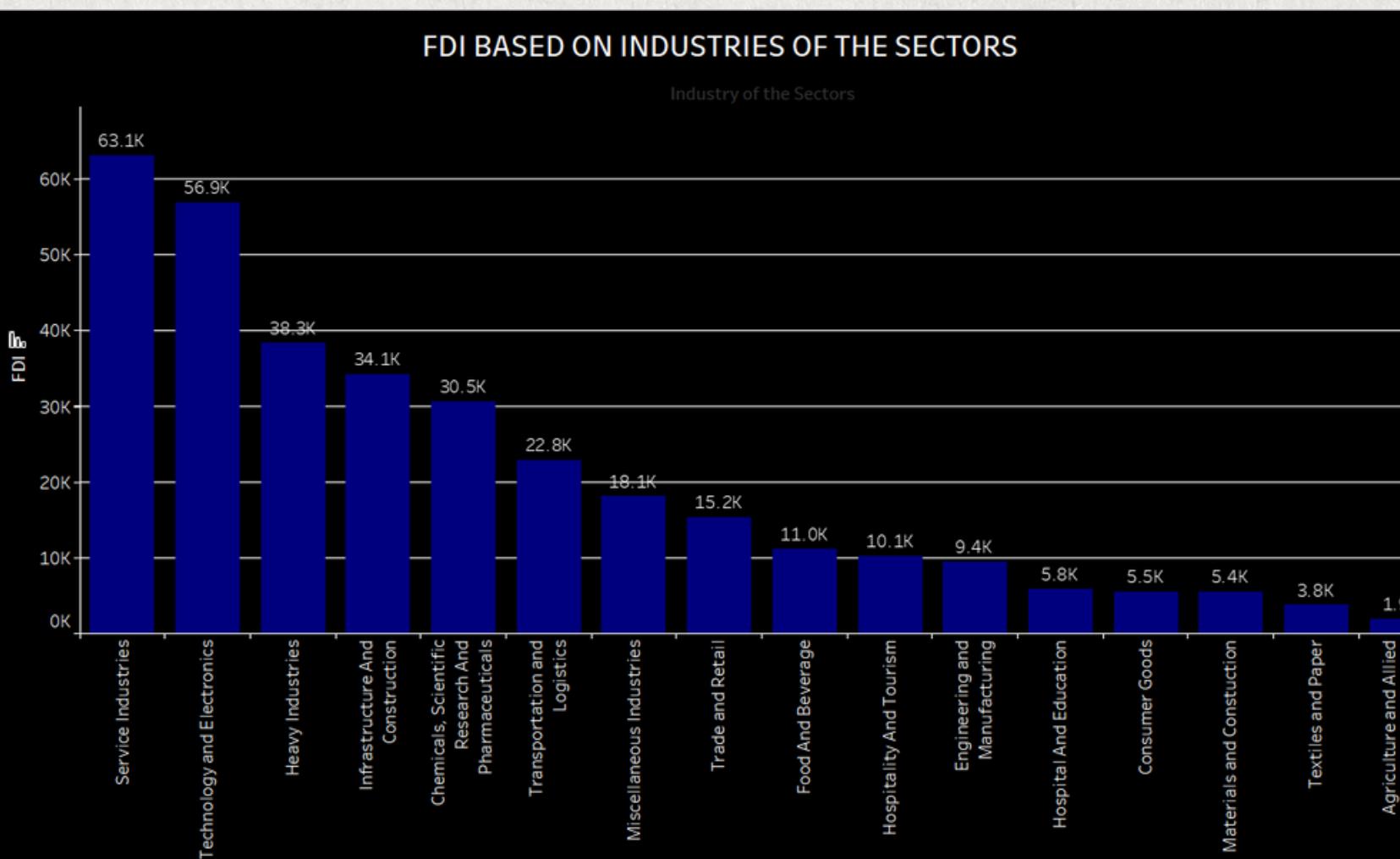
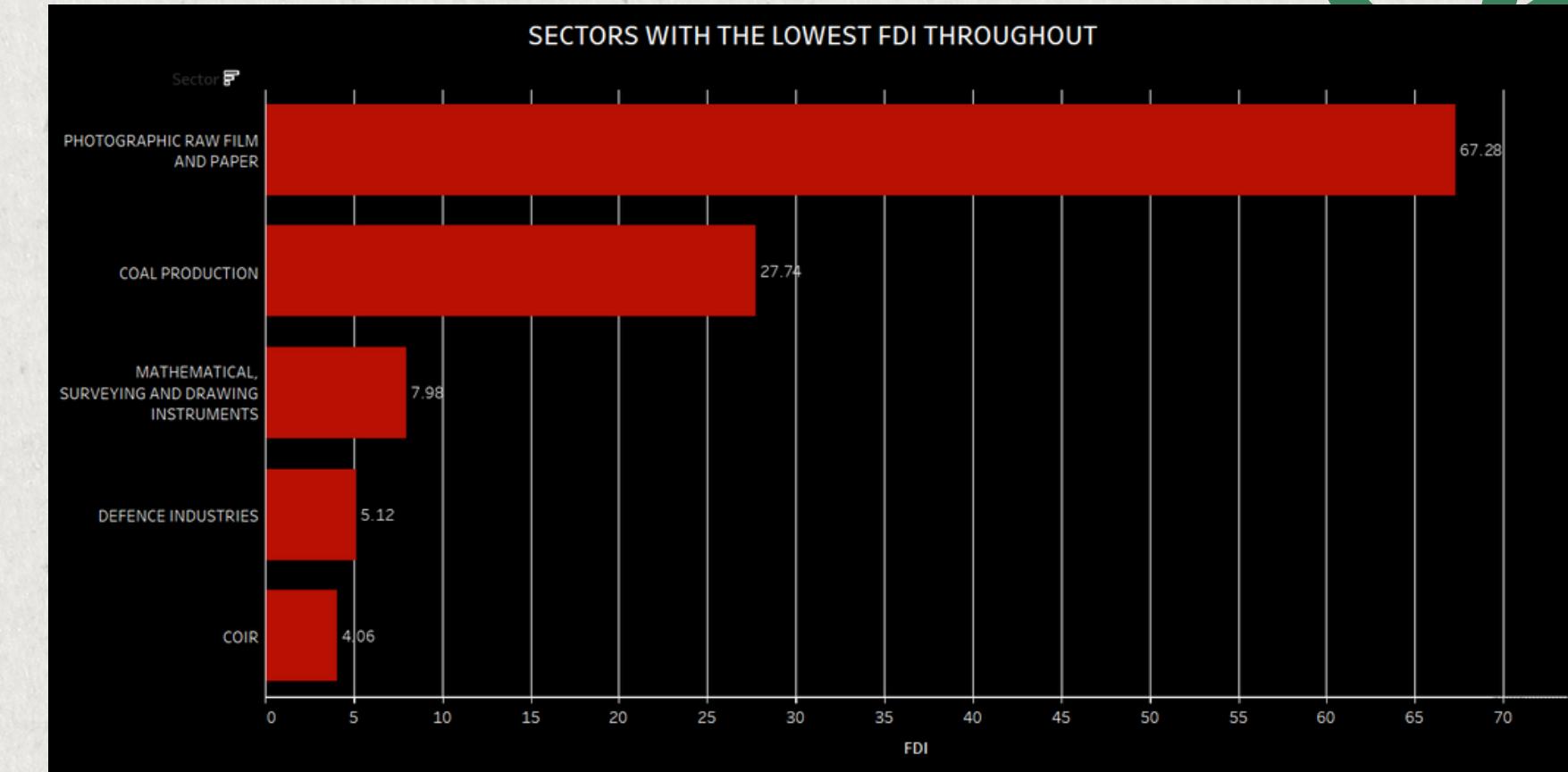


Sectors with the Highest FDI Throughout

- The Services Sector accounted to have the highest FDI with 59.4K
- The Second Highest sector was the Computer Software and Hardware sector with 24.6K.
- Construction Development sector stood third with 24.2K FDI.
- Telecommunications Sectors took the fourth spot in terms of highest FDI with 23.9K total FDI.
- The Fifth most Highest sector was observed by the Automobile Industry with 16.6K total FDI.

Sectors with the Lowest FDI Throughout

- The Photographic Raw Film and Paper accounted to have the fifth least FDI with 67.28 total FDI.
- The Fourth Least sector was the Coal Production sector with 27.74 total FDI.
- Mathematical Surveying and Drawing Equipment sector stood third with just 7.98 total FDI.
- Defense Industries took the second spot in terms of lowest FDI with 5.12 total FDI.
- The Least sector was observed by the COIR sector with just 4.06 total FDI.



FDI based on Industries of the Sectors

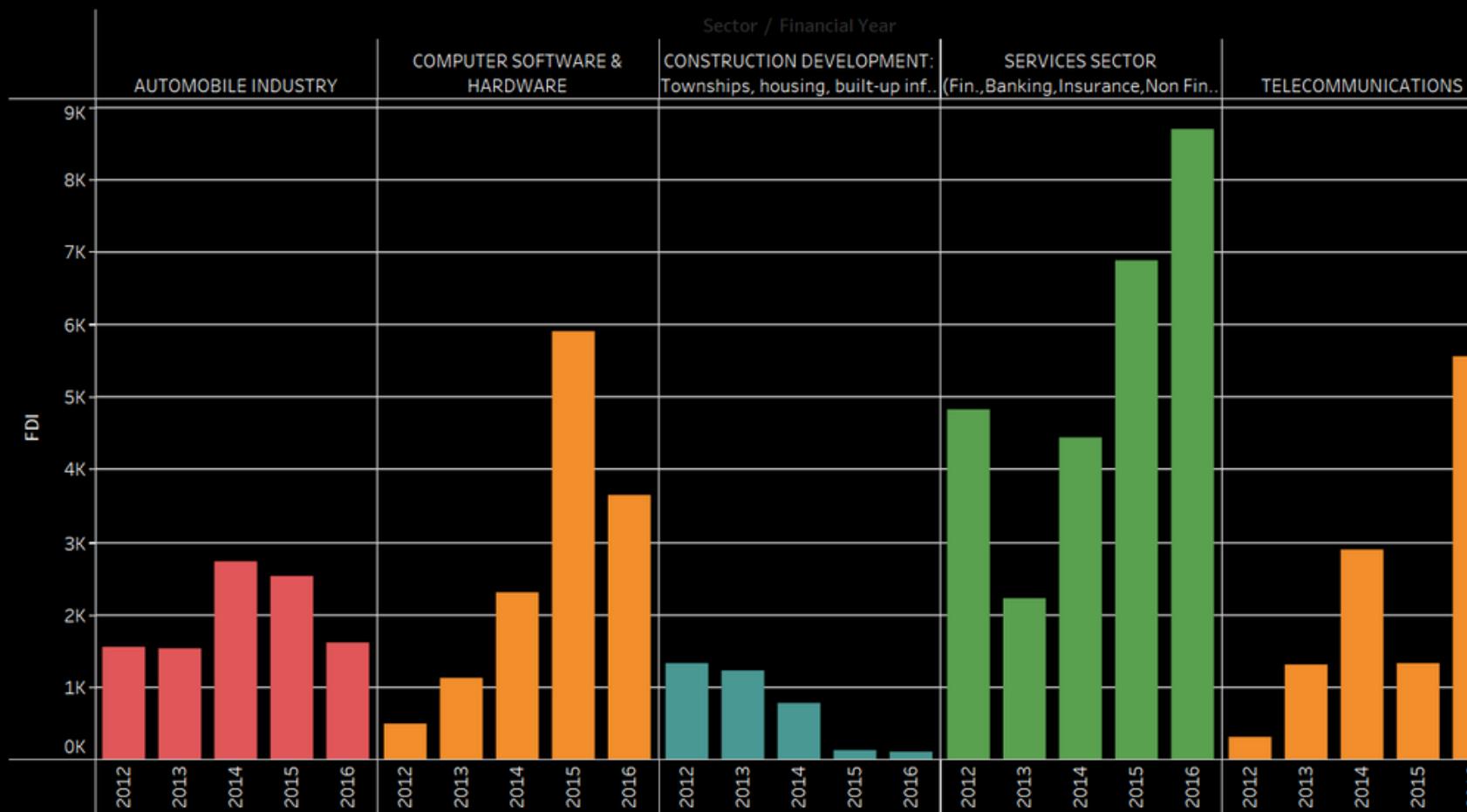
- The industries of sector provide insights on the grouping of the sectors based on similar characteristics and analyzing them altogether to observe which industry is performing well and which industries are under-performing.
- The top three industries were:
 - Service Industries with 63.1K total FDI.
 - Technology and Electronics with 59.1K total FDI.
 - Heavy Industries with 38.3K total FDI.
- The bottom three industries were:
 - Materials and Constructions with 5.4K total FDI.
 - Textiles and Paper with 3.8K total FDI.
 - Agriculture Allied Services with 1.9K total FDI

Trend of well performing Industries over the past 5 Years

- The Chemicals & Pharmaceuticals industry had a decent trend with the highest trend being observed in the year 2011, the industry has had a flat trend from 2014 to 2016
- The Heavy Industries had the lowest trend in 2008, but observed its highest trend in 2011, the pattern however is decent throughout.
- Infrastructure and Construction has been the lowest performing sector among the top 5 with a deflecting trend throughout.
- The Second best trend was observed by the Service Industry which has grown really well throughout the past 5 Years and reaching its peak in the year 2016.
- The best performing industry is the Technology and Electronics industry with an excellent trend and reaching the highest peak in the year 2016.



TOP 5 PROFITABLE SECTORS IN THE LAST 5 YEARS

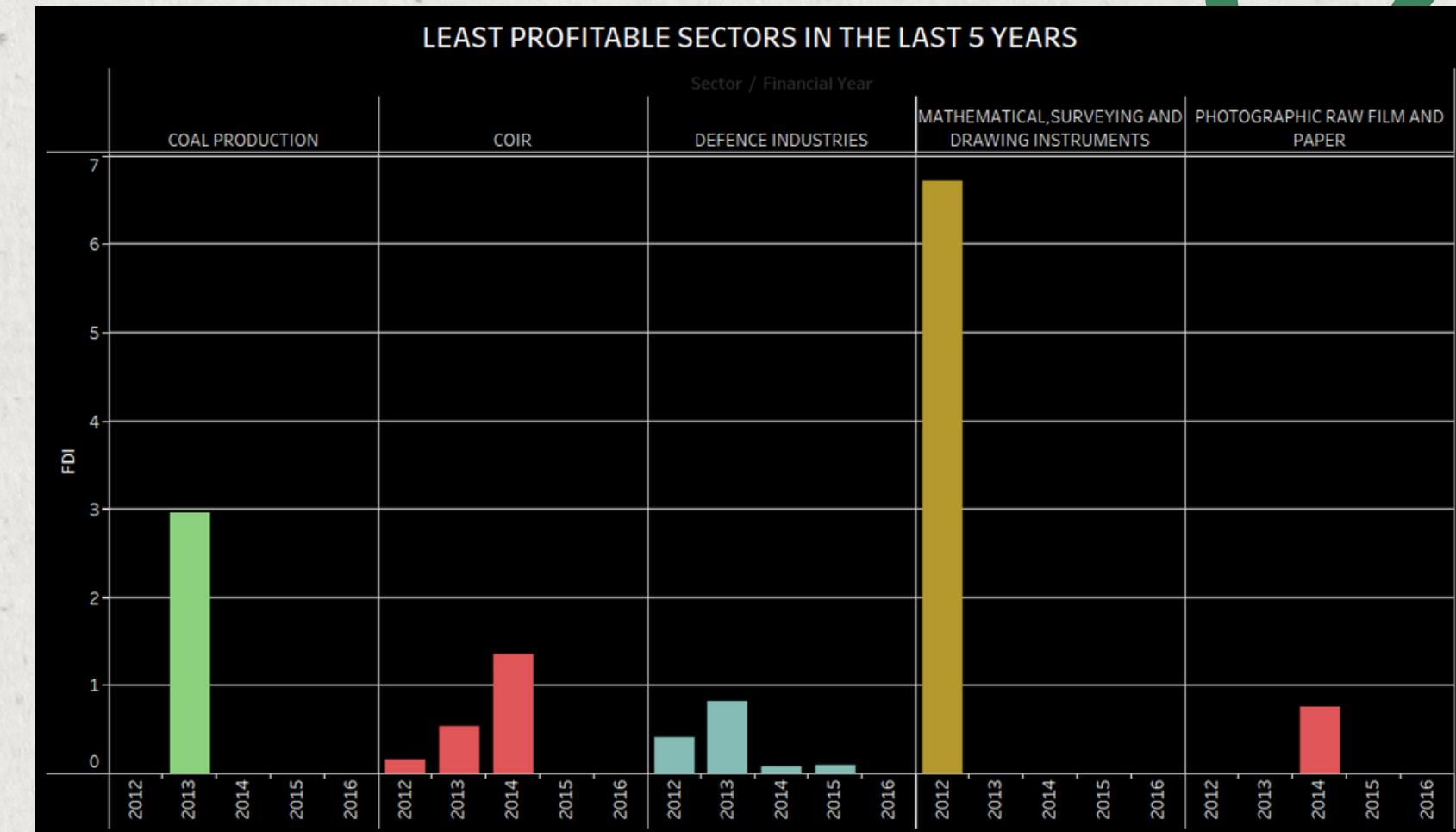


Top 5 sectors in the last 5 Years

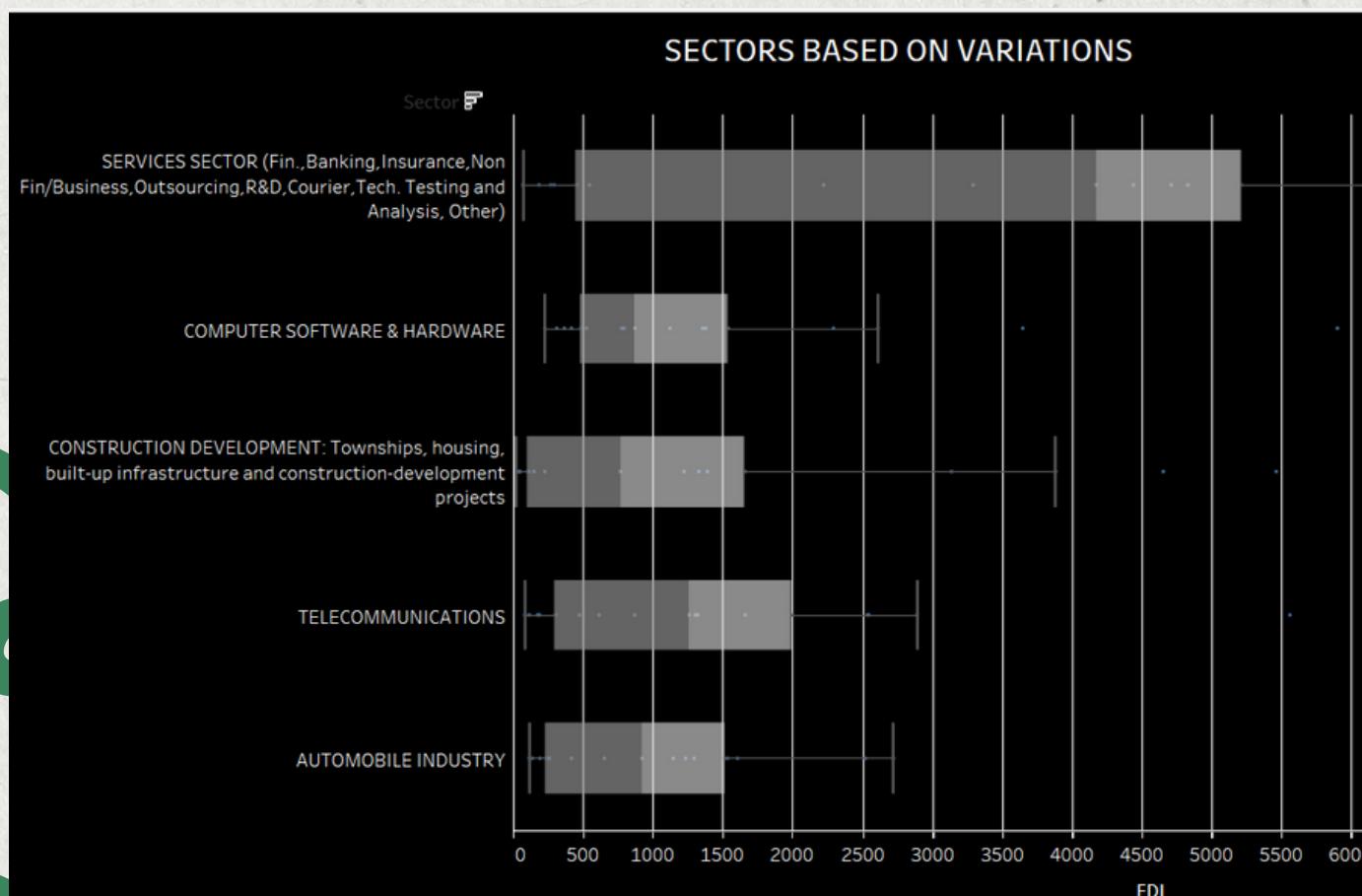
- The Automobile Industry is in top 5 sectors with a decent trend from 2008 - 2016.
- The Computer Software and Hardware industry has had one of the best growth trends by reaching the peak in 2015.
- Construction Development Industry had the lowest trend among the top 5 sectors with a downward trend in the recent years.
- The Services Sector had the best trend throughout and is the best in terms of FDI by having a highest growth trend.
- The Telecommunications sector observed the third best trend with the third best growth trend.

Least Profitable Sectors in the last 5 Years

- The Coal Production sector accounted to be the fifth least profitable sector in terms of FDI.
- The Fourth Least sector was the COIR sector with the highest sector reaching at only 5 FDI.
- Defense sector stood third one of the lowest decline observed.
- Mathematical Surveying and Drawing Instrument took the second spot in terms of lowest FDI the last 5 years.
- Photographic Raw Film and Paper sector observed no trend at all until the year 2012.



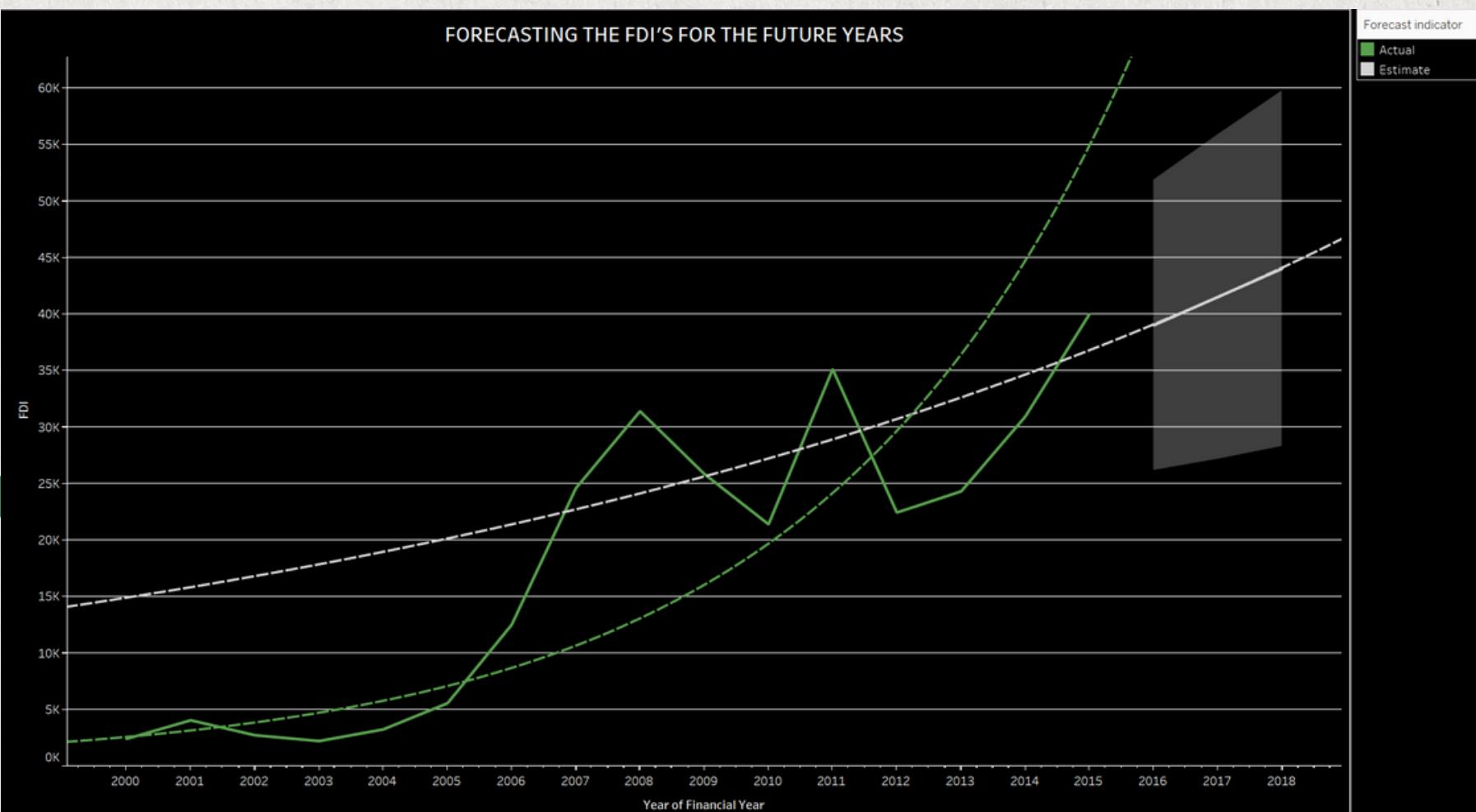
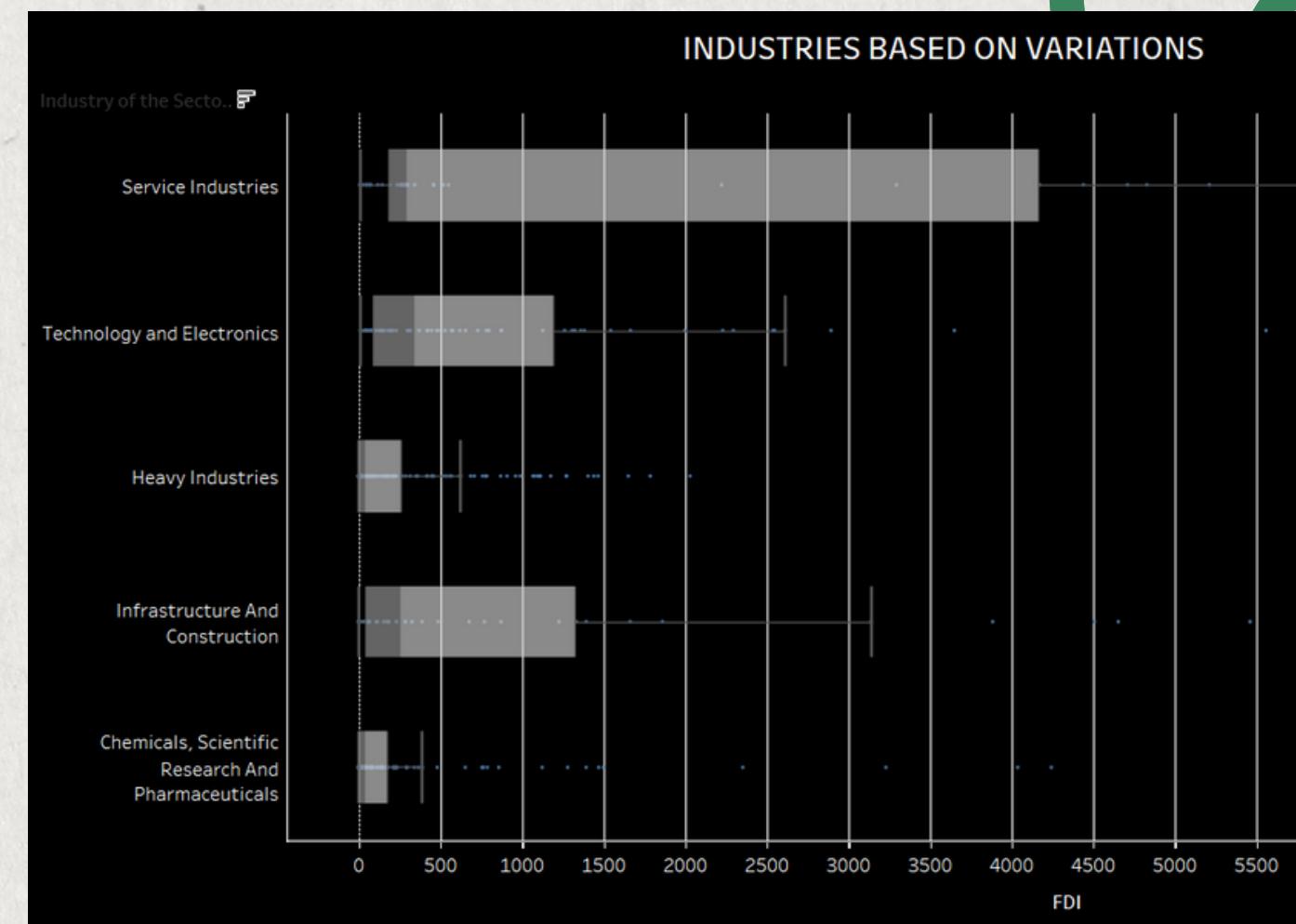
Sectors based on Variations



- Variation typically refers to the degree of change or fluctuation in FDI inflows over a specified period. Understanding the variation in FDI is crucial for businesses to comprehend the dynamics of international investment and make informed decisions.
- The Services Sector observed the most variations.
- Computer Software and Hardware observed the second most variations.
- Construction Development observed the third most variations.
- Telecommunications sector observed the fourth most variations
- Automobile Industries sector observed the fifth most variations.

Industries based on variation

- The industries with the top 5 variation are:
 - Service Industries observed the most variations.
 - Technology and Electronics observed the second most variations.
 - Heavy Industries had the third most variations.
 - Infrastructure and Construction had the fourth most variations.
 - Chemicals and Pharmaceuticals industries had the fifth most variations.



Forecasting the FDI's for the Future

- Using Data Visualization, the future of FDI's are forecasted so as to understand the growth of the FDI's for the following year
 - The Actual Trend based on Visualizations help us understand the trend in the year 2016 which reached 60K.
 - The Estimated Trend based on Visualizations helps us understand the trend to follow a gradual uptrend rather than an immediate trend, with the year 2017 and 2018 observed the trend to reach 40K and 60K in a gradual trend throughout 2017 and 2018 respectively.

03. CONCLUSION

CONCLUSION



- In conclusion, the Foreign Direct Investment (FDI) data analysis has provided valuable insights into the intricate dynamics of global capital flows.
- By scrutinizing historical patterns, sectoral distributions, and geographical trends, we have gained a comprehensive understanding of the factors influencing FDI.
- The analysis not only revealed the impact of past patterns on investment but also facilitated the identification of opportunities and challenges for businesses.
- Through data-driven insights, we have laid the groundwork for informed decision-making, enabling stakeholders to anticipate future trends, attract targeted investments, and optimize strategies for sustainable economic growth.
- This FDI data analysis serves as a valuable tool for fostering international economic cooperation, guiding policymakers in creating conducive environments for investment, and positioning businesses to thrive in an increasingly interconnected global economy.



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Thank you!





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