



Economic Impact Study

Tourism Impact Analysis'

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Overview

Objective

- Analyze the economic impact of tourism changes across 10 major tourist destinations
- Compare pre and post-2020 tourism receipt and GDP relationships
- Visualize economic resilience patterns across different countries



Tools & Technologies & Data Sources

- Python for data processing and analysis
- pandas for data manipulation
- Matplotlib for data visualization
- NumPy for numerical computations



- World Development Indicators (GDP data)
- Tourism receipt data from top 10 tourism countries
- <https://datatopics.worldbank.org/world-development-indicators/>



Methodology

Data Processing

- Implemented custom TourismImpactAnalysis class
- Preprocessed and normalized economic indicators
- Calculated year-over-year changes and ratios

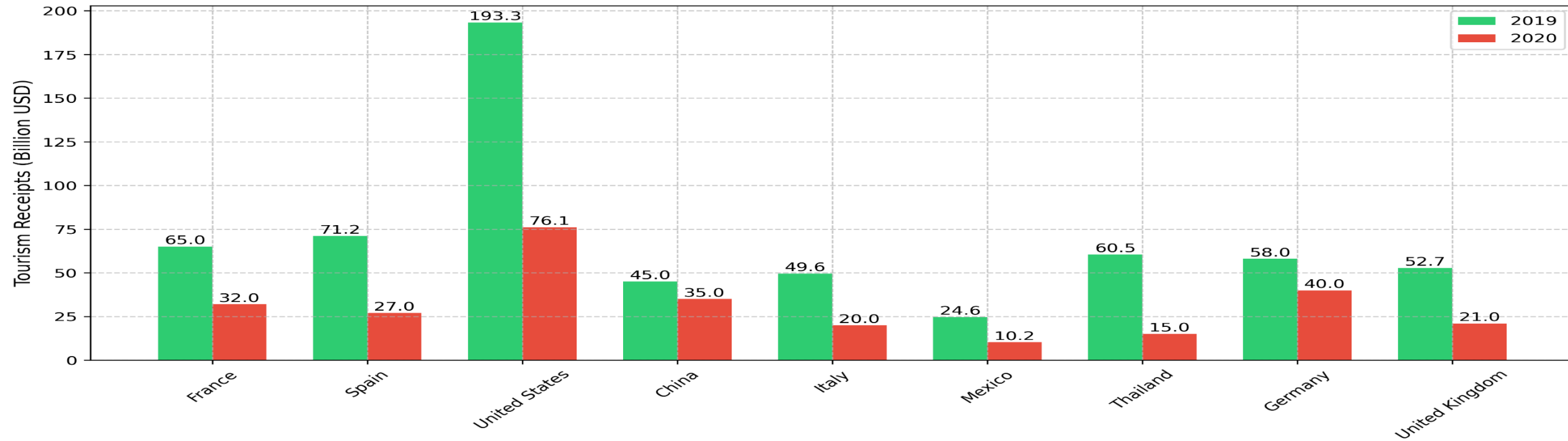


Analysis Component

- Tourism receipts comparison (2019 vs 2020)
- GDP Impact Analysis
- Tourism contribution to GDP calculations
- Percentage change computations

Tourism Receipts Impact

Tourism Receipts Comparison (2019 vs 2020)

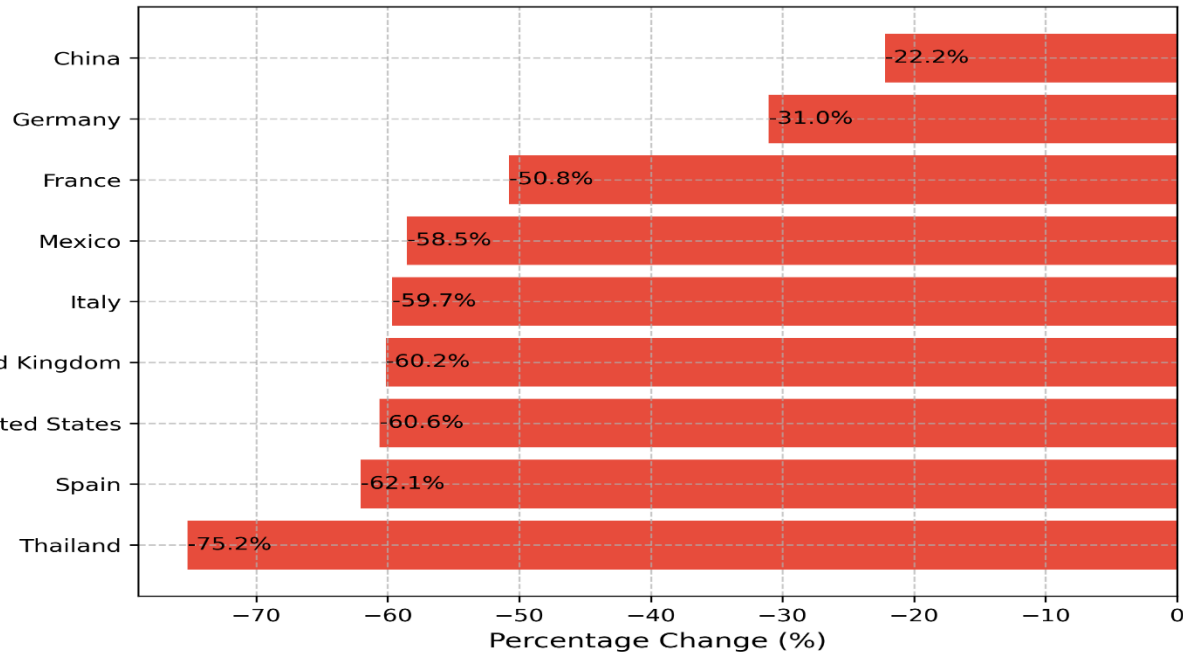


Analysis Highlight

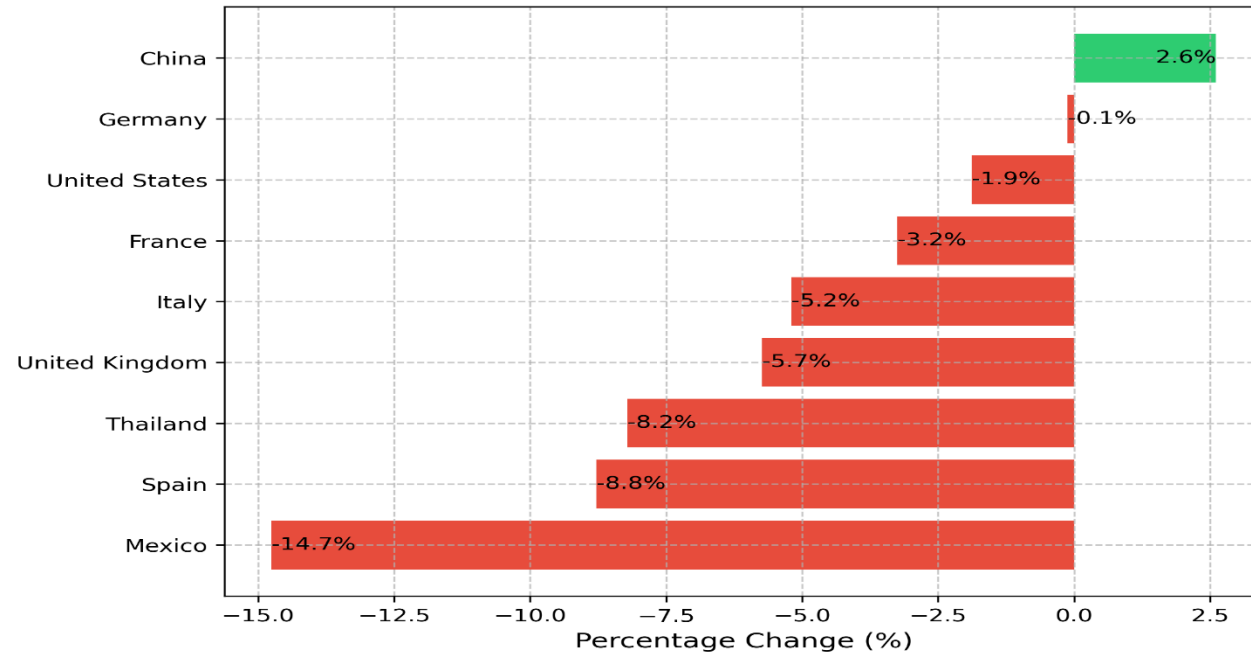
- United States showed highest absolute receipts: \$193.3B(2019) -> \$76.1B(2020)
- All countries experienced significant declines
- China showed most resilience with smallest percentage drop
- Thailand experienced most severe impact with 75.2% decline

Economic Impact

Tourism Receipts Change (2019-2020)



GDP Change (2019-2020)

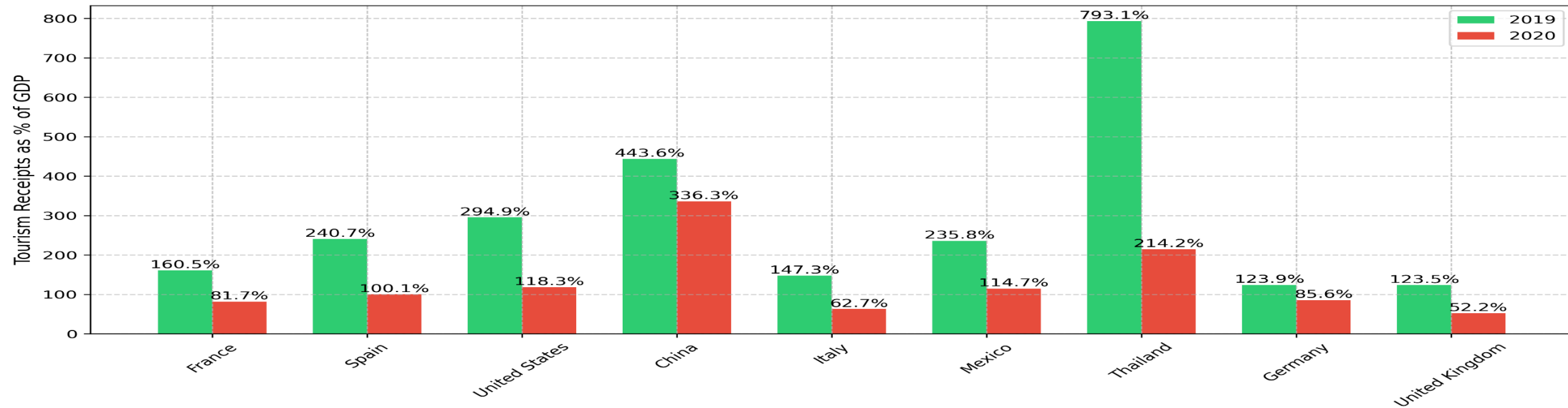


Key Observations

- Tourism receipts declined more severely than overall GDP
- China maintained positive GDP growth despite tourism decline, even when COVID happened
- Mexico experienced most severe GDP impact (-14.7%)
- European countries showed moderate GDP resilience despite tourism losses

Economic Impact

Tourism Contribution to GDP (2019 vs 2020)



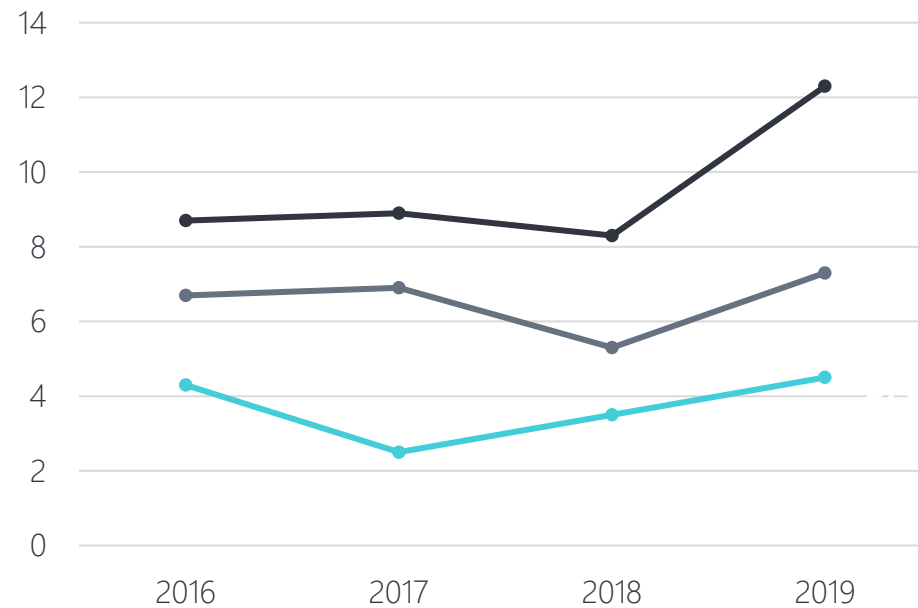
Notable Patterns

- China showed the highest tourism-to-GDP ratio pre-crisis (443.6%)
- Most countries experienced significant drops in tourism's GDP contribution
- Germany maintained a relatively stable tourism-to-GDP ratio
- Thailand's tourism dependency evident in dramatic ratio changes

Project Impact & Applications

Business Value

- Qualified economic resilience patterns
- Identified tourism dependency risks
- Provided data-driven insights for recovery planning



Conclusion

Key Achievements

- Successfully analyzed tourism impact across 10 major global destinations
- Developed scalable Python solution for economic data analysis
- Created comprehensive visualization suite for multi-dimensional analysis

Critical Insights

- Tourism decline ranged from -22.2% (China) to -75.2% (Thailand)
- GDP impact showed varying resilience (-14.7% to +2.6%)
- Tourism contribution to GDP revealed hidden economic vulnerabilities

Technical Proficiencies Demonstrated

- Object-oriented Python programming
- Data processing and statistical analysis
- Advanced data visualization
- Economic indicator analysis





THANK YOU