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## 1. Introduction

This report presents a detailed analysis of global economic trends, focusing on GDP per capita, economic growth, ease of doing business, and their interrelationships. Using heat maps, animations, and comparative metrics from various countries, the report aims to understand the factors that impact economic success and business viability across regions. These insights are crucial for policymakers, business leaders, and economists who seek to foster sustainable economic growth, promote favorable business environments, and address the disparities among nations. This analysis thus sheds light on economic disparities and business opportunities and provides a foundation for informed policy decisions and strategic investments.

## 2. Research Questions

By examining the dataset's structure, visuals, and dashboard layout, the following research questions were formulated:

**1. How does GDP per capita vary across countries over time?**

*This question aims to explore the differences in economic prosperity globally and identify countries that have shown significant improvement or decline over time.*

**2. What is the relationship between ease of doing business scores and GDP per capita?**

*This question investigates whether a favorable business environment correlates with a higher GDP per capita, suggesting the impact of regulatory and business-friendly policies on economic performance.*

**3. Which regions exhibit the highest and lowest economic growth rates?**

*By identifying regions with contrasting economic growth rates, this question highlights factors that contribute to regional economic success or stagnation.*

**4. What impact does ease of doing business have on economic growth?**

*This question examines the extent to which business environment reforms could spur economic growth, particularly in developing countries.*

**5. How do ease of doing business scores be compared across continents?**

*Exploring ease of business scores by continent helps understand how business climates vary by region, providing insights into continental trends and opportunities.*

### **3. Methodology**

#### **Datasets**

The datasets employed in this analysis were sourced from reputable economic data providers and cover multiple indicators. Key datasets include:

- **GDP per Capita:** This data set records GDP per capita values for various countries, providing a measure of average economic prosperity per individual.
- **Economic Growth (GDP Growth %):** This data captures year-over-year growth rates, indicating economic expansion or contraction trends.
- **Ease of Doing Business Scores:** These scores measure regulatory ease and efficiency for businesses, providing insights into business environments across countries.

## **Data Cleaning and Processing**

Data cleaning steps included handling null values, particularly for countries with missing data points. For the heat map visualizations, geospatial data (latitude and longitude) was verified and corrected for consistency. Numeric values, such as GDP per capita and growth rates, were normalized to ensure comparability across countries. Finally, datasets were combined and cross-referenced to align country names and codes accurately, facilitating coherent multi-metric analyses.

## **4. Visual Analysis of Insights**

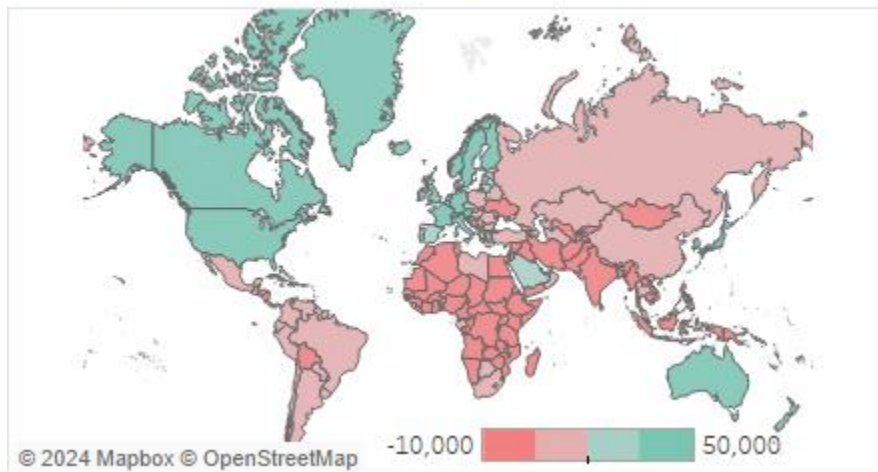
In this section, we dive into a data-driven story, exploring each visual insight sequentially. Each visual provides a unique lens through which we understand global economic trends, business climates, and growth dynamics. By weaving these insights together, we uncover a compelling picture of the current state and potential trajectory of global economies.

### **1. GDP per Capita Heat Map Animation**

Our journey begins with the GDP per capita heat map animation, which spans multiple years to illustrate changes in global economic prosperity. This animation is an evolving story of wealth distribution, highlighting regions where prosperity is deeply entrenched and others where it is barely present. The animation shows high GDP per capita concentrations in North America and Europe, and select regions in Asia, which appear in warm, vibrant colors, symbolizing wealth. Africa and South Asia, however, are depicted in cooler colors, representing lower GDP per capita levels and, consequently, limited economic resources. Over time, we see emerging shifts, with

countries like China and India starting to brighten, suggesting a gradual increase in GDP per capita due to economic reforms and industrialization. This animation underscores the disparity between the developed and developing world, yet also highlights signs of convergence in specific regions.

**GDP per Capita Heat Map Animation - 2021**

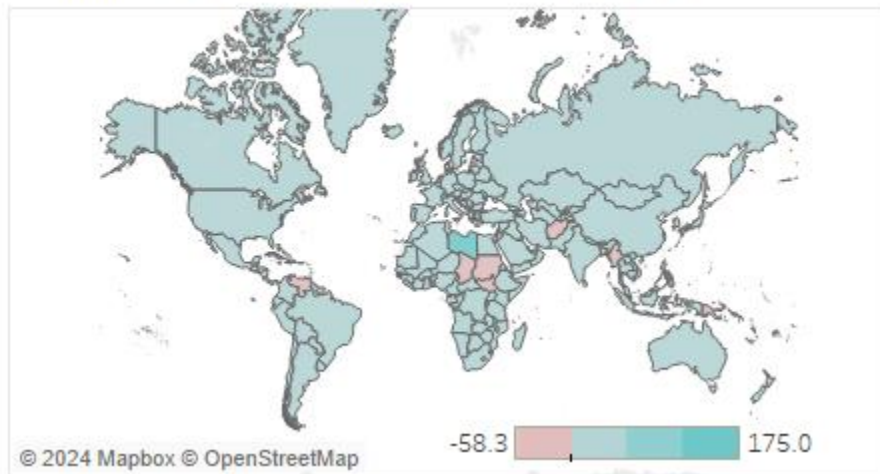


## **2. Economic Growth Heat Map - for Business Growth**

The second visual insight is the economic growth heat map, which paints a picture of annual GDP growth across countries. Here, nations with growth rates radiate warmth, while countries facing negative growth appear muted or cooler. The story told by this map is multifaceted, as some regions exhibit robust growth while others reveal economic vulnerabilities. For instance, countries like the Solomon Islands and West Bank and Gaza show negative growth rates, hinting at the impact of local challenges like political instability and resource limitations. In contrast, Sub-Saharan African nations and parts of Asia reflect growth rates, suggesting the effects of economic development initiatives and a burgeoning labor force. This heat map insight helps investors and policymakers

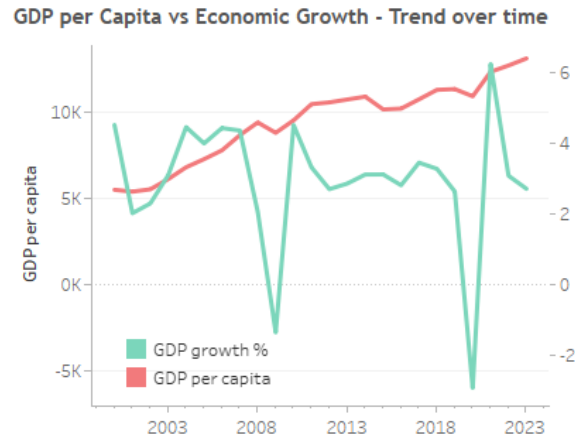
identify growth regions, even as it underscores the fragility of growth in regions prone to instability.

**Economic Growth Heat Map - for Business Growth - 2021**



### **3. GDP per Capita vs. Economic Growth - Trend over Time**

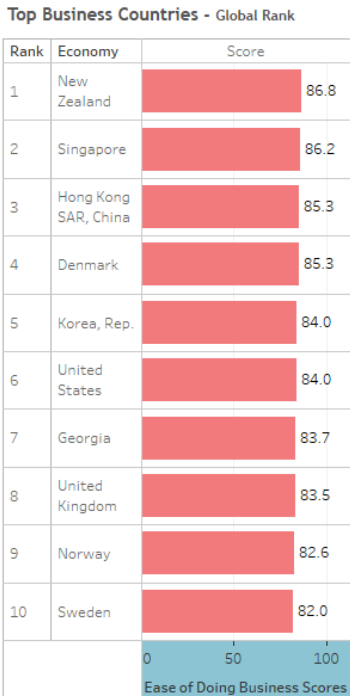
Our third visual, showing GDP per capita against economic growth trends over time, creates a timeline of resilience and recovery. We see a consistent upward trend in GDP per capita through much of the early 2000s, with notable dips during the 2008 financial crisis and again in 2020 due to the COVID-19 pandemic. Economic growth rates fluctuate accordingly, illustrating how external shocks reverberate through economies. Despite setbacks, we observe a strong recovery by 2021, when GDP growth accelerates, reflecting economic rebound efforts. This visual encapsulates the persistence of economies to adapt and recover, underscoring the cyclical nature of global growth patterns and the resilience needed to navigate economic disruptions.



## 5. Top Business Countries

In the fifth visual, we delve into a leaderboard of the top countries for business, ranked by ease of doing business scores. Leading this list are New Zealand, Singapore, and Hong Kong SAR, followed closely by the United States and Korea. These nations offer competitive advantages through transparent, efficient regulations that reduce the administrative burdens on businesses. Each country on this list represents an economic powerhouse with the infrastructure, policies, and governance conducive to innovation and entrepreneurial success. For policymakers in other regions, this visual serves as a goalpost, offering lessons in regulatory efficiency and ease of entry for businesses.

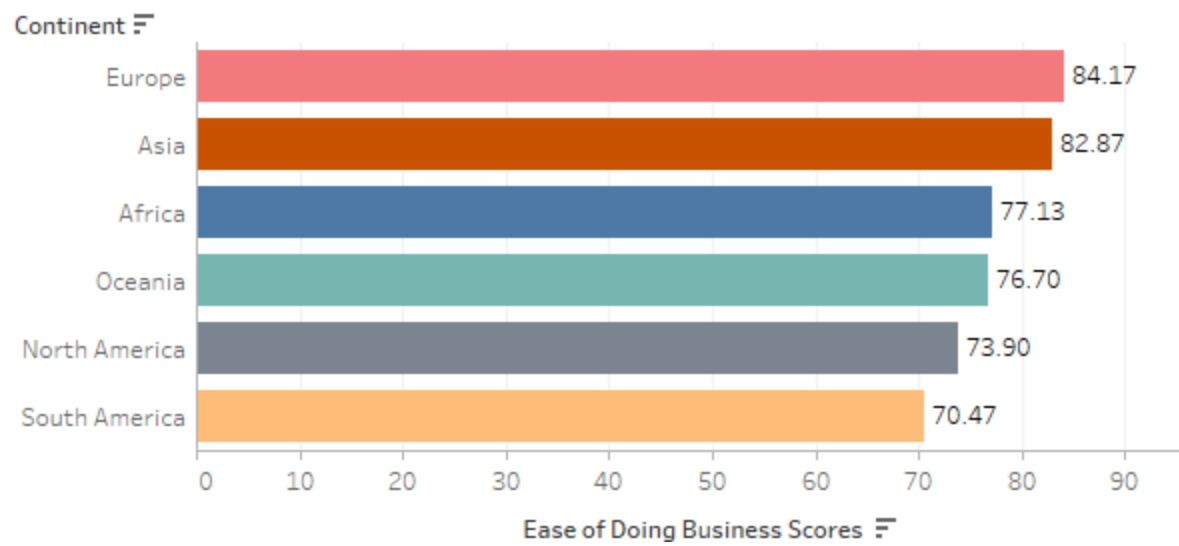




6. Regional Analysis of Ease of Doing Business

The sixth insight provides a regional analysis of ease of doing business, comparing average scores across continents. Europe and Asia emerge as leaders, reflecting strong infrastructure, regulatory transparency, and economic stability. South America and Africa lag, suggesting potential areas for improvement. This analysis emphasizes the correlation between regional governance and business efficiency, as well as the need for targeted policy reforms. By examining this visual, policymakers can identify where regional disparities lie and direct resources towards addressing regulatory bottlenecks to make their regions more competitive in the global economy.

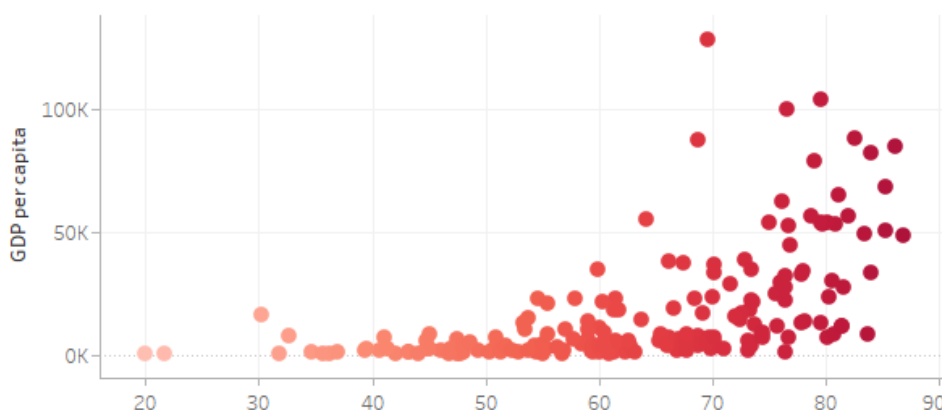
### Regional Analysis of Ease of Doing Business - drilldown to top 3 countries by region



## 7. Ease of Doing Business vs. GDP per Capita - 2023

Our seventh visual insight compares ease of doing business scores with GDP per capita, presenting a nuanced understanding of how business climate correlates with economic prosperity. Generally, we observe that countries with higher ease of doing business scores also enjoy higher GDP per capita levels. However, there are intriguing exceptions; for instance, countries with high ease of doing business scores but moderate GDP per capita suggest that favorable business environments alone are not sufficient to guarantee prosperity. Similarly, some resource-rich countries with lower ease scores still maintain high GDP per capita, indicating that economic factors beyond business climate—such as natural resources—play a critical role in wealth generation. This visual insight prompts a deeper inquiry into the balance of factors that sustain economic wealth.

Ease of Doing Business vs GDP per Capita - 2023



## 8. Ease of Doing Business Score Heat Map Animation (2000-2023)

An animated heat map showing ease of doing business over time tells the story of regulatory evolution. Countries with significant score improvements signal ongoing reforms and a commitment to creating more favorable business conditions. For instance, countries in Eastern Europe and Southeast Asia show a gradual shift from cooler colors to warmer hues, signifying progressive changes that make these regions more attractive for businesses. Conversely, areas that remain unchanged may indicate static or even regressive business climates, possibly due to entrenched bureaucratic practices or lack of policy focus. This animation provides a longitudinal view, revealing how reforms—or the lack thereof—have shaped the business landscapes in different parts of the world over two decades.

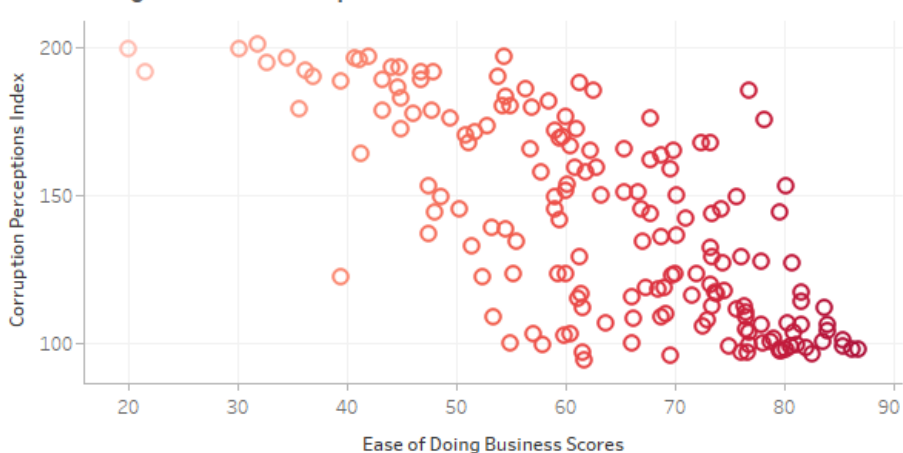
Ease of Doing Business vs Crime Index - 2023



## 9. Ease of Doing Business vs. Economic Growth - Comparative Analysis

Our final visual insight compares ease of doing business scores against economic growth rates, illustrating the impact of business climate on a nation's economic trajectory. Countries with high ease scores and growth rates, such as South Korea and Singapore, demonstrate that regulatory efficiency can drive robust economic growth. However, countries with lower ease scores and stagnant or negative growth rates—such as parts of Africa and the Middle East—highlight the challenges that regulatory inefficiencies pose to economic progress. This insight reinforces the critical link between streamlined business regulations and sustained economic growth, emphasizing the need for reforms in countries seeking to accelerate development.

Ease of Doing Business vs Corruption Index - 2023



Each visual insight provides a unique piece of the puzzle, revealing how GDP, business climate, and growth patterns interact globally. From GDP per capita to the ease of doing business, these insights help us understand the ingredients that shape economic success and reveal paths for improvement in regions struggling with regulatory and economic challenges. By piecing together these insights, this story offers a roadmap for a more balanced global economy, where opportunities are enhanced, and barriers to business and prosperity are dismantled.

## 5. Key Findings

- **Economic Disparities:** Wealth distribution is highly uneven, with countries in Europe and North America consistently showing higher GDP per capita than those in Africa and South Asia.
- **Impact of Business Environment:** A positive business environment, indicated by high ease of doing business scores, generally correlates with higher GDP per capita and economic growth. Countries with streamlined regulations tend to attract investment and promote entrepreneurial activity.
- **Regional Trends:** Europe and Asia lead in ease of business scores, reflecting more business-friendly climates, while Africa and South America face regulatory challenges.
- **Economic Growth Variability:** Economic growth rates are volatile in regions affected by conflict and political instability, indicating the impact of governance on economic performance.

## 6. Recommendations and Implementation

1. **Policy Reforms in Low-Scoring Countries:** Governments in countries with low ease of doing business scores should consider regulatory reforms to reduce bureaucracy, streamline business procedures, and promote transparency to attract investment.
2. **Focus on Regional Development Programs:** Initiatives targeted at regions with low GDP per capita, such as infrastructure and education, can enhance human capital and stimulate economic growth.
3. **Sustain Growth in High-Performing Economies:** Countries with high GDP and favorable business climates should focus on innovation and sustainability to maintain their economic position amid global competition.

Implementing these recommendations would require coordinated efforts from governments, international organizations, and private sector entities to ensure lasting economic development.

## 7. Conclusion

This analysis of global economic trends and business environments reveals substantial disparities between countries, emphasizing the need for tailored policies to promote business-friendly climates and economic growth. Countries with streamlined regulatory environments tend to outperform others in economic metrics, underscoring the importance of efficient business policies. By fostering favorable conditions, governments can support sustainable development and address economic challenges. These insights serve as a foundation for policymakers, economists, and business leaders to strategize and promote inclusive economic growth worldwide.

## 8. Additional Research Questions

1. How does political stability influence economic growth and ease of doing business scores?
2. What is the impact of foreign direct investment on GDP per capita in developing countries?
3. How do environmental sustainability practices affect long-term economic growth?
4. What role does digital infrastructure play in easing business processes and promoting growth?

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