



# **BANKING IN EMERGING ECONOMICS**



# CONTENTS

<b>PaderInvestment Advisory Group .....</b>	<b>1</b>
<b>Results and Findings .....</b>	<b>1</b>
Methods .....	1
Findings .....	1
<b>Introduction and Problem Description.....</b>	<b>2</b>
Introduction .....	2
Problem Description .....	3
<b>Proposed Method.....</b>	<b>5</b>
Step-By-Step Description .....	5
<b>Results .....</b>	<b>6</b>
Euclidean Distance .....	6
Overall Rankings.....	7
World Heatmap .....	8
Scatter Chart.....	9
Radar Chart.....	11
<b>Data Analysis .....</b>	<b>12</b>
Interpretation .....	12
Recommendations .....	12
Conclusion .....	13
<b>Appendix .....</b>	<b>15</b>
Data Cleaning .....	15





BANKING  
HALL

CORNHILL

HISPANIA  
Restaurant & Bar

OWN  
BOX

Regus

Sainsbury's  
Local

POST  
OFFICE  
COURT  
ECA

© Jeffrey Hemsworth  
Unsplash

# PaderInvestment Advisory Group

The PaderInvestment Advisory Group evaluates potential locations for its next expansion. Country-specific characteristics, market dynamics and bank-specific advantages play an important role. Country-specific characteristics include market access restrictions, regulations on activities and investments, capital flow restrictions, tax policies and government incentives. The size and growth potential of the banking market are also important factors. The dynamics of the foreign financial market are influenced by competition among existing banks and the market structure. Banks with special competencies have a competitive advantage and can transfer them abroad. The decision to expand into emerging markets requires careful analysis. This project examines raw bank data from 24 countries across four continents. The aim is to gain insights into the conditions and success of the banks' international expansion in emerging markets.

## Results and Findings

### Methods

This study uses various methods to evaluate potential locations for the PaderInvestment Advisory Group. Data analysis and evaluation are used to make informed expansion decisions.

First, the raw data from 24 selected countries is processed and cleaned in which duplicates are removed and the data is categorized into strengths and weaknesses. Particular attention is paid to the validity and realism of the data. Strengths include factors that indicate a favorable environment for expansion, while weaknesses represent potential risks and challenges. Normalization of the data provides a comparable basis for assessing countries. Calculating averages for strengths and weaknesses allows for an overall assessment.

To present the results visually, a scatterplot is used to show the Euclidean distance of each country from the ideal point. Rankings are created to rank the suitability of countries for enlargement. Visualization techniques such as radar charts are also used to highlight the strengths and weaknesses of each country. A global heat map highlights the differences in strengths and weaknesses between countries.

### Findings

Our results show that China is in first place, followed by Estonia in second and the Czech Republic in third. According to our analysis, these countries show high potential for the international expansion strategies of PaderInvestment Advisory Group. Countries such as Slovenia, Mexico and Slovakia follow and are also offering attractive opportunities. Countries such as Algeria, South Africa and India are further down the list, indicating different market conditions and challenges. Identifying these rankings allows PaderInvestment Advisory Group to make decisions on the next location based on the data and insights available, and to target its international expansion efforts.





Taiwan Semiconductor  
Manufacturing  
\$116.80

Today  
\$0.25 (0.21%)  
After-Hours  
\$0.48 (0.41%)



About

Taiwan Semiconductor  
engages in  
Tod

# Introduction and Problem Description

## Introduction

The internationalization of banking in emerging markets is a topic of great interest to both researchers and practitioners. The decision of multinational banks to expand into emerging markets is influenced by several factors, including country-specific characteristics, market dynamics and bank-specific advantages. Country-specific characteristics such as market access restrictions, regulations on services and investment, capital flow regimes and tax incentives play a crucial role in the choice of a particular country as an expansion destination for international banks.

The size of the market for banking products and the growth potential of the target markets are also important factors. Financial market dynamics, including competition among existing banks and market structure, also influence banking internationalization. Concentrated oligopolistic markets with a few large banks differ from highly fragmented markets with many players.

We focus on banking in emerging markets. We look at a sample of countries across four continents to examine different economic and cultural contexts. By analyzing various factors, such as country-specific characteristics and bank-specific advantages, we can gain insights into how banks can align their international expansion strategies in emerging markets.

Our research findings will help us to better understand the conditions and success of banking internationalization in emerging markets. In addition, 280 raw data factors have been associated with banking in 24 countries across four continents. This data forms the basis of this data report.

## Problem Description

Opening a new banking office in a foreign country is a challenging task. There are several reasons why the process can be difficult.

First, banks face many regulatory hurdles when expanding into another country. Since each individual country has its own regulatory and supervisory authorities that oversee the banking sector, the process can be very time consuming and very complex.

Another aspect of the complications a bank can face opening a new banking location are cultural differences. Unique cultures also have a huge impact on the banking sector in general. The way financial transactions are carried out can vary vastly depending on the location. Banks must understand local customer needs and respond to them accordingly.

The competitive environment is another important factor. The banking sector in many countries already is a highly competitive field being home to a lot of global players. Competing with these global players also means competing with established banks that already possess a loyal customer base. Differentiation and outstanding quality are needed to compete with these established global players.

Furthermore, establishing a banking presence and competing with global players requires a reliable infrastructure and modern technology. This can be a challenge in some countries and therefore many factors concerning the country's development must be considered.

Focusing on every aspect can be very hard and will end in this project failing. The country chosen should have a broad range of strengths and should have a favorable and welcoming banking atmosphere. Since the PaderInvestment Advisory Group is rather small and new in the banking field sector they must be able to adapt quickly to the new environment and should be able to gain a technological lead compared to the already established banks.

Many of the 280 factors picked will help the PaderInvestment Advisory Group to narrow it down to one of the 24 emerging countries and to find the optimal fit where the banking landscapes allows the PaderInvestment Advisory Group to adapt quickly and gain a significant lead compared to its competition.







# Proposed Method

## Step-By-Step Description

Our goal in this banking report is to provide an appropriate overview with which it should be possible to find a settlement for the international expansion of the PaderInvestment Advisory Group.

For that reason, we narrowed it down to the top 24 emerging economies in which the PaderInvestment Advisory Group could possibly get a new home. To help us decide we compared each individual country with the help of 280 factors providing us with information of the Gross domestic product up to data of the total crimes happening in each of the countries. Ranking the 24 emerging economies with the help of the 280 factors, we were able to find the ideal location for the PaderInvestment Advisory Group.

The methodology employed in this study can be broken down into three key steps. Our first task was organizing the data. Secondly, we implemented the Euclidean model to be able to find the optimal solution. At last, we present our findings and insights gained from the analysis. Moving forward each of these steps will be described in detail.

The first step, data organization and cleaning, involves putting the collected data into a structured form and minimizing possible sources of error. This involves identifying and removing unneeded factors to optimize model generation. If duplicates have been found certain rules will be followed to avoid any errors: If duplicates have different values, only one entry will be evaluated and the others are deleted, if the duplicates have different values, the attribute with the fewest missing values is given priority, if the number of the missing values for the duplicates is the same, the average of the values for each attribute is calculated. This considers the classification of the factors as strengths or weaknesses. This careful cleansing of the data provides a reliable basis for the subsequent analysis.

The second and most central part of our analysis is building the Euclid model, based on the concept of the Euclidean distance, to compare alternatives and evaluate them against an ideal value. By assigning the different factors as strengths and weaknesses we ensure a differentiated view on each country thus allowing the arrangement of said countries. To ensure a significant and accurate comparison of the data, it was crucial to normalize the diverse data points. This process of normalization entailed scaling the values and converting them into a standardized range from 0 to 1. In this range, 0 signifies the lowest feasible value, while 1 corresponds to the utmost achievable value. Through data normalization, we guaranteed precise comparability of all factors, thereby facilitating accurate calculations of Euclidean distances.

The last step, the presentation, is to prepare and display the results of the Euclid model. By visualizing the data and putting each country in the Euclidean space or by ranking the countries we can evaluate the results and have a proper look on the data we have. Furthermore, the presentation provides a detailed insight into the differences and similarities between countries, supporting decision making or further analysis.

By carefully following these steps, we ensure that the data cleaning, normalization, and Euclidean distance calculations are methodologically correct and reliable to provide meaningful results for the report.

# Results

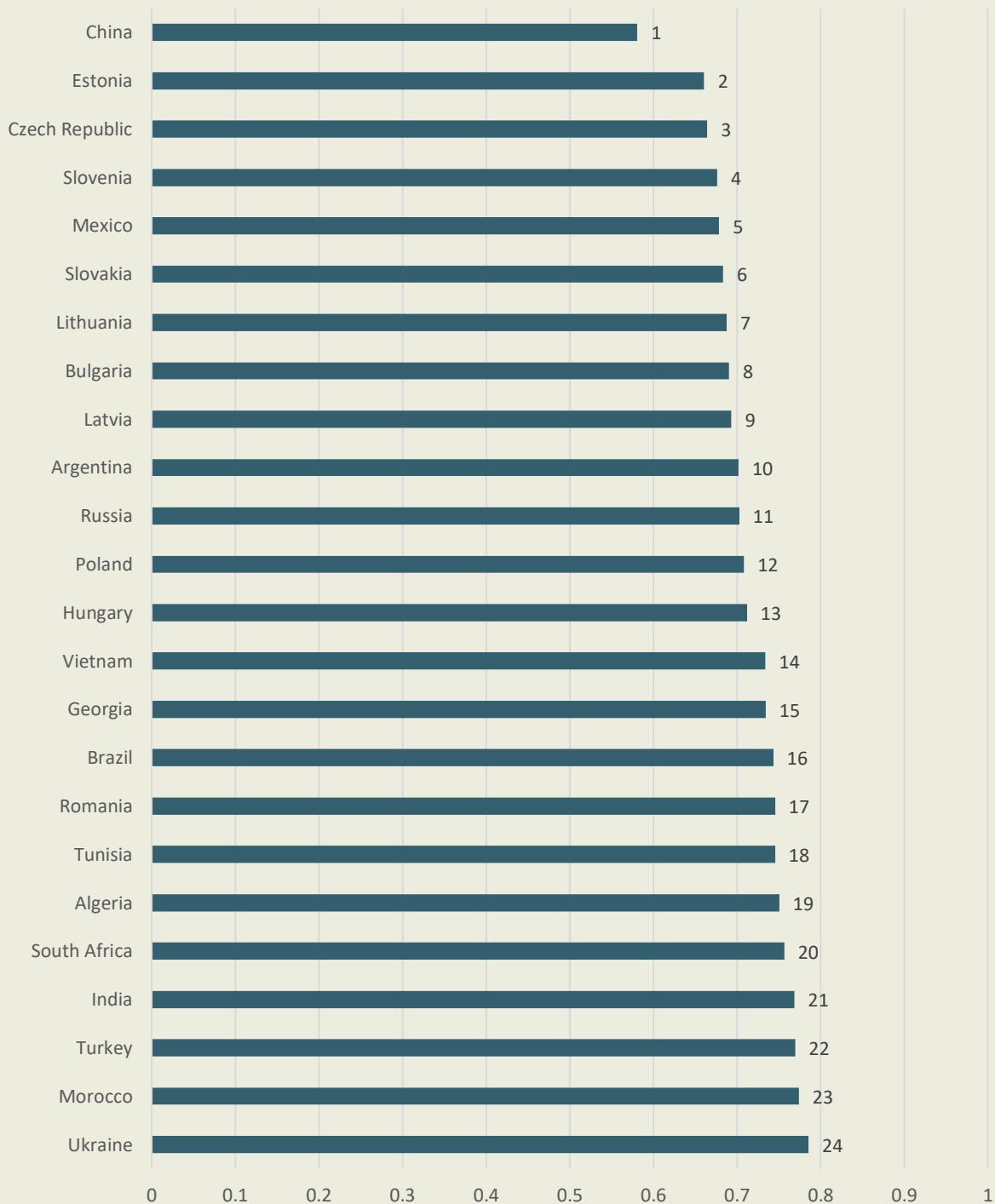
## Euclidean Distance

The table below lists the 24 nations. The Euclidean distances are listed in the left-hand column, while the rankings of each nation are listed on the right-hand side of the table.

Country	Euclidean Distance
Algeria	0,750674214
Argentina	0,701967597
Brazil	0,743526801
Bulgaria	0,69054061
China	0,580847356
Czech Republic	0,664498857
Estonia	0,660665786
Georgia	0,734344591
Hungary	0,712048416
India	0,768576222
Latvia	0,693129015
Lithuania	0,687511438
Mexico	0,678529854
Morocco	0,774054392
Poland	0,708428385
Romania	0,745683469
Russia	0,702700569
Slovakia	0,683497071
Slovenia	0,676438389
South Africa	0,75661911
Tunisia	0,745718822
Turkey	0,769711171
Ukraine	0,785519196
Vietnam	0,733971005

## Overall Rankings

This bar graph displays the 24 nations sorted by Euclidean distance to the ideal point (1, 0). Euclidean distances are presented on the x-axis, and each nation's rank is represented on the right-hand side of each bar.

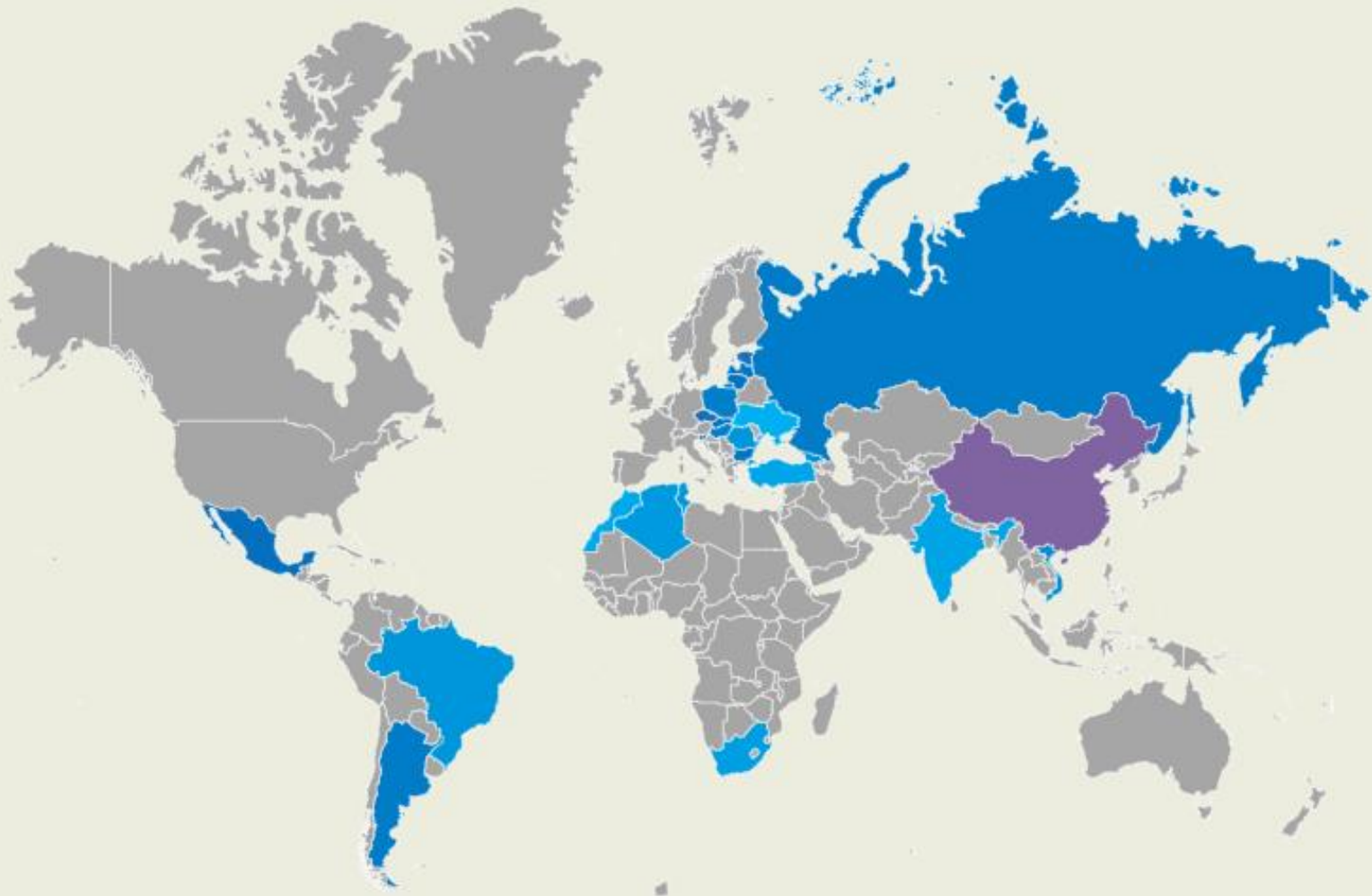




## World Heatmap

A heatmap of the world including all 24 emerging countries the PaderInvestment Advisory Group considers expanding.

### Legend Map of Heat Map

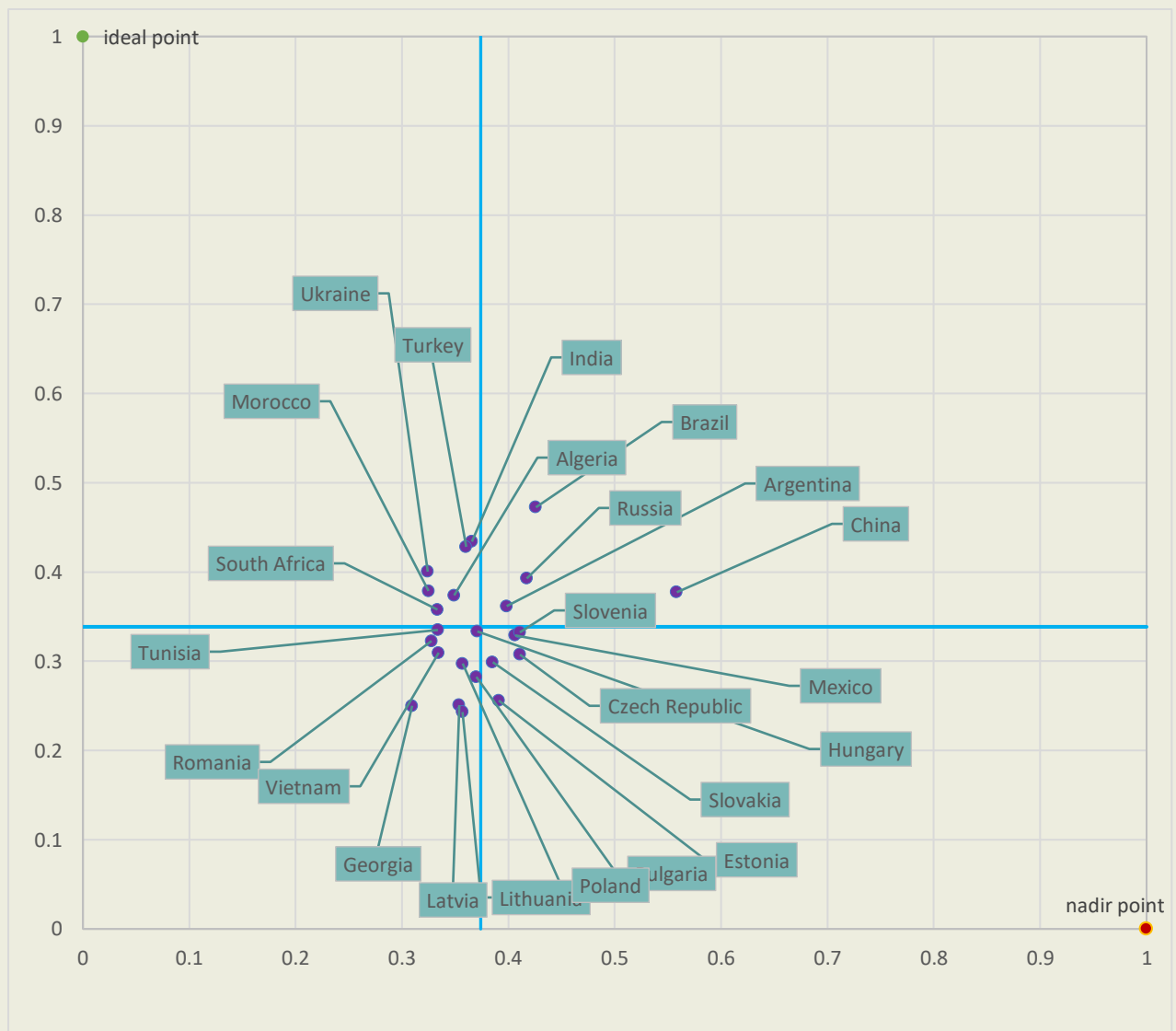


### Description

Looking at the heatmap one can see that the countries dyed in a light blue hue, are countries like Brazil who should not be taken into consideration as of now. Countries in a darker blue tone like Russia, are countries which do perform better than most countries but are still not close enough to the optimal solution. China being the only country inked in purple is the optimal solution.

## Scatter Chart

The Scatter Chart shows each emerging economy and their strengths on the x-axis and the weakness on the y-axis. The horizontal line indicates the average weakness score, and the vertical line indicates the average strength score. The intersection of these lines is the average point. Only the extreme points are labelled to be more visually appealing.



## Description

The Scatter chart can be divided into 4 quadrants.

The lower left quadrant contains those countries with a low weakness score and a low strength score. These countries are not really suitable for an expansion.

In the upper left quadrant one can find countries with a higher-than-average weakness score but lower-than-average strength score. These countries are not suitable for an expansion in the near future, since these countries do not show a lucrative financial market for the PaderInvestment Advisory Group. Expanding business in one of these countries is not advisable.

The lower right quadrant is home to those countries that have a lower-than-average weakness score but a higher-than-average strength score. These countries are suitable for an expansion in the near future, since they show signs of a great financial market and combined with the lower-than-average weakness score expanding business is advised.

The upper right quadrant is characterized by containing countries with a higher-than-average weakness score and a higher-than-average strength score. These countries should be observed closely since they show great financial market conditions but expanding there can be risky because of the uncertain future these countries hold.

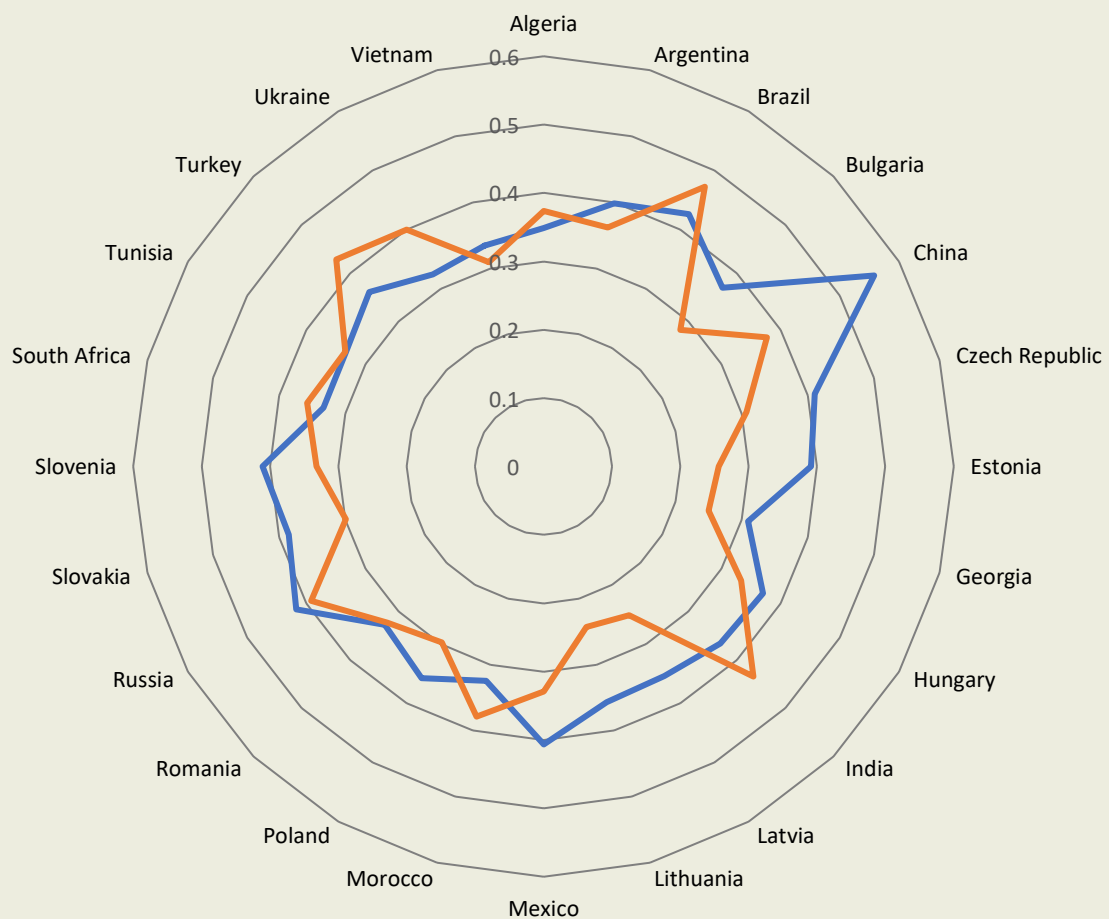


## Radar Chart

To give the data more depth than the previous chart, and to visualize the ratio of Strength Score to Weakness Score for each country a radar chart was created.

### Legend Map of Radar Chart

- Opportunities / Strength
- Threats / Weak



### Description

The radar chart greatly shows the strength and weakness ratio of the 24 emerging economies. Especially China, Czech Republic and Estonia show a higher average strength score to average weak score ratio than other countries which also results in them being the top 3 targets for the PaderInvestment Advisory Group expansion. Countries with a bad strength to weakness ratio like Turkey or Ukraine result in scoring lower overall.

# Data Analysis

## Interpretation

The analysis of the available information has led us to identify the best possible solution for the expansion of PaderInvestment Advisory Group in the foreign financial landscape. The rankings of the various countries have provided valuable insights to guide our decision-making and strategic direction.

China's top ranking highlights its high potential and attractive conditions for financial banking services. With its robust economy, huge market size and sustained growth, China is a promising platform for financial services. As one of the BRIC countries, China's prominence further strengthens our solution and confirms it as the ideal destination for the PaderInvestment Advisory Group's expansion.

In addition, Estonia, ranked second, and the Czech Republic, ranked third, show considerable potential as favorable locations for the PaderInvestment Advisory Group. Estonia has established itself as a leading financial technology hub, while the Czech Republic shows solid economic performance and a stable political environment. Both countries also have lower than average vulnerability scores, further supporting their suitability for the PaderInvestment Advisory Group's expansion plans.

Countries ranked 4th to 24th, such as Brazil, India, and Russia, remain attractive markets despite China's superior performance across a range of metrics. As part of the BRIC countries, they warrant ongoing evaluation and reassessment of their value to the PaderInvestment Advisory Group in the coming years.

## Recommendations

Based on the available data, there are clear recommendations for the PaderInvestment Advisory Group for expansion into the foreign financial sector. With these recommendations the company's decision making, and strategic direction will be guided.

First, there should be an urgent need to expand into China. China offers enormous potential with a strong economy and continued growth throughout the last years. As part of the four emerging BRIC countries, China's top ranking confirms our recommendation and makes it clear that the PaderInvestment Advisory Group should find its next destination in China.

Also promising are Estonia in second place and the Czech Republic in third. Estonia has established itself as a leading financial technology location, offering a favorable regulatory environment and advanced digital infrastructure. The Czech Republic has a solid economic performance, a well-developed banking industry and a stable political environment. Both countries also have lower vulnerability ratings, increasing their attractiveness to PaderInvestment Advisory Group.

Rankings 4 to 24 include other countries such as Brazil, India, and Russia. Although these countries have been overtaken by China in many respects, they are still attractive markets. It is important not to forget these countries and to reassess their value to PaderInvestment Advisory Group in the coming years. Regular monitoring of their market conditions and continuous analysis of their growth potential is crucial.

The PaderInvestment Advisory Group should focus on balanced market diversification. In addition to expansion in China, Estonia, the Czech Republic should also be considered.

These recommendations provide the PaderInvestment Advisory Group with a clear roadmap for its expansion plans. Going into the future the PaderInvestment Advisory Group must utilize the lessons learned and make informed decision. By following these recommendations, the PaderInvestment Advisory Group can achieve sustainable growth, expand its global presence, and establish itself as a leading player in the international banking and investment sector.

## Conclusion

In conclusion, the analysis of the rankings provides valuable insights for the decision-making process of the PaderInvestment Advisory Group's expansion plans. China's top position confirms its status as the most favorable destination for growth, given its robust economy and huge market opportunities. Estonia and the Czech Republic emerge as promising alternatives, each offering unique advantages for the PaderInvestment Advisory Group's strategic objectives.

By prioritizing expansion in China, closely monitoring Estonia and the Czech Republic, and evaluating the potential of other BRIC countries, the PaderInvestment Advisory Group can navigate the foreign financial landscape with a well-informed approach.

Ultimately, the Group's success lies in its ability to use the insights gained from this analysis to develop market entry strategies, build strong partnerships, and deploy resources effectively. With this the PaderInvestment Advisory Group can accomplish sustainable growth, expand its global footprint, and achieve a position as a major player in the international banking and investment sector.





# Appendix

## Data Cleaning

The data cleansing process applied certain rules to create a consistent and reliable data base. The following steps were taken to clean up the duplicates and improve the quality of the data.

Identical duplicates: if the duplicates had identical values, all but one instance were deleted. This step ensures a unique record structure and prevents duplicate records.

Different values: If the duplicates have different values, specific rules were applied to merge the values. For attributes where there was no match, the average of the individual attribute values was calculated. This approach allows for meaningful merging of data and minimizes loss of information.

Factor classification considered: Factor classification was taken into account when evaluating the averages. If a factor was classified as an opportunity, the one with the higher average score was retained. Conversely, if a factor was classified as a risk, the one with the lower average score was retained. This ensured that the relevant and meaningful data was retained for further analysis.

By applying these data cleaning rules, the error rate in removing duplicates was minimized. This allowed for more accurate analysis and interpretation of the data, enabling informed decisions to be made.