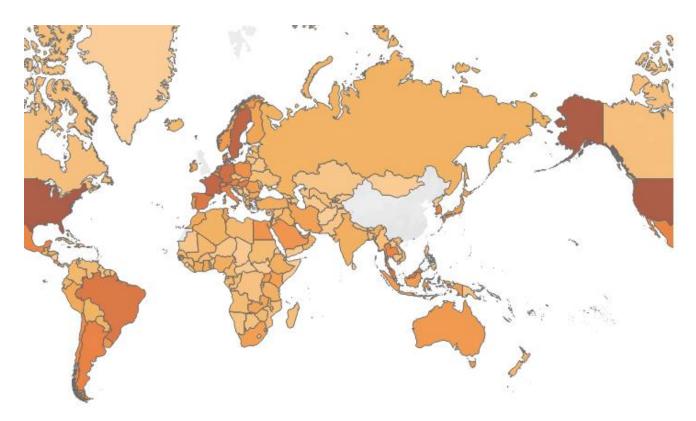
# **REPORT**

# ANALYSIS ON RESULTS OF INTERNATIONAL FOOTBALL MATCHES HELD BETWEEN 1872-2017

### Where, Why and How?

International football matches that take place in different formats happens all over the world. The most famous countries that usually host the matches have their home side playing for most number of matches that the home countries have hosted.

So far countries across the world have hosted tournaments that actually served as a major factor affecting results. Lets take a look at the map as to know which all countries have hosted any of the tournaments that had taken place worldwide.



The North American countries have like more number of tournaments that were hosted by the respective countries. Countries in the European continent, have denser and considerably more number of tournaments happening there.

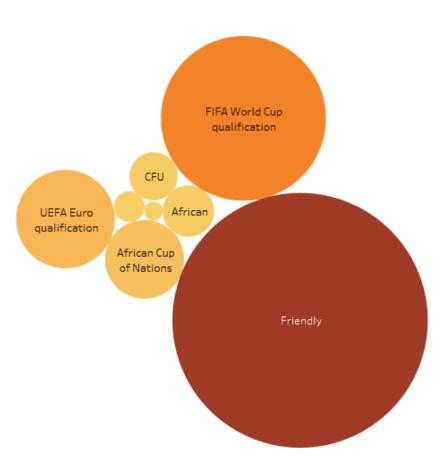
This visual on a flat sense tells us that the more number of tournaments that is being held in the countries is because they have their own teams that have been like playing for a very wide variety of tournaments and thus motivating the sport with the sponsorship of

more such tournaments. We would see later that the home team would be consistently having a good home score which exists as an implicit factor on the results of such matches.

#### Does the category of tournament matter?

As we move on this article would be helpful in a prediction analysis of any similar kind of future matches that would involve factors affecting them being similar in a large sense.

Lets take a look at what more popular category of tournaments are being held across the years.



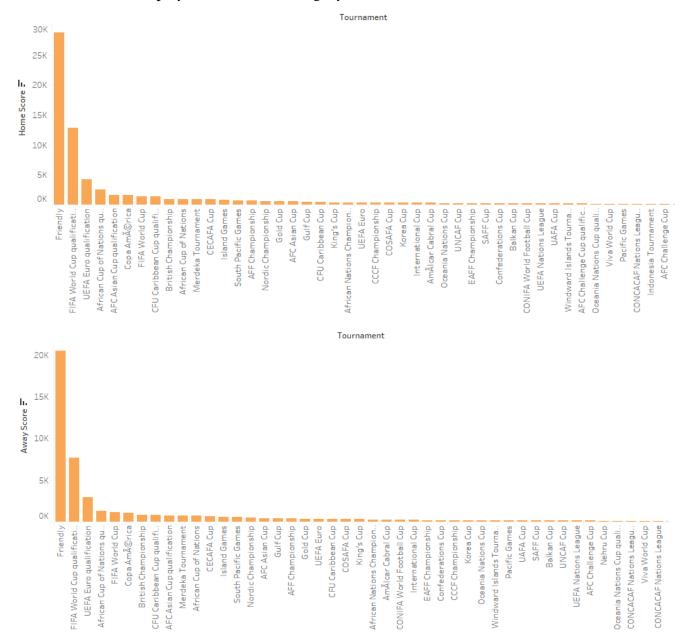
• The more common a category of match and the tournament it belongs to is, the more information we get from it and more the chance of predicting the further match results accurately.

Fig : Most popular tournaments conducted across the countries.

Most tournaments had been

under these categories and the top 8 categories have been represented with the number of matches that they have played. The type of tournament does not really matter because even the home team scores of any match result or score depends on the number of matches they have played in that particular category.

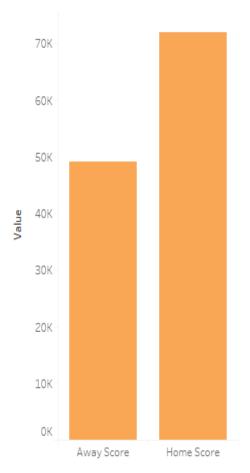
Lets take a look at the visualization of the graph clearly showing that both the home and away scores of the teams does not depend upon the category of the tournament but the number of matches played under that category.



Type of tournament does not decide biasing that takes place. The difference in the measure is just because of the general higher lower sense of score between the home teams and the away teams.

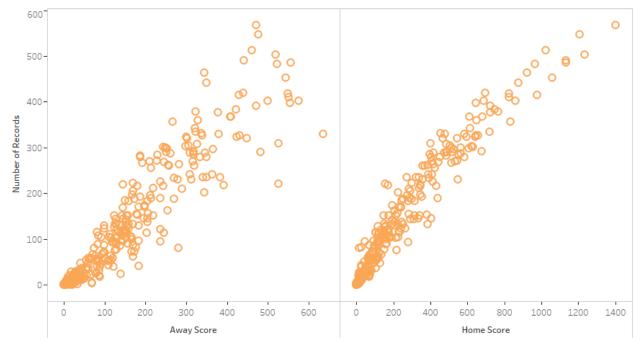
## What is the effect of the playing teams being home team or away team?

From the dataset that contains the results of previous years match records and its results, It seems that the effect of the team being home team and away team plays a major role in predicting the match results.



This is the general situation apart from other factors being weather climate and others. The actual reason may be because of pitch conditions that is in favor to them. The presence of home audience also becomes a matter of fact.

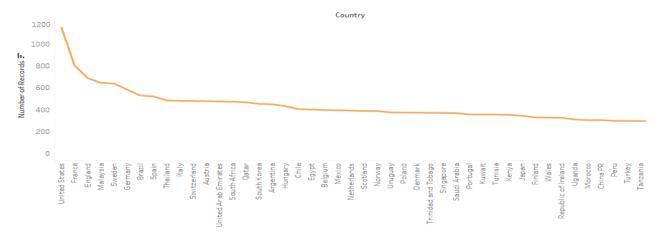
So now that we got the main trend we would look in through the available sources whether this proves right with an evidence. We visualize the number of records of the previous matches held irrespective of what category it falls under. The number of matches whose results are recorded and the scores obtained in those matches are plotted.



Moreover this is considered as the main aspect that is looked into while assuming that the predicted results would be of high accuracy. Thus we infer that predictions made should always consider this factor on a large scale.

#### Current football teams and its records

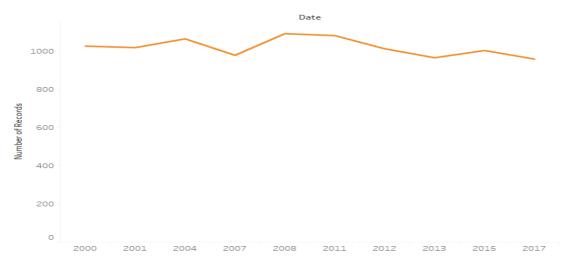
Over years the number of football playing teams have increased and changed. The records now contain the teams from the countries that are currently playing that have been merged into other teams or newly formed.



Since 1872, many teams have been on top, decided to be the best team across various formats of matches. Among those teams are the few countries that are visualized.

The popularity of the country or the records that the team have created does not look upto or involve in any prediction of the results of a match given its not affected by any other factor, but probability or the chance of winning a match sometimes depend on such popularity or the strength of the team. In such scenarios this visual would be helpful.

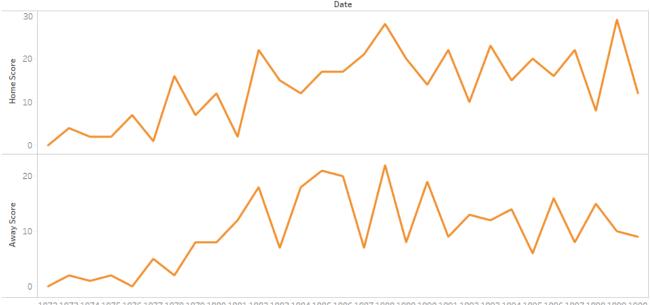
#### How's it across decades?



Over approximately 1000 matches are being played each year. The number of matches held across teams indicate that the growing popularity of football matches in the present decade on an average is on the same line.

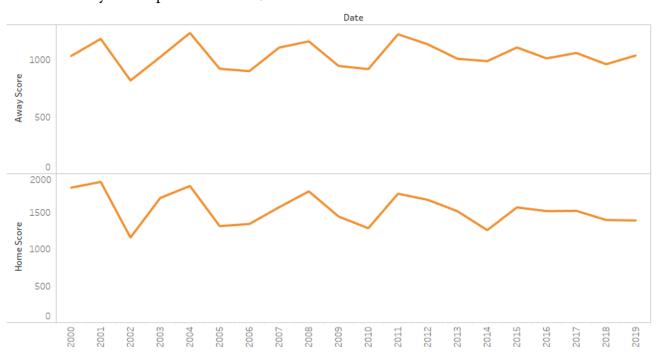
This is one of the reasons why this article is being written, with increase in popularity of the game, we try to predict results based on the inference that we obtain from the previous results.

This is even more evident from the visualization that had been noted with respect to the scores of home teams and away teams. Teams that have been playing through these many years are rarely found. So this summary assumes that the present countries are either a replacement of the teams that were playing already or a team that was merged into some other already existing teams. In 1800 s, (records as of 1872)



1872 1873 1874 1875 1876 1877 1878 1879 1880 1881 1882 1883 1884 1885 1886 1887 1888 1889 1890 1891 1892 1893 1894 1895 1896 1897 1898 1899 1900

# And currently in the present decade,



The scores of teams here are calculated with respect to many factor that we considered and evidently proved that its the most effective way of going with the prediction.

#### **Results Prediction**

We have now understood how a result of a match could differ based on the factors that affects the matches and the records that are available for the matches that were being played over so many years since then.

Analysis of how the results have fallen into and based on what matches those results belong to would contribute a major part in predictions. Keeping these effects in count, and these elements as tools one could predict a football match result on a moderately high accuracy.

Thanks for reading the article.

#### References:

https://www.kaggle.com/martj42/international-football-results-from-1872-to-2017