

Spark Funds

Investment
Case Study

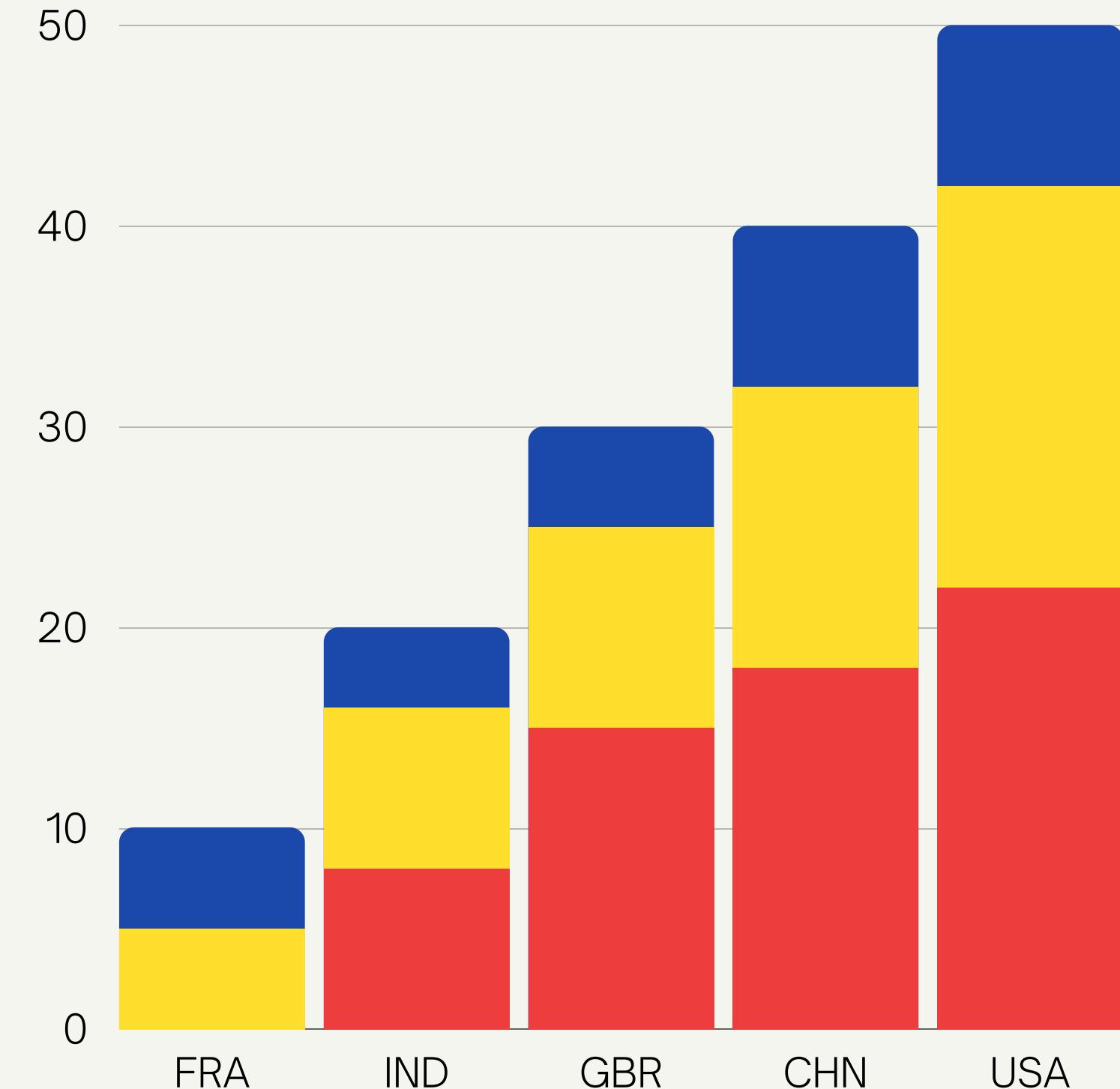
By: Abhinav Joshi



Background

Overview of the project

Spark Funds is an asset management company. Spark Funds wants to make investments in a few companies. The CEO of Spark Funds wants to understand the global trends in investments so that she can take the investment decisions effectively.



Objectives

The objective is to identify the best sectors, countries, and a suitable investment type for making investments. The overall strategy is to invest where others are investing, implying that the 'best' sectors and countries are the ones 'where most investors are investing'.

Strategy

Spark Funds wants to invest where most other investors are investing. This pattern is often observed among early stage startup investors.

Spark Funds has two minor constraints for investments:

1. It wants to invest between 5 to 15 million USD per round of investment
 2. It wants to invest only in English-speaking countries because of the ease of communication with the companies it would invest in
-



Project Flow

Plots

Sector Analysis 2

Sector Analysis 1

Country Analysis

Funding Type Analysis

Data Cleaning

1. Data Cleaning

Imported the files in correct format. Analysed the files, made corrections. Dropped duplicated entries and unnecessary columns. We chose to drop null values rather than imputing them. We created a 'clean' master Dataframe

2. Funding Type Analysis

From the master Dataframe we created a new dataframe containing only 4 funding types. From amongst these we calculated their means as being most representative.

3. Country Analysis

We created a new Dataframe containing top9 countries having investment type as venture. From these 9, we selected the top 3 English speaking countries.

4. Sector Analysis 1

We imported the mapping file. Made changes to this file and created a merged dataframe where each primary sector was mapped to main sector

5. Sector Analysis 2

We created 3 distinct datasets for each of the top3 countries having venture type investment in the range \$5-15 million USD. Based on these Dataframe we came to the final analysis as presented in this presentation.

6. Plots

As a final step, we made use of graphs to better communicate the results.

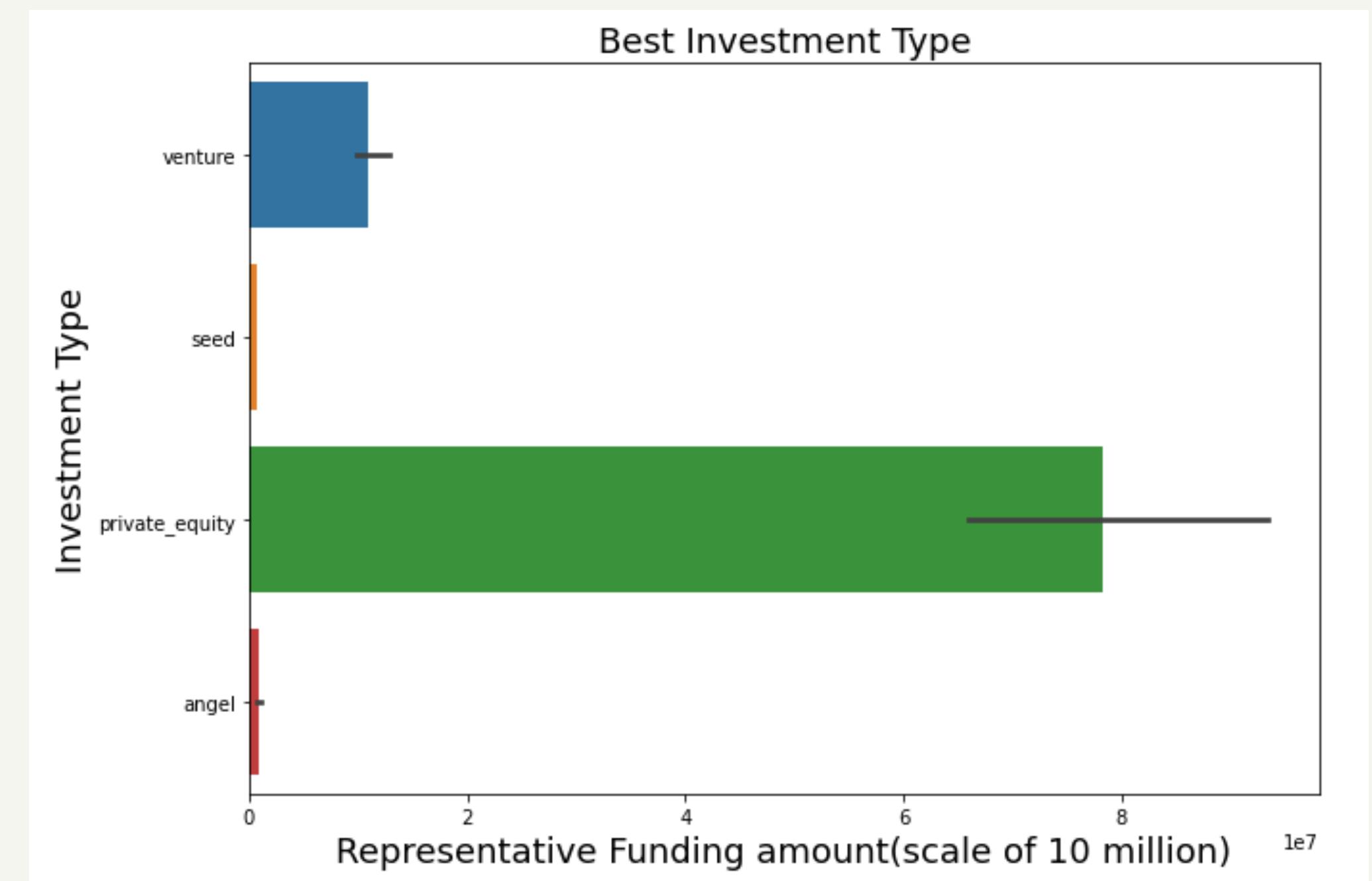
Funding Type Analysis

Finding the right investment type

We had to choose one of these four investment types for each potential investment:

1. Seed
2. Angel
3. Venture
4. Private_equity

The analysis based on our model showed that averaging at about \$11 million the venture type investment is most suited for sparks fund as it lies in the range \$5-15 million.



Country Analysis

We selected top9 countries in terms of total investments of venture type across all sectors

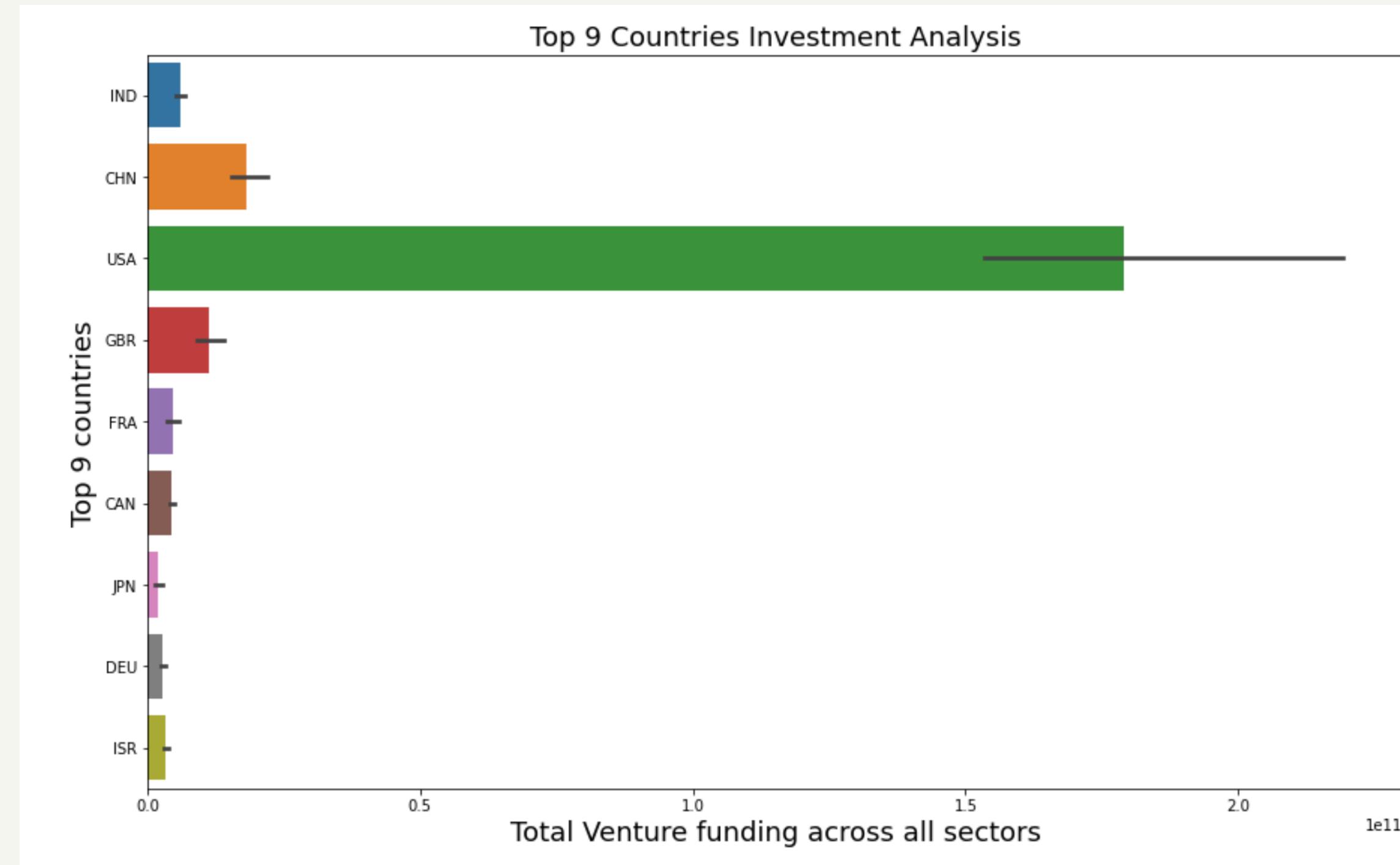
Out of these 9, the top 3 are

1. USA
2. CHN
3. GBR

Now since CHN is not an English-speaking country, we dropped it and selected the next highest country in terms of total investments of venture type across all sectors, which is IND

So the final top 3 are

1. USA
2. GBR
3. IND



Sector Analysis

We then proceeded to single out the top 3 sectors in each of these top-3 countries, which saw the maximum number of investments. The outcomes are as following:

USA

Top 3 sectors to invest in

- 1.Others
- 2.Cleantech/Semiconductors
- 3.Social, finance, Analytics

GBR

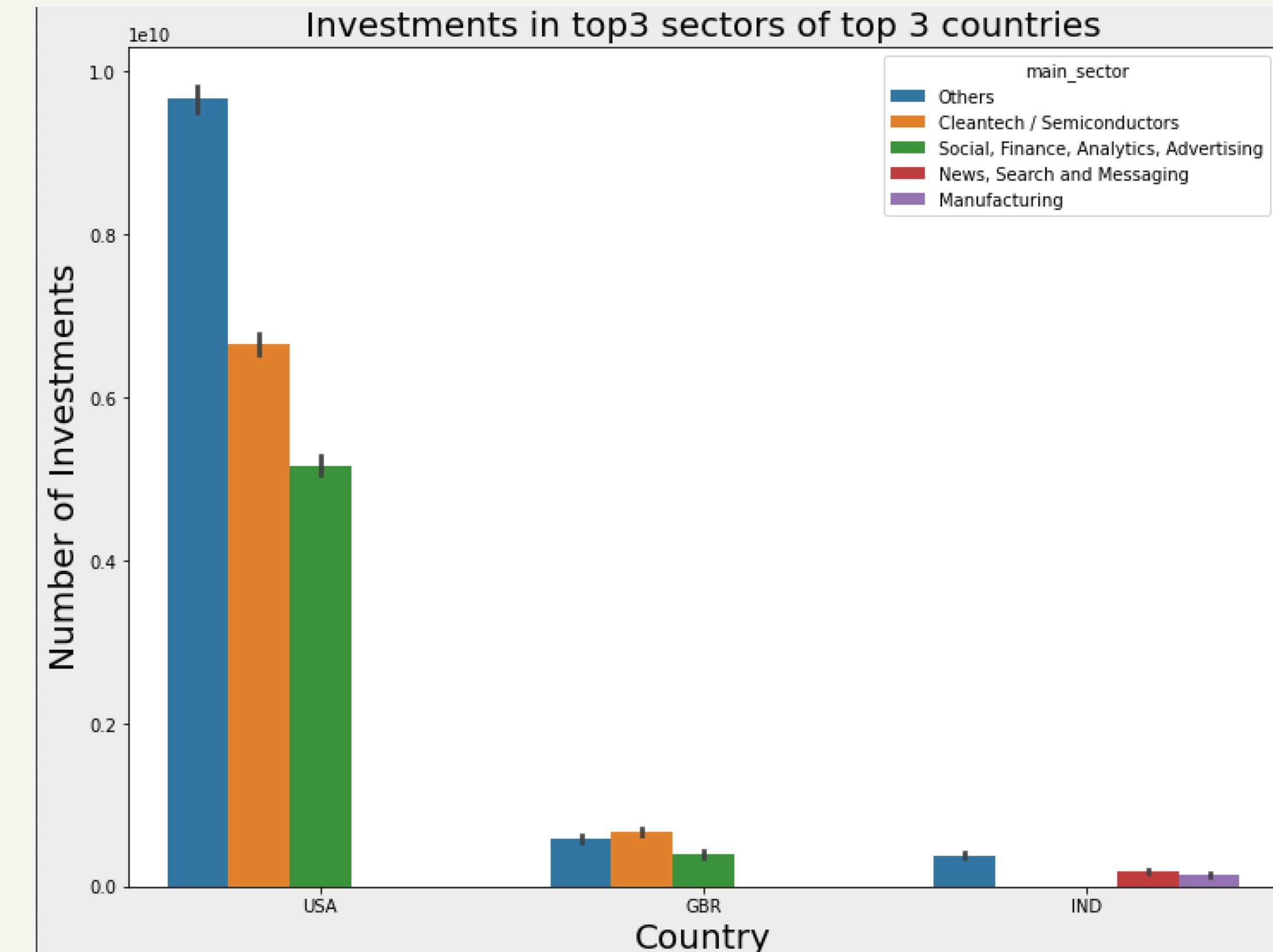
Top 3 sectors to invest in

- 1.Cleantech/Semiconductors
- 2.Others
- 3.Social, finance, Analytics

IND

Top 3 sectors to invest in

- 1.Others
- 2.News Search, Messaging
3. Manufacturing



Final Analysis

TOP 3 COUNTRIES TO INVEST IN

USA

GBR

IND

MAIN SECTORS TO INVEST IN

1. OTHERS
2. CLEANTECH/SEMICONDUCTORS
3. SOCIAL, FINANCE, ANALYTICS, ADVERTISING

1. CLEANTECH/SEMICONDUCTORS
2. OTHERS
3. SOCIAL, FINANCE, ANALYTICS, ADVERTISING

1. CLEANTECH/SEMICONDUCTORS
2. OTHERS
3. SOCIAL, FINANCE, ANALYTICS, ADVERTISING

TOP 2 COMPANIES TO INVEST IN

1. PAYNEARME
2. GLENROSE INSTRUMENTS

1. ONYVAX
2. KALITEUKASH

1. EXIMSOFT-TRIANZ AND HOMESHOP18
2. IMIMOBILE