

# INVESTMENT ASSIGNMENT SUBMISSION

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## Investment Analysis for Spark Funds

Spark Funds wants to invest where most other investors are investing.

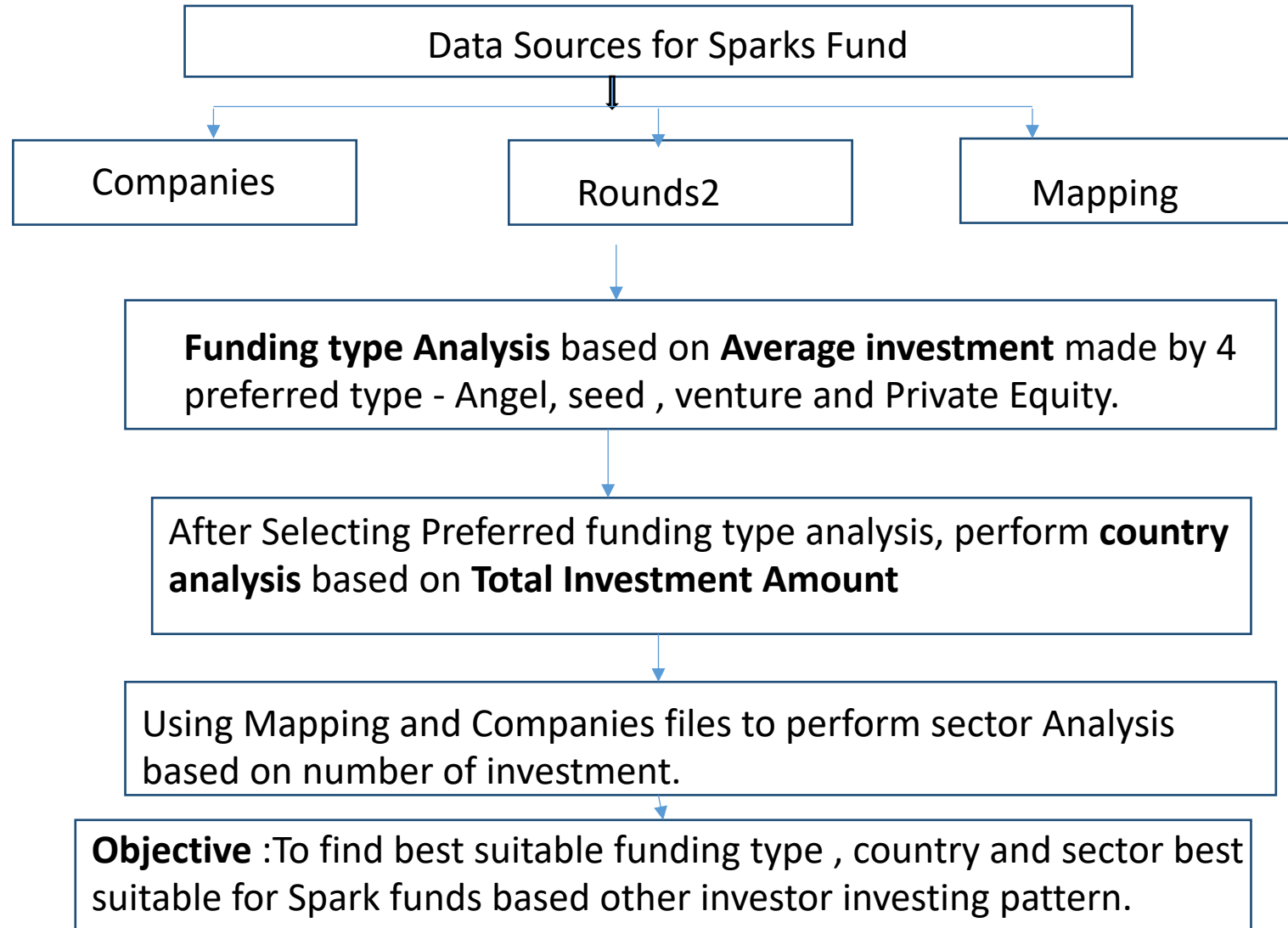
Business objective :

- Spark Funds Want to Invest 5 to 15 Million USD.
- It wants to invest only in English speaking country

Investment type should be among this 4 categories:

- Seed
- Angel
- Venture
- Private Equity

## Problem solving methodology - Flow



# Analysis

Data from three data sources are provided :

- 1.Companies – It contains basic information about the companies like company name, Country code, etc.
- 2.Rounds2 –It contains information of companies funding
- 3.Mapping – It contains the mapping information of Sector names in the companies table.

## Missing value Analysis:

% missing value for companies data

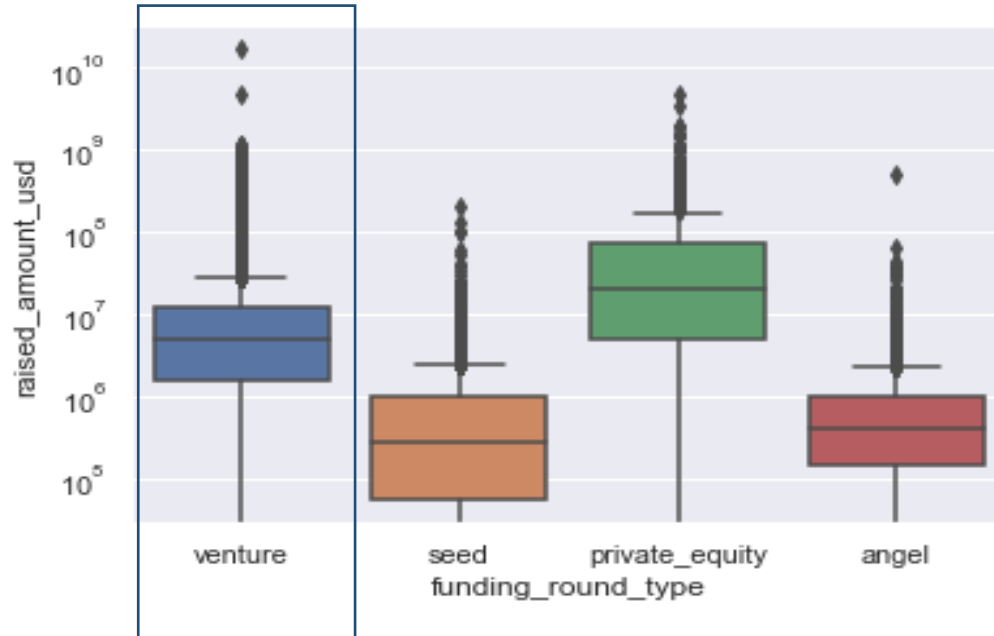
	column_name	percent_missing
0	founded_at	22.93
1	state_code	12.88
2	region	12.10
3	city	12.10
4	country_code	10.48
5	homepage_url	7.62
6	category_list	4.74
7	permalink	0.00
8	name	0.00
9	status	0.00
10	permalink_upr	0.00

% missing value for rounds2 data

	column_name	percent_missing
0	funding_round_code	72.91
1	raised_amount_usd	17.39
2	company_permalink	0.00
3	funding_round_permalink	0.00
4	funding_round_type	0.00
5	funded_at	0.00
6	company_permalink_upr	0.00

# Funding Type Analysis

Distribution of Investment value for funding type



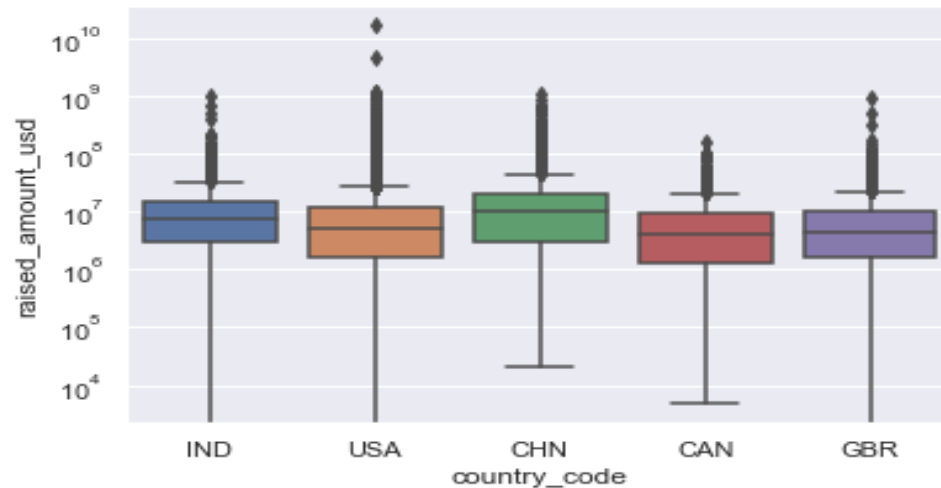
Investment type which is the most suitable for Spark Funds between 5 to 15 million dollar is 'Venture'

raised_amount_usd	
funding_round_type	
private_equity	7.330859e+07
venture	1.174895e+07
angel	9.586945e+05
seed	7.198180e+05

Above box plot shows that 'private equity' is having highest investment among all with an average investment of around 73 million.

As Venture Type lies between 5 to 15 Million USD and most representative, we will select 'Venture' funding type.

## Country Analysis



The top nine countries which have received the highest total funding across all sectors for chosen funding type 'venture' :

country_code	raised_amount_usd
USA	4.225108e+11
CHN	3.983542e+10
GBR	2.024563e+10
IND	1.439186e+10
CAN	9.583332e+09
FRA	7.259537e+09
ISR	6.907515e+09
DEU	6.346960e+09
JPN	3.363677e+09

Total_number_of_investment	
country_code	
USA	38372
GBR	2303
CHN	2087
CAN	1346
IND	992
FRA	985
ISR	910
DEU	786
ESP	343

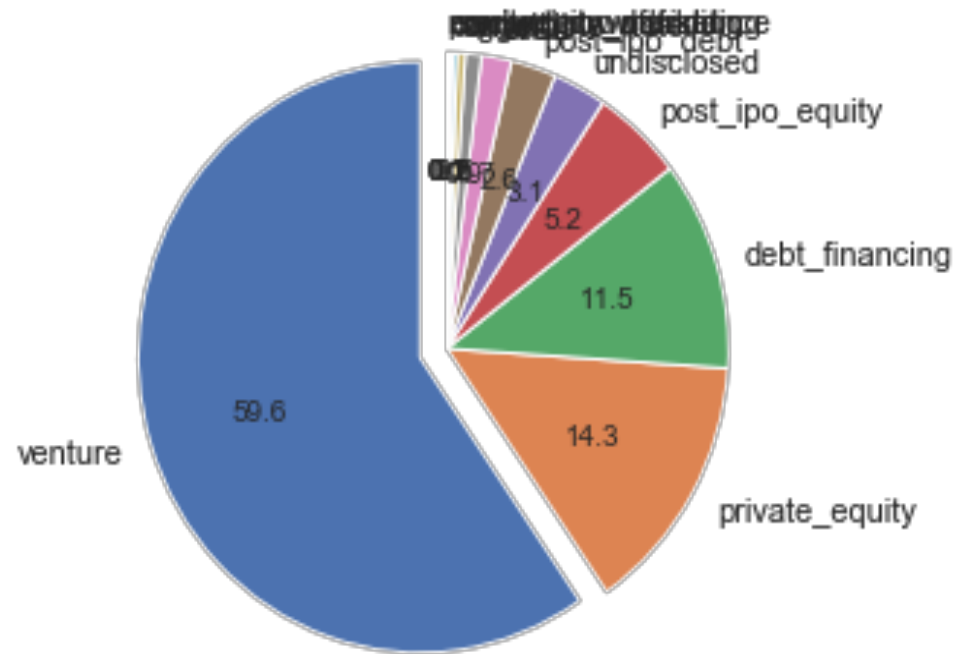
Out of Top9 countries which has got maximum Total funding, Top3 English Speaking countries which gets maximum average funding are

1. Country1 - USA
2. Country2 - GBR
3. Country3 - IND

Spark Funds wants to invest in **English Speaking** Countries based on total investment amount(Highlighted in Red) so we have not selected CHN.

# Analysis Results

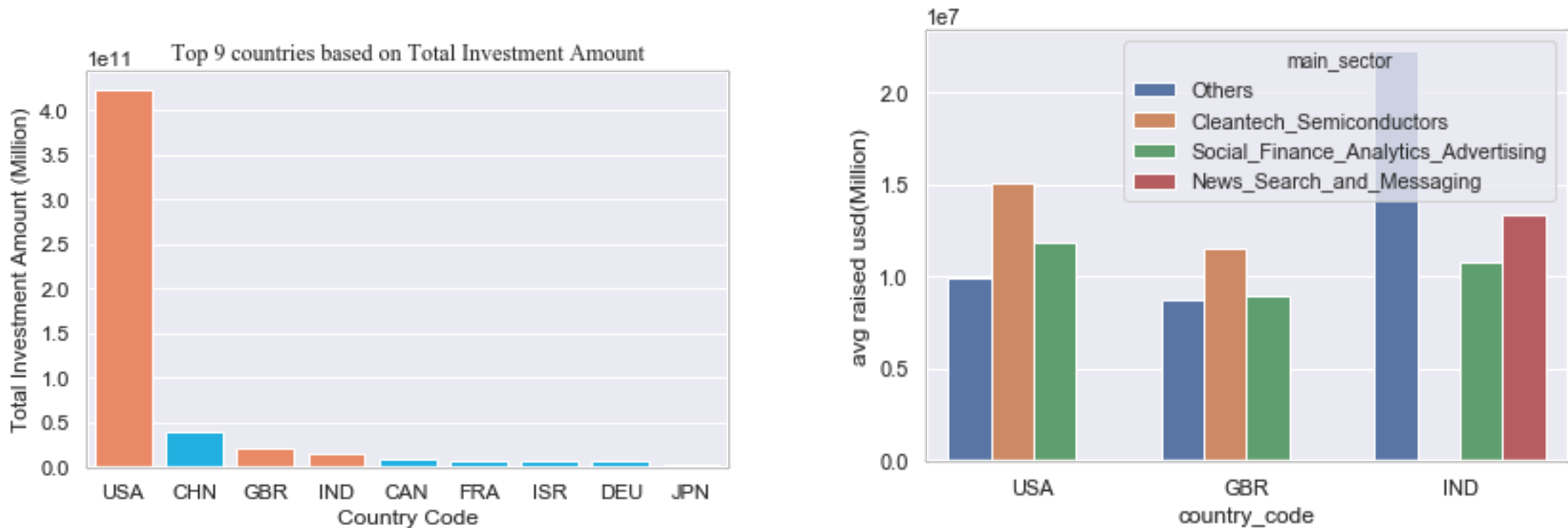
Plot 1



- Plot showing fraction of total investment globally in venture , private equity , seed etc.
- Here we can clearly see venture is contributing around 60% of Total 'Average amount of investment'

# Analysis Results

Plot 2

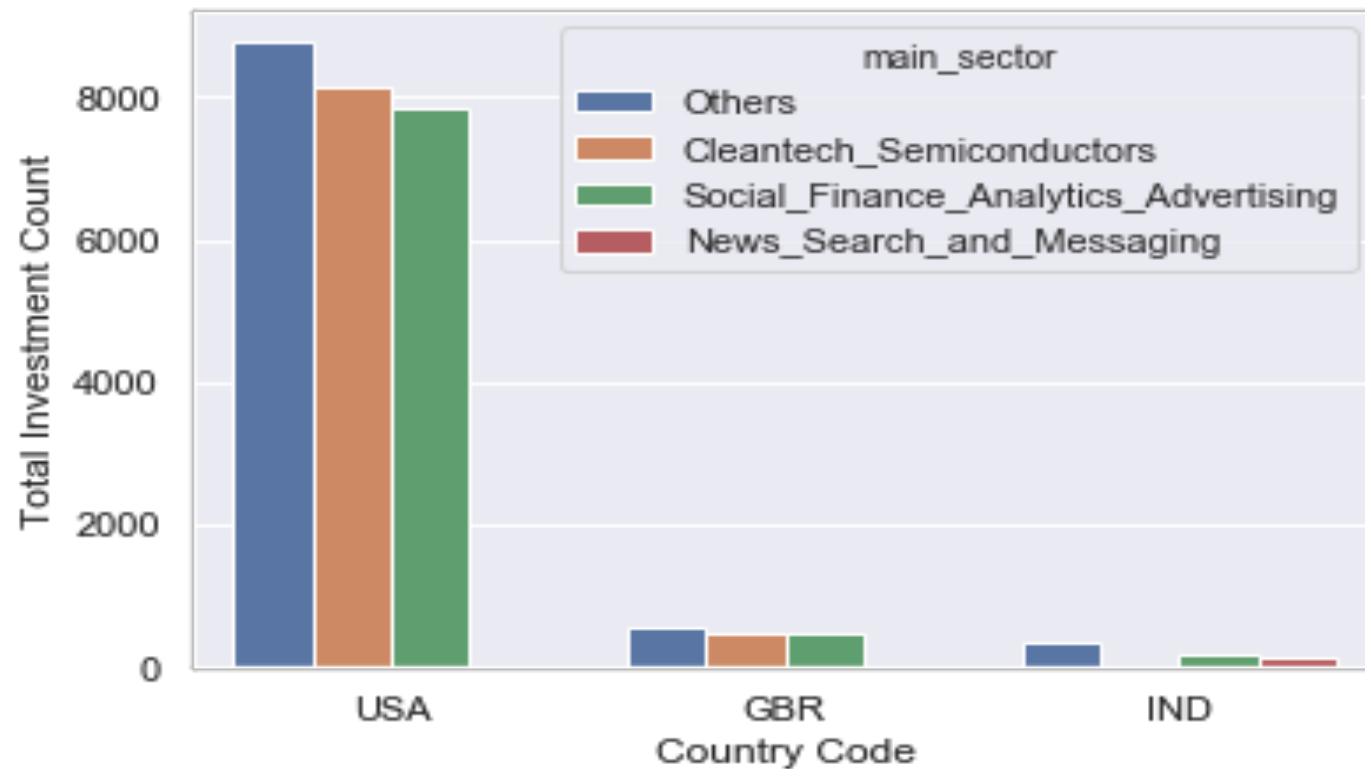


Above plot showing top 9 countries against the total investments of funding type.



# Analysis result

Plot 3



Plot showing the number of investments in top 3 sectors and top 3 countries.

## Conclusions

**Sparks Fund should invest in USA country on category as others keeping funding type as 'Venture'.**