INVESTMENT ASSIGNMENT

SUBMISSION

Papiya Das

Spark Funds Investment Case Study

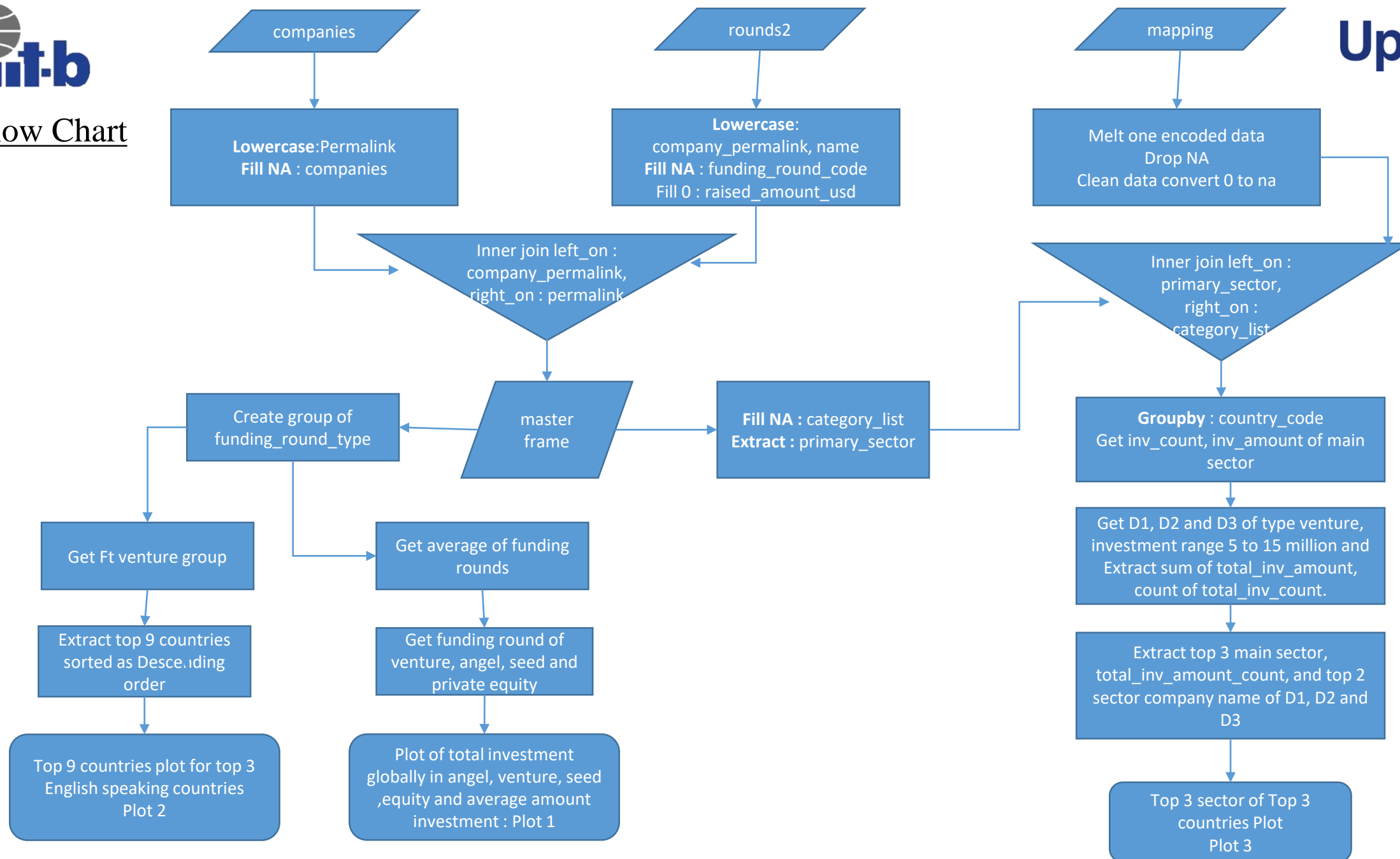Spark Funds, an asset management company wants to make investments in a few companies.

Spark Funds wants to understand the global trends in investments so that they can take the investment decisions effectively.

Spark Funds constraints for investments :

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

Spark Funds' business objective :

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'.

Flow Chart

companies

rounds2

mapping

UpGrad

Lowercase:Permalink
Fill NA : companies

Lowercase:
company_permalink, name
Fill NA : funding_round_code
Fill 0 : raised_amount_usd

Melt one encoded data
Drop NA
Clean data convert 0 to na

Inner join left_on :
company_permalink,
right_on : permalink

Inner join left_on :
primary_sector,
right_on :
category_list

Create group of
funding_round_type

master
frame

Fill NA : category_list
Extract : primary_sector

Groupby : country_code
Get inv_count, inv_amount of main
sector

Get Ft venture group

Get average of funding
rounds

Get D1, D2 and D3 of type venture,
investment range 5 to 15 million and
Extract sum of total_inv_amount,
count of total_inv_count.

Extract top 9 countries
sorted as Descending
order

Get funding round of
venture, angel, seed and
private equity

Extract top 3 main sector,
total_inv_amount_count, and top 2
sector company name of D1, D2 and
D3

Top 9 countries plot for top 3
English speaking countries
Plot 2

Plot of total investment
globally in angel, venture, seed
,equity and average amount
investment : Plot 1

Top 3 sector of Top 3
countries Plot
Plot 3

\<Funding Type Analysis\>

The funding types such as seed, venture, angel, etc. depend on the type of the company (startup, corporate, etc.), its stage (early stage startup, funded startup, etc.), the amount of funding (a few million USD to a billion USD), and so on.

What we have to do :
- Calculate **most representative value of the investment amount** for each of the four funding types (venture, angel, seed, and private equity)
- Extract the investment type suitable for Spark Funds.

Most Invested Funding Type : **Venture**

<Country Analysis>

Spark Funds wants to invest in countries with the highest amount of funding for the chosen investment type.

We have to find out :

- Top nine countries which have received the highest total funding across all sectors.
- Identify the top 3 English Speaking countries.

Top 3 English Speaking Countries:

- USA
- GBR
- IND

\<Sector Analysis\>

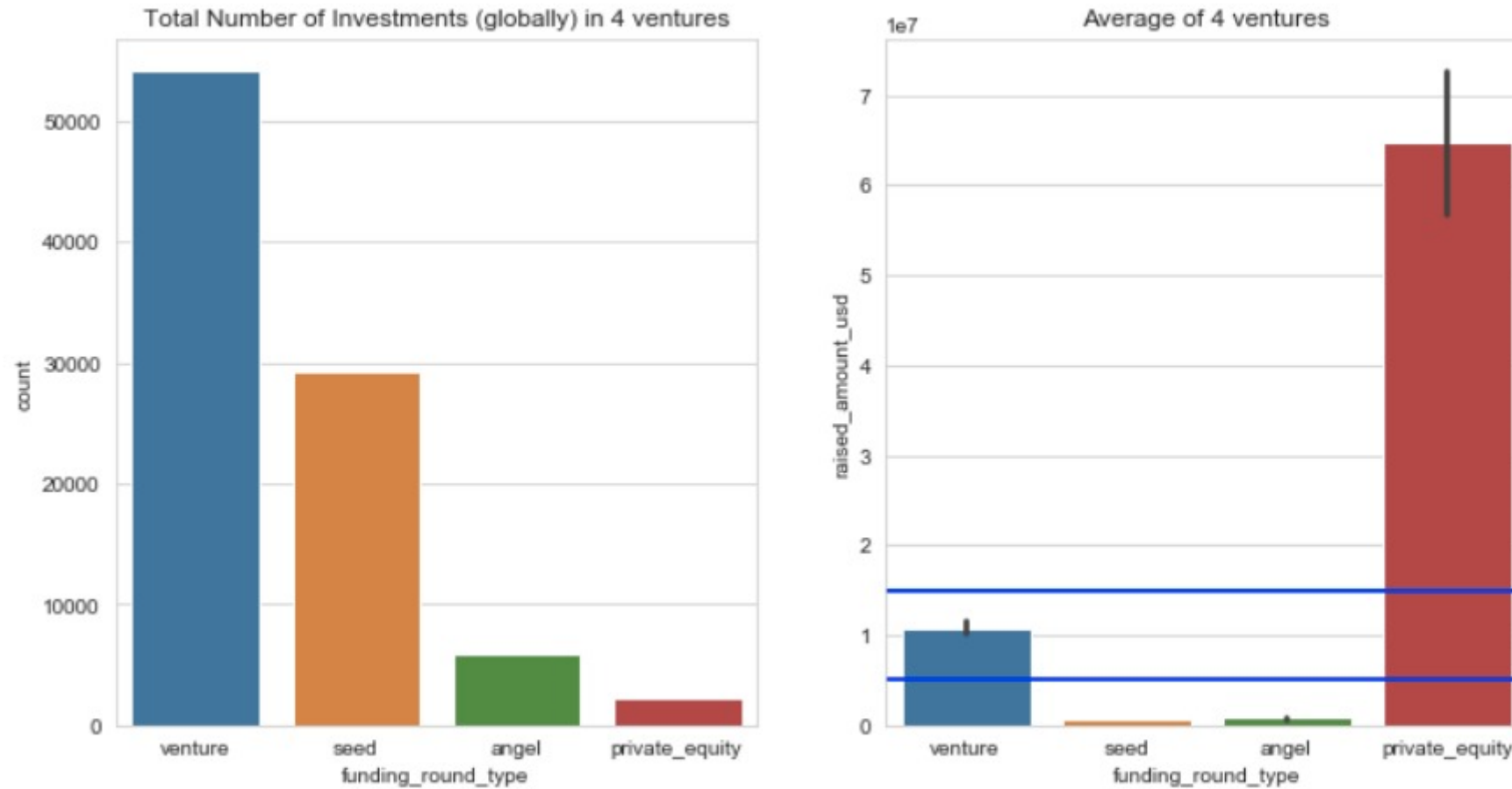As we already have the funding type and country analysis data, we can get the top 3 sector of English speaking countries.

What we have to do :
- Extract the eight main sectors of the companies and get the primary sector of every company.
- Get the preferred companies between 5 to 15 million USD
- Extract the top 3 companies sectors.

Sectors of Top 3 English speaking Countries are :
- Others
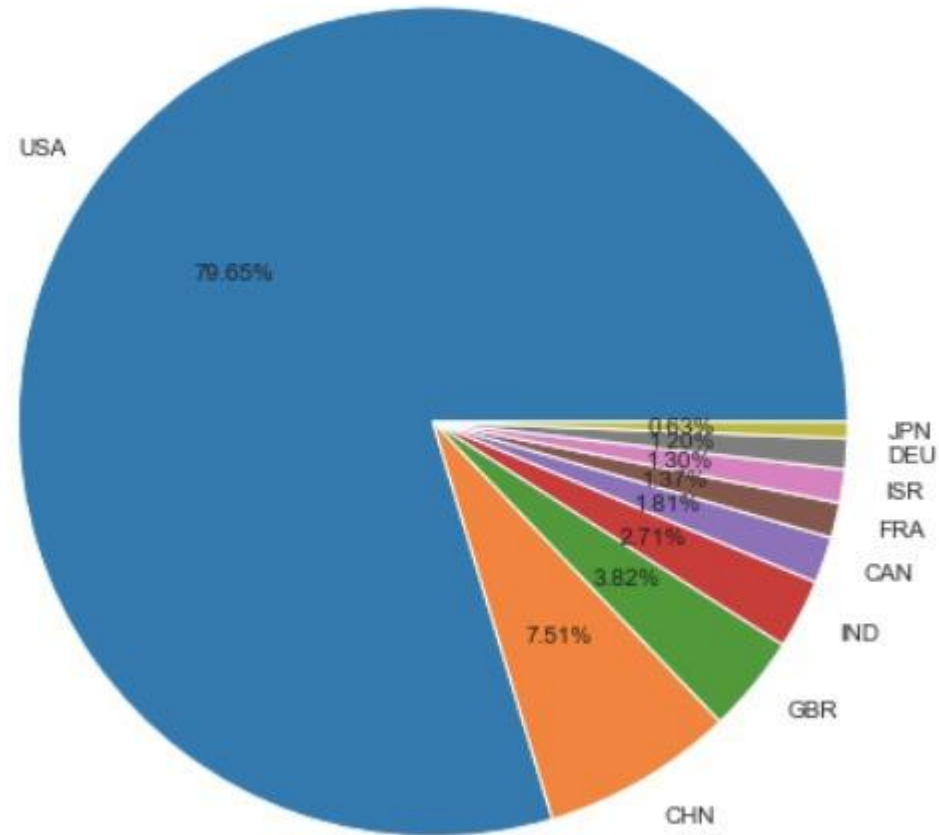- Social, Finance, Analytics, Advertising
- Cleantech / Semiconductors
- News, Search and Messaging

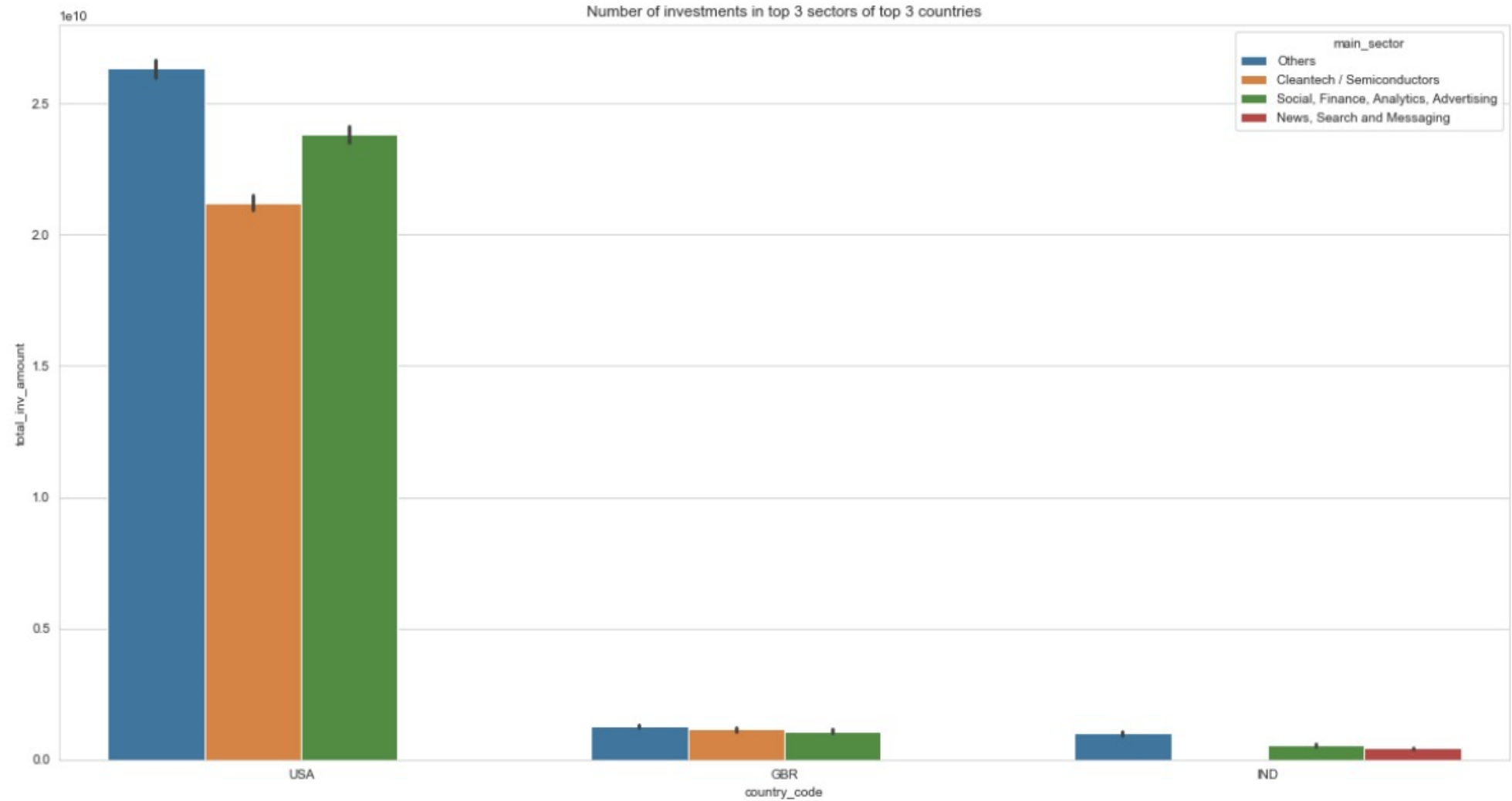Fraction of total investments (globally) in **angel, venture, seed, and private equity**.

The average amount of investment in each funding type.

Top 9 countries against the total amount of investments in FT (Venture)

Top 9 countries against the total amount of investments of funding type (**Venture**).

Above makes clear the **top 3** English Speaking Countries are : **USA, GBR, and IND**.

Number of investments in the **top 3 sectors** of the **top 3 countries.**

\<Conclusions\>

Based on the data it is clear that USA is the place to make investment, and according to numbers 50% of the amount can be invested in top 2 companies of top 2 sectors equally among all 4 companies.

- Total attorneys
- ToutApp
- Sigfig
- Zynga

Next 50% can be invested in the top company of top 2 sector of GBR and IND respectively.

- Silverrail Technologies
- Mythings
- Voylla retail pvt. ltd.
- TravelGuru

Amount can be invested between 5 to 15 million in the above 8 companies.