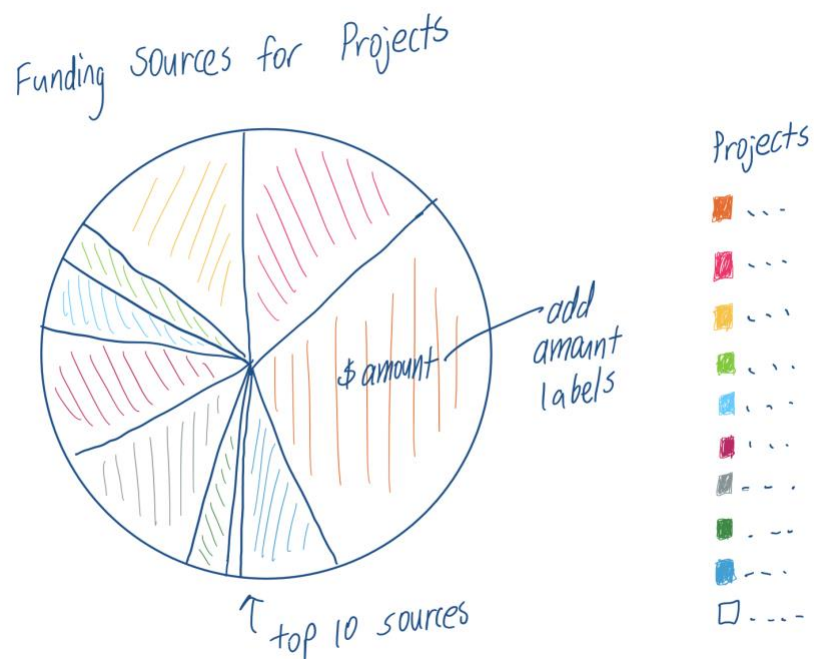
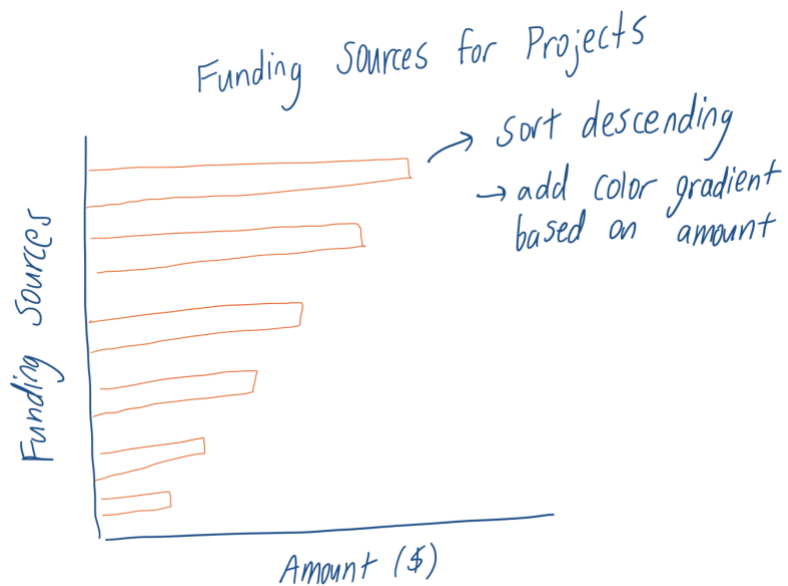


Question 1

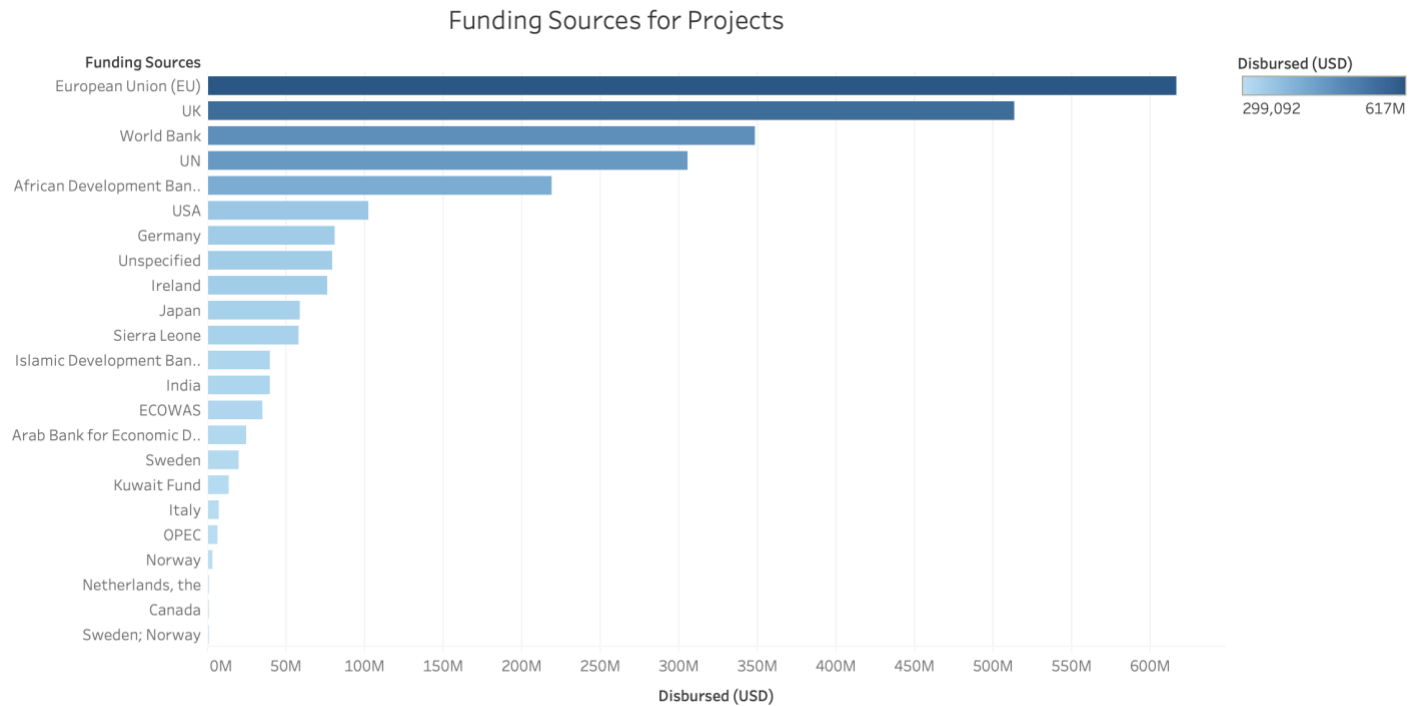
Part 1

Who are the dominant funding sources of these projects?

Visualizations



Implementation



Justification

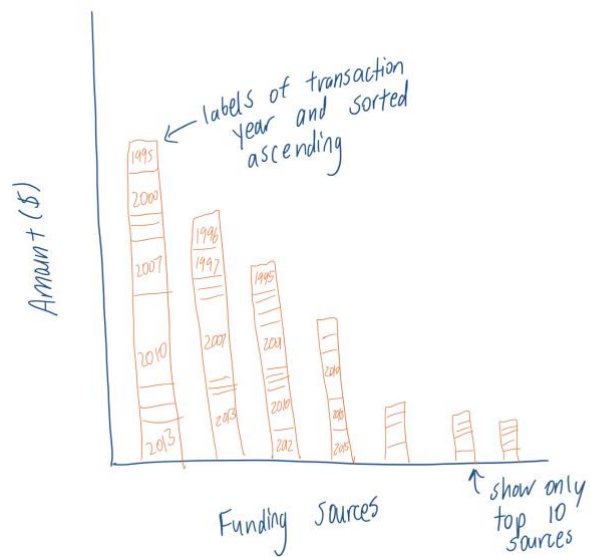
I chose to implement the horizontal bar graph as I thought it was easier to read than the pie graph. The bar graph has the amounts ordered descending with color gradated to also show the funding sources with the most disbursed money. The Funding Sources are located on the Y-axis with the amount in USD on the x-axis. This graph quickly shows the dominant funding sources at a first glance where as a pie chart you might have to guess based on the size of the slices.

Part 2

Do the dominant funding sources change over time?

Visualizations

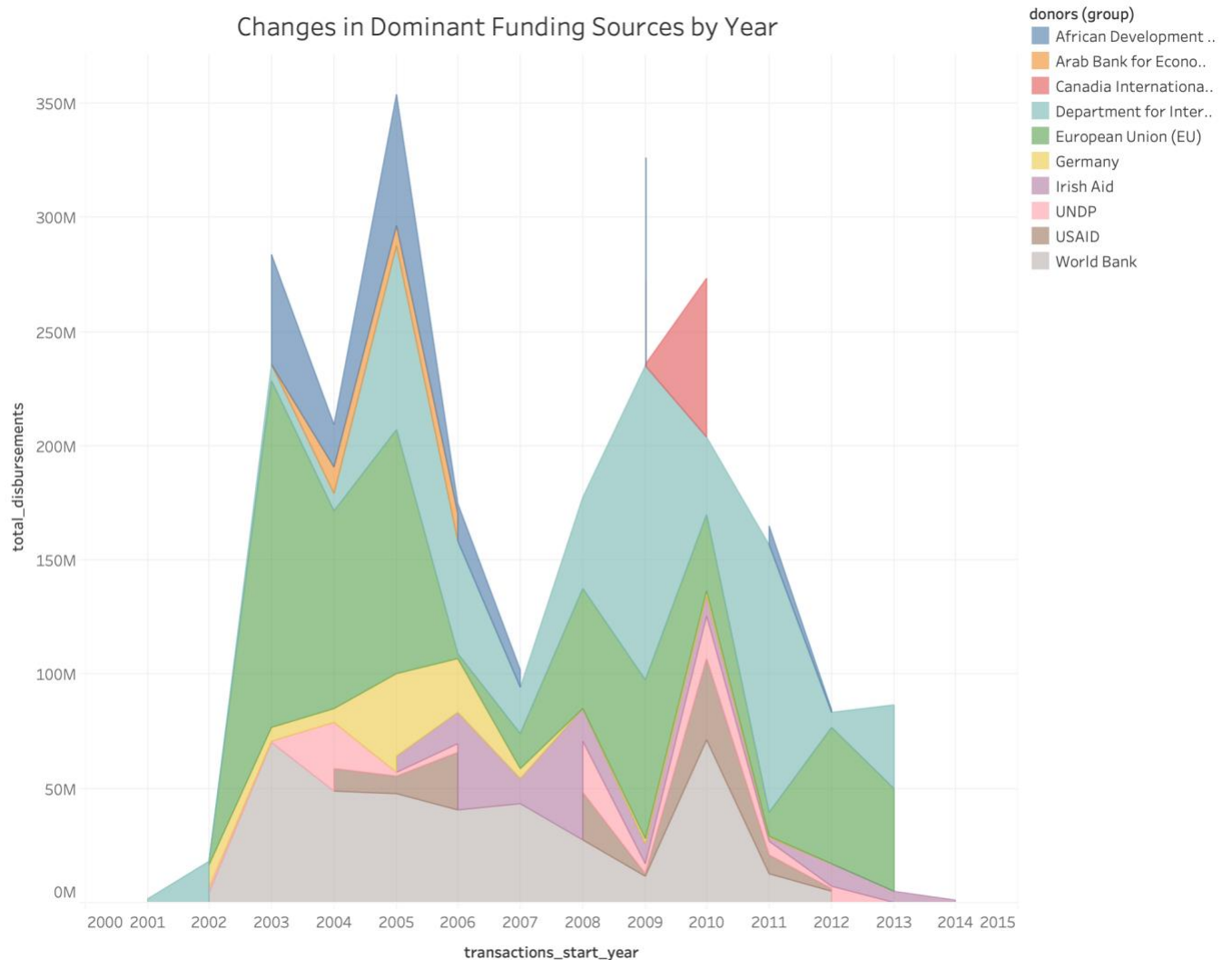
Changes in Dominant Funding Sources by Year



Changes in Funding Sources over Time



Implementation



Justification

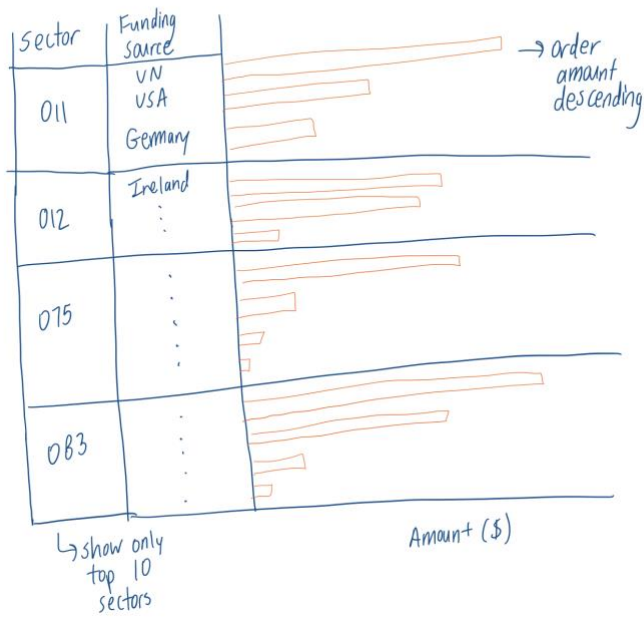
I chose the area chart because it was quite a bit easier to read and also identify who were the top funding sources. The bar chart showed who were the dominant funding sources, but you couldn't see the changes over time clearly. The area chart was able to see the changes over time and who the dominant sources were. I also only showed the top 10 funding sources as those are the most important in answering the question.

Part 3

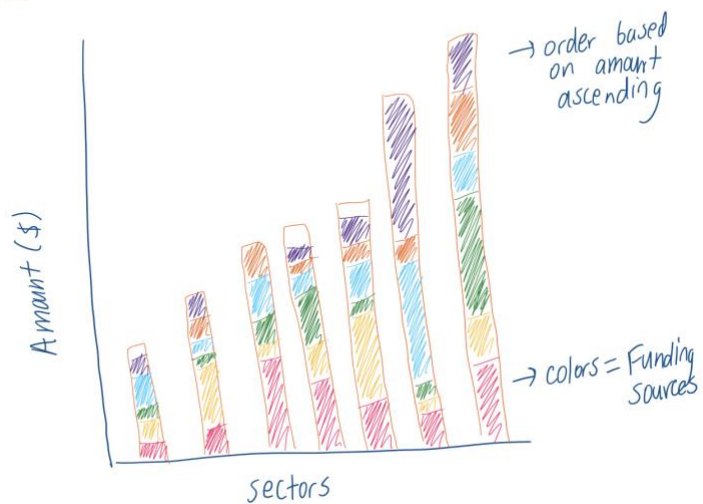
What is the correlation between the sectors and the funding sources?

Visualizations

Correlation Between Dominant Funding sources per sector

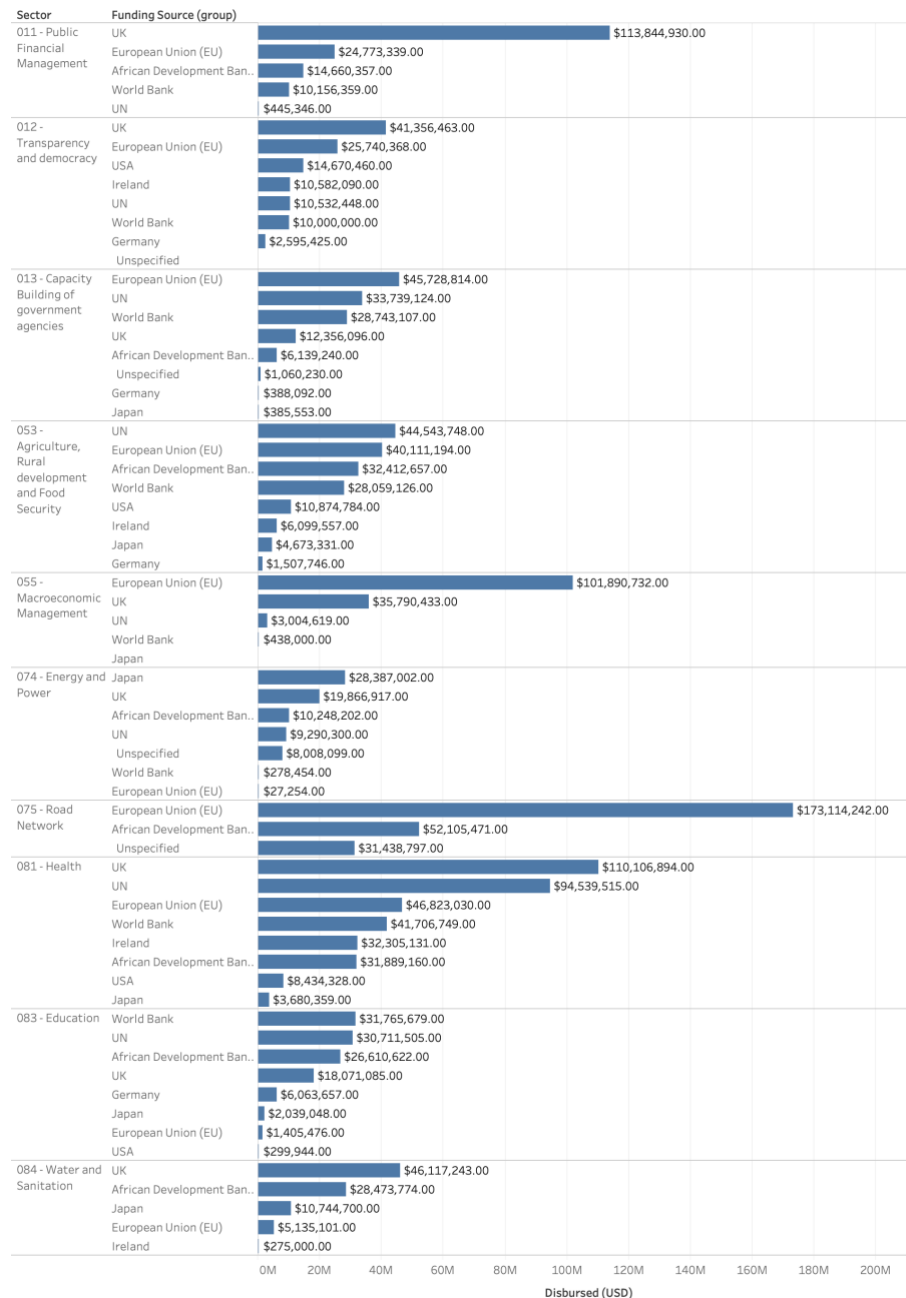


Correlation Between Dominant Funding sources per Sector



Implementation

Correlation Between Dominant Funding Sources per Sector



Sum of Disbursed (USD) for each Funding Source (group) broken down by Sector. The marks are labeled by sum of Disbursed (USD). The view is filtered on Funding Source (group) and Sector. The Funding Source (group) filter keeps 10 of 22 members. The Sector filter keeps 10 of 64 members.

Justification

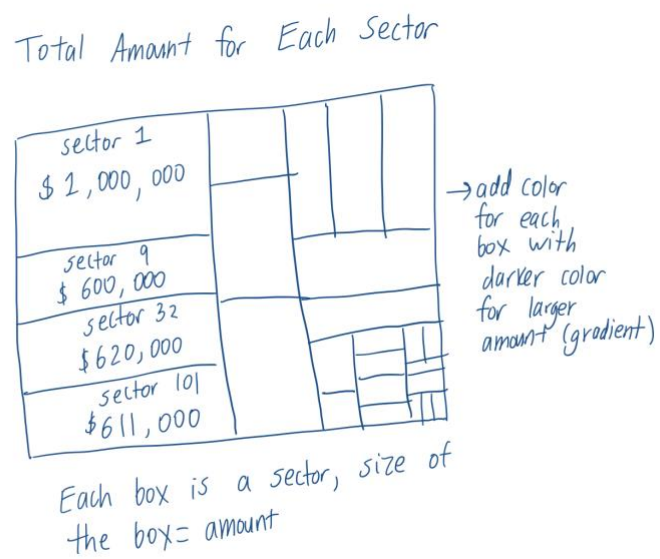
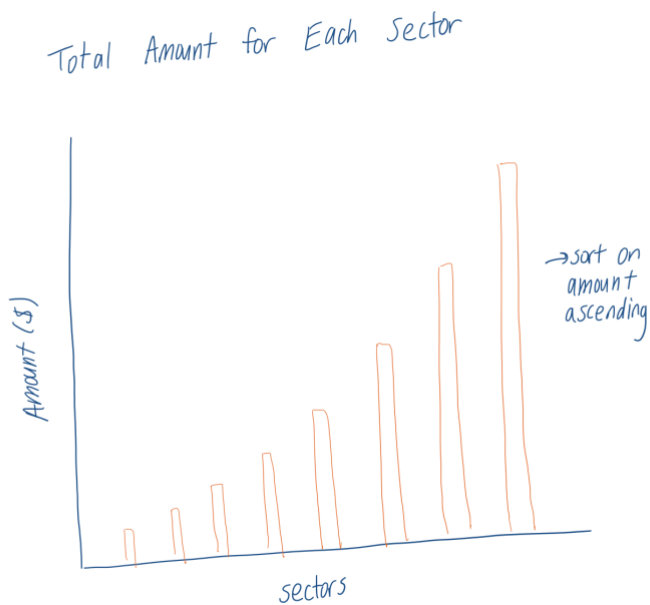
I went with horizontal bar graph as I thought it was easier to tell the actual amount of funding per sector. I also think the horizontal bar graph shows the correlation between sector and funding sources better than the stacked bar graph. The Disbursed amount in USD is broken up

by Funding Sources and then additionally by Sectors on the y-axis. Within each sector the amount is ordered descending to quickly see which are the greatest ones within each sector.

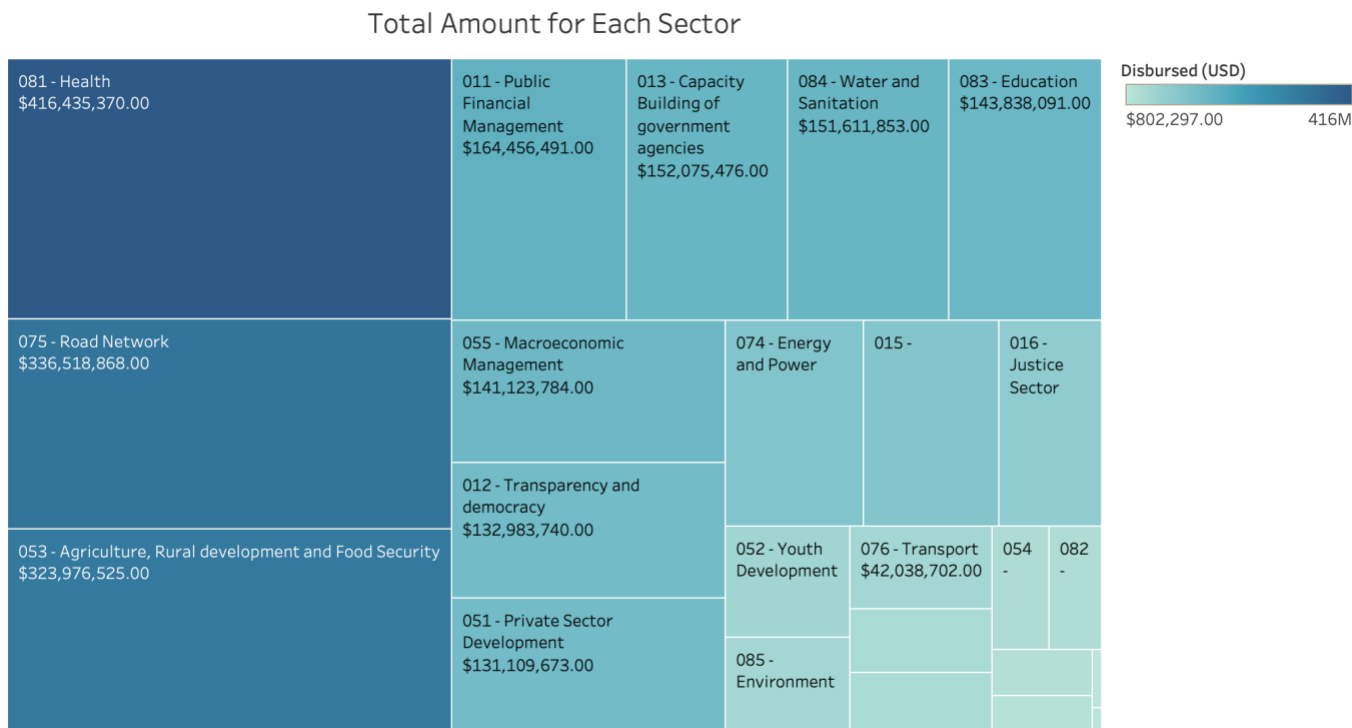
Part 4

What is the total amount for each sector of the projects?

Visualizations



Implementation



Sector (group) and sum of Disbursed (USD). Color shows sum of Disbursed (USD). Size shows sum of Disbursed (USD). The marks are labeled by Sector (group) and sum of Disbursed (USD).

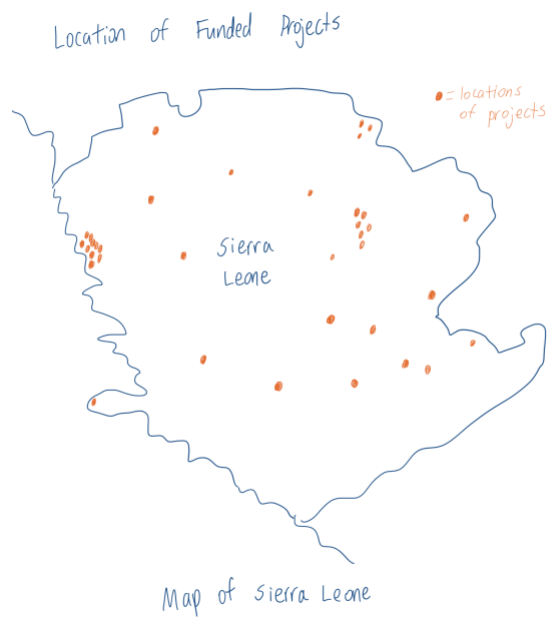
Justification

I went with the treemap because at a first glance it is very easy to see the total amount for each sector and see which sectors are the largest. I chose a gradated color scheme to compliment the size of the boxes in being able to tell which ones are the biggest and smallest. Each box is an individual sector with the total amount for each sector written in each box.

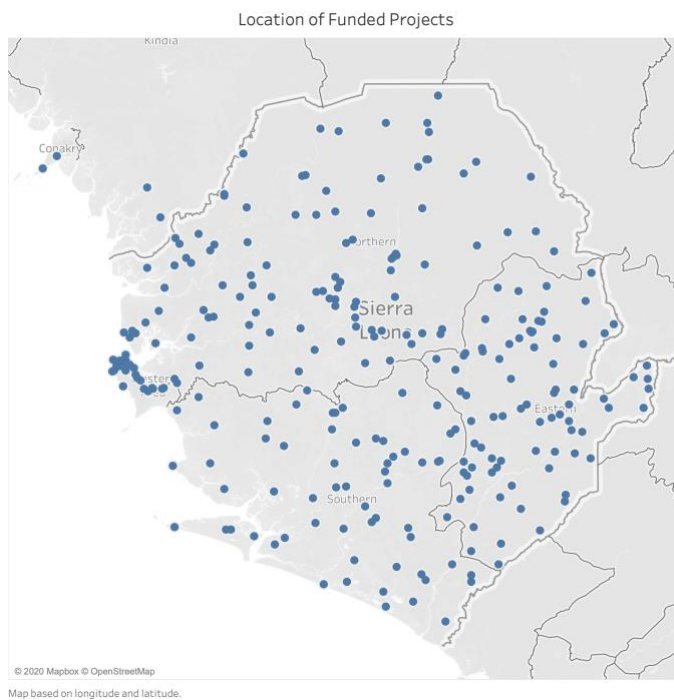
Part 5

Where are the funded projects geolocated?

Visualizations



Implementation



Justification

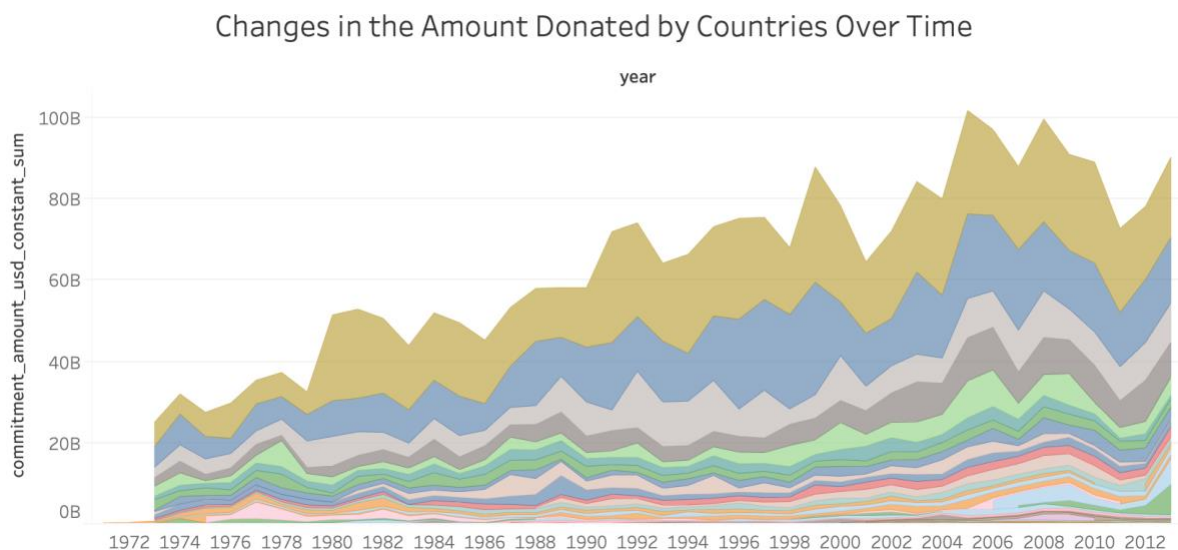
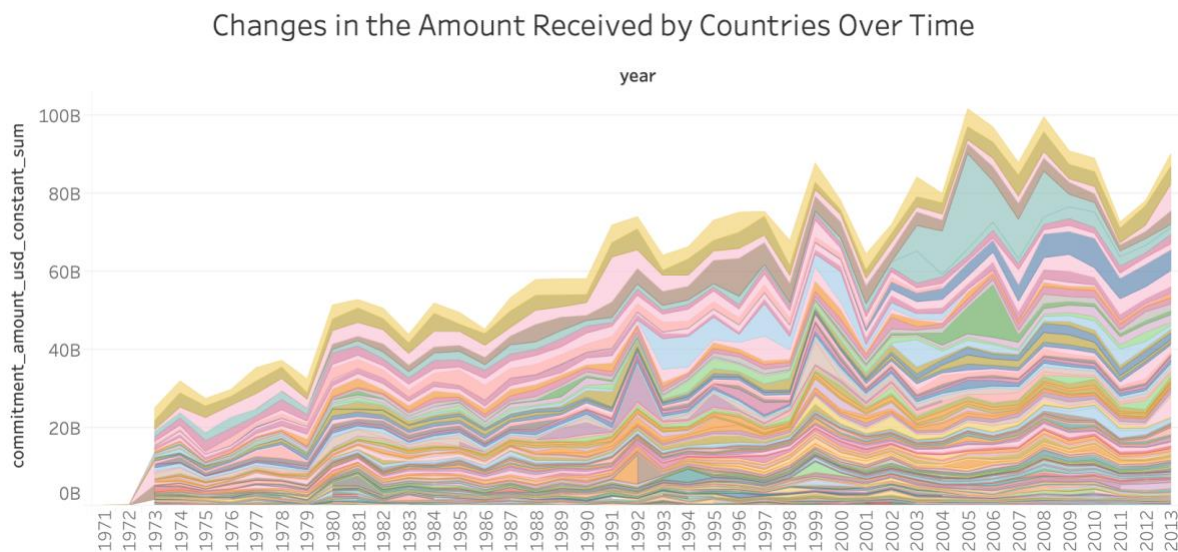
I chose to do a geographical map with blue dots representing the locations of all the funded projects. I wasn't able to come up with a second visualization as I couldn't think of another way to represent this data well. The map is of Sierra Leone where all the projects are located, and each dot represents a single funded project. You can clearly see from the map where the higher density areas are for funded projects.

Question 3

Data was cleaned in Tableau Prep Builder by removing Financial Institutions and extraneous dates. Financial Institutes were removed as they aren't single countries donating to another country and they include institutes like ASDF and Bill Gates Foundation. Some dates were removed as there was one date of 9999 and there were also very old dates that barely included any data. The data was also grouped by each country and any same countries with different spellings of their name were grouped together. Tableau Prep Builder lets your clean, aggregate, and join the datasets and output into your chosen format. This made it really easy to then input the cleaned dataset into Tableau. The prepared data is included under Output.csv.

Part 1

How does the amount donated vs. amount received change over time across all countries?



Recipient Countries

| | | | | | | |
|-----------------|------------------|-------------------|--------------------|-------------------|--------------------|---------------|
| Indonesia | Uganda | Kuwait | Taiwan | Yugoslavia | Latvia | Liechtenstein |
| India | Bolivia | Dominican Rep.. | Mauritius | Wallis & Futuna | Grenada | Iceland |
| Egypt | Senegal | Liberia | Romania | Belize | Tuvalu | Macao |
| China | Malaysia | Chile | Cuba | St. Helena | Cook Islands | Switzerland |
| Iraq | Algeria | Laos | Central African .. | Hong Kong, Chi.. | St.Vincent & Gr.. | French Guiana |
| Pakistan | Nicaragua | Mauritania | Mayotte | Maldives | Norway | Germany |
| Bangladesh | South Africa | Costa Rica | Macedonia, FYR | Tonga | Gibraltar | |
| Philippines | Mali | Uzbekistan | Guinea-Bissau | Marshall Islands | Barbados | |
| Israel | Myanmar | Iran | New Caledonia | Turkmenistan | St. Kitts & Nevis | |
| Afghanistan | Serbia | Sierra Leone | Hungary | Global | Antigua & Barb.. | |
| Viet Nam | Argentina | Georgia | Guyana | Comoros | Aruba | |
| Tanzania | Zimbabwe | Chad | Trinidad & Toba.. | Kiribati | United Arab Em.. | |
| Russia | Haiti | Burundi | Eritrea | Equatorial Guin.. | Niue | |
| Thailand | Yemen | Albania | Tajikistan | Cyprus | Turks and Caico.. | |
| Turkey | Nepal | Botswana | Djibouti | United Kingdom | Estonia | |
| Mozambique | Syria | Togo | Bulgaria | Martinique | France | |
| Morocco | Burkina Faso | Mongolia | Australia | Ireland | Tokelau | |
| Nigeria | Honduras | Oman | Bahrain | Belarus | New Zealand | |
| Kenya | Malawi | Saudi Arabia | Bhutan | Libya | Slovenia | |
| Brazil | El Salvador | Namibia | Croatia | Malta | Northern Maria.. | |
| Congo, Democr.. | Madagascar | Gabon | Moldova | Guadeloupe | Belgium | |
| Mexico | Somalia | Solomon Islands | Italy | Seychelles | Finland | |
| Ethiopia | Cambodia | Cape Verde | Singapore | Slovak Republic | Portugal | |
| Sudan | Venezuela | Timor-Leste | French Polynesia | Sao Tome & Pri.. | Falkland Islands | |
| Sri Lanka | Angola | South Sudan | Czech Republic | Austria | Denmark | |
| Jordan | Rwanda | Kazakhstan | Fiji | Montserrat | Bahamas | |
| Ghana | Guatemala | Armenia | Vanuatu | Qatar | Anguilla | |
| Papua New Gui.. | Niger | Canada | Japan | Nauru | Virgin Islands (.. | |
| Peru | Lebanon | Paraguay | Micronesia, Fe.. | Montenegro | United States | |
| Zambia | Bosnia-Herzeg.. | Middle East, Re.. | Netherlands An.. | Dominica | Cayman Islands | |
| Tunisia | Congo, Republi.. | Suriname | Gambia | Spain | Soviet Union | |
| Colombia | Ukraine | Azerbaijan | Korea, Democr.. | Luxembourg | Bermuda | |
| Korea | Ecuador | Panama | Reunion | Palau | Sweden | |
| Poland | Jamaica | Kosovo | Swaziland | St. Lucia | St. Pierre & Miq.. | |
| Cameroon | Benin | Lesotho | Uruguay | Greece | Brunei | |
| Cote d'Ivoire | Guinea | Kyrgyz Republic | Samoa | Lithuania | Serbia and Mon.. | |

Donor Countries

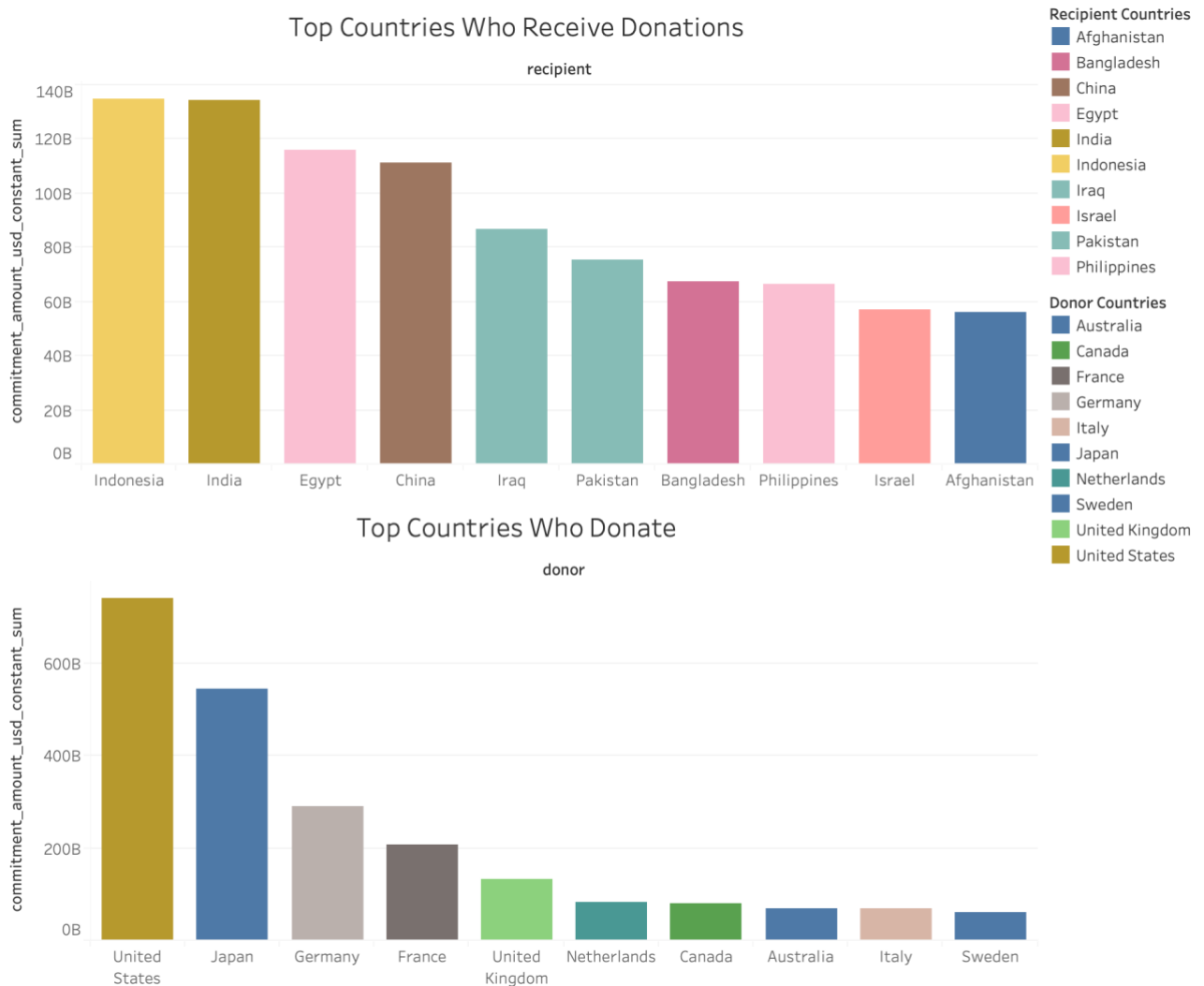
| | | | |
|----------------|------------------|-----------------|-----------|
| United States | Switzerland | Czech Republic | Colombia |
| Japan | Belgium | South Africa | Lithuania |
| Germany | Saudi Arabia | Brazil | Chile |
| France | Korea | Poland | Romania |
| United Kingdom | United Arab Em.. | Iceland | Latvia |
| Netherlands | Austria | Qatar | |
| Canada | Finland | Slovak Republic | |
| Australia | Portugal | Liechtenstein | |
| Italy | Ireland | Estonia | |
| Sweden | India | Thailand | |
| Norway | New Zealand | Slovenia | |
| Spain | Luxembourg | Hungary | |
| Denmark | Greece | Cyprus | |
| Kuwait | Taiwan | Monaco | |

Answer: In the last 40 years the amount received and donated by countries in total has increased by over 3 times. In 1974 there was roughly \$30 billion in amount donated and received and in 2012 that number jumped to around \$90 billion. The USA, Japan, Germany and

France have consistently been the top donating countries. Indonesia, India, Egypt, China, and Iraq have been the top receivers with Iraq receiving the most.

Part 2

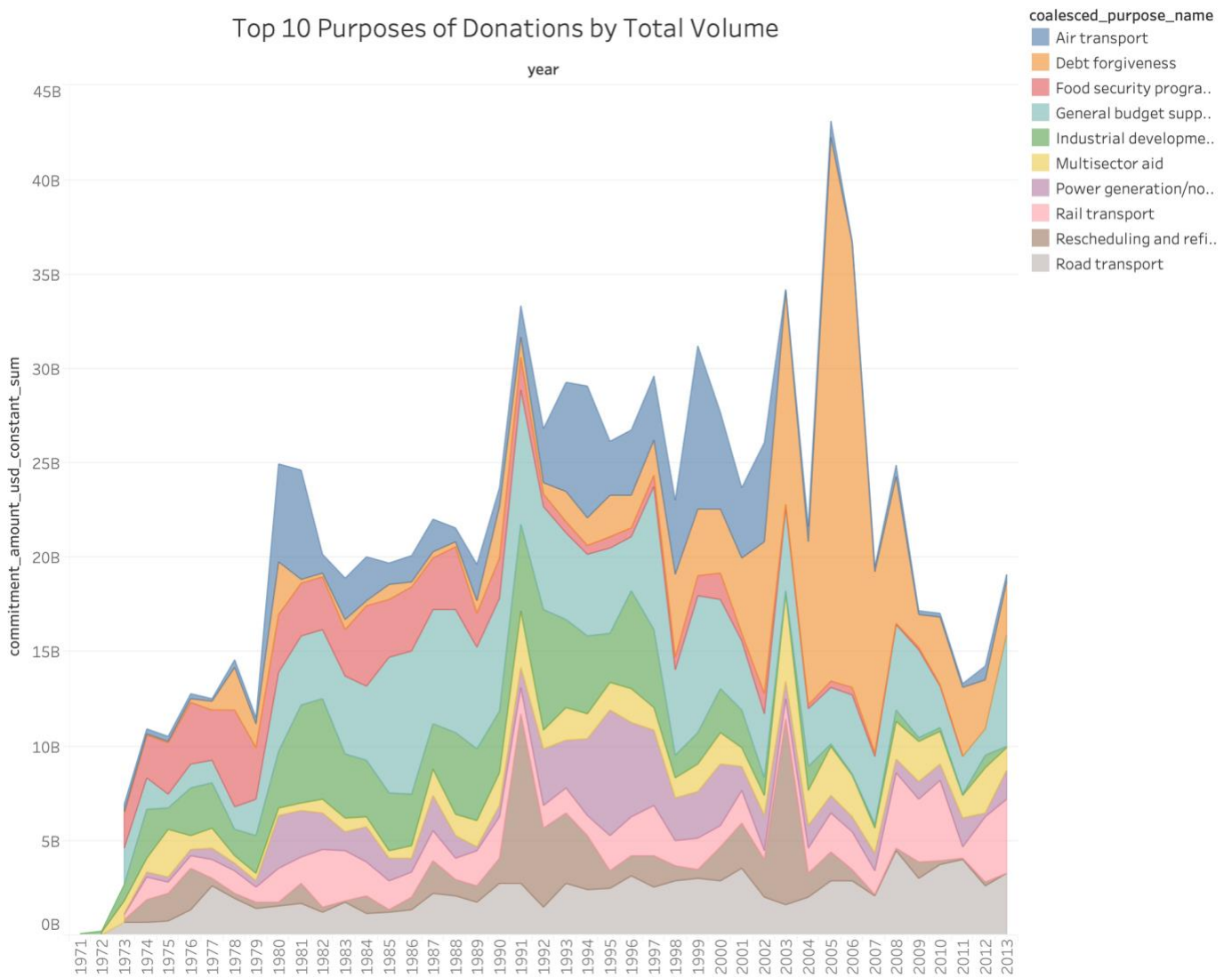
Are there countries that mostly send or mostly receive and countries that have similar amount they receive and send?



Answer: The countries that mostly send money are United States, Japan, Germany, and France. The countries that mostly receive donations are Indonesia, India, Egypt and China. There are no countries that have similar amounts they send and receive.

Part 3

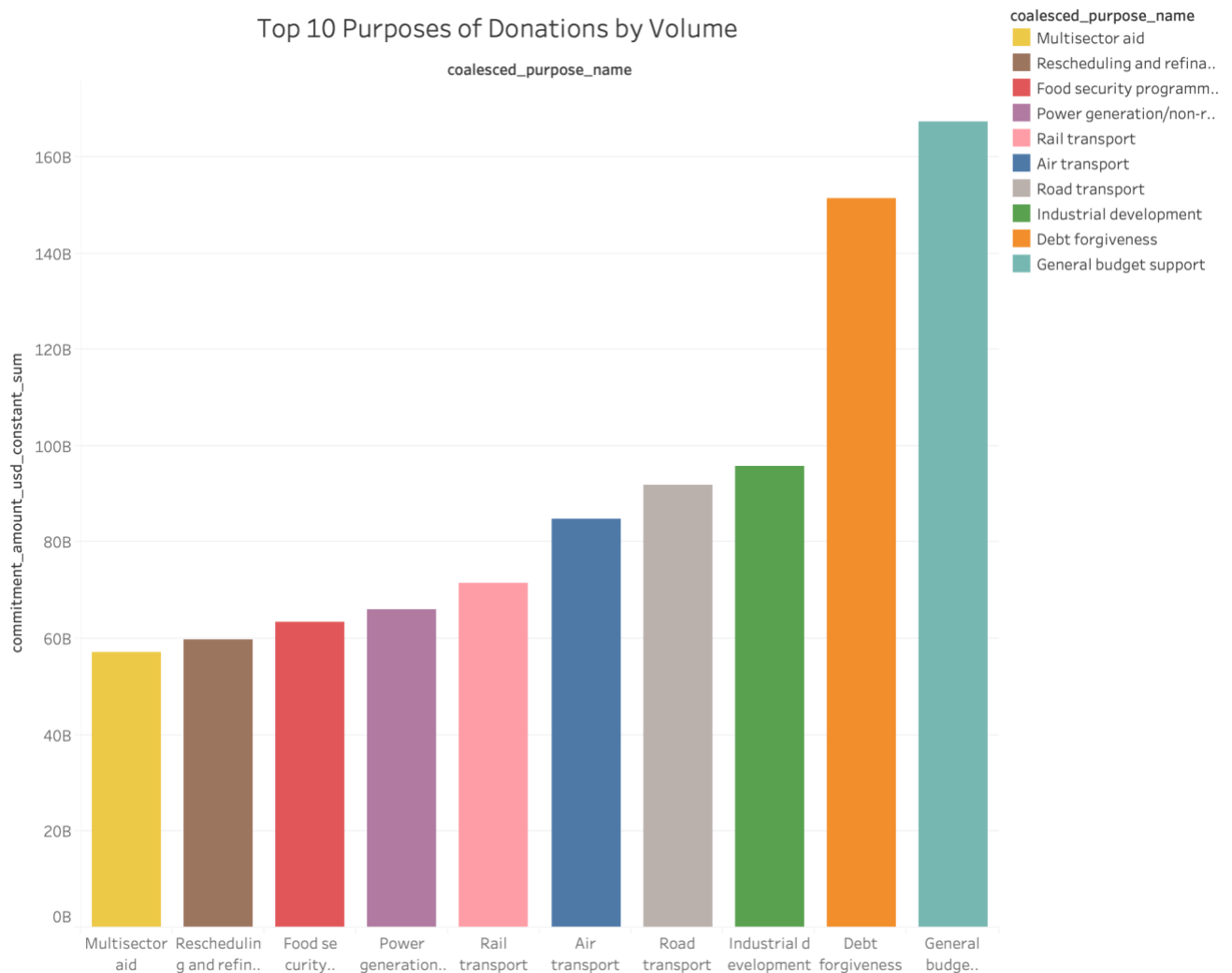
What are the top 10 purposes of donations (in terms of total volume) and how does their volume compare over time?



Answer: The top 10 purposes of donations are shown in the graph above. Debt Forgiveness (orange) increased greatly over the last 40 years. Food Security Program (red) and Air Transport (dark blue) decreased significantly over the last 40 years.

Part 4

Are there types that have a much higher/lower volume overall among the top 10?



Answer: General Budget Support has the largest volume and has almost 3 times as much as Multisector Aid which is the 10th highest. Debt forgiveness also has a very high volume and then rest drop significantly by around \$50 billion.