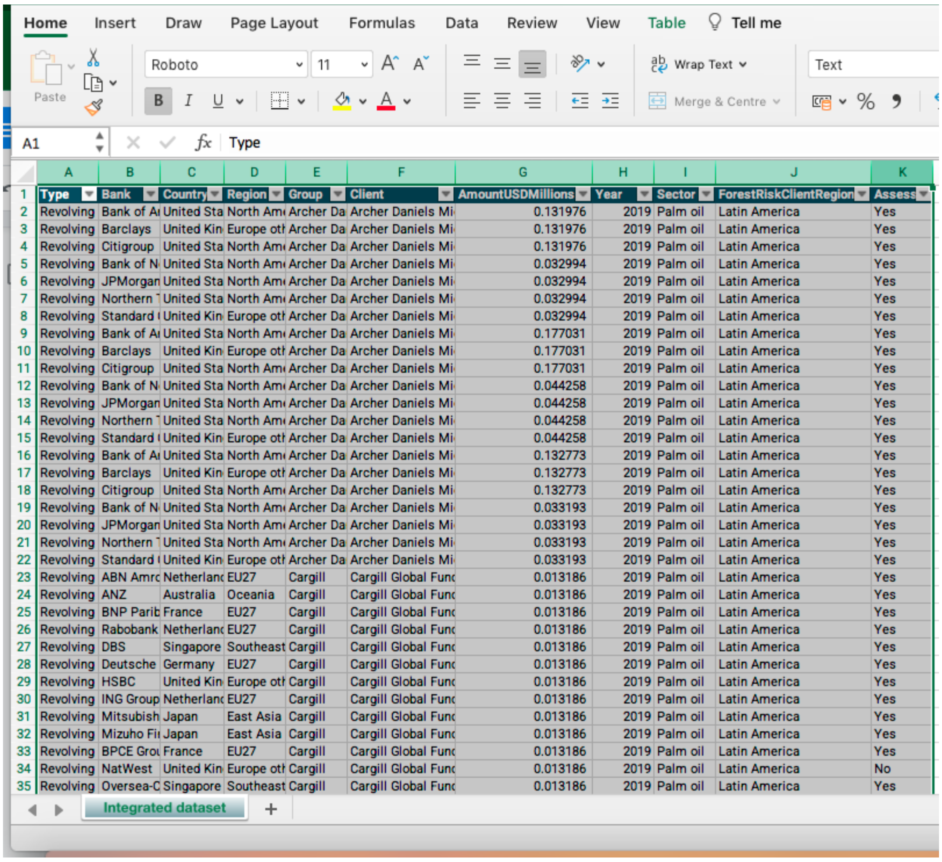
Excel guide for data analysis

To carry out further analysis, you can download the dataset from the Data Deep Dive page or, if you are interested in the Brazilian Agriculture Finance Program and would like the extended smallholder dataset, you can download that from [FAQ 10](FAQ 10).

Pivot tables: to identify financiers of companies, or company clients of financiers

1. Select the columns (A-K) to highlight the full dataset



	A	B	C	D	E	F	G	H	I	J	K
1	Type	Bank	Country	Region	Group	Client	AmountUSDMillions	Year	Sector	ForestRiskClientRegion	Assess
2	Revolving	Bank of A	United Sta	North Am	Archer Da	Archer Daniels Mi	0.131976	2019	Palm oil	Latin America	Yes
3	Revolving	Barclays	United Kin	Europe ot	Archer Da	Archer Daniels Mi	0.131976	2019	Palm oil	Latin America	Yes
4	Revolving	Citigroup	United Sta	North Am	Archer Da	Archer Daniels Mi	0.131976	2019	Palm oil	Latin America	Yes
5	Revolving	Bank of N	United Sta	North Am	Archer Da	Archer Daniels Mi	0.032994	2019	Palm oil	Latin America	Yes
6	Revolving	JPMorgan	United Sta	North Am	Archer Da	Archer Daniels Mi	0.032994	2019	Palm oil	Latin America	Yes
7	Revolving	Northern	United Sta	North Am	Archer Da	Archer Daniels Mi	0.032994	2019	Palm oil	Latin America	Yes
8	Revolving	Standard	United Kin	Europe ot	Archer Da	Archer Daniels Mi	0.032994	2019	Palm oil	Latin America	Yes
9	Revolving	Bank of A	United Sta	North Am	Archer Da	Archer Daniels Mi	0.177031	2019	Palm oil	Latin America	Yes
10	Revolving	Barclays	United Kin	Europe ot	Archer Da	Archer Daniels Mi	0.177031	2019	Palm oil	Latin America	Yes
11	Revolving	Citigroup	United Sta	North Am	Archer Da	Archer Daniels Mi	0.177031	2019	Palm oil	Latin America	Yes
12	Revolving	Bank of N	United Sta	North Am	Archer Da	Archer Daniels Mi	0.044258	2019	Palm oil	Latin America	Yes
13	Revolving	JPMorgan	United Sta	North Am	Archer Da	Archer Daniels Mi	0.044258	2019	Palm oil	Latin America	Yes
14	Revolving	Northern	United Sta	North Am	Archer Da	Archer Daniels Mi	0.044258	2019	Palm oil	Latin America	Yes
15	Revolving	Standard	United Kin	Europe ot	Archer Da	Archer Daniels Mi	0.044258	2019	Palm oil	Latin America	Yes
16	Revolving	Bank of A	United Sta	North Am	Archer Da	Archer Daniels Mi	0.132773	2019	Palm oil	Latin America	Yes
17	Revolving	Barclays	United Kin	Europe ot	Archer Da	Archer Daniels Mi	0.132773	2019	Palm oil	Latin America	Yes
18	Revolving	Citigroup	United Sta	North Am	Archer Da	Archer Daniels Mi	0.132773	2019	Palm oil	Latin America	Yes
19	Revolving	Bank of N	United Sta	North Am	Archer Da	Archer Daniels Mi	0.033193	2019	Palm oil	Latin America	Yes
20	Revolving	JPMorgan	United Sta	North Am	Archer Da	Archer Daniels Mi	0.033193	2019	Palm oil	Latin America	Yes
21	Revolving	Northern	United Sta	North Am	Archer Da	Archer Daniels Mi	0.033193	2019	Palm oil	Latin America	Yes
22	Revolving	Standard	United Kin	Europe ot	Archer Da	Archer Daniels Mi	0.033193	2019	Palm oil	Latin America	Yes
23	Revolving	ABN Amr	Netherlan	EU27	Cargill	Cargill Global Fun	0.013186	2019	Palm oil	Latin America	Yes
24	Revolving	ANZ	Australia	Oceania	Cargill	Cargill Global Fun	0.013186	2019	Palm oil	Latin America	Yes
25	Revolving	BNP Parib	France	EU27	Cargill	Cargill Global Fun	0.013186	2019	Palm oil	Latin America	Yes
26	Revolving	Rabobank	Netherlan	EU27	Cargill	Cargill Global Fun	0.013186	2019	Palm oil	Latin America	Yes
27	Revolving	DBS	Singapore	Southeast	Cargill	Cargill Global Fun	0.013186	2019	Palm oil	Latin America	Yes
28	Revolving	Deutsche	Germany	EU27	Cargill	Cargill Global Fun	0.013186	2019	Palm oil	Latin America	Yes
29	Revolving	HSBC	United Kin	Europe ot	Cargill	Cargill Global Fun	0.013186	2019	Palm oil	Latin America	Yes
30	Revolving	ING Group	Netherlan	EU27	Cargill	Cargill Global Fun	0.013186	2019	Palm oil	Latin America	Yes
31	Revolving	Mitsubish	Japan	East Asia	Cargill	Cargill Global Fun	0.013186	2019	Palm oil	Latin America	Yes
32	Revolving	Mizuho Fi	Japan	East Asia	Cargill	Cargill Global Fun	0.013186	2019	Palm oil	Latin America	Yes
33	Revolving	BPCE Gro	France	EU27	Cargill	Cargill Global Fun	0.013186	2019	Palm oil	Latin America	Yes
34	Revolving	NatWest	United Kin	Europe ot	Cargill	Cargill Global Fun	0.013186	2019	Palm oil	Latin America	No
35	Revolving	Oversea-C	Singapore	Southeast	Cargill	Cargill Global Fun	0.013186	2019	Palm oil	Latin America	Yes

2. Go to **insert > pivot table > new worksheet**

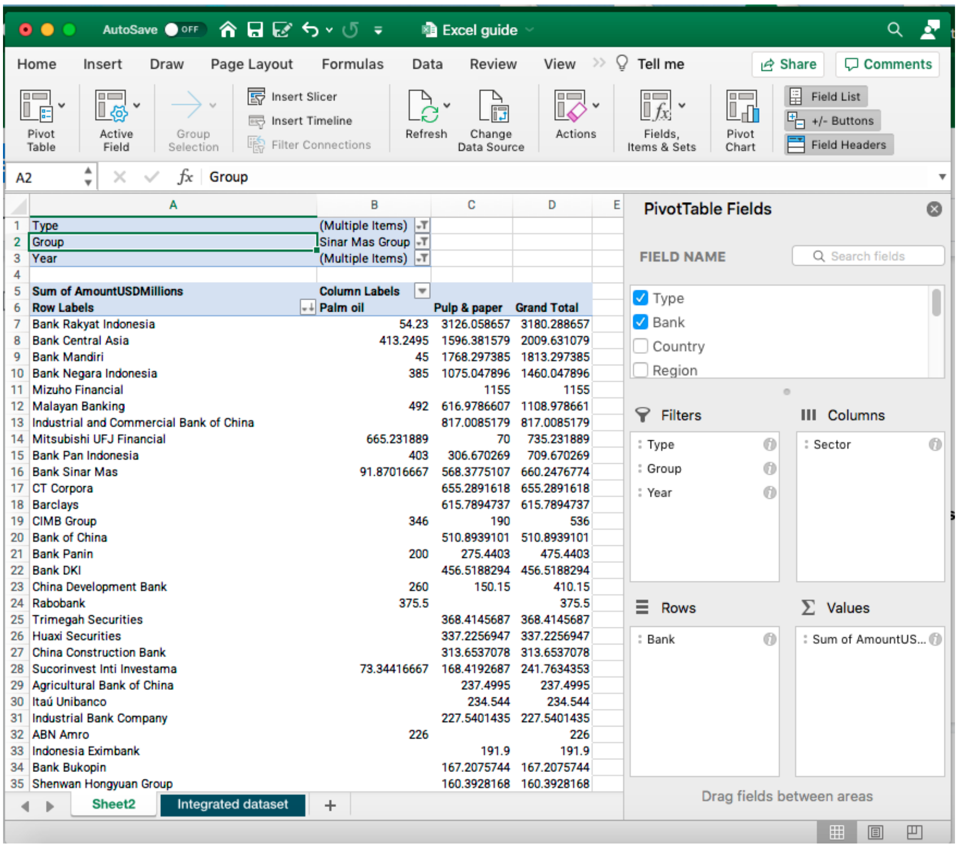
3. Drag the column headers into the appropriate boxes in the **PivotTable Fields** box

Example 1. **Identifying investors in Sinar Mas showing sectors**

Filters include:

- Type (of finance) → select credit or investment (eg. bond- and share-holding)
- Group → select the company of interest (eg. Sinar Mas Group)
- Year → select timeframe (eg. 2021)
    - *nb. Credit data exists from 2013 by year up to 2021 (June) while Investment data is the most recent position based on filings in April 2021.*

Rows include:



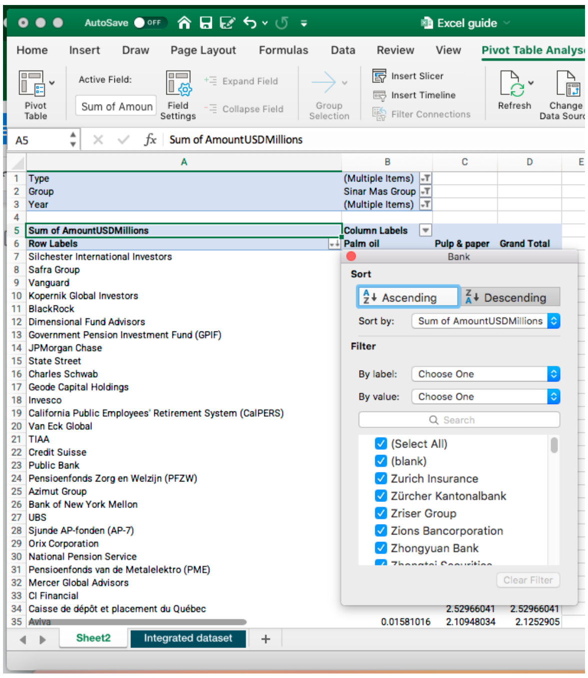
Bank → can be filtered to only show certain banks but here it shows all banks that have invested in Sinar Mas.

Columns include:

- Sector → can be filtered to only show certain sectors but here it shows all that Sinar Mas has investment in.

Values include:

- Sum of AmountUSDmillions → make sure this is set to "sum" and not "count"
  - *nb. To change this, right click on the* ***AmountUSDmillions > Value field settings > summarise by … sum***



Example 2. **Identifying which countries FI’s are financing companies in each forest basin region, and by sector**

Filters include:

- Type (of finance) → select credit (eg. bond issuance, corporate loan, revolving credit facility, share issuance)
- Year → select timeframe (eg. 2016-2021)
    - *nb. Credit data exists from 2013 by year up to 2021 (June) while Investment data is the most recent position based on filings in April 2021.*

Rows include:

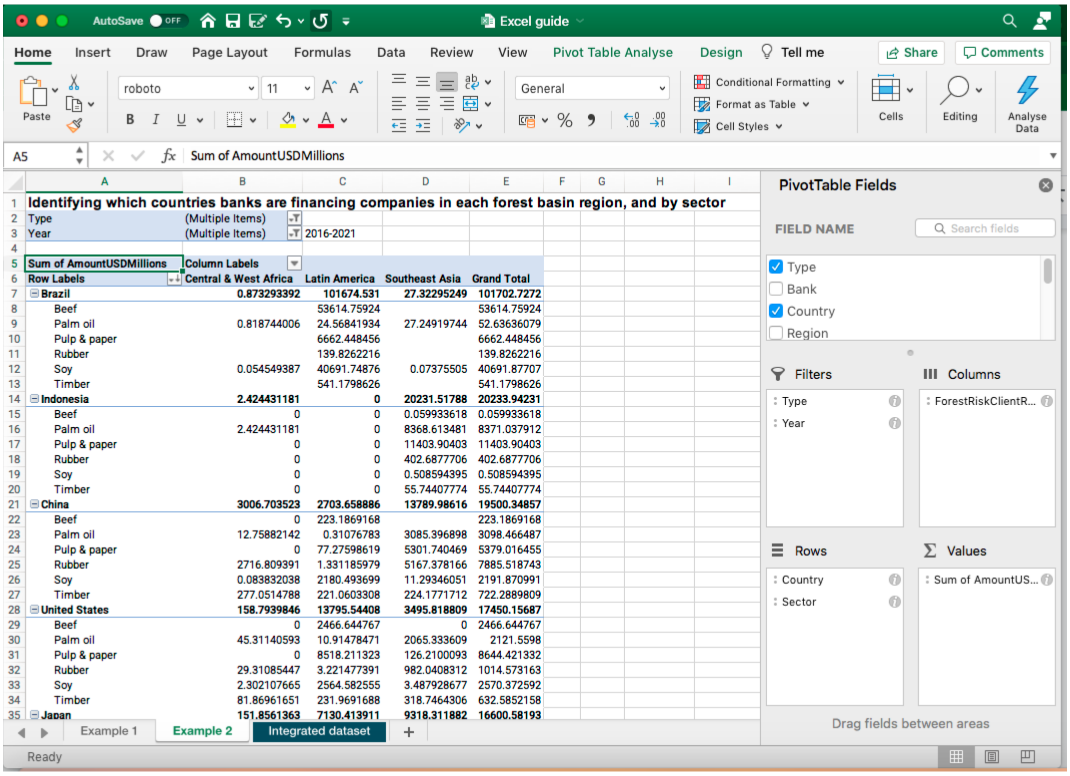
- Country → the country that the FI’s HQ is located
- Sector → can be filtered to only show certain sectors but here it shows all.

Columns include:

- Forest-risk client region → shows Southeast Asia, Latin America or Central & West Africa.

Values include:

- Sum of AmountUSDmillions → make sure this is set to “sum” and not “count”
    - *nb. To change this, right click on the **AmountUSDmillions > Value field settings > summarise by … sum***



Type	(Multiple Items)			
Year	(Multiple Items)	2016-2021		
Sum of AmountUSDMillions	Column Labels			
Row Labels	Central & West Africa	Latin America	Southeast Asia	Grand Total
Brazil	**0.873293392**	**101674.531**	**27.32295249**	**101702.7272**
Beef		53614.75924		53614.75924
Palm oil	0.818744006	24.56841934	27.24919744	52.63636079
Pulp & paper		6662.448456		6662.448456
Rubber		139.8262216		139.8262216
Soy	0.054549387	40691.74876	0.07375505	40691.87707
Timber		541.1798626		541.1798626
Indonesia	**2.424431181**	**0**	**20231.51788**	**20233.94231**
Beef	0	0	0.059933618	0.059933618
Palm oil	2.424431181	0	8368.613481	8371.037912
Pulp & paper	0	0	11403.90403	11403.90403
Rubber	0	0	402.6877706	402.6877706
Soy	0	0	0.508594395	0.508594395
Timber	0	0	55.74407774	55.74407774
China	**3006.703523**	**2703.658886**	**13789.98616**	**19500.34857**
Beef	0	223.1869168		223.1869168
Palm oil	12.75882142	0.31076783	3085.396898	3098.466487
Pulp & paper	0	77.27598619	5301.740469	5379.016455
Rubber	2716.809391	1.331185979	5167.378166	7885.518743
Soy	0.083832038	2180.493699	11.29346051	2191.870991
Timber	277.0514788	221.0603308	224.1771712	722.2889809
United States	**158.7939846**	**13795.54408**	**3495.818809**	**17450.15687**
Beef	0	2466.644767	0	2466.644767
Palm oil	45.31140593	10.91478471	2065.333609	2121.5598
Pulp & paper	0	8518.211323	126.2100093	8644.421332
Rubber	29.31085447	3.221477391	982.0408312	1014.573163
Soy	2.302107665	2564.582555	3.487928677	2570.372592
Timber	81.86961651	231.9691688	318.7464306	632.5852158
Japan	**151.8561363**	**7130.413911**	**9318.311882**	**16600.58193**

4. Order results by size by selecting the **filter button to sort > descending > sort by “sum of AmountUSDmillion”**
   (eg. banks from largest financier to smallest).

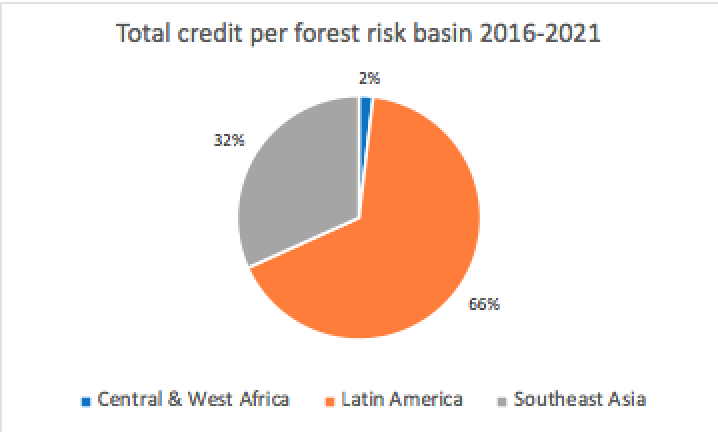
Creating graphs

Example 3. Pie charts
Good for summaries such as global investment by forest-risk basin, or MUFG credit by sector

1. Select the data you want to use for the pie chart, there must be 2 variables, eg. Forest risk basin and Amount USD Millions.

2. Click **Insert** > **Insert Pie or Doughnut Chart**, and then pick the chart you want.

3. Use the toolbar to **Add chart elements** such as data labels (eg. values or percentages) or to change colours



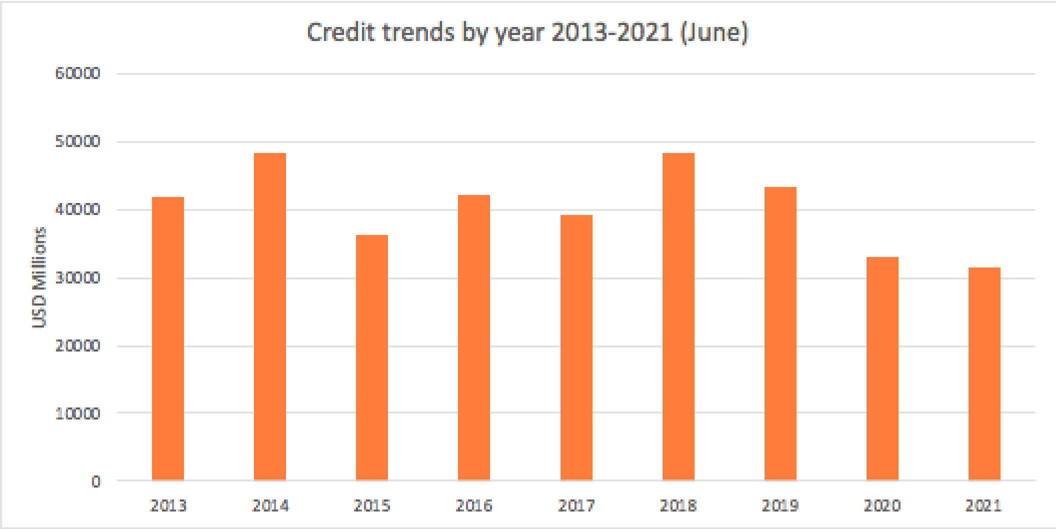
Example 4. Bar chart (single)
Good for trends by year

1. Select the data you want to use for the pie chart, there must be 2 variables, eg. Year and Amount USD Millions.

2. Click **Insert** > **Insert Bar chart** (eg. 2D column), and then pick the chart you want.

3. Use the toolbar to **Add chart elements** such as data labels (eg. values or percentages) or to change colours

4. If the data displays incorrectly, go to **Chart design>Select data>** then check if the correct data is highlighted for the X and Y axes. If not, you can manually select these by adding/removing your own **Legend Entry**



Example 5. **Bar chart (multi)**

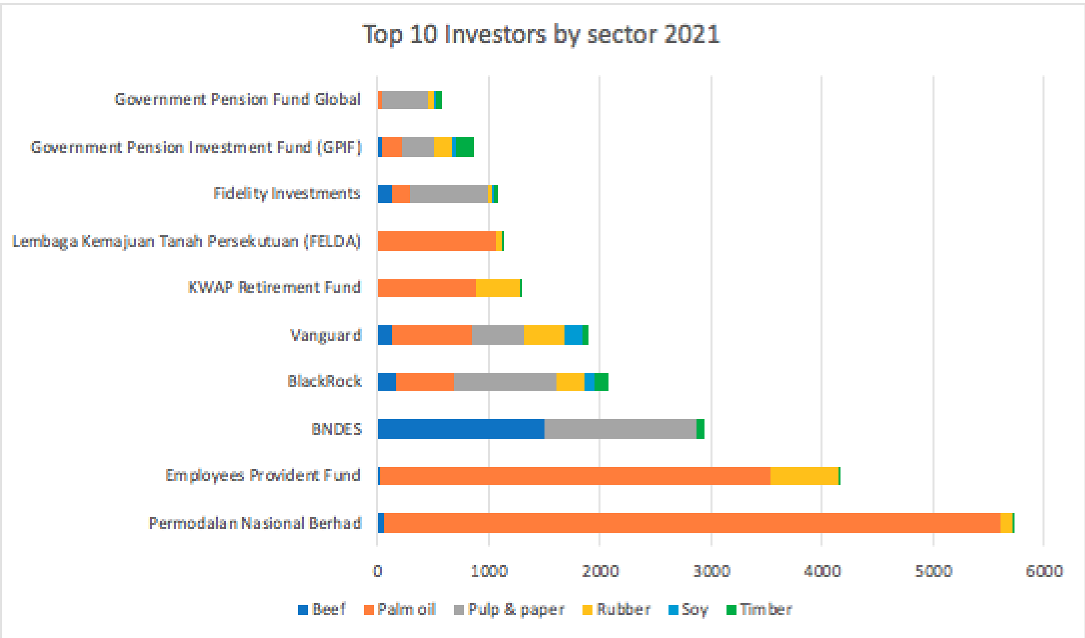
- Good for mutli-variable charts such as, top 10 investors globally by sector

1. Select the data you want to use for the pie chart, there must be 2 variables, eg. Forest risk basin and Amount USD Millions.

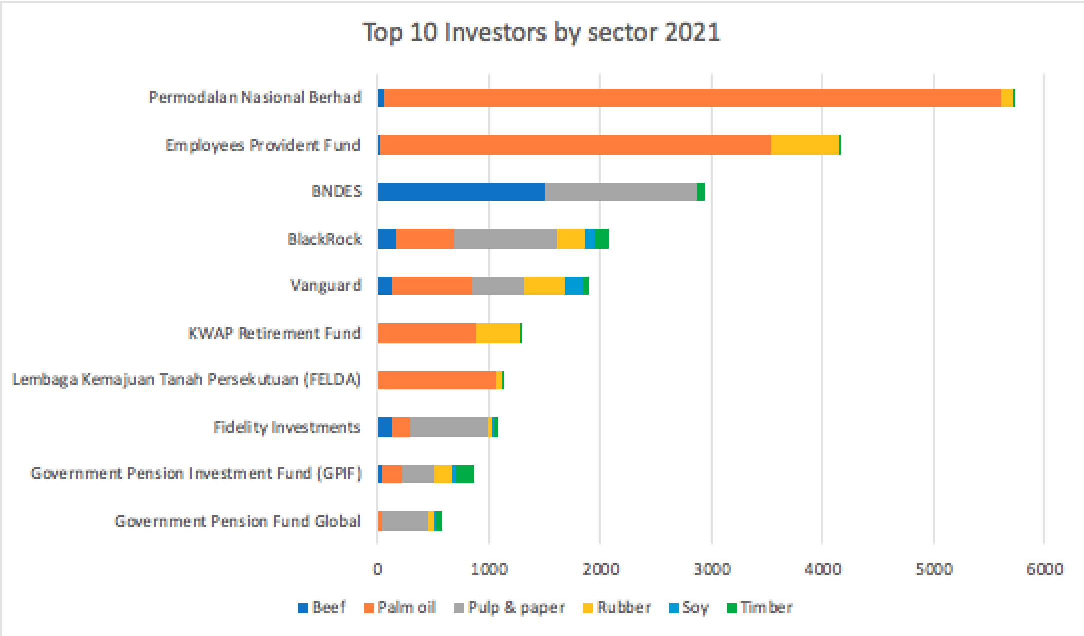
2. Click **Insert** > **Insert Bar Chart (2D stacked bar)**, and then pick the chart you want.

3. Use the toolbar to **Add chart elements** such as data labels (eg. values or percentages) or to change colours

4. If you want to show the top 10 investors with the largest on top you need to change the order from this:



To this:



Click on the bank/investor names to pull up the **Format Axis** box and go to **Axis options>Axis positions>Categories in reverse order**.