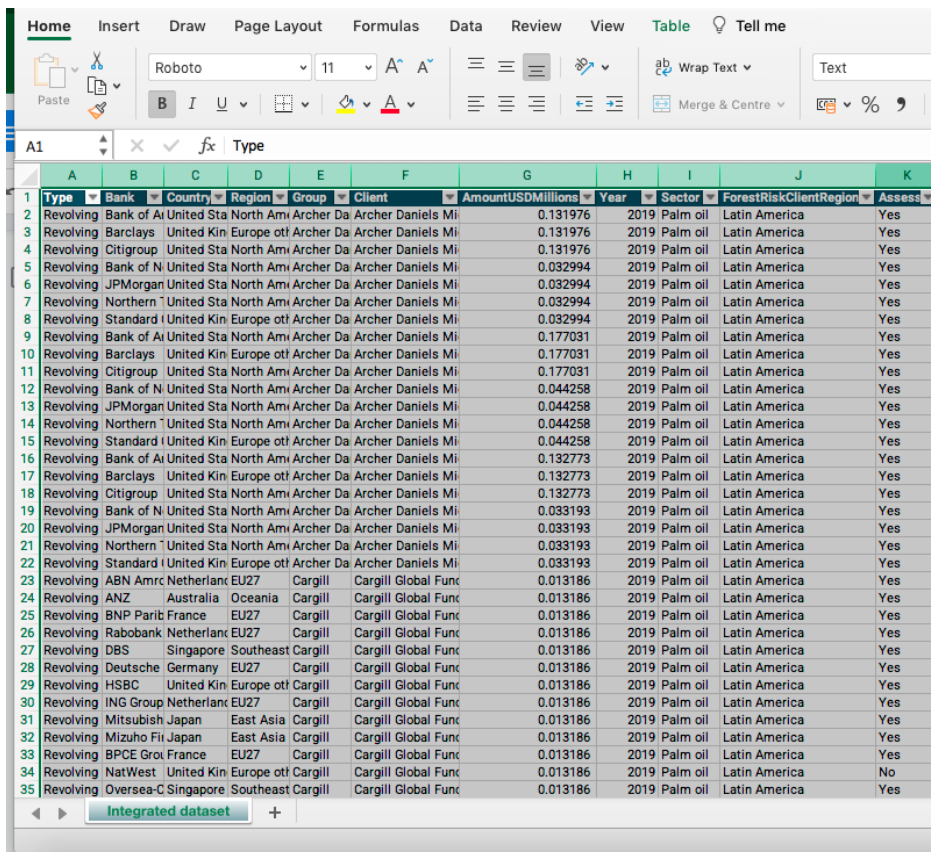


Excel guide for data analysis

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](#).

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 Ai	United Sta	North Am	Archer Da	Archer Daniels Mi	0.131976	2019	Palm oil	Latin America	Yes
3	Revolving	Barclays	United Kin	Europe otf	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 otf	Archer Da	Archer Daniels Mi	0.032994	2019	Palm oil	Latin America	Yes
9	Revolving	Bank of Ai	United Sta	North Am	Archer Da	Archer Daniels Mi	0.177031	2019	Palm oil	Latin America	Yes
10	Revolving	Barclays	United Kin	Europe otf	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 otf	Archer Da	Archer Daniels Mi	0.044258	2019	Palm oil	Latin America	Yes
16	Revolving	Bank of Ai	United Sta	North Am	Archer Da	Archer Daniels Mi	0.132773	2019	Palm oil	Latin America	Yes
17	Revolving	Barclays	United Kin	Europe otf	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 otf	Archer Da	Archer Daniels Mi	0.033193	2019	Palm oil	Latin America	Yes
23	Revolving	ABN Amrc	Netherlan	EU27	Cargill	Cargill Global Func	0.013186	2019	Palm oil	Latin America	Yes
24	Revolving	ANZ	Australia	Oceania	Cargill	Cargill Global Func	0.013186	2019	Palm oil	Latin America	Yes
25	Revolving	BNP Parib	France	EU27	Cargill	Cargill Global Func	0.013186	2019	Palm oil	Latin America	Yes
26	Revolving	Rabobank	Netherlan	EU27	Cargill	Cargill Global Func	0.013186	2019	Palm oil	Latin America	Yes
27	Revolving	DBS	Singapore	Southeast	Cargill	Cargill Global Func	0.013186	2019	Palm oil	Latin America	Yes
28	Revolving	Deutsche	Germany	EU27	Cargill	Cargill Global Func	0.013186	2019	Palm oil	Latin America	Yes
29	Revolving	HSBC	United Kin	Europe otf	Cargill	Cargill Global Func	0.013186	2019	Palm oil	Latin America	Yes
30	Revolving	ING Group	Netherlan	EU27	Cargill	Cargill Global Func	0.013186	2019	Palm oil	Latin America	Yes
31	Revolving	Mitsubish	Japan	East Asia	Cargill	Cargill Global Func	0.013186	2019	Palm oil	Latin America	Yes
32	Revolving	Mizuho Fii	Japan	East Asia	Cargill	Cargill Global Func	0.013186	2019	Palm oil	Latin America	Yes
33	Revolving	BPCE Gro	France	EU27	Cargill	Cargill Global Func	0.013186	2019	Palm oil	Latin America	Yes
34	Revolving	NatWest	United Kin	Europe otf	Cargill	Cargill Global Func	0.013186	2019	Palm oil	Latin America	No
35	Revolving	Oversea-C	Singapore	Southeast	Cargill	Cargill Global Func	0.013186	2019	Palm oil	Latin America	Yes

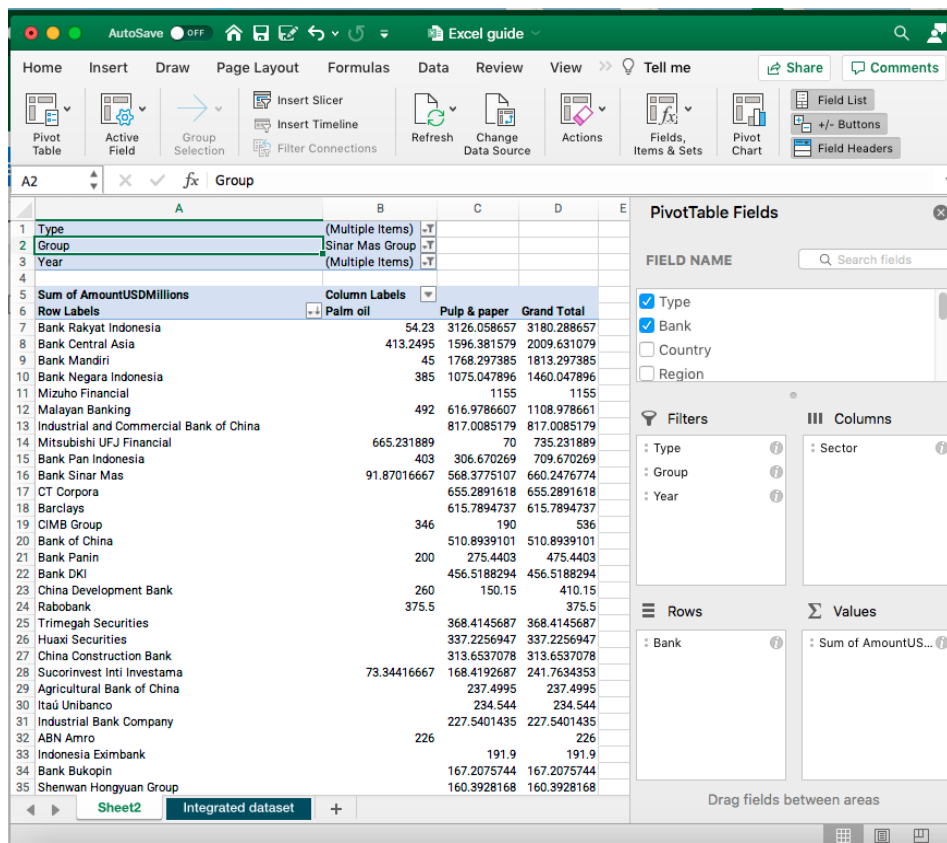
2. Go to **insert > pivot table > new worksheet**
3. Drag the column headers into the appropriate boxes in the **PivotTable Fields** box

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:



The screenshot shows the Excel PivotTable Fields task pane. The 'Filters' section contains 'Type', 'Group', and 'Year'. The 'Columns' section contains 'Sector'. The 'Rows' section contains 'Bank'. The 'Values' section contains 'Sum of AmountUSDmillions'. The main table shows data for various banks, including Bank Rakyat Indonesia, Bank Central Asia, Bank Mandiri, Bank Negara Indonesia, Mizuho Financial, Malayan Banking, Industrial and Commercial Bank of China, Mitsubishi UFJ Financial, Bank Pan Indonesia, Bank Sinar Mas, CT Corpora, Barclays, CIMB Group, Bank of China, Bank Panin, Bank DKI, China Development Bank, Rabobank, Trimegah Securities, Huaxi Securities, China Construction Bank, Sucorinvest Inti Investama, Agricultural Bank of China, Itaú Unibanco, Industrial Bank Company, ABN Amro, Indonesia Eximbank, Bank Bukopin, and Shenwan Hongyuan Group.

Row Labels	Pulp & paper	Grand Total
Bank Rakyat Indonesia	54.23	3126.058657
Bank Central Asia	413.2495	1596.381579
Bank Mandiri	45	1768.297385
Bank Negara Indonesia	385	1075.047896
Mizuho Financial		1155
Malayan Banking	492	616.9786607
Industrial and Commercial Bank of China		817.0085179
Mitsubishi UFJ Financial	665.231889	70
Bank Pan Indonesia	403	306.670269
Bank Sinar Mas	91.87016667	568.3775107
CT Corpora		655.2891618
Barclays		615.7894737
CIMB Group	346	190
Bank of China		510.8939101
Bank Panin	200	275.4403
Bank DKI		456.5188294
China Development Bank	260	150.15
Rabobank	375.5	375.5
Trimegah Securities		368.4145687
Huaxi Securities		337.2256947
China Construction Bank		313.6537078
Sucorinvest Inti Investama	73.34416667	168.4192687
Agricultural Bank of China		237.4995
Itaú Unibanco		234.544
Industrial Bank Company		227.5401435
ABN Amro	226	226
Indonesia Eximbank		191.9
Bank Bukopin		167.2075744
Shenwan Hongyuan Group		160.3928168

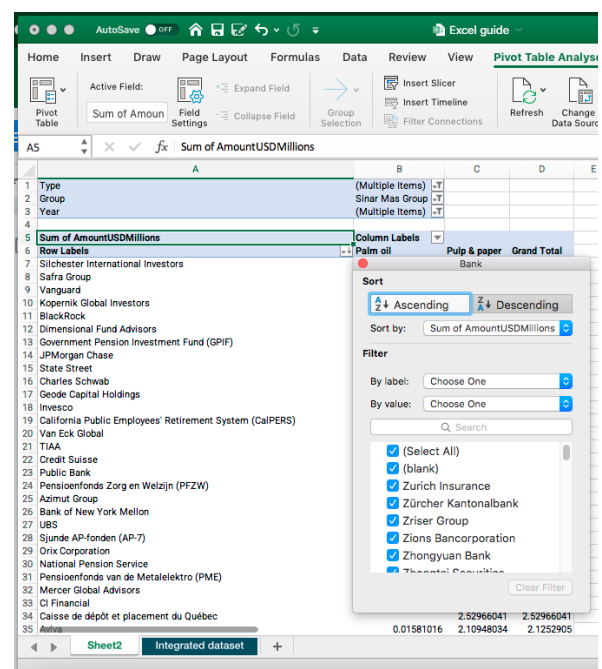
Bank → can be filtered to only show certain banks but here it shows all banks that have invested in Sinar Mas.

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*



The screenshot shows the Excel PivotTable Sort and Filter task pane. The 'Sort' section is set to 'Ascending' and 'Sum of AmountUSDmillions'. The 'Filter' section is set to 'Choose One' for both 'By label' and 'By value'. The 'Filter' list includes '(Select All)', '(blank)', 'Zurich Insurance', 'Zürcher Kantonalbank', 'Zürcher Group', 'Zions Bancorporation', 'Zhongyuan Bank', and 'Zhongyuan Securities'.

Row Labels	Pulp & paper	Grand Total
Silchester International Investors		
Safra Group		
Vanguard		
Kopernik Global Investors		
BlackRock		
Dimensional Fund Advisors		
Government Pension Investment Fund (GPIF)		
JPMorgan Chase		
State Street		
Charles Schwab		
Geode Capital Holdings		
Invesco		
California Public Employees' Retirement System (CalPERS)		
Van Eck Global		
TIAA		
Credit Suisse		
Public Bank		
Pensioenfonds Zorg en Welzijn (PFZW)		
Azimut Group		
Bank of New York Mellon		
UBS		
Sjunde AP-fonden (AP-7)		
Orix Corporation		
National Pension Service		
Pensioenfonds van de Metaalektro (PME)		
Mercer Global Advisors		
Ci Financial		
Caisse de dépôt et placement du Québec		

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***

	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	0.059933618	0.059933618
Palm oil	2.424431181	0	8368.613481	8371.037912
Pulp & paper		0	11403.90403	11403.90403
Rubber		0	402.6877706	402.6877706
Soy		0	0.508594395	0.508594395
Timber		0	55.74407774	55.74407774
China	3006.703523	2703.658886	13789.98616	19500.34857
Beef		223.1869168		223.1869168
Palm oil	12.75882142	0.31076783	3085.396898	3098.466487
Pulp & paper		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		2466.644767	0	2466.644767
Palm oil	45.31140593	10.91478471	2065.333609	2121.5598
Pulp & paper		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

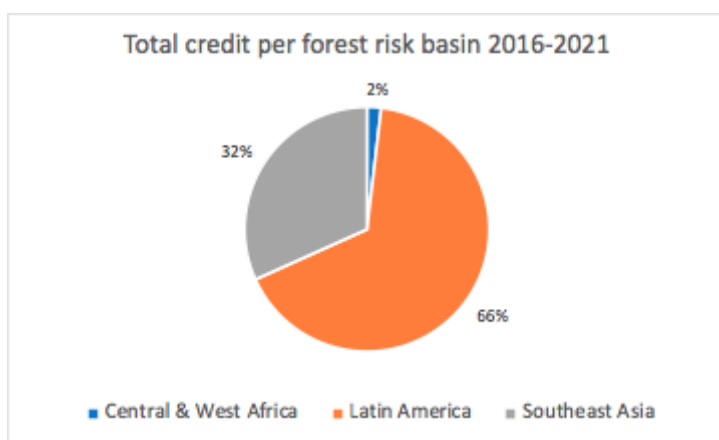
4. Order results by size by selecting the **filter button** to sort > **descending** > sort by “**sum of AmountUSDmillion**”
(eg. banks from largest financier to smallest).

Creating graphs

Example 3. Pie charts

Good for summaries such as global investment by forest-risk basin, or MUFG credit by sector

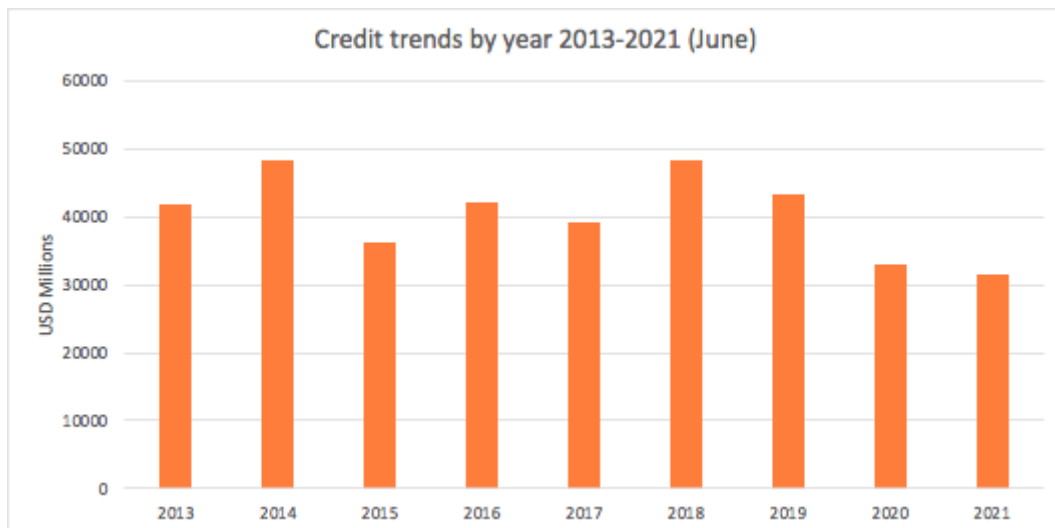
1. Select the data you want to use for the pie chart, there must be 2 variables, eg. Forest risk basin and Amount USD Millions.
2. Click **Insert > Insert Pie or Doughnut Chart**, and then pick the chart you want.
3. Use the toolbar to **Add chart elements** such as data labels (eg. values or percentages) or to change colours



Example 4. Bar chart (single)

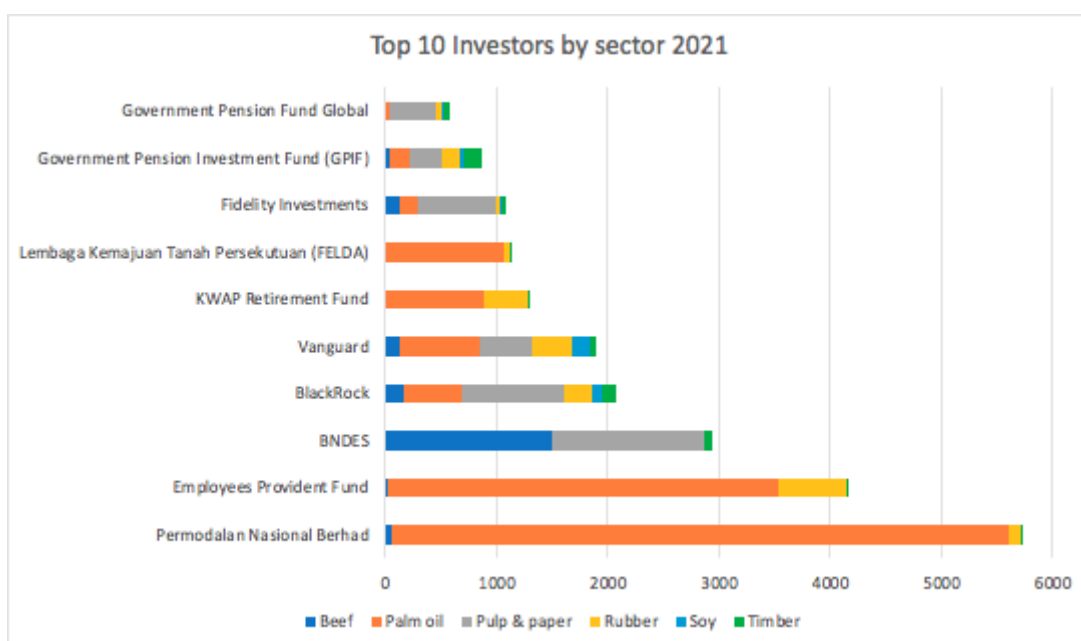
Good for trends by year

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**

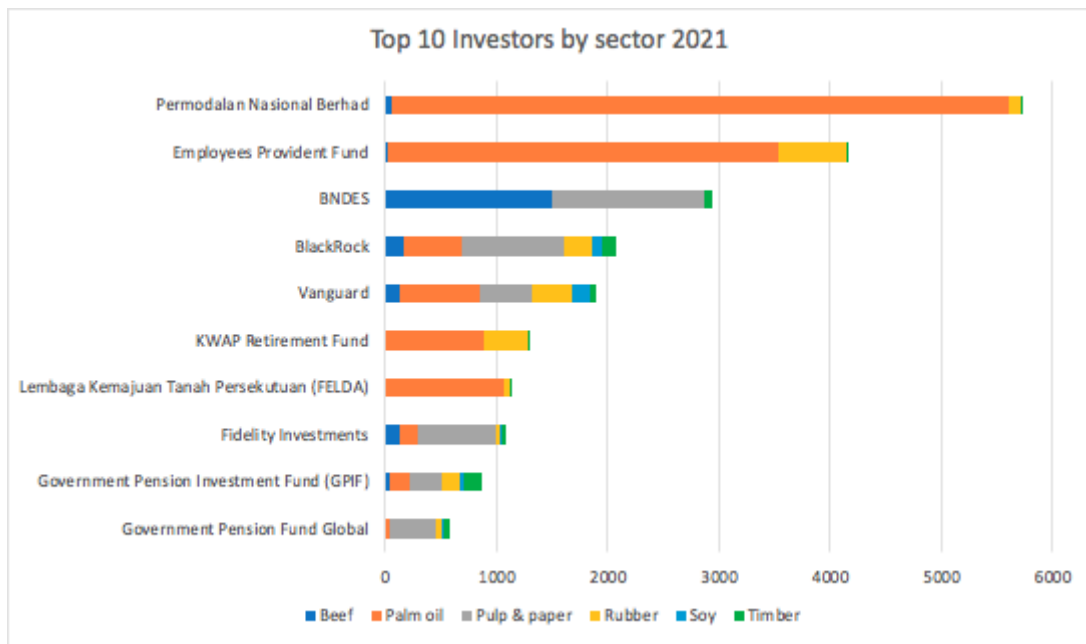


Example 5. Bar chart (multi)

- Good for multi-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**.

