fDiMarkets.com
CROSSBORDER INVESTMENT MONITOR

About fDi Markets

Table of Contents

1 Type of FDI tracked 2

2 Data coverage (up to 22 August 2022) 2

3 Status of projects tracked 2

4 Sources of data 2

5 Data updates 3

6 List of all deal/data tags for each Project tracked 3

7 Industry classification 4

8 Capital investment and jobs data 5

8.1 Algorithm for making capital investment and jobs estimates 5

8.2 Qualification of large Investment projects 6

9 Appendix 7

fDiMarkets.com
CROSSBORDER INVESTMENT MONITOR

1 Type of FDI tracked

fDi Markets tracks companies announcing, opening or considering greenfield FDI in a new physical project or expansion of an existing investment which creates new jobs and capital investment.

Joint ventures are only included where they lead to a new physical operation and where they are majority owned by the foreign investors, based on information we have available.

Mergers & acquisitions (M&A) and other equity and non-equity investments are not tracked. There is no minimum size for a project to be included.

Note that our FDI leads dataset on companies considering FDI (called "Investor Signals") is available as an optional module not as part of the standard subscription to the global FDI database.

2 Data coverage (up to 22 August 2022)

- Over 252,000 greenfield investment projects
- Around US$14 trillion of greenfield investment projects
- Over 90,000 companies with greenfield investment projects

3 Status of projects tracked

The data includes FDI projects that have either been "announced" or "opened" by a company. This status gives an indication of the stage of the investment project. An announced project is where the company has made their final investment decision and are moving towards project implementation. An opened project is where the project is fully operational.

Typically, projects are captured at the announcement stage for capital intensive projects (as it typically takes 2 years for a capital-intensive project to become operational) and at the opening stage of services operations with limited capital investment required.

Our research team update the project status when the company makes further announcements about their project. However not all companies make further announcements and therefore some projects will remain at the announced status.

4 Sources of data

fDi Markets is produced by team of multi-lingual business analysts, who are full time employees of the Financial Times Ltd, ensuring the highest quality staff conduct the data research.
Data is collected primarily from publicly available sources, including:

- Financial Times newswires and internal information sources
- Tens of Thousands of media sources, including all of the world's top business sources

- Over 3,000 industry and investment promotion agency sources
- Data purchased from market research and publication companies

Each project identified is cross-referenced against multiple sources, with primary focus on direct company sources. This allows further company and project information to be captured.

5 Data updates

Our dataset on FDI projects starts in 2003.

Our dataset on FDI projects in Free Zones starts in 2017

Our dataset for Relocation projects starts in 2019.

Data on project announcements, opening and companies considering FDI are updated daily typically within 24 hours of a company announcing a project or intention to invest overseas. The latest data can be accessed real time for subscribers of fDi Markets in the "Home Page – Live Data".

Our monthly data goes through a quality control process, which takes one month to complete. Other than the "Home Page – Live Data" each month's FDI data goes live on the last working data of the subsequent month. For example, our June 2022 data goes live on the last working day of July 2022. This applies to the "Company Profiles", "Project Database", and "Trends Analysis" modules in fDi Markets.

Please note that the investment projects tracked by fDi Markets are updated regularly and revised based on new intelligence being received and our algorithms also update data so as to improve accuracy over time. Typically, 20 projects per day are updated with revised information.

6 List of all deal/data tags for each Project tracked

1. Date of announcement (year/quarter/month/day of month also indicated)
2. Parent company name
3. Investing company name
4. Short profile of parent and investing company
5. Destination country, region, and city
6. Company revenues (note not available for every company)
7. Source country, region, city
8. Free Zone
9. Jobs and investment amount (including estimates when information not available)
10. Cluster, sector and business activity
11. Sub-sectors
12. Type of project (new, expansion, co-location)
13. Project status: announced or opened

14. Motives for investment (available on online application and not for all projects)
15. Regional export markets (available on online application and not for all projects)
16. Filter by size of projects
17. Contact decision makers in company and contact information where we are able to publish the data according to data protection rules (GDPR compliant)

7 Industry classification

Each *project* is classified according to its cluster, sector, sub-sector and business activity, based on a proprietary industry classification system. It is important to note that we classify the project not the company, which allows users to see the different industries a company is actively investing in.

We use a proprietary industry classification system because we capture both the industry (sector and subsector) and the business activity of the operation, which allows for more in-depth analysis that adopting a standard classification system.

We record every project into:

- One of 39 Sectors
- One of 270 Sub-sectors
- One of 17 Clusters
- One of 18 Business Activities

We adopt the academic definition of a Cluster as the end-user industry and supporting and related industries. This is very useful for FDI attraction and economic development as it shows the supply chains and value chains around the main end-user industries. For example, the Food, Beverage & Tobacco Cluster will include everything from agriculture, to processing, to the machinery, packaging and services firms providing products and services to the industry. As another example, the Environmental Technology Cluster includes everything from solar and wind farms through to manufacturing wind turbines, PV and specialist engineering firms.

The Business Activity is defined as the actual function of the operation. Examples include, R&D, HQs, Logistics, Manufacturing, Shared Service Centres etc. This allows the user to see how different functions are being mapped out. The business activity drives the location determinants of a project as well as the sector.

The fDi Markets classification is not the same as any standard industrial classification system, such as NAICS, because fDi Markets is a two-dimensional classification system while and NAICS/SIC/ISIC are one-dimensional systems.

Take the example of a "chemicals R&D centre" in fDi Markets:

- This would go under the *"*chemicals *sector"* in fDi Markets and the "R&D *business activity*" in fDi Markets because fDi Markets is a two-dimensional classification system;
- A chemicals R&D centre would be classified in the R&D code (541712) in NAICS not into the "chemicals" NAICS code (325) or corresponding 5-digit codes

The NAICS code to use to convert a Sector or Subsector in fDi Markets depends on the “activity" of the operation to determine which NAICS code a project in a particular sector or subsector should go into. There are around 6000 combinations.

8 Capital investment and jobs data

The data on capital investment and job creation is based on the total the company is making in their operation at the time of the project announcement or opening. This is a similar methodology used by investment promotion agencies and economic development organizations around the world.

As companies can raise capital locally, phase their investment over a period of time, and can channel their investment through different countries the data cannot be directly compared to the official data on FDI flows.

The data from fDi Markets is more accurate and a real time indicator of the real, productive investment companies are making in their overseas subsidiaries.

fDi Markets data also includes estimates for capital investment and job creation bases on our proprietary algorithms when a company does not release the information.

8.1 Algorithm for making capital investment and jobs estimates

When information on capital investment or jobs is not available, our algorithms estimate capital investment and jobs. The algorithm runs every month at the time our previous month’s data goes live. Therefore, while the number of FDI projects in the “Home – Live Data” module is real time, the data on capital investment and jobs will not be complete until the month’s data goes live. The algorithms look at our entire database of projects where we have actual data on capital investment and jobs to make estimates for 135,000 different project scenarios. More explanation is provided below for the two main case types:

Case Type A: If we know either the capital investment OR the jobs

- The algorithm looks at projects where we have the actual data on capital investment AND jobs in the same sector, same activity, and in the same country as the project
- At least 10 projects with actual data are needed. If there are less than 10 projects, the algorithm looks at projects in the world region the country is located in. If there are still not enough projects, it looks at projects globally
- The algorithm applies a standard deviation to remove outliers
- It then calculates the average **ratio** of capital investment to jobs and then applies this ratio to the missing capital investment OR jobs data we have for the project
- Each estimate is therefore unique for that project
- Our testing shows that a high level of accuracy is achieved in estimating the missing capital investment OR jobs data because the calculated ratios are fairly consistent across projects

Case Type B: If we do not know the capital investment NOR the jobs

- The algorithm follows the same process as above, only this time it calculates the **average size** of capital investment and jobs of projects in the same sector/activity/country
- As we have no information on the capital investment and jobs of the project, the estimate for the project is purely based on the average size based on a standard deviation of previous projects with actual data
- As every project is different, it is not possible to provide accurate estimates at the individual project level
- We recommend at least 20 projects in the search sample when using estimates of Case Type B

Note that if our research team subsequently find information on the actual capital investment or jobs (typically when the company opens the project) we will correct the planned or estimated data we entered for that project (even if it was several years ago). This means that the capital investment and jobs data are being constantly updated as we receive more accurate data. Furthermore, as we have a larger dataset of actual data on the capital investment and jobs of project, our algorithms become more accurate and the estimates are updated.

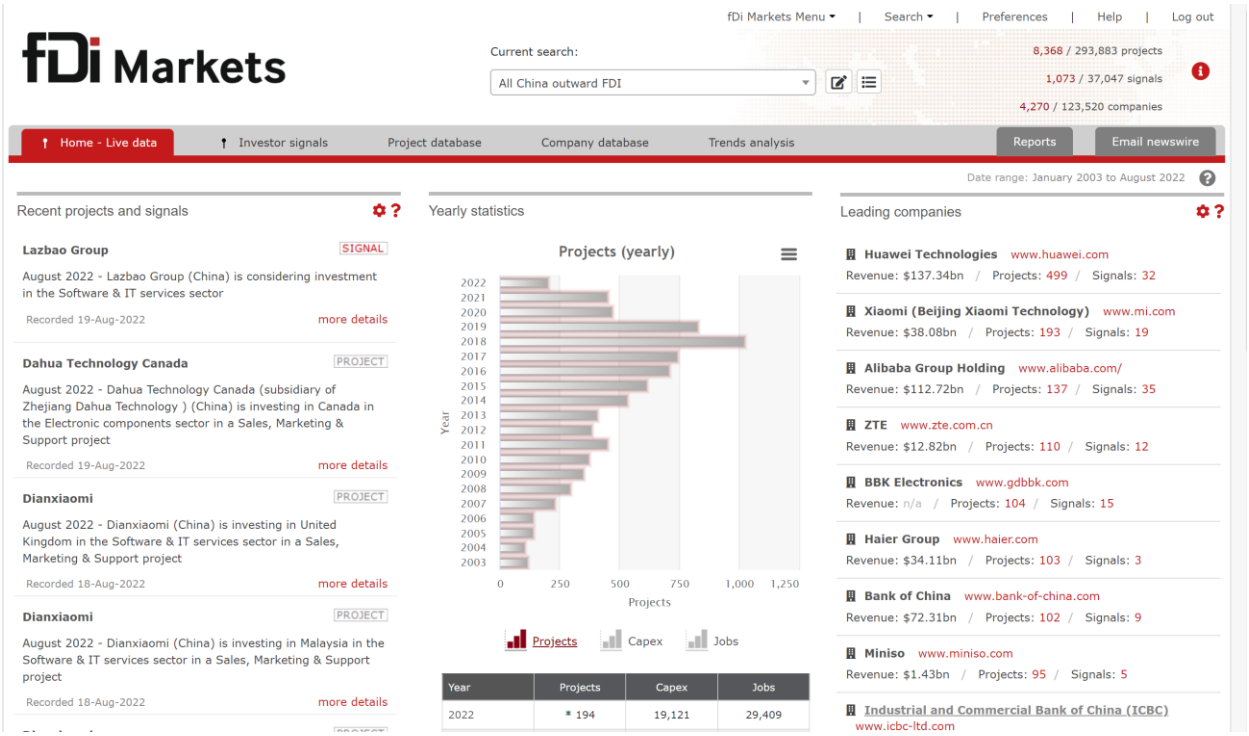
8.2 Qualification of large Investment projects

Large investment projects, defined as a project with capital investment above US$1billion or job creation above 1,000, which have a status as announced are researched on a quarterly basis in order to verify the details. This is to check for updates on the project, such as size of investment and opening dates. If the project has been cancelled it is then removed from the database.

Please see Appendix below for screenshots of the fDi Markets application

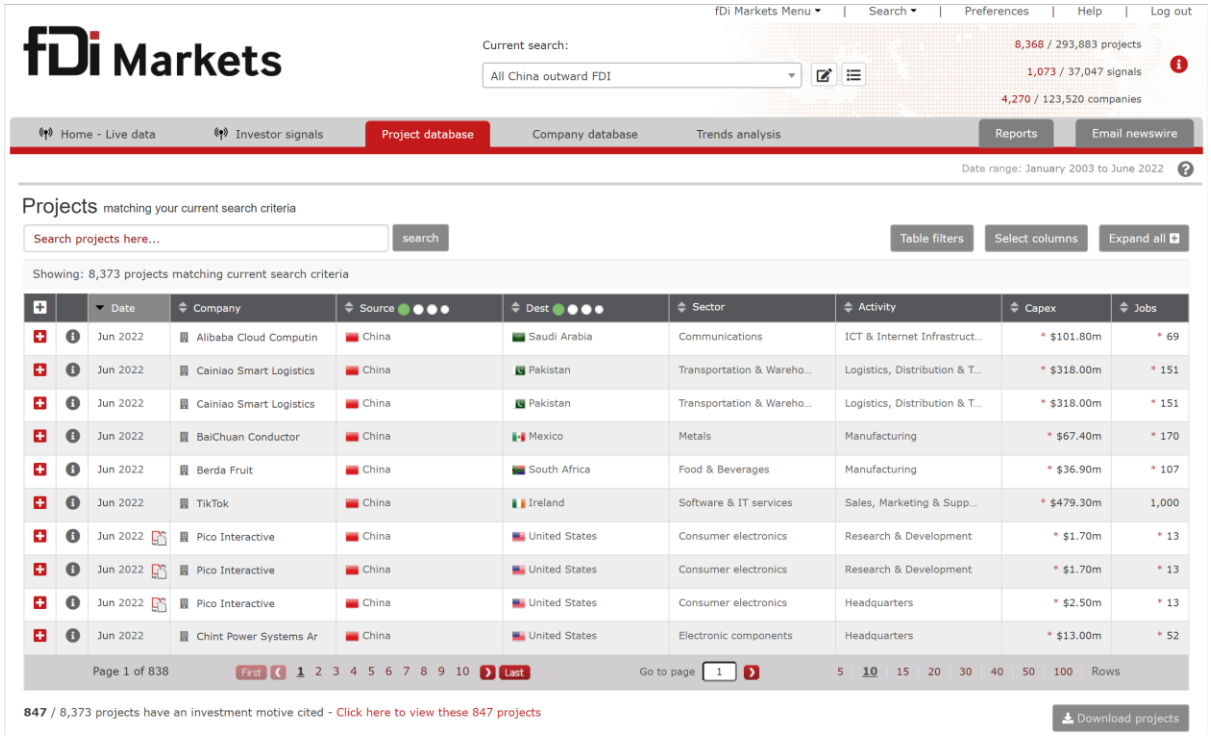
1. Home - Live Data

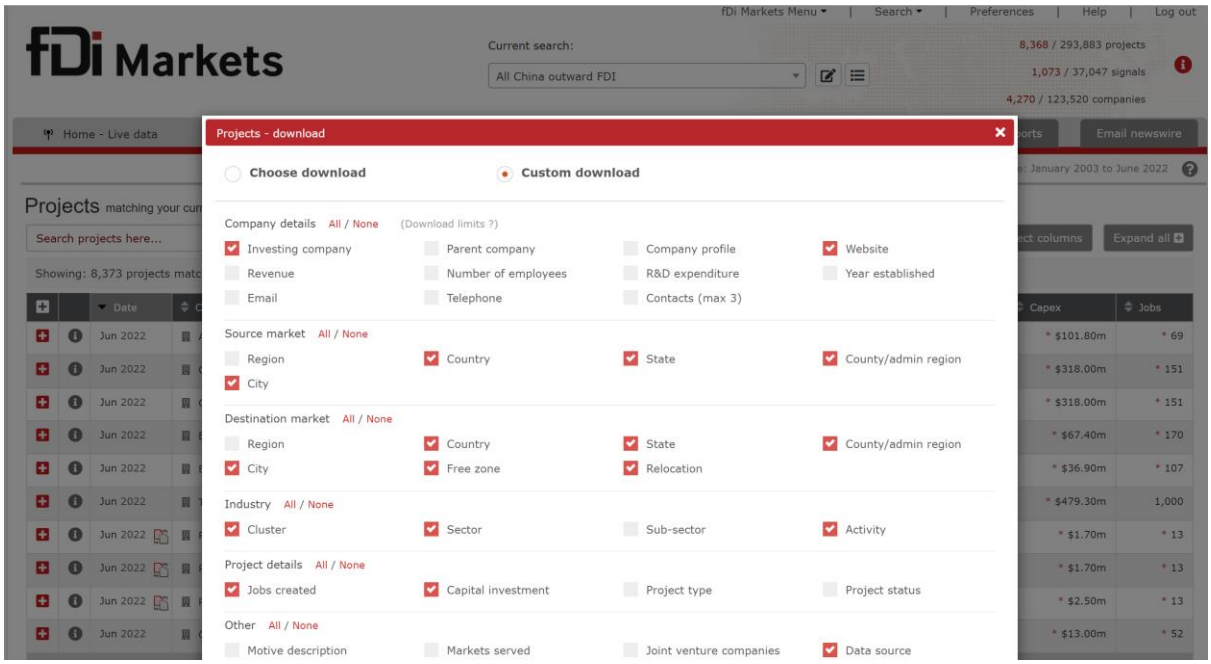
This section provides real-time tracking of Greenfield FDI projects and signals, as well as a summary of the project, capital investment and job creation flows. This page, as with all sections in the application relates solely to the "search" you have created – in this case, FDI into China. You can also download at the click of a button an excel spreadsheet of the Top 100 investors.



2. Project Database

The Project Database section is similar to Online Excel sheet allowing you to build and download a customized FDI project database. Users can download up to 500 projects at a time into an excel spreadsheet at the "*click of a button*". There is the option for a standard download or a customised download. Users are allowed to download a maximum of 30 Excels per week.

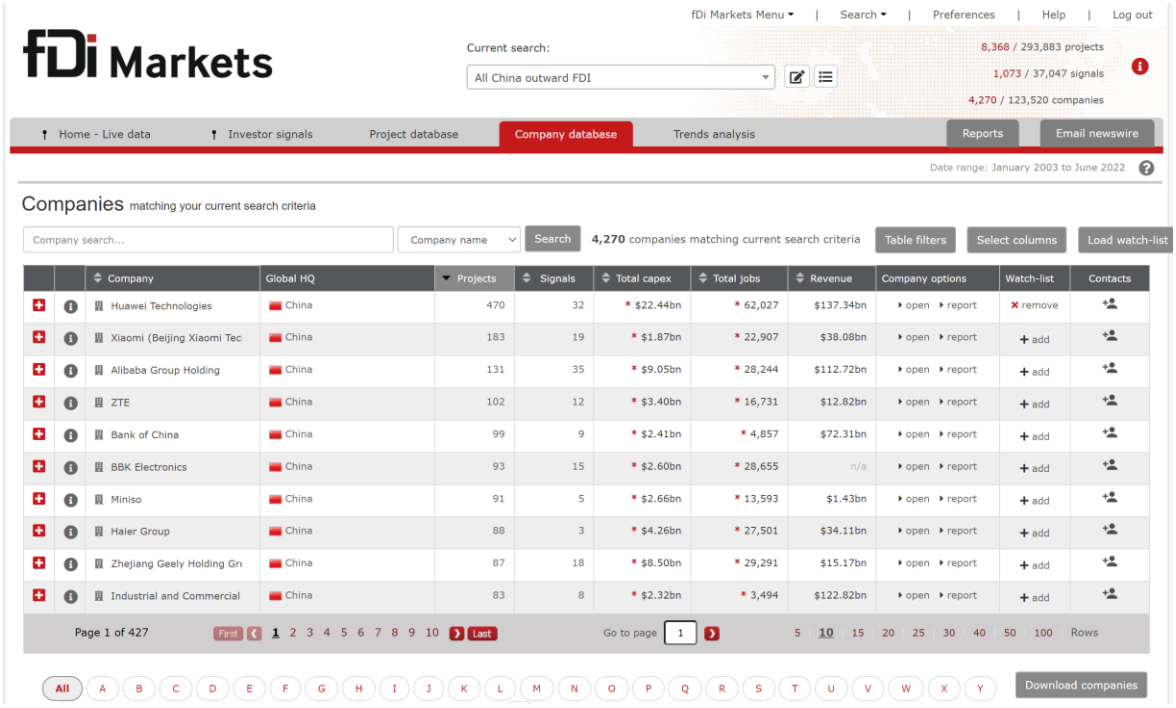


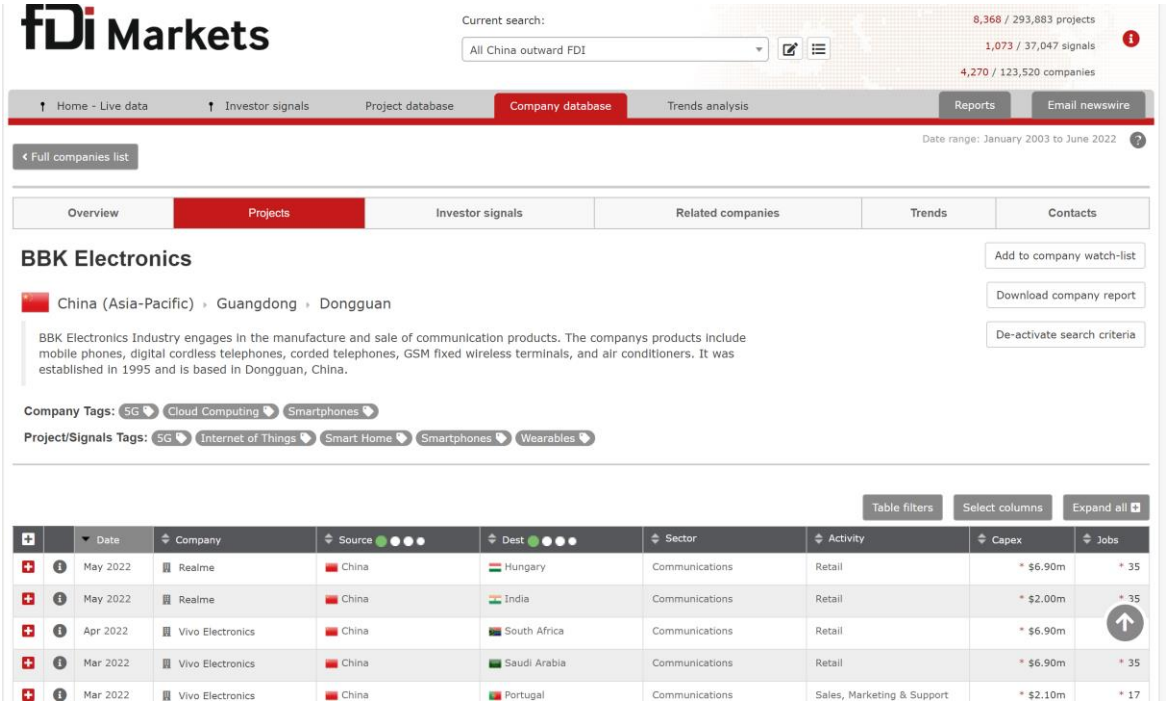


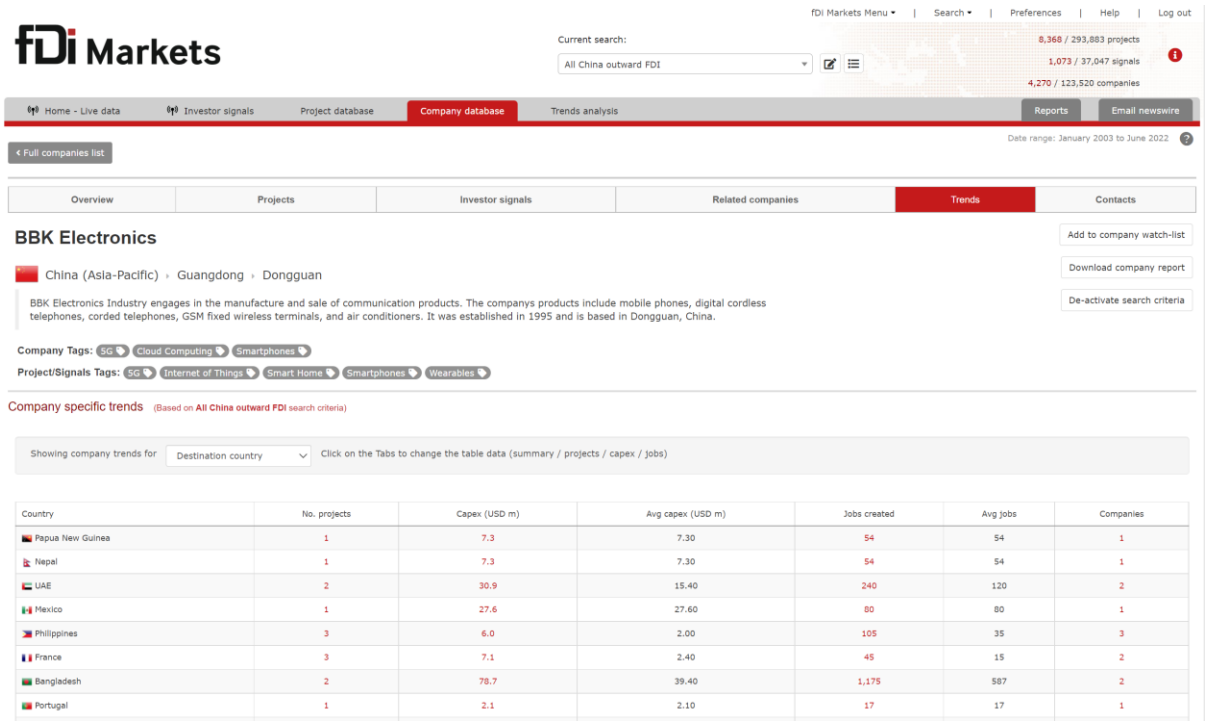
3. Company Database

fDi Markets
CROSSBORDER INVESTMENT MONITOR

We have tracked investment from over 90,000 companies since 2003 (including subsidiaries) allowing you to better understand which part of the company is investing. You will also be able to find out where else the company has invested, conduct detailed analysis of their investment projects and signals, related companies and list key contact people within these organisations. You can download a comprehensive Word report on every company.



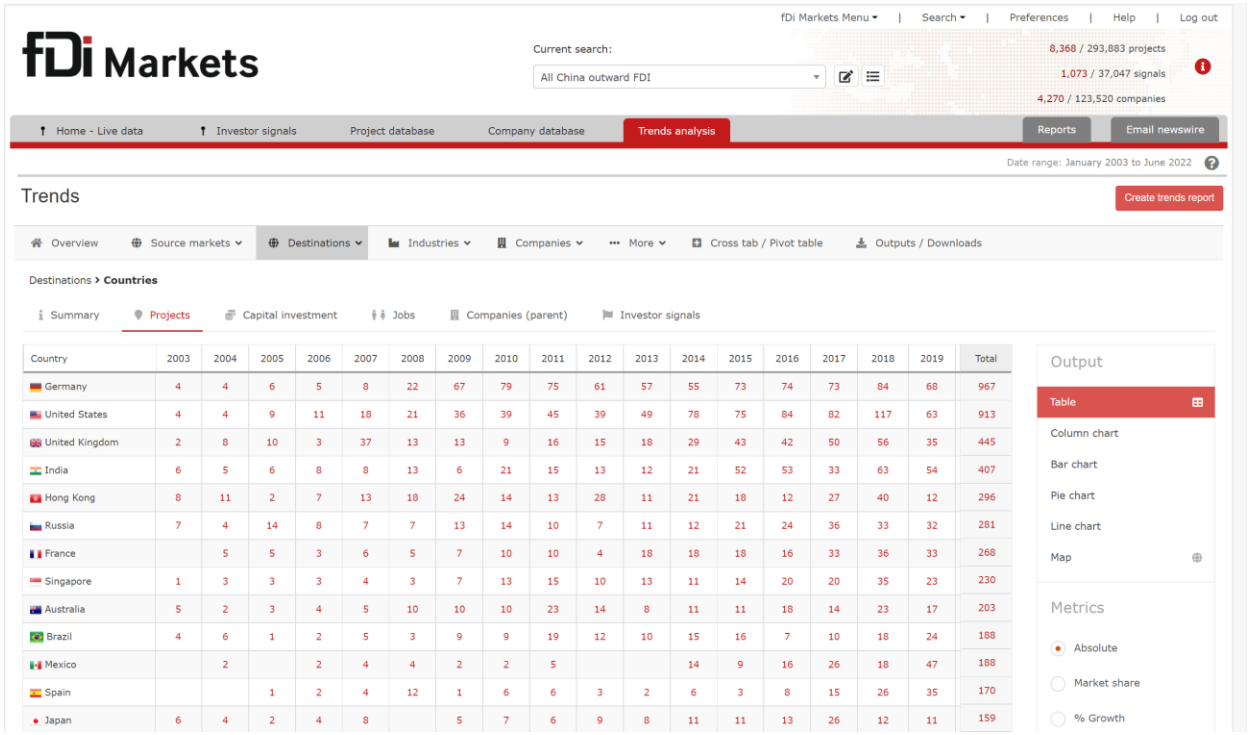




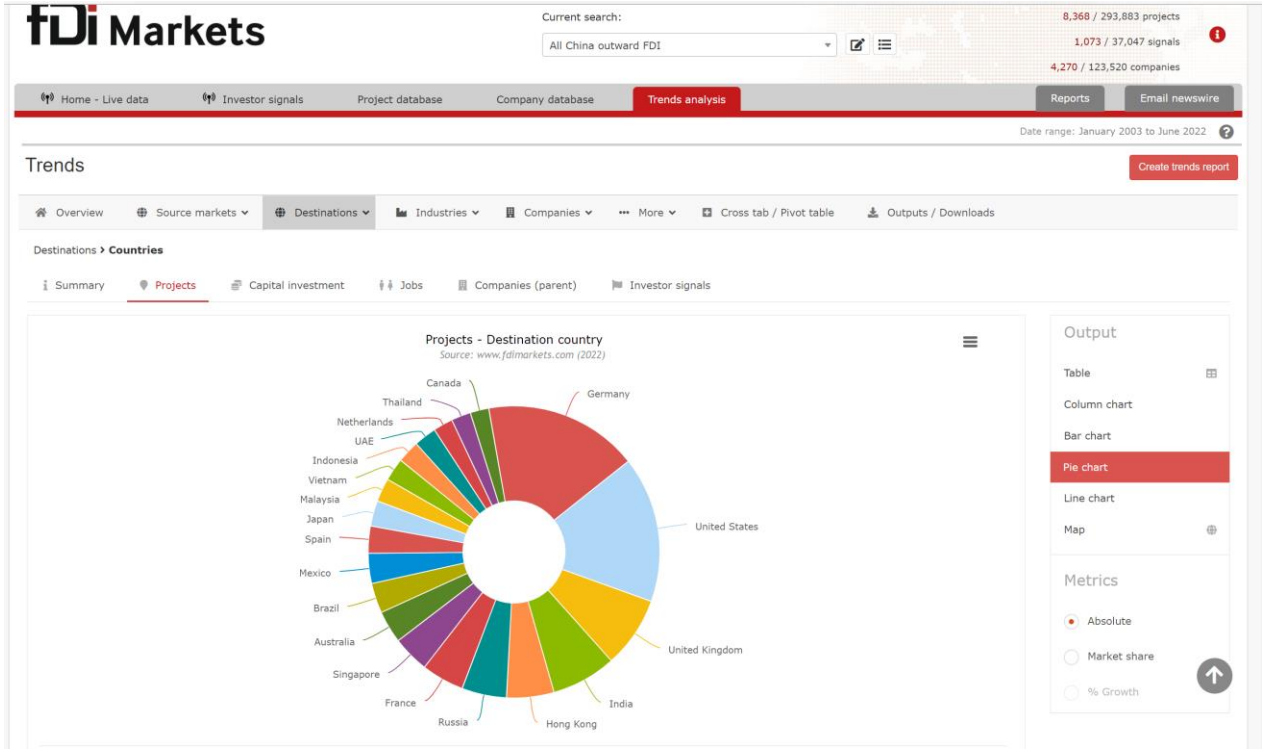
4. Trends Analysis

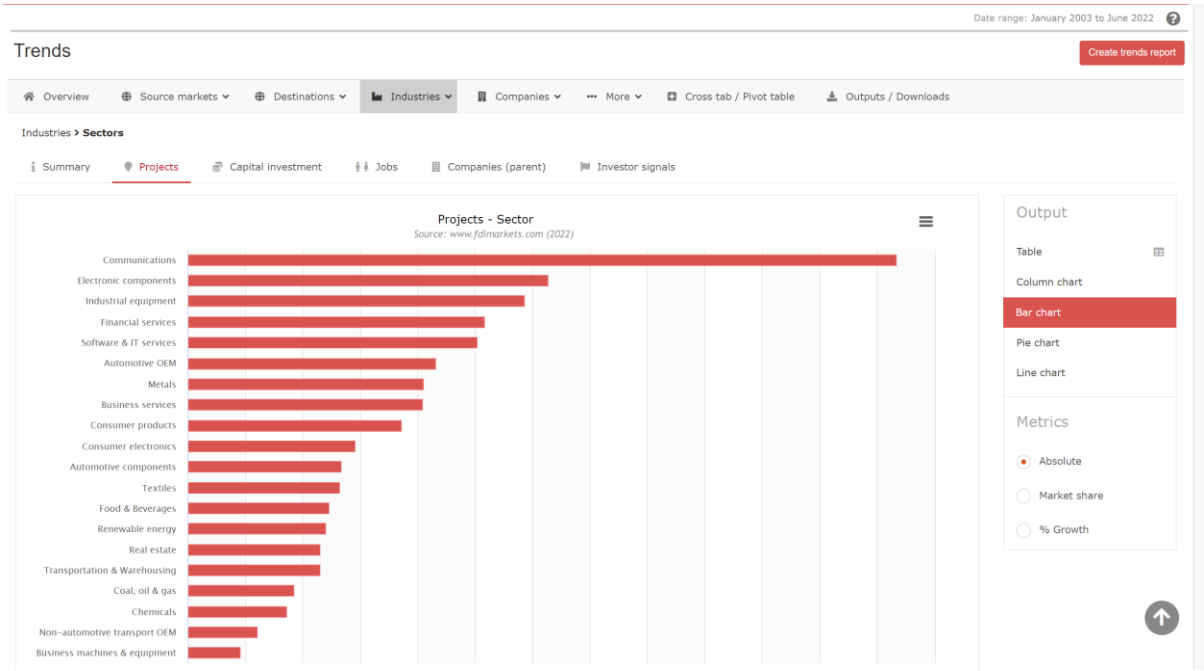
Within Trends Analysis, you can conduct detailed analysis of investments relating to your chosen criteria. You can download a comprehensive Word report on any area of search (e.g. sectors, source markets, destination).

fDiMarkets.com
CROSSBORDER INVESTMENT MONITOR



Country	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	Total
Germany	4	4	6	5	8	22	67	79	75	61	57	55	73	74	73	84	68	967
United States	4	4	9	11	18	21	36	39	45	39	49	78	75	84	82	117	63	913
United Kingdom	2	8	10	3	37	13	13	9	16	15	18	29	43	42	50	56	35	445
India	6	5	6	8	8	13	6	21	15	13	12	21	52	53	33	63	54	407
Hong Kong	8	11	2	7	13	18	24	14	13	28	11	21	18	12	27	40	12	296
Russia	7	4	14	8	7	7	13	14	10	7	11	12	21	24	36	33	32	281
France		5	5	3	6	5	7	10	10	4	18	18	18	16	33	36	33	268
Singapore	1	3	3	3	4	3	7	13	15	10	13	11	14	20	20	35	23	230
Australia	5	2	3	4	5	10	10	10	23	14	8	11	11	18	14	23	17	203
Brazil	4	6	1	2	5	3	9	9	19	12	10	15	16	7	10	18	24	188
Mexico		2		2	4	4	2	2	5			14	9	16	26	18	47	188
Spain			1	2	4	12	1	6	6	3	2	6	3	8	15	26	35	170
Japan	6	4	2	4	8		5	7	6	9	8	11	11	13	26	12	11	159




Date range: January 2003 to June 2022
Trends
Create trends report
Overview
Source markets
Destinations
Industries
Companies
More
Cross tab / Pivot table
Outputs / Downloads
Industries › Sectors
Summary
Projects
Capital investment
Jobs
Companies (parent)
Investor signals
Projects - Sector
Source: www.fdimarkets.com (2022)
Communications
Electronic components
Industrial equipment
Financial services
Software & IT services
Automotive OEM
Metals
Business services
Consumer products
Consumer electronics
Automotive components
Textiles
Food & Beverages
Renewable energy
Real estate
Transportation & Warehousing
Coal, oil & gas
Chemicals
Non-automotive transport OEM
Business machines & equipment
Output
Table
Column chart
Bar chart
Pie chart
Line chart
Metrics
Absolute
Market share
% Growth