# Hall of Shame

## 390 Financial Institutions made an estimated USD 498 billion available to 27 nuclear weapon producing companies since January 2013.

The Hall of Shame details the financial relationships with the nuclear weapons producing companies identified in this report. It provides information about the banks, pension funds, insurance companies and asset management companies that provide financing for the companies involved in the nuclear weapons industry. In this section we provide details about the nature and value of specific transactions and holdings.

Financial institutions can be involved in financing companies by providing corporate loans, by assisting companies with share- and bond issues, and by (managing) investments in shares and bonds of these companies. For asset managers and pension funds, the only relevant type of financial involvement is (managing) share- and bondholdings of the selected companies.

A summary of the financial relations of the nuclear weapon companies with the financial institutions can be found in the main report.

Don't Bank on the Bomb presents the most significant financing relationships with one or more of the selected nuclear weapon companies. To select these financial institutions, the following criteria were used:

- All financial institutions involved in loans and underwriting deals for one or more of the companies since 1 January 2013, as well as those involved in loans which have been closed before that date but have not yet matured at the time of writing.;
- All financial institutions which own at least 0.5% of the outstanding shares or bonds of at least one of the companies.

We found 390 financial institutions that meet these criteria.

#### How is the information presented?

Financial institutions are listed alphabetically in this chapter. Each section provides the following information for each financial institution:

- The **total amount** the financial institution made available to the nuclear weapons producers listed in the report since January 1, 2013.
- The **types** of financial relations with the nuclear weapon companies. The relations are grouped by loans, investment banking and asset management. Financial activities are listed alphabetically by nuclear weapons company for each category.
- The **details** of the financial relationship, including the name of the producing company, the amount, and the date. For loans and bonds the maturity date is given.

All data is presented in tables. For loans, the first column represents the names of the companies that received the loans, the second column shows which subsidiary or part of the selected company has issued the loan. The third column (# FI's), shows the number of financial institutes participating in loans as loans are often offered by a syndicate of financial institutions. The fourth column represents the value of the total loan offered by the syndicate to the company. The fifth column is the amount for which this specific financial institute participated in the loan. This amount is calculated depending on the role the financial institute plays in the syndicate, as explained below. The last column shows the date the loan was issued.



Loan tables basically look like this:

Nuclear	Number of		Amount this		
weapons	financial		financial		Date the loan
producing	institutions		institution	Date the loan	will expire
company that	participating	Total value of	invested in	was issued	(maturity
got the loan	in the loan	the loan	the loan	(closed).	date).

The tables for underwriting of share and bond issuances have the same columns. The method for calculating these the value per financial institute can be below.

The tables for share and bondholdings managed by the financial institutions show the nuclear weapon producing companies, the country in which this company is situated, the percentage of all bonds or shares outstanding hold or managed by the specific institution, and the total value of the shares or bonds held by the financial institution in the indicated company.

Share and bondholding tables basically look like this:

If the amounts per financial institution were known, these amounts were assigned. If the amounts were unknown, an estimate was used. The estimates are based on the following rules of thumb:

- In the case of loans (corporate loans or revolving credit facilities), 40% of the total amount is committed by bookrunners and 60% by other participants of the syndicate. If, however, the amount of bookrunners is (almost) equal to, or higher than, the amount of participants, the reverse is used: 60% for the bookrunners and 40% for the arrangers. So if there are for example 5 bookrunners and 4 participants and the amount of the loan is € 100, the estimate will be that the bookrunners commit 60% (€ 12 each) and the participants 40% (€ 10 each). The amount provided by bookrunners is *always* higher than the amount provided by other participants;
- In the case of share- and bond issuances, 75% of the total amount is committed by bookrunners and 25% by other participants of the syndicate. The amount provided by bookrunners should *always* be higher than the amount provided by other participants.
- In the case of share- and bondholdings, the amounts are always known, so no estimate is needed.

Figures presented are rounded up/down to the nearest dollar at the filing date. Commas (,) indicate thousands separators while periods (.) used as decimal points. Financial institutions operating in Bermuda, Guernsey and Jersey are noted, but classified in summary tables and documents as UK based.

## Methodology

#### How was the research conducted?

Which financial institutions are involved in the financing of the selected nuclear weapon companies was researched in annual reports, stock exchange filings and other publications of the companies



concerned, archives of trade magazines, local newspapers and the financial press as well as specialized financial databases (Thomson ONE, Bloomberg).

#### What is included?

All forms of financing meeting the definition of substantive financial relationships are included in the report. This comprises financial institutions participating in loans and underwriting deals since 1 January 2013, as well as those involved in loans which have been closed before that date but have not yet matured at the time of writing.

For (managing) investments in shares or bonds of nuclear weapon companies, a group-level threshold of at least 0.5% of the outstanding shares or bonds at most recent filing dates is applied per financial institution.

The following information is provided for each form of financing qualifying as substantive:

- Name of the company receiving financing;
- Type of financing (loan, guarantee, share issuance, bond issuance, share ownership, bond ownership, other);
- · Total amount;
- For share- and bondholdings: percentage of all shares or bonds outstanding at the most recent filing date;
- Filing / closing date;
- For loans and bond issuances: Maturity;
- For loans, bond and share issuances: Amounts provided by each financial institution participating.

#### What definitions are used?

The following definitions are used in this project:

- **Financial institutions**: banks, pension funds, asset managers, insurance companies and other financial institutions from any country in the world;
- Nuclear weapon producing companies: companies involved in producing or maintaining nuclear weapons or significant, specific components thereof. Which share of the company's turnover this activity constitutes is not deemed relevant;
- **Substantive involvement in financing**: financial institutions can be involved in financing nuclear weapon companies by providing corporate loans, project finance or working capital facilities; by underwriting share and bond issuances; and by (managing) investments in shares and bonds of these companies.
  - All participation in loans and underwriting deals since 1 January 2012 is considered to be of substantive importance. Also participation in loans which have been closed before that date but have not yet matured at the time of writing is included in the analysis.
  - Shareholdings at the most recent filing date are considered to be substantive if the investments of a financial institution at group-level reach or cross the threshold of 0.5% of the company's outstanding shares.
  - Bondholdings at the most recent filing date are considered to be substantive if the investments
    of a financial institution at group-level reach or cross the threshold of 0.5% of the company's
    outstanding bonds.

#### What are the different types of financial relationships?

Financial institutions can be involved in financing companies by providing corporate loans, by assisting companies with share- and bond issues, and by (managing) investments in shares and bonds of these companies.

• **Share issues**: Issuing shares on the stock exchange gives a company the opportunity to increase its equity by attracting a large number of new shareholders or increase the equity from its existing shareholders.



When it's the first time a company offers its shares on the stock exchange, this is called an *Initial Public Offering (IPO)*. When a company's shares are already traded on the stock exchange, this is called a *secondary offering* of additional shares. To arrange an IPO or a secondary offering, a company needs the assistance of one or more (investment) banks, which will promote the shares and find shareholders. The role of investment banks in this process therefore is very important.

- **Bond issues**: Issuing bonds can best be described as cutting a large loan into small pieces, and selling each piece separately. Bonds are issued on a large scale by governments, but also by corporations. Like shares, bonds are traded on the stock exchange. To issue bonds, a company needs the assistance of one or more (investment) banks which underwrite a certain amount of the bonds. Underwriting is in effect buying with the intention of selling to investors. If the investment bank fails to sell all bonds it has underwritten, it will end up owning the bonds.
- (Managing) shareholdings: Financial institutions can, through the funds they are managing, buy shares of a certain company. This provides the company with new equity, and gives the bank a direct influence on the company's strategy. The magnitude of this influence depends on the size of the shareholding.
- (Managing) investments in bonds: Financial institutions can also buy bonds of a certain company. The main difference between owning shares and bonds is that owner of a bond is not a co-owner of the issuing company; the owner is a creditor of the company. The buyer of each bond is entitled to repayment after a certain number of years, and to a certain interest during each of these years.
- **Loans**: The easiest way to obtain debt is to borrow money. In most cases, money is borrowed from commercial banks. oThe proceeds of corporate loans can be used for all activities of the company. Loans can be either short-term or long-term.
  - Short-term loans (including trade credits, current accounts, leasing agreements, et cetera) have a maturity of less than a year. They are mostly used as working capital for day-to-day operations. Short-term debts are often provided by a single commercial bank, which does not ask for substantial guarantees from the company.
  - Long-term loans have a maturity of at least one year, but generally of three to ten years. Long-term corporate loans are in particular useful to finance expansion plans, which only generate rewards after some period of time.
  - Loan syndicates often arrange long-term loans. A loan syndicate is a group of banks brought together by one or more arranging banks. The loan syndicate will only undersign the loan agreement if the company can provide certain guarantees that interest and repayments on the loan will be fulfilled.
  - A revolving credit facility is a type of loan that provides a company with an option to take up a loan from a bank (or more often: a banking syndicate) when it has an urgent financing need. Revolving credits are often concluded for a five year period and then renewed. But many companies renegotiate their revolving credit facility every year with the same banking syndicate. Amounts, interest rates, fees and participating banks can change slightly every year. As the financial press often reports these renegotiations for larger companies, this might raise the impression that banks are lending huge sums of money to the same company every year. But: this concerns renegotiations of basically the same facility and a revolving credit facility is hardly ever actually called upon for a loan.
- **Project finance**: Project finance is a specific long-term loan. The proceeds of this loan can only be used to finance a specific project: a mine, pipeline, wind farm, road, etc. Project finance is often extended by a banking syndicate, like corporate loans. Different from corporate loans, the repayment of a project finance loan is dependent upon the revenues that a project is expected to generate once it is up and running. To guarantee the payment of interest and repayments as much as possible, the banks usually demand that the revenues of the project must be used first to pay interest and repayment. Only if the revenues are large enough, the remainder will be paid out as dividend to the owner(s) of the project.



Banks run a fairly high risk with this form of loans: if the project is not successful and does not generate (sufficient) revenues, they will not receive interest and repayments (or less than agreed). In that case, the banks do not have the option (or only to a very limited extent) to call upon the owner(s) of the project to pay interest and repayments from the revenues generated by other activities of the owner(s). This is called non-recourse or limited-recourse financing. Because banks run a higher risk with a project finance loan, they will carefully evaluate the project in advance and will demand to be closely involved in the day-to-day running of the project. Also, banks will demand a higher interest rate for project financing loans. This makes project financing loans less attractive for most companies planning to develop a project. Project finance is a niche market for financing projects under specific circumstances, e.g. if the project is very large compared to the size of the owner, or if some of the owners of the project do not have cheaper financing options available.

For asset managers and pension funds, the only relevant type of financial involvement is (managing) share- and bondholdings of the selected companies.



#### Hall of Shame

## 1. A.K. Group (India)

A.K. Group (India) has made an estimated US\$ 51 million available to the nuclear weapons companies selected for this research project since January 2013.

A.K. Group (India) underwrote bond issuances for an estimated amount of US\$ 51 million to the nuclear weapon companies since January 2013 (see table below).

Table 1 Underwriting of bond issuances by A.K. Group

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Interest rate	Issue date	Maturity date
Larsen & Toubro	36	5	9.345	13-6-2014	13-5-2016
Larsen & Toubro	45	6	9.440	13-6-2014	13-6-2016
Larsen & Toubro	8	3	Varies	28-10-2014	28-9-2016
Larsen & Toubro	8	3	9.570	28-10-2014	27-10-2017
Larsen & Toubro	6	2	8.800	17 <del>-4</del> -2015	17-4-2017
Larsen & Toubro	31	16	8.930	30-4-2015	28-8-2015
Larsen & Toubro	4	1	8.909	19-5-2015	18-5-2018
Larsen & Toubro	3	1	8.926	8-7-2015	2-7-2018
Larsen & Toubro	3	1	8.928	8-7-2015	5-7-2018
Larsen & Toubro	2	1	8.800	19-8-2015	16-8-2016
Larsen & Toubro	8	3	8.610	29-10-2015	25-9-2017
Larsen & Toubro	8	3	8.610	29-10-2015	29-9-2017
Larsen & Toubro	4	1	8.650	24-5-2016	24-5-2019
Larsen & Toubro	4	1	8.639	24-5-2016	28-6-2019
Larsen & Toubro	10	3	8.720	29-6-2016	28-6-2019
Larsen & Toubro	10	3	8.713	29-6-2016	22-7-2019

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

## 2. Aberdeen Asset Management (United Kingdom)

Aberdeen Asset Management (United Kingdom) has made an estimated US\$ 175 million available to the nuclear weapons companies selected for this research project since January 2013.

Aberdeen Asset Management (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 175 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.



Table 2 Shareholdings managed by Aberdeen Asset Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	164	0.75	1-6-2016
Serco	United Kingdom	10	0.63	1-6-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 3. ABP (Netherlands)

ABP (Netherlands) has made an estimated US\$ 40 million available to the nuclear weapons companies selected for this research project since January 2013.

ABP (Netherlands) owns or manages shares of the nuclear weapon companies for an amount of US\$ 40 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 3 Shareholdings managed by ABP

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	40	0.54	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 4. Abu Dhabi Investment Council (United Arab Emirates)

Abu Dhabi Investment Council (United Arab Emirates) has made an estimated US\$ 100 million available to the nuclear weapons companies selected for this research project since January 2013.

Abu Dhabi Investment Council (United Arab Emirates) provided loans for an estimated amount of US\$ 100 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 4 Loans provided by Abu Dhabi Investment Council

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Boeing	2,465	50	4-11-2015	3-11-2016
Boeing	2,365	50	4-11-2015	3-11-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

## 5. Academy Securities (United States)

Academy Securities (United States) has made an estimated US\$ 30 million available to the nuclear weapons companies selected for this research project since January 2013.

Academy Securities (United States) underwrote bond issuances for an estimated amount of US\$ 30 million to the nuclear weapon companies since January 2013 (see table below).



Table 5 Underwriting of bond issuances by Academy Securities

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Interest rate	Issue date	Maturity date
Boeing	350	9	1.650	27-10-2015	30-10-2020
Boeing	400	4	3.375	16-5-2016	15-6-2046
Lockheed Martin	500	1	3.100	16-11-2015	15-1-2023
Lockheed Martin	500	1	4.500	16-11-2015	15-5-2036
Lockheed Martin	750	2	1.850	16-11-2015	23-11-2018
Lockheed Martin	1,250	3	2.500	16-11-2015	23-11-2020
Lockheed Martin	2,000	5	3.550	16-11-2015	15-1-2026
Lockheed Martin	2,000	5	4.700	16-11-2015	15-5-2046

## 6. Adage Capital Management (United States)

Adage Capital Management (United States) has made an estimated US\$ 482 million available to the nuclear weapons companies selected for this research project since January 2013.

Adage Capital Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 482 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 6 Shareholdings managed by Adage Capital Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
General Dynamics	United States	213	0.53	31-3-2016
Raytheon	United States	269	0.74	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 7. Aditya Birla Group (India)

Aditya Birla Group (India) has made an estimated US\$ 123 million available to the nuclear weapons companies selected for this research project since January 2013.

Aditya Birla Group (India) owns or manages shares of the nuclear weapon companies for an amount of US\$ 123 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 7 Shareholdings managed by Aditya Birla Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Larsen & Toubro	India	123	0.60	31-5-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.



### 8. Aegon (Netherlands)

Aegon (Netherlands) has made an estimated US\$ 379 million available to the nuclear weapons companies selected for this research project since January 2013.

Aegon (Netherlands) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 379 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 8 Bondholdings managed by Aegon

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	40	0.65	31-5-2016
Boeing	United States	139	1.31	31-3-2016
Honeywell International	United States	107	0.80	31-3-2016
Leonardo-Finmeccanica	Italy	57	1.18	31-3-2016
Raytheon	United States	37	0.68	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

### 9. Affiliated Managers Group (United States)

Affiliated Managers Group (United States) has made an estimated US\$ 1,426 million available to the nuclear weapons companies selected for this research project since January 2013.

Affiliated Managers Group (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 1,426 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 9 Shareholdings managed by Affiliated Managers Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	383	1.73	1-6-2016
Huntington Ingalls Industries	United States	60	0.93	31-3-2016
Lockheed Martin	United States	418	0.63	31-3-2016
Orbital ATK	United States	94	1.85	31-3-2016
Safran	France	472	1.62	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 10. AJO (United States)

AJO (United States) has made an estimated US\$ 351 million available to the nuclear weapons companies selected for this research project since January 2013.

AJO (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 351 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.



Table 10 Shareholdings managed by AJO

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Huntington Ingalls Industries	United States	103	1.60	31-3-2016
Northrop Grumman	United States	248	0.70	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 11. Alken Asset Management (United Kingdom)

Alken Asset Management (United Kingdom) has made an estimated US\$ 113 million available to the nuclear weapons companies selected for this research project since January 2013.

Alken Asset Management (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 113 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 11 Shareholdings managed by Alken Asset Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Thales	France	113	0.71	31-12-2015

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 12. Allianz (Germany)

Allianz (Germany) has made an estimated US\$ 1,748 million available to the nuclear weapons companies selected for this research project since January 2013.

Allianz (Germany) owns or manages shares of the nuclear weapon companies for an amount of US\$ 185 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 12 Shareholdings managed by Allianz

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	88	1.18	31-3-2016
Huntington Ingalls Industries	United States	33	0.51	31-3-2016
Orbital ATK	United States	65	1.28	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Allianz (Germany) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 1,562 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.



Table 13 Bondholdings managed by Allianz

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	40	1.95	30-9-2015
BAE Systems	United Kingdom	161	2.63	31-3-2016
Boeing	United States	259	2.43	31-3-2016
Fluor	United States	13	0.84	31-3-2016
Honeywell International	United States	345	2.60	31-3-2016
Huntington Ingalls Industries	United States	45	3.78	30-9-2015
Leonardo-Finmeccanica	Italy	129	2.66	31-3-2016
Moog	United States	21	7.15	31-3-2016
Northrop Grumman	United States	191	2.99	31-3-2016
Raytheon	United States	191	3.55	31-3-2016
Safran	France	153	7.19	31-3-2016
Textron	United States	15	0.52	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 13. Allstate (United States)

Allstate (United States) has made an estimated US\$ 288 million available to the nuclear weapons companies selected for this research project since January 2013.

Allstate (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 288 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 14 Bondholdings managed by Allstate

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Company	Country	(03\$ 11111)	70 Outstanding	rilling date
Fluor	United States	20	1.29	31-3-2016
General Dynamics	United States	20	0.69	31-3-2016
Lockheed Martin	United States	99	0.63	31-3-2016
Northrop Grumman	United States	61	0.96	31-3-2016
Orbital ATK	United States	16	2.27	31-3-2016
Raytheon	United States	52	0.96	31-3-2016
Textron	United States	20	0.68	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 14. Altius Finserv Private (India)

Altius Finserv Private (India) has made an estimated US\$ 6 million available to the nuclear weapons companies selected for this research project since January 2013.

Altius Finserv Private (India) underwrote bond issuances for an estimated amount of US\$ 6 million to the nuclear weapon companies since January 2013 (see table below).



Table 15 Underwriting of bond issuances by Altius Finserv Private

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Interest rate	Issue date	Maturity date
Larsen & Toubro	6	2	9.588	27-3-2014	6-4-2015
Larsen & Toubro	6	2	9.587	27-3-2014	7-4-2015
Larsen & Toubro	6	2	9.586	27-3-2014	8-4-2015
Larsen & Toubro	6	2	Varies	27-3-2014	8-4-2015

## 15. Alyeska Investment Group (United States)

Alyeska Investment Group (United States) has made an estimated US\$ 143 million available to the nuclear weapons companies selected for this research project since January 2013.

Alyeska Investment Group (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 143 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 16 Shareholdings managed by Alyeska Investment Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Orbital ATK	United States	67	1.31	31-3-2016
Textron	United States	77	0.78	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 16. Amalgamated Bank of Chicago (United States)

Amalgamated Bank of Chicago (United States) has made an estimated US\$ 29 million available to the nuclear weapons companies selected for this research project since January 2013.

Amalgamated Bank of Chicago (United States) provided loans for an estimated amount of US\$ 29 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 17 Loans provided by Amalgamated Bank of Chicago

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.



## 17. American Automobile Association (United States)

American Automobile Association (United States) has made an estimated US\$ 4 million available to the nuclear weapons companies selected for this research project since January 2013.

American Automobile Association (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 4 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 18 Bondholdings managed by American Automobile Association

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Orbital ATK	United States	4	0.56	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

### 18. American Century Investments (United States)

American Century Investments (United States) has made an estimated US\$ 790 million available to the nuclear weapons companies selected for this research project since January 2013.

American Century Investments (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 790 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 19 Shareholdings managed by American Century Investments

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	5	0.52	31-3-2016
Boeing	United States	579	0.72	31-3-2016
Huntington Ingalls Industries	United States	43	0.67	31-3-2016
Textron	United States	163	1.66	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 19. American Equity Investment Life Holding (United States)

American Equity Investment Life Holding (United States) has made an estimated US\$ 177 million available to the nuclear weapons companies selected for this research project since January 2013.

American Equity Investment Life Holding (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 177 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 20 Bondholdings managed by American Equity Investment Life Holding

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	39	0.63	31-3-2016
General Dynamics	United States	46	1.58	31-3-2016



Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Northrop Grumman	United States	32	0.50	31-3-2016
Raytheon	United States	40	0.74	31-3-2016
Safran	France	20	0.94	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

### 20. American Family (United States)

American Family (United States) has made an estimated US\$ 366 million available to the nuclear weapons companies selected for this research project since January 2013.

American Family (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 366 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 21 Bondholdings managed by American Family

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
General Dynamics	United States	103	3.55	31-3-2016
Moog	United States	2	0.78	31-3-2016
Northrop Grumman	United States	146	2.28	31-3-2016
Orbital ATK	United States	5	0.74	31-3-2016
Raytheon	United States	110	2.05	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

### 21. American Financial Group (United States)

American Financial Group (United States) has made an estimated US\$ 12 million available to the nuclear weapons companies selected for this research project since January 2013.

American Financial Group (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 12 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 22 Bondholdings managed by American Financial Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	12	0.77	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 22. American International Group (AIG) (United States)

American International Group (AIG) (United States) has made an estimated US\$ 1,229 million available to the nuclear weapons companies selected for this research project since January 2013.



American International Group (AIG) (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 1,229 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 23 Bondholdings managed by American International Group (AIG)

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	150	2.45	31-3-2016
Boeing	United States	108	1.01	31-3-2016
Fluor	United States	40	2.54	31-3-2016
General Dynamics	United States	70	2.42	31-3-2016
Honeywell International	United States	89	0.67	31-3-2016
Huntington Ingalls Industries	United States	9	0.72	31-3-2016
Leonardo-Finmeccanica	Italy	103	2.12	31-3-2016
Lockheed Martin	United States	265	1.68	31-3-2016
Moog	United States	3	0.92	31-3-2016
Northrop Grumman	United States	167	2.62	31-3-2016
Orbital ATK	United States	33	4.67	31-3-2016
Raytheon	United States	132	2.45	31-3-2016
Textron	United States	61	2.12	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 23. American National Insurance (United States)

American National Insurance (United States) has made an estimated US\$ 112 million available to the nuclear weapons companies selected for this research project since January 2013.

American National Insurance (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 112 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 24 Bondholdings managed by American National Insurance

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	37	2.38	31-3-2016
General Dynamics	United States	23	0.78	31-3-2016
Raytheon	United States	31	0.58	31-3-2016
Textron	United States	21	0.72	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 24. American United Mutual Insurance (United States)

American United Mutual Insurance (United States) has made an estimated US\$ 147 million available to the nuclear weapons companies selected for this research project since January 2013.



American United Mutual Insurance (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 147 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 25 Bondholdings managed by American United Mutual Insurance

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	46	2.98	31-3-2016
General Dynamics	United States	15	0.50	31-3-2016
Moog	United States	14	4.67	31-3-2016
Raytheon	United States	31	0.58	31-3-2016
Textron	United States	41	1.40	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 25. Ameriprise Financial (United States)

Ameriprise Financial (United States) has made an estimated US\$ 3,756 million available to the nuclear weapons companies selected for this research project since January 2013.

Ameriprise Financial (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 3,368 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 26 Shareholdings managed by Ameriprise Financial

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	630	2.84	2-5-2016
General Dynamics	United States	274	0.68	31-3-2016
Honeywell International	United States	1,356	1.59	31-3-2016
Lockheed Martin	United States	761	1.13	31-3-2016
Moog	United States	26	1.75	31-3-2016
Northrop Grumman	United States	289	0.81	31-3-2016
Orbital ATK	United States	33	0.64	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Ameriprise Financial (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 388 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 27 Bondholdings managed by Ameriprise Financial

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Huntington Ingalls Industries	United States	18	1.48	31-3-2016
Lockheed Martin	United States	140	0.89	31-3-2016
Moog	United States	8	2.75	31-3-2016
Northrop Grumman	United States	176	2.76	31-3-2016



Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Orbital ATK	United States	15	2.20	31-3-2016
Safran	France	30	1.41	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

#### 26. Analytic Investors (United States)

Analytic Investors (United States) has made an estimated US\$ 44 million available to the nuclear weapons companies selected for this research project since January 2013.

Analytic Investors (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 44 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 28 Shareholdings managed by Analytic Investors

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Huntington Ingalls Industries	United States	44	0.69	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 27. Anchor Bolt Capital (United States)

Anchor Bolt Capital (United States) has made an estimated US\$ 28 million available to the nuclear weapons companies selected for this research project since January 2013.

Anchor Bolt Capital (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 28 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 29 Shareholdings managed by Anchor Bolt Capital

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	28	0.59	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 28. Anima (Italy)

Anima (Italy) has made an estimated US\$ 105 million available to the nuclear weapons companies selected for this research project since January 2013.

Anima (Italy) owns or manages shares of the nuclear weapon companies for an amount of US\$ 72 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.



Table 30 Shareholdings managed by Anima

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Leonardo-Finmeccanica	Italy	72	1.06	31-5-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Anima (Italy) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 33 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 31 Bondholdings managed by Anima

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Leonardo-Finmeccanica	Italy	33	0.68	31-5-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

#### 29. Anthem (United States)

Anthem (United States) has made an estimated US\$ 2 million available to the nuclear weapons companies selected for this research project since January 2013.

Anthem (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 2 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 32 Bondholdings managed by Anthem

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Moog	United States	2	0.59	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 30. ANZ (Australia)

ANZ (Australia) has made an estimated US\$ 2,019 million available to the nuclear weapons companies selected for this research project since January 2013.

ANZ (Australia) provided loans for an estimated amount of US\$ 1,665 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 33 Loans provided by ANZ

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	1,050	39	29-1-2014	29-1-2019
Airbus Group	3,797	66	14-10-2014	14-10-2019



	Total value	Est. participation of this bank	Closing	Maturity
Company	(US\$ mln)	(US\$ mln)	date	date
BAE Systems	3,269	131	12-12-2013	12-12-2018
Bechtel	1,000	20	7-6-2016	7-6-2021
Bechtel	1,500	30	7-6-2016	7-6-2021
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	30	23-9-2014	15-10-2015
Boeing	2,473	30	23-9-2014	16-10-2019
Boeing	2,465	30	4-11-2015	3-11-2016
Boeing	2,365	30	4-11-2015	3-11-2020
Fluor	1,800	180	7-11-2012	9-11-2017
Fluor	1,700	70	25-2-2016	25-2-2021
General Dynamics	1,000	125	21-6-2013	21-6-2018
General Dynamics	1,000	46	10-11-2015	10-11-2020
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	60	10-7-2015	10-7-2020
Honeywell International	1,500	25	29-4-2016	28-4-2017
Jacobs Engineering	460	39	7-2-2014	7-2-2019
Larsen & Toubro	47	5	27-8-2013	1-6-2018
Larsen & Toubro	59	7	27-8-2013	1-8-2017
Larsen & Toubro	64	7	27-8-2013	1-6-2018
Larsen & Toubro	100	11	27-8-2013	1-6-2018
Larsen & Toubro	100	11	27-8-2013	1-6-2018
Lockheed Martin	1,500	50	14-8-2014	14-8-2019
Lockheed Martin	2,500	50	9-10-2015	9-10-2020
Lockheed Martin	7,000	110	9-10-2015	7-10-2016
Northrop Grumman	1,600	64	8-7-2015	8-7-2020
Raytheon	1,250	44	13-11-2015	13-11-2020
Serco	1,159	72	21-2-2012	28-3-2017
Serco	714	45	12-3-2015	12-3-2019
Thales	1,835	122	19-12-2014	19-12-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

ANZ (Australia) underwrote bond issuances for an estimated amount of US\$ 354 million to the nuclear weapon companies since January 2013 (see table below).

Table 34 Underwriting of bond issuances by ANZ

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	350	10	30-4-2013	15-11-2018



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	300	4	28-10-2014	30-10-2021
Boeing	300	4	28-10-2014	30-10-2024
Boeing	250	3	18-2-2015	1-3-2025
Boeing	250	3	18-2-2015	1-3-2035
Boeing	250	3	18-2-2015	1-3-2045
Boeing	250	4	27-10-2015	30-10-2022
Boeing	300	5	27-10-2015	30-10-2025
Boeing	350	5	27-10-2015	30-10-2020
Boeing	400	5	16-5-2016	15-6-2046
Boeing	400	8	16-5-2016	15-6-2026
Boeing	400	9	16-5-2016	15-6-2023
Fluor	500	10	18-11-2014	15-12-2024
Fluor	555	9	14-3-2016	21-3-2023
Honeywell International	300	10	18-11-2013	1-12-2023
Honeywell International	700	23	18-11-2013	17-11-2015
Lockheed Martin	500	9	12-2-2015	1-3-2035
Lockheed Martin	750	14	12-2-2015	1-3-2025
Lockheed Martin	1,000	18	12-2-2015	1-3-2045
Lockheed Martin	500	8	16-11-2015	15-1-2023
Lockheed Martin	500	8	16-11-2015	15-5-2036
Lockheed Martin	750	11	16-11-2015	23-11-2018
Lockheed Martin	1,250	19	16-11-2015	23-11-2020
Lockheed Martin	2,000	30	16-11-2015	15-1-2026
Lockheed Martin	2,000	30	16-11-2015	15-5-2046
Northrop Grumman	850	26	28-5-2013	1-6-2018
Northrop Grumman	950	29	28-5-2013	1-6-2043
Northrop Grumman	1,050	32	28-5-2013	1-8-2023
Raytheon	300	5	24-11-2014	15-12-2024
Raytheon	300	5	24-11-2014	15-12-2044

## 31. Apto Partners (United States)

Apto Partners (United States) has made an estimated US\$ 16 million available to the nuclear weapons companies selected for this research project since January 2013.

Apto Partners (United States) underwrote bond issuances for an estimated amount of US\$ 16 million to the nuclear weapon companies since January 2013 (see table below).



Table 35 Underwriting of bond issuances by Apto Partners

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	250	3	18-2-2015	1-3-2035
Boeing	250	6	27-10-2015	30-10-2022
Boeing	400	8	16-5-2016	15-6-2026

## 32. AQR Capital Management (United States)

AQR Capital Management (United States) has made an estimated US\$ 1,197 million available to the nuclear weapons companies selected for this research project since January 2013.

AQR Capital Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 1,197 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 36 Shareholdings managed by AQR Capital Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BWX Technologies	United States	54	1.56	31-3-2016
General Dynamics	United States	278	0.69	31-3-2016
Huntington Ingalls Industries	United States	196	3.05	31-3-2016
Northrop Grumman	United States	349	0.98	31-3-2016
Orbital ATK	United States	65	1.28	31-3-2016
Raytheon	United States	203	0.56	31-3-2016
Textron	United States	52	0.53	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 33. Arab Bank (Jordan)

Arab Bank (Jordan) has made an estimated US\$ 50 million available to the nuclear weapons companies selected for this research project since January 2013.

Arab Bank (Jordan) provided loans for an estimated amount of US\$ 50 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 37 Loans provided by Arab Bank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Bechtel	1,000	20	7-6-2016	7-6-2021



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Bechtel	1,500	30	7-6-2016	7-6-2021

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

## 34. Aristotle Capital Management (United States)

Aristotle Capital Management (United States) has made an estimated US\$ 210 million available to the nuclear weapons companies selected for this research project since January 2013.

Aristotle Capital Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 210 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 38 Shareholdings managed by Aristotle Capital Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
General Dynamics	United States	210	0.52	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 35. Arrowstreet Capital (United States)

Arrowstreet Capital (United States) has made an estimated US\$ 71 million available to the nuclear weapons companies selected for this research project since January 2013.

Arrowstreet Capital (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 71 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 39 Shareholdings managed by Arrowstreet Capital

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BWX Technologies	United States	23	0.65	31-3-2016
Moog	United States	11	0.70	31-3-2016
Orbital ATK	United States	38	0.74	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### **36.** Artisan Partners (United States)

Artisan Partners (United States) has made an estimated US\$ 505 million available to the nuclear weapons companies selected for this research project since January 2013.

Artisan Partners (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 505 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.



Table 40 Shareholdings managed by Artisan Partners

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	157	2.09	31-3-2016
Jacobs Engineering	United States	213	4.01	31-3-2016
Textron	United States	135	1.38	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 37. Associated Banc-Corp (United States)

Associated Banc-Corp (United States) has made an estimated US\$ 29 million available to the nuclear weapons companies selected for this research project since January 2013.

Associated Banc-Corp (United States) provided loans for an estimated amount of US\$ 29 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 41 Loans provided by Associated Banc-Corp

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

#### 38. Assurant (United States)

Assurant (United States) has made an estimated US\$ 14 million available to the nuclear weapons companies selected for this research project since January 2013.

Assurant (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 14 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 42 Bondholdings managed by Assurant

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	14	0.89	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 39. Auto-Owners Insurance (United States)

Auto-Owners Insurance (United States) has made an estimated US\$ 35 million available to the nuclear weapons companies selected for this research project since January 2013.



Auto-Owners Insurance (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 35 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 43 Bondholdings managed by Auto-Owners Insurance

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	16	0.77	31-3-2016
Fluor	United States	20	1.25	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 40. Aviva (United Kingdom)

Aviva (United Kingdom) has made an estimated US\$ 221 million available to the nuclear weapons companies selected for this research project since January 2013.

Aviva (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 111 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 44 Shareholdings managed by Aviva

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	111	0.50	1-6-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Aviva (United Kingdom) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 110 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 45 Bondholdings managed by Aviva

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Northrop Grumman	United States	50	0.79	31-3-2016
Safran	France	60	2.83	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

#### 41. AXA (France)

AXA (France) has made an estimated US\$ 3,331 million available to the nuclear weapons companies selected for this research project since January 2013.

AXA (France) owns or manages shares of the nuclear weapon companies for an amount of US\$ 2,834 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.



Table 46 Shareholdings managed by AXA

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	104	2.20	31-3-2016
BAE Systems	United Kingdom	1,164	5.14	15-4-2016
Fluor	United States	43	0.57	31-3-2016
Honeywell International	United States	576	0.67	31-3-2016
Jacobs Engineering	United States	39	0.73	31-3-2016
Lockheed Martin	United States	367	0.54	31-3-2016
Northrop Grumman	United States	541	1.51	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

AXA (France) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 496 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 47 Bondholdings managed by AXA

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	3	0.73	31-3-2016
BAE Systems	United Kingdom	97	1.58	31-3-2016
Boeing	United States	119	1.12	31-3-2016
Honeywell International	United States	83	0.62	31-3-2016
Northrop Grumman	United States	108	1.69	31-3-2016
Raytheon	United States	87	1.62	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 42. Axis Bank (India)

Axis Bank (India) has made an estimated US\$ 300 million available to the nuclear weapons companies selected for this research project since January 2013.

Axis Bank (India) underwrote bond issuances for an estimated amount of US\$ 193 million to the nuclear weapon companies since January 2013 (see table below).

Table 48 Underwriting of bond issuances by Axis Bank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Larsen & Toubro	26	13	21-3-2014	21-4-2015
Larsen & Toubro	36	5	13-6-2014	13-5-2016
Larsen & Toubro	45	6	13-6-2014	13-6-2016
Larsen & Toubro	151	151	24-9-2015	24-9-2020
Larsen & Toubro	15	3	13-4-2016	28-3-2018



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Larsen & Toubro	15	3	13-4-2016	12-3-2019
Larsen & Toubro	15	3	13-4-2016	12-9-2019
Larsen & Toubro	15	3	13-4-2016	30-9-2019
Larsen & Toubro	15	3	13-4-2016	13-6-2019
Larsen & Toubro	15	3	13-4-2016	12-4-2019
Larsen & Toubro	15	3	13-4-2016	31-5-2019

Axis Bank (India) owns or manages shares of the nuclear weapon companies for an amount of US\$ 107 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 49 Shareholdings managed by Axis Bank

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Larsen & Toubro	India	107	0.52	31-5-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 43. Baird (United States)

Baird (United States) has made an estimated US\$ 39 million available to the nuclear weapons companies selected for this research project since January 2013.

Baird (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 39 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 50 Shareholdings managed by Baird

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	39	0.52	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 44. Banca Monte dei Paschi di Siena (Italy)

Banca Monte dei Paschi di Siena (Italy) has made an estimated US\$ 100 million available to the nuclear weapons companies selected for this research project since January 2013.

Banca Monte dei Paschi di Siena (Italy) provided loans for an estimated amount of US\$ 100 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.



Table 51 Loans provided by Banca Monte dei Paschi di Siena

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Leonardo-Finmeccanica	3,001	100	9-7-2014	9-7-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

## 45. Banca Popolare di Sondrio (Italy)

Banca Popolare di Sondrio (Italy) has made an estimated US\$ 111 million available to the nuclear weapons companies selected for this research project since January 2013.

Banca Popolare di Sondrio (Italy) provided loans for an estimated amount of US\$ 111 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 52 Loans provided by Banca Popolare di Sondrio

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Leonardo-Finmeccanica	3,001	100	9-7-2014	9-7-2019
Leonardo-Finmeccanica	2,212	11	6-7-2015	6-7-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

## 46. Banca Popolare Emilia Romagna (Italy)

Banca Popolare Emilia Romagna (Italy) has made an estimated US\$ 155 million available to the nuclear weapons companies selected for this research project since January 2013.

Banca Popolare Emilia Romagna (Italy) provided loans for an estimated amount of US\$ 155 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 53 Loans provided by Banca Popolare Emilia Romagna

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Leonardo-Finmeccanica	3,001	100	9-7-2014	9-7-2019
Leonardo-Finmeccanica	2,212	55	6-7-2015	6-7-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.



## 47. Banco Bilbao Vizcaya Argentaria (BBVA) (Spain)

Banco Bilbao Vizcaya Argentaria (BBVA) (Spain) has made an estimated US\$ 2,998 million available to the nuclear weapons companies selected for this research project since January 2013.

Banco Bilbao Vizcaya Argentaria (BBVA) (Spain) provided loans for an estimated amount of US\$ 2,164 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 54 Loans provided by Banco Bilbao Vizcaya Argentaria (BBVA)

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	600	40	23-9-2011	30-9-2016
Aecom	750	20	7-6-2013	7-6-2018
Aecom	1,050	39	29-1-2014	29-1-2019
Aecom	500	20	11-8-2014	17-10-2019
Aecom	1,188	59	11-8-2014	17-10-2021
Aecom	1,925	77	11-8-2014	17-10-2019
Airbus Group	3,797	134	14-10-2014	14-10-2019
Bechtel	1,000	20	7-6-2016	7-6-2021
Bechtel	1,500	30	7-6-2016	7-6-2021
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,300	460	29-9-2012	15-10-2017
Boeing	2,473	50	23-9-2014	15-10-2015
Boeing	2,473	50	23-9-2014	16-10-2019
Boeing	2,465	50	4-11-2015	3-11-2016
Boeing	2,365	50	4-11-2015	3-11-2020
BWX Technologies	700	32	22-5-2012	8-6-2017
BWX Technologies	600	36	11-5-2015	11-5-2020
General Dynamics	1,000	125	21-6-2013	21-6-2018
General Dynamics	1,000	80	10-11-2015	10-11-2020
Honeywell International	3,000	129	30-3-2012	2-4-2017
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	120	10-7-2015	10-7-2020
Honeywell International	1,500	45	29-4-2016	28-4-2017
Jacobs Engineering	460	55	5-3-2015	5-3-2020
Jacobs Engineering	1,140	137	5-3-2015	5-3-2020
Leonardo-Finmeccanica	3,001	100	9-7-2014	9-7-2019
Leonardo-Finmeccanica	2,212	90	6-7-2015	6-7-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

Banco Bilbao Vizcaya Argentaria (BBVA) (Spain) underwrote bond issuances for an estimated amount of US\$ 835 million to the nuclear weapon companies since January 2013 (see table below).



Table 55 Underwriting of bond issuances by Banco Bilbao Vizcaya Argentaria (BBVA)

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Aecom	800	80	17-9-2014	15-10-2022
Aecom	800	80	17-9-2014	15-10-2024
Aecom	800	80	30-10-2015	15-10-2022
Aecom	800	80	30-10-2015	15-10-2024
Airbus Group	640	64	20-10-2014	29-10-2029
Airbus Group	679	75	13-5-2016	13-5-2026
Airbus Group	1,018	113	13-5-2016	13-5-2031
Boeing	300	9	28-10-2014	30-10-2021
Boeing	300	9	28-10-2014	30-10-2024
Boeing	250	18	28-10-2014	30-10-2017
Boeing	250	6	18-2-2015	1-3-2025
Boeing	250	8	18-2-2015	1-3-2035
Boeing	250	8	18-2-2015	1-3-2045
Boeing	250	8	27-10-2015	30-10-2022
Boeing	300	9	27-10-2015	30-10-2025
Boeing	350	16	27-10-2015	30-10-2020
Boeing	400	10	16-5-2016	15-6-2023
Boeing	400	12	16-5-2016	15-6-2026
Boeing	400	16	16-5-2016	15-6-2046
Honeywell International	300	10	18-11-2013	1-12-2023
Honeywell International	700	23	18-11-2013	17-11-2015
Honeywell International	837	4	15-2-2016	22-2-2028
Honeywell International	1,116	6	15-2-2016	22-2-2018
Honeywell International	1,116	6	15-2-2016	21-2-2020
Honeywell International	1,395	7	15-2-2016	22-2-2023
Leonardo-Finmeccanica	950	59	26-11-2013	19-1-2021
Leonardo-Finmeccanica	339	20	17-1-2014	19-1-2021

## 48. Banco de Sabadell (Spain)

Banco de Sabadell (Spain) has made an estimated US\$ 29 million available to the nuclear weapons companies selected for this research project since January 2013.

Banco de Sabadell (Spain) provided loans for an estimated amount of US\$ 29 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.



Table 56 Loans provided by Banco de Sabadell

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

### 49. Banco Popolare (Italy)

Banco Popolare (Italy) has made an estimated US\$ 45 million available to the nuclear weapons companies selected for this research project since January 2013.

Banco Popolare (Italy) provided loans for an estimated amount of US\$ 45 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 57 Loans provided by Banco Popolare

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)		Maturity date
Leonardo-Finmeccanica	2,212	45	6-7-2015	6-7-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

## 50. BancPlus (United States)

BancPlus (United States) has made an estimated US\$ 29 million available to the nuclear weapons companies selected for this research project since January 2013.

BancPlus (United States) provided loans for an estimated amount of US\$ 29 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 58 Loans provided by BancPlus

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

## 51. Bank Hapoalim (Israel)

Bank Hapoalim (Israel) has made an estimated US\$ 120 million available to the nuclear weapons companies selected for this research project since January 2013.



Bank Hapoalim (Israel) provided loans for an estimated amount of US\$ 120 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 59 Loans provided by Bank Hapoalim

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Orbital ATK	200	13	3-9-2012	3-9-2017
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018
Orbital ATK	800	34	29-9-2015	29-9-2020
Orbital ATK	1,000	43	29-9-2015	29-9-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

#### 52. Bank of America (United States)

Bank of America (United States) has made an estimated US\$ 25,024 million available to the nuclear weapons companies selected for this research project since January 2013.

Bank of America (United States) provided loans for an estimated amount of US\$ 10,048 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 60 Loans provided by Bank of America

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	600	120	23-9-2011	30-9-2016
Aecom	700	70	14-10-2011	19-10-2016
Aecom	1,000	100	14-10-2011	19-10-2016
Aecom	750	150	7-6-2013	7-6-2018
Aecom	39	4	16-12-2013	19-12-2018
Aecom	655	66	16-12-2013	19-12-2018
Aecom	961	96	16-12-2013	19-12-2018
Aecom	1,050	105	29-1-2014	29-1-2019
Aecom	500	40	11-8-2014	17-10-2019
Aecom	1,188	95	11-8-2014	17-10-2021
Aecom	1,050	105	11-8-2014	17-10-2019
Aecom	1,925	154	11-8-2014	17-10-2019
Aerojet Rocketdyne	100	8	30-5-2014	30-5-2019
Aerojet Rocketdyne	200	15	30-5-2014	30-5-2019
Aerojet Rocketdyne	400	54	17-6-2016	17-6-2021
Aerojet Rocketdyne	350	61	17-6-2016	17-6-2021



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Airbus Group	3,797	66	14-10-2014	14-10-2019
BAE Systems	3,269	131	12-12-2013	12-12-2018
Bechtel	975	195	27-7-2012	27-7-2017
Bechtel	1,000	150	14-6-2013	14-6-2018
Bechtel	2,000	300	14-6-2013	14-6-2018
Bechtel	1,000	150	19-9-2014	17-10-2019
Bechtel	1,000	200	19-9-2014	17-10-2019
Bechtel	2,000	300	19-9-2014	17-10-2019
Bechtel	1,000	48	7-6-2016	7-6-2021
Bechtel	1,500	72	7-6-2016	7-6-2021
Bechtel	500	150	7-6-2016	7-6-2021
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	125	23-9-2014	15-10-2015
Boeing	2,473	125	23-9-2014	16-10-2019
Boeing	2,465	125	4-11-2015	3-11-2016
Boeing	2,365	125	4-11-2015	3-11-2020
BWX Technologies	700	70	22-5-2012	8-6-2017
BWX Technologies	400	32	11-5-2015	11-5-2020
BWX Technologies	500	40	11-5-2015	11-5-2020
BWX Technologies	600	48	11-5-2015	11-5-2020
CH2M Hill	900	72	19-4-2012	19-4-2017
CH2M Hill	1,100	220	22-3-2014	30-1-2019
Fluor	1,800	270	7-11-2012	9-11-2017
Fluor	1,700	255	28-5-2014	28-5-2019
Fluor	1,800	270	28-5-2014	28-5-2019
Fluor	1,700	121	25-2-2016	25-2-2021
Fluor	1,800	163	25-2-2016	25-2-2021
General Dynamics	1,000	125	21-6-2013	21-6-2018
General Dynamics	1,000	80	10-11-2015	10-11-2020
Honeywell International	3,000	129	30-3-2012	2-4-2017
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	190	10-7-2015	10-7-2020
Honeywell International	3,000	750	30-9-2015	28-9-2016
Honeywell International	1,500	65	29-4-2016	28-4-2017
Honeywell International	4,000	343	29-4-2016	29-4-2021
Huntington Ingalls Industries	489	27	23-9-2013	6-11-2018
Huntington Ingalls Industries	650	35	23-9-2013	6-11-2018
Huntington Ingalls Industries	1,250	125	13-7-2015	13-7-2020
Jacobs Engineering	1,160	155	23-3-2012	23-3-2017
Jacobs Engineering	460	61	7-2-2014	7-2-2019



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Jacobs Engineering	1,140	152	7-2-2014	7-2-2019
Jacobs Engineering	460	61	5-3-2015	5-3-2020
Jacobs Engineering	1,140	152	5-3-2015	5-3-2020
Leonardo-Finmeccanica	3,001	100	9-7-2014	9-7-2019
Leonardo-Finmeccanica	2,212	90	6-7-2015	6-7-2020
Lockheed Martin	1,500	120	14-8-2014	14-8-2019
Lockheed Martin	2,500	230	9-10-2015	9-10-2020
Lockheed Martin	7,000	530	9-10-2015	7-10-2016
Moog	900	108	28-3-2013	28-3-2018
Moog	1,100	110	22-5-2014	22-5-2019
Moog	1,100	110	28-6-2016	28-6-2021
Northrop Grumman	575	22	31-3-2011	24-1-2017
Orbital ATK	200	20	3-9-2012	3-9-2017
Orbital ATK	250	25	8-10-2013	1-11-2020
Orbital ATK	700	47	8-10-2013	1-11-2018
Orbital ATK	1,010	67	8-10-2013	1-11-2018
Orbital ATK	150	15	24-6-2014	24-12-2018
Orbital ATK	800	46	29-9-2015	29-9-2020
Orbital ATK	1,000	57	29-9-2015	29-9-2020
Raytheon	1,400	280	13-12-2011	13-12-2016
Raytheon	1,250	167	13-11-2015	13-11-2020
Serco	1,159	72	21-2-2012	28-3-2017
Serco	45	9	12-3-2015	12-12-2016
Serco	714	45	12-3-2015	12-3-2019
Textron	1,000	100	30-9-2013	4-10-2018
Textron	500	50	23-1-2014	23-1-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

Bank of America (United States) underwrote share issuances for an estimated amount of US\$ 4,114 million to the nuclear weapon companies since January 2013 (see table below).

Table 61 Underwriting of share issuances by Bank of America

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date
Airbus Group	492	492	4-4-2013
Airbus Group	2,987	597	9-4-2013
Airbus Group	2,987	597	9-4-2013
Airbus Group	166	166	1-8-2013
Safran	1,218	305	15-11-2013



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date
Safran	1,153	1,153	3-3-2015
Safran	796	398	30-11-2015
Serco	270	135	1-5-2014
Serco	62	7	16-4-2015
Serco	62	12	16-4-2015
Serco	785	94	16-4-2015
Serco	785	157	16-4-2015

Source: Thomson Reuters Eikon, "Bond and share issue underwritings", viewed in June/July 2016.

Bank of America (United States) underwrote bond issuances for an estimated amount of US\$ 4,216 million to the nuclear weapon companies since January 2013 (see table below).

Table 62 Underwriting of bond issuances by Bank of America

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Aecom	800	80	17-9-2014	15-10-2022
Aecom	800	80	17-9-2014	15-10-2024
Aecom	800	80	30-10-2015	15-10-2022
Aecom	800	80	30-10-2015	15-10-2024
Airbus Group	1,209	242	14-6-2016	14-6-2021
BAE Systems	250	63	3-12-2015	7-10-2044
BAE Systems	500	125	3-12-2015	15-12-2020
BAE Systems	750	188	3-12-2015	15-12-2025
Boeing	350	10	30-4-2013	15-11-2018
Boeing	250	9	28-10-2014	30-10-2017
Boeing	300	9	28-10-2014	30-10-2024
Boeing	300	25	28-10-2014	30-10-2021
Boeing	250	6	18-2-2015	1-3-2025
Boeing	250	8	18-2-2015	1-3-2035
Boeing	250	19	18-2-2015	1-3-2045
Boeing	250	8	27-10-2015	30-10-2022
Boeing	300	9	27-10-2015	30-10-2025
Boeing	350	25	27-10-2015	30-10-2020
Boeing	400	33	16-5-2016	15-6-2046
Boeing	400	36	16-5-2016	15-6-2026
Boeing	400	40	16-5-2016	15-6-2023
Fluor	500	150	18-11-2014	15-12-2024
Fluor	555	139	14-3-2016	21-3-2023
Honeywell International	300	10	18-11-2013	1-12-2023



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Honeywell International	700	23	18-11-2013	17-11-2015
Honeywell International	837	180	15-2-2016	22-2-2028
Honeywell International	1,116	240	15-2-2016	22-2-2018
Honeywell International	1,116	240	15-2-2016	21-2-2020
Honeywell International	1,395	300	15-2-2016	22-2-2023
Huntington Ingalls Industries	600	60	17-11-2014	15-12-2021
Huntington Ingalls Industries	600	75	2-11-2015	15-11-2025
Leonardo-Finmeccanica	950	59	26-11-2013	19-1-2021
Leonardo-Finmeccanica	339	20	17-1-2014	19-1-2021
Lockheed Martin	500	40	12-2-2015	1-3-2035
Lockheed Martin	750	60	12-2-2015	1-3-2025
Lockheed Martin	1,000	80	12-2-2015	1-3-2045
Lockheed Martin	500	38	16-11-2015	15-1-2023
Lockheed Martin	500	38	16-11-2015	15-5-2036
Lockheed Martin	750	56	16-11-2015	23-11-2018
Lockheed Martin	1,250	94	16-11-2015	23-11-2020
Lockheed Martin	2,000	150	16-11-2015	15-1-2026
Lockheed Martin	2,000	150	16-11-2015	15-5-2046
Moog	300	40	18-11-2014	1-12-2022
Northrop Grumman	850	26	28-5-2013	1-6-2018
Northrop Grumman	950	29	28-5-2013	1-6-2043
Northrop Grumman	1,050	32	28-5-2013	1-8-2023
Northrop Grumman	600	60	3-2-2015	15-4-2045
Orbital ATK	300	50	22-10-2013	1-10-2021
Orbital ATK	400	43	22-9-2015	1-10-2023
Raytheon	300	78	24-11-2014	15-12-2024
Raytheon	300	78	24-11-2014	15-12-2044
Safran	699	233	5-1-2016	31-12-2020
Textron	250	25	23-1-2014	1-3-2021
Textron	350	35	23-1-2014	1-3-2024
Textron	350	89	23-10-2014	1-3-2025
Textron	350	27	4-3-2016	15-3-2026

Bank of America (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 6,646 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.



Table 63 Shareholdings managed by Bank of America

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Boeing	United States	626	0.76	31-3-2016
BWX Technologies	United States	22	0.64	31-3-2016
Fluor	United States	51	0.69	31-3-2016
General Dynamics	United States	970	2.42	31-3-2016
Honeywell International	United States	1,777	2.08	31-3-2016
Huntington Ingalls Industries	United States	46	0.71	31-3-2016
Jacobs Engineering	United States	35	0.66	31-3-2016
Lockheed Martin	United States	1,897	2.82	31-3-2016
Moog	United States	14	0.97	31-3-2016
Northrop Grumman	United States	378	1.06	31-3-2016
Orbital ATK	United States	56	1.11	31-3-2016
Raytheon	United States	773	2.12	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 53. Bank of China (China)

Bank of China (China) has made an estimated US\$ 585 million available to the nuclear weapons companies selected for this research project since January 2013.

Bank of China (China) provided loans for an estimated amount of US\$ 585 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 64 Loans provided by Bank of China

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	50	23-9-2014	15-10-2015
Boeing	2,473	50	23-9-2014	16-10-2019
Boeing	2,465	50	4-11-2015	3-11-2016
Boeing	2,365	50	4-11-2015	3-11-2020
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	60	10-7-2015	10-7-2020
Honeywell International	1,500	25	29-4-2016	28-4-2017
Leonardo-Finmeccanica	3,001	100	9-7-2014	9-7-2019
Leonardo-Finmeccanica	2,212	61	6-7-2015	6-7-2020
Textron	500	25	23-1-2014	23-1-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.



#### 54. Bank of Communications (China)

Bank of Communications (China) has made an estimated US\$ 20 million available to the nuclear weapons companies selected for this research project since January 2013.

Bank of Communications (China) provided loans for an estimated amount of US\$ 20 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 65 Loans provided by Bank of Communications

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	750	20	7-6-2013	7-6-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

### 55. Bank of East Asia (China)

Bank of East Asia (China) has made an estimated US\$ 25 million available to the nuclear weapons companies selected for this research project since January 2013.

Bank of East Asia (China) provided loans for an estimated amount of US\$ 25 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 66 Loans provided by Bank of East Asia

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Textron	500	25	23-1-2014	23-1-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

### 56. Bank of New York Mellon (United States)

Bank of New York Mellon (United States) has made an estimated US\$ 6,935 million available to the nuclear weapons companies selected for this research project since January 2013.

Bank of New York Mellon (United States) provided loans for an estimated amount of US\$ 872 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 67 Loans provided by Bank of New York Mellon

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)		Maturity date
Bechtel	1,000	20	7-6-2016	7-6-2021
Bechtel	1,500	30	7-6-2016	7-6-2021



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	30	23-9-2014	15-10-2015
Boeing	2,473	30	23-9-2014	16-10-2019
Boeing	2 <b>,4</b> 65	30	4-11-2015	3-11-2016
Boeing	2,365	30	4-11-2015	3-11-2020
General Dynamics	1,000	46	10-11-2015	10-11-2020
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	60	10-7-2015	10-7-2020
Honeywell International	1,500	25	29-4-2016	28-4-2017
Northrop Grumman	1,500	129	8-9-2011	8-9-2016
Northrop Grumman	1,600	64	8-7-2015	8-7-2020
Orbital ATK	200	13	3-9-2012	3-9-2017
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018
Orbital ATK	800	34	29-9-2015	29-9-2020
Orbital ATK	1,000	43	29-9-2015	29-9-2020
Raytheon	1,250	44	13-11-2015	13-11-2020
Textron	1,000	75	30-9-2013	4-10-2018
Textron	500	25	23-1-2014	23-1-2019

Bank of New York Mellon (United States) underwrote bond issuances for an estimated amount of US\$ 255 million to the nuclear weapon companies since January 2013 (see table below).

Table 68 Underwriting of bond issuances by Bank of New York Mellon

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	350	10	30-4-2013	15-11-2018
Boeing	300	4	28-10-2014	30-10-2021
Boeing	300	4	28-10-2014	30-10-2024
Boeing	250	3	18-2-2015	1-3-2025
Boeing	250	3	18-2-2015	1-3-2035
Boeing	250	3	18-2-2015	1-3-2045
Boeing	250	4	27-10-2015	30-10-2022
Boeing	300	5	27-10-2015	30-10-2025
Boeing	350	5	27-10-2015	30-10-2020
Boeing	400	5	16-5-2016	15-6-2046
Boeing	400	8	16-5-2016	15-6-2026
Boeing	400	9	16-5-2016	15-6-2023
Honeywell International	300	10	18-11-2013	1-12-2023
Honeywell International	700	23	18-11-2013	17-11-2015



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Northrop Grumman	850	26	28-5-2013	1-6-2018
Northrop Grumman	950	29	28-5-2013	1-6-2043
Northrop Grumman	1,050	32	28-5-2013	1-8-2023
Raytheon	300	5	24-11-2014	15-12-2024
Raytheon	300	5	24-11-2014	15-12-2044
Textron	250	19	23-1-2014	1-3-2021
Textron	350	26	23-1-2014	1-3-2024
Textron	350	10	23-10-2014	1-3-2025
Textron	350	11	4-3-2016	15-3-2026

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

Bank of New York Mellon (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 5,808 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 69 Shareholdings managed by Bank of New York Mellon

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	55	1.17	31-3-2016
Aerojet Rocketdyne	United States	12	1.16	31-3-2016
Airbus Group	The Netherlands	286	0.59	31-5-2016
BAE Systems	United Kingdom	343	1.55	26-4-2016
Boeing	United States	982	1.21	31-3-2016
BWX Technologies	United States	57	1.65	31-3-2016
Fluor	United States	73	0.98	31-3-2016
General Dynamics	United States	370	0.92	31-3-2016
Honeywell International	United States	1,368	1.59	31-3-2016
Huntington Ingalls Industries	United States	114	1.76	31-3-2016
Jacobs Engineering	United States	109	2.05	31-3-2016
Lockheed Martin	United States	588	0.86	31-3-2016
Moog	United States	19	1.23	31-3-2016
Northrop Grumman	United States	597	1.67	31-3-2016
Orbital ATK	United States	55	1.07	31-3-2016
Raytheon	United States	687	1.89	31-3-2016
Textron	United States	94	0.95	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 57. Banner Bank (United States)

Banner Bank (United States) has made an estimated US\$ 29 million available to the nuclear weapons companies selected for this research project since January 2013.



Banner Bank (United States) provided loans for an estimated amount of US\$ 29 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 70 Loans provided by Banner Bank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

# 58. Barclays (United Kingdom)

Barclays (United Kingdom) has made an estimated US\$ 7,969 million available to the nuclear weapons companies selected for this research project since January 2013.

Barclays (United Kingdom) provided loans for an estimated amount of US\$ 4,678 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 71 Loans provided by Barclays

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	39	2	16-12-2013	19-12-2018
Aecom	655	39	16-12-2013	19-12-2018
Aecom	961	58	16-12-2013	19-12-2018
Aecom	1,050	39	29-1-2014	29-1-2019
Aecom	500	20	11-8-2014	17-10-2019
Aecom	1,188	59	11-8-2014	17-10-2021
Aecom	1,925	77	11-8-2014	17-10-2019
Airbus Group	3,797	134	14-10-2014	14-10-2019
BAE Systems	3,269	131	12-12-2013	12-12-2018
Bechtel	1,000	100	14-6-2013	14-6-2018
Bechtel	2,000	200	14-6-2013	14-6-2018
Bechtel	1,000	28	7-6-2016	7-6-2021
Bechtel	1,500	42	7-6-2016	7-6-2021
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	90	23-9-2014	15-10-2015
Boeing	2,473	90	23-9-2014	16-10-2019
Boeing	2,465	90	4-11-2015	3-11-2016
Boeing	2,365	90	4-11-2015	3-11-2020
Engility	50	10	23-4-2014	9-5-2019



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Engility	250	50	23-4-2014	9-5-2021
Engility	393	79	23-4-2014	9-5-2020
Engility	60	20	25-11-2014	26-8-2019
Engility	150	75	25-11-2014	26-8-2021
Engility	<del>4</del> 35	218	25-11-2014	26-8-2020
Fluor	1,700	227	28-5-2014	28-5-2019
Fluor	1,800	240	28-5-2014	28-5-2019
Fluor	1,700	70	25-2-2016	25-2-2021
Fluor	1,800	75	25-2-2016	25-2-2021
Honeywell International	3,000	129	30-3-2012	2-4-2017
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	190	10-7-2015	10-7-2020
Honeywell International	3,000	750	30-9-2015	28-9-2016
Honeywell International	1,500	65	29-4-2016	28-4-2017
Honeywell International	4,000	343	29-4-2016	29-4-2021
Jacobs Engineering	1,140	62	7-2-2014	7-2-2019
Leonardo-Finmeccanica	3,001	100	9-7-2014	9-7-2019
Leonardo-Finmeccanica	2,212	45	6-7-2015	6-7-2020
Lockheed Martin	1,500	50	14-8-2014	14-8-2019
Lockheed Martin	2,500	75	9-10-2015	9-10-2020
Lockheed Martin	7,000	110	9-10-2015	7-10-2016
Raytheon	1,250	44	13-11-2015	13-11-2020
Serco	1,159	72	21-2-2012	28-3-2017
Serco	45	9	12-3-2015	12-12-2016
Serco	714	45	12-3-2015	12-3-2019
Thales	1,835	122	19-12-2014	19-12-2019

Barclays (United Kingdom) underwrote share issuances for an estimated amount of US\$ 500 million to the nuclear weapon companies since January 2013 (see table below).

Table 72 Underwriting of share issuances by Barclays

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date
Safran	796	398	30-11-2015
Serco	62	7	16-4-2015
Serco	785	94	16-4-2015

Source: Thomson Reuters Eikon, "Bond and share issue underwritings", viewed in June/July 2016.



Barclays (United Kingdom) underwrote bond issuances for an estimated amount of US\$ 1,893 million to the nuclear weapon companies since January 2013 (see table below).

Table 73 Underwriting of bond issuances by Barclays

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Airbus Group	640	96	20-10-2014	29-10-2029
BAE Systems	250	21	3-12-2015	7-10-2044
BAE Systems	500	42	3-12-2015	15-12-2020
BAE Systems	750	63	3-12-2015	15-12-2025
Boeing	150	50	30-4-2013	3-11-2014
Boeing	250	9	28-10-2014	30-10-2017
Boeing	300	9	28-10-2014	30-10-2024
Boeing	300	15	28-10-2014	30-10-2021
Boeing	250	6	18-2-2015	1-3-2025
Boeing	250	8	18-2-2015	1-3-2035
Boeing	250	12	18-2-2015	1-3-2045
Boeing	250	8	27-10-2015	30-10-2022
Boeing	350	11	27-10-2015	30-10-2020
Boeing	300	14	27-10-2015	30-10-2025
Boeing	400	12	16-5-2016	15-6-2026
Boeing	400	16	16-5-2016	15-6-2046
Boeing	400	36	16-5-2016	15-6-2023
Fluor	500	10	18-11-2014	15-12-2024
Fluor	555	9	14-3-2016	21-3-2023
Honeywell International	300	10	18-11-2013	1-12-2023
Honeywell International	700	23	18-11-2013	17-11-2015
Honeywell International	837	180	15-2-2016	22-2-2028
Honeywell International	1,116	240	15-2-2016	22-2-2018
Honeywell International	1,116	240	15-2-2016	21-2-2020
Honeywell International	1,395	300	15-2-2016	22-2-2023
Larsen & Toubro	18	5	21-1-2015	15-2-2017
Larsen & Toubro	18	5	21-1-2015	19-1-2018
Leonardo-Finmeccanica	950	59	26-11-2013	19-1-2021
Leonardo-Finmeccanica	339	20	17-1-2014	19-1-2021
Lockheed Martin	500	9	12-2-2015	1-3-2035
Lockheed Martin	750	14	12-2-2015	1-3-2025
Lockheed Martin	1,000	18	12-2-2015	1-3-2045
Lockheed Martin	500	8	16-11-2015	15-1-2023
Lockheed Martin	500	8	16-11-2015	15-5-2036
Lockheed Martin	750	11	16-11-2015	23-11-2018
Lockheed Martin	1,250	19	16-11-2015	23-11-2020

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Lockheed Martin	2,000	30	16-11-2015	15-1-2026
Lockheed Martin	2,000	30	16-11-2015	15-5-2046
Northrop Grumman	850	26	28-5-2013	1-6-2018
Northrop Grumman	950	29	28-5-2013	1-6-2043
Northrop Grumman	1,050	32	28-5-2013	1-8-2023
Raytheon	300	8	24-11-2014	15-12-2024
Raytheon	300	8	24-11-2014	15-12-2044
Serco	20	10	13-5-2013	14-5-2020
Serco	70	35	13-5-2013	14-5-2022
Serco	150	75	13-5-2013	14-5-2024

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

Barclays (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 899 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 74 Shareholdings managed by Barclays

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	899	3.97	17-2-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 59. BayernLB (Germany)

BayernLB (Germany) has made an estimated US\$ 402 million available to the nuclear weapons companies selected for this research project since January 2013.

BayernLB (Germany) provided loans for an estimated amount of US\$ 393 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 75 Loans provided by BayernLB

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Airbus Group	3,797	66	14-10-2014	14-10-2019
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	50	23-9-2014	15-10-2015
Boeing	2,473	50	23-9-2014	16-10-2019
Boeing	2, <del>4</del> 65	50	4-11-2015	3-11-2016
Boeing	2,365	50	4-11-2015	3-11-2020
Honeywell International	4,000	60	10-7-2015	10-7-2020
Honeywell International	1,500	25	29-4-2016	28-4-2017



BayernLB (Germany) underwrote bond issuances for an estimated amount of US\$ 10 million to the nuclear weapon companies since January 2013 (see table below).

Table 76 Underwriting of bond issuances by BayernLB

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	350	10	30-4-2013	15-11-2018

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

## 60. BB&T (United States)

BB&T (United States) has made an estimated US\$ 690 million available to the nuclear weapons companies selected for this research project since January 2013.

BB&T (United States) provided loans for an estimated amount of US\$ 563 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 77 Loans provided by BB&T

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	750	20	7-6-2013	7-6-2018
Aecom	39	2	16-12-2013	19-12-2018
Aecom	655	39	16-12-2013	19-12-2018
Aecom	961	58	16-12-2013	19-12-2018
Aecom	1,050	39	29-1-2014	29-1-2019
BWX Technologies	700	32	22-5-2012	8-6-2017
BWX Technologies	400	27	11-5-2015	11-5-2020
BWX Technologies	500	33	11-5-2015	11-5-2020
BWX Technologies	600	36	11-5-2015	11-5-2020
Huntington Ingalls Industries	1,250	71	13-7-2015	13-7-2020
Moog	1,100	63	28-6-2016	28-6-2021
Northrop Grumman	575	22	31-3-2011	24-1-2017
Orbital ATK	200	13	3-9-2012	3-9-2017
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018
Orbital ATK	800	34	29-9-2015	29-9-2020
Orbital ATK	1,000	43	29-9-2015	29-9-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.



BB&T (United States) underwrote bond issuances for an estimated amount of US\$ 25 million to the nuclear weapon companies since January 2013 (see table below).

Table 78 Underwriting of bond issuances by BB&T

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Huntington Ingalls Industries	600	25	2-11-2015	15-11-2025

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

BB&T (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 102 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 79 Shareholdings managed by BB&T

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Jacobs Engineering	United States	64	1.22	31-3-2016
Moog	United States	37	2.28	31-5-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 61. Beck, Mack & Oliver (United States)

Beck, Mack & Oliver (United States) has made an estimated US\$ 53 million available to the nuclear weapons companies selected for this research project since January 2013.

Beck, Mack & Oliver (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 53 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 80 Shareholdings managed by Beck, Mack & Oliver

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	53	0.71	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 62. Becker Capital Management (United States)

Becker Capital Management (United States) has made an estimated US\$ 22 million available to the nuclear weapons companies selected for this research project since January 2013.

Becker Capital Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 22 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.



Table 81 Shareholdings managed by Becker Capital Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BWX Technologies	United States	22	0.62	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 63. Bessemer Group (United States)

Bessemer Group (United States) has made an estimated US\$ 291 million available to the nuclear weapons companies selected for this research project since January 2013.

Bessemer Group (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 291 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 82 Shareholdings managed by Bessemer Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	83	1.11	31-3-2016
Raytheon	United States	208	0.57	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 64. Bestinver (Spain)

Bestinver (Spain) has made an estimated US\$ 155 million available to the nuclear weapons companies selected for this research project since January 2013.

Bestinver (Spain) owns or manages shares of the nuclear weapon companies for an amount of US\$ 155 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 83 Shareholdings managed by Bestinver

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Thales	France	155	0.98	31-12-2015

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 65. BlackRock (United States)

BlackRock (United States) has made an estimated US\$ 32,869 million available to the nuclear weapons companies selected for this research project since January 2013.

BlackRock (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 32,032 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.



Table 84 Shareholdings managed by BlackRock

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	3 <del>4</del> 8	7.37	31-3-2016
Aerojet Rocketdyne	United States	115	10.95	31-3-2016
Airbus Group	The Netherlands	3,118	6.57	25-1-2016
BAE Systems	United Kingdom	1,507	6.69	1-6-2016
Boeing	United States	4,296	5.30	31-3-2016
BWX Technologies	United States	141	4.05	31-3-2016
Engility	United States	34	4.96	31-3-2016
Fluor	United States	424	5.66	31-3-2016
General Dynamics	United States	2,320	5.79	31-3-2016
Honeywell International	United States	5,060	5.91	31-3-2016
Huntington Ingalls Industries	United States	496	7.69	31-3-2016
Jacobs Engineering	United States	305	5.73	31-3-2016
Larsen & Toubro	India	253	1.21	30-6-2016
Leonardo-Finmeccanica	Italy	88	1.49	30-6-2016
Lockheed Martin	United States	4,072	6.04	31-3-2016
Moog	United States	159	10.58	31-3-2016
Northrop Grumman	United States	2,406	6.74	31-3-2016
Orbital ATK	United States	369	7.24	31-3-2016
Raytheon	United States	2,937	8.07	31-3-2016
Safran	France	2,507	8.82	15-6-2016
Serco	United Kingdom	55	3.53	26-4-2016
Textron	United States	713	7.27	31-3-2016
Thales	France	308	1.70	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

BlackRock (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 837 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 85 Bondholdings managed by BlackRock

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	2	0.55	30-6-2016
BAE Systems	United Kingdom	34	0.55	31-3-2016
Boeing	United States	130	1.22	31-3-2016
Fluor	United States	11	0.71	30-6-2016
General Dynamics	United States	40	1.37	30-6-2016
Honeywell International	United States	85	0.64	30-6-2016
Huntington Ingalls Industries	United States	27	2.25	30-4-2016
Leonardo-Finmeccanica	Italy	102	2.11	30-6-2016



Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Lockheed Martin	United States	170	1.08	30-6-2016
Moog	United States	8	2.51	31-3-2016
Northrop Grumman	United States	125	1.96	30-6-2016
Raytheon	United States	68	1.26	30-6-2016
Textron	United States	15	0.53	30-6-2016
Thales	France	20	0.91	31-5-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 66. Blaylock Beal Van (United States)

Blaylock Beal Van (United States) has made an estimated US\$ 45 million available to the nuclear weapons companies selected for this research project since January 2013.

Blaylock Beal Van (United States) underwrote bond issuances for an estimated amount of US\$ 45 million to the nuclear weapon companies since January 2013 (see table below).

Table 86 Underwriting of bond issuances by Blaylock Beal Van

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)		Maturity date
Boeing	300	3	28-10-2014	30-10-2024
Boeing	250	3	18-2-2015	1-3-2045
Boeing	300	5	27-10-2015	30-10-2025
Boeing	400	9	16-5-2016	15-6-2023
Lockheed Martin	500	1	16-11-2015	15-1-2023
Lockheed Martin	500	1	16-11-2015	15-5-2036
Lockheed Martin	750	2	16-11-2015	23-11-2018
Lockheed Martin	1,250	3	16-11-2015	23-11-2020
Lockheed Martin	2,000	5	16-11-2015	15-1-2026
Lockheed Martin	2,000	5	16-11-2015	15-5-2046
Northrop Grumman	600	8	3-2-2015	15-4-2045

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

# 67. Blue Cross Blue Shield Association (United States)

Blue Cross Blue Shield Association (United States) has made an estimated US\$ 2 million available to the nuclear weapons companies selected for this research project since January 2013.

Blue Cross Blue Shield Association (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 2 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.



Table 87 Bondholdings managed by Blue Cross Blue Shield Association

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	2	0.61	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

#### 68. Blue Harbour Group (United States)

Blue Harbour Group (United States) has made an estimated US\$ 354 million available to the nuclear weapons companies selected for this research project since January 2013.

Blue Harbour Group (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 354 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 88 Shareholdings managed by Blue Harbour Group

Company		Total value (US\$ mln)	% Outstanding	Filing date
BWX Technologies	United States	354	10.17	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 69. BMO Financial Group (Canada)

BMO Financial Group (Canada) has made an estimated US\$ 511 million available to the nuclear weapons companies selected for this research project since January 2013.

BMO Financial Group (Canada) provided loans for an estimated amount of US\$ 327 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 89 Loans provided by BMO Financial Group

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)		Maturity date
Aecom	700	35	14-10-2011	19-10-2016
Aecom	1,000	50	14-10-2011	19-10-2016
Aecom	1,050	39	29-1-2014	29-1-2019
Aecom	500	20	11-8-2014	17-10-2019
Aecom	1,050	47	11-8-2014	17-10-2019
Aecom	1,188	59	11-8-2014	17-10-2021
Aecom	1,925	77	11-8-2014	17-10-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

BMO Financial Group (Canada) owns or manages shares of the nuclear weapon companies for an amount of US\$ 184 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.



Table 90 Shareholdings managed by BMO Financial Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Huntington Ingalls Industries	United States	99	1.54	31-3-2016
Jacobs Engineering	United States	84	1.58	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 70. BNP Paribas (France)

BNP Paribas (France) has made an estimated US\$ 9,008 million available to the nuclear weapons companies selected for this research project since January 2013.

BNP Paribas (France) provided loans for an estimated amount of US\$ 6,954 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 91 Loans provided by BNP Paribas

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date	
Aecom	700	70	14-10-2011	19-10-2016	
Aecom	1,000	100	14-10-2011	19-10-2016	
Aecom	750	20	7-6-2013	7-6-2018	
Aecom	39	4	16-12-2013	19-12-2018	
Aecom	655	66	16-12-2013	19-12-2018	
Aecom	961	96	16-12-2013	19-12-2018	
Aecom	1,050	105	29-1-2014	29-1-2019	
Aecom	500	<del>4</del> 0	11-8-2014	17-10-2019	
Aecom	1,188	95	11-8-2014	17-10-2021	
Aecom	1,050	105	11-8-2014	17-10-2019	
Aecom	1,925	154	11-8-2014	17-10-2019	
Airbus Group	3,797	134	14-10-2014	14-10-2019	
BAE Systems	3,269	131	12-12-2013	12-12-2018	
Bechtel	975	195	27-7-2012	27-7-2017	
Bechtel	1,000	150	14-6-2013	14-6-2018	
Bechtel	2,000	300	14-6-2013	14-6-2018	
Bechtel	1,000	150	19-9-2014	17-10-2019	
Bechtel	1,000	200	19-9-2014	17-10-2019	
Bechtel	2,000	300	19-9-2014	17-10-2019	
Bechtel	1,000	48	7-6-2016	7-6-2021	
Bechtel	1,500	72	7-6-2016	7-6-2021	
Bechtel	500	150	7-6-2016	7-6-2021	
Boeing	2,300	42	5-11-2011	10-11-2016	



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Boeing	2,473	90	23-9-2014	15-10-2015
Boeing	2,473	90	23-9-2014	16-10-2019
Boeing	2,465	90	4-11-2015	3-11-2016
Boeing	2,365	90	4-11-2015	3-11-2020
BWX Technologies	700	70	22-5-2012	8-6-2017
BWX Technologies	400	32	11-5-2015	11-5-2020
BWX Technologies	500	40	11-5-2015	11-5-2020
BWX Technologies	600	48	11-5-2015	11-5-2020
CH2M Hill	900	135	19-4-2012	19-4-2017
CH2M Hill	1,100	220	22-3-2014	30-1-2019
Fluor	1,800	270	7-11-2012	9-11-2017
Fluor	1,700	255	28-5-2014	28-5-2019
Fluor	1,800	270	28-5-2014	28-5-2019
Fluor	1,700	121	25-2-2016	25-2-2021
Fluor	1,800	163	25-2-2016	25-2-2021
Honeywell International	3,000	129	30-3-2012	2-4-2017
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	120	10-7-2015	10-7-2020
Honeywell International	1,500	45	29-4-2016	28-4-2017
Jacobs Engineering	1,160	139	23-3-2012	23-3-2017
Jacobs Engineering	1,160	155	23-3-2012	23-3-2017
Jacobs Engineering	460	61	7-2-2014	7-2-2019
Jacobs Engineering	1,140	62	7-2-2014	7-2-2019
Jacobs Engineering	1,140	152	7-2-2014	7-2-2019
Jacobs Engineering	460	61	5-3-2015	5-3-2020
Jacobs Engineering	1,140	152	5-3-2015	5-3-2020
Leonardo-Finmeccanica	3,001	150	9-7-2014	9-7-2019
Leonardo-Finmeccanica	2,212	153	6-7-2015	6-7-2020
Northrop Grumman	575	22	31-3-2011	24-1-2017
Northrop Grumman	1,500	129	8-9-2011	8-9-2016
Northrop Grumman	1,600	64	8-7-2015	8-7-2020
Raytheon	1,250	44	13-11-2015	13-11-2020
Safran	1,320	176	21-10-2011	21-10-2016
Safran	2,744	235	4-12-2015	4-12-2020
Thales	1,835	122	19-12-2014	19-12-2019

BNP Paribas (France) underwrote bond issuances for an estimated amount of US\$ 2,046 million to the nuclear weapon companies since January 2013 (see table below).



Table 92 Underwriting of bond issuances by BNP Paribas

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Aecom	800	80	17-9-2014	15-10-2022
Aecom	800	80	17-9-2014	15-10-2024
Aecom	800	80	30-10-2015	15-10-2022
Aecom	800	80	30-10-2015	15-10-2024
Airbus Group	558	93	26-6-2015	1-7-2022
Airbus Group	679	75	13-5-2016	13-5-2026
Airbus Group	1,018	113	13-5-2016	13-5-2031
Airbus Group	1,209	242	14-6-2016	14-6-2021
Boeing	350	10	30-4-2013	15-11-2018
Boeing	250	9	28-10-2014	30-10-2017
Boeing	300	9	28-10-2014	30-10-2021
Boeing	300	15	28-10-2014	30-10-2024
Boeing	250	8	18-2-2015	1-3-2035
Boeing	250	8	18-2-2015	1-3-2045
Boeing	250	14	18-2-2015	1-3-2025
Boeing	300	9	27-10-2015	30-10-2025
Boeing	350	11	27-10-2015	30-10-2020
Boeing	250	11	27-10-2015	30-10-2022
Boeing	400	10	16-5-2016	15-6-2023
Boeing	400	16	16-5-2016	15-6-2046
Boeing	400	18	16-5-2016	15-6-2026
Fluor	500	85	18-11-2014	15-12-2024
Fluor	555	139	14-3-2016	21-3-2023
Honeywell International	300	10	18-11-2013	1-12-2023
Honeywell International	700	23	18-11-2013	17-11-2015
Honeywell International	837	4	15-2-2016	22-2-2028
Honeywell International	1,116	6	15-2-2016	22-2-2018
Honeywell International	1,116	6	15-2-2016	21-2-2020
Honeywell International	1,395	7	15-2-2016	22-2-2023
Larsen & Toubro	200	67	9-9-2014	24-9-2019
Leonardo-Finmeccanica	950	59	26-11-2013	19-1-2021
Leonardo-Finmeccanica	339	20	17-1-2014	19-1-2021
Northrop Grumman	850	26	28-5-2013	1-6-2018
Northrop Grumman	950	29	28-5-2013	1-6-2043
Northrop Grumman	1,050	32	28-5-2013	1-8-2023
Northrop Grumman	600	24	3-2-2015	15-4-2045
Raytheon	300	8	24-11-2014	15-12-2024
Raytheon	300	8	24-11-2014	15-12-2044



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)		Maturity date
Safran	699	233	5-1-2016	31-12-2020
Thales	389	56	13-3-2013	19-3-2021
Thales	648	93	13-3-2013	20-3-2018
Thales	668	125	31-5-2016	7-6-2023

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

BNP Paribas (France) owns or manages shares of the nuclear weapon companies for an amount of US\$ 7 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 93 Shareholdings managed by BNP Paribas

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Engility	United States	7	1.13	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 71. Boston Private (United States)

Boston Private (United States) has made an estimated US\$ 57 million available to the nuclear weapons companies selected for this research project since January 2013.

Boston Private (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 57 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 94 Shareholdings managed by Boston Private

Company		Total value (US\$ mln)	% Outstanding	Filing date
BWX Technologies	United States	57	1.64	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 72. BPCE Group (France)

BPCE Group (France) has made an estimated US\$ 2,617 million available to the nuclear weapons companies selected for this research project since January 2013.

BPCE Group (France) provided loans for an estimated amount of US\$ 712 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 95 Loans provided by BPCE Group

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)		Maturity date
Airbus Group	3,797	134	14-10-2014	14-10-2019



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)		Maturity date
Leonardo-Finmeccanica	2,212	22	6-7-2015	6-7-2020
Safran	1,320	198	21-10-2011	21-10-2016
Safran	2,744	235	4-12-2015	4-12-2020
Thales	1,835	122	19-12-2014	19-12-2019

BPCE Group (France) underwrote bond issuances for an estimated amount of US\$ 494 million to the nuclear weapon companies since January 2013 (see table below).

Table 96 Underwriting of bond issuances by BPCE Group

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Airbus Group	640	64	20-10-2014	29-10-2029
Airbus Group	558	93	26-6-2015	1-7-2022
Airbus Group	679	75	13-5-2016	13-5-2026
Airbus Group	1,018	113	13-5-2016	13-5-2031
Thales	389	56	13-3-2013	19-3-2021
Thales	648	93	13-3-2013	20-3-2018

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

BPCE Group (France) owns or manages shares of the nuclear weapon companies for an amount of US\$ 1,046 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 97 Shareholdings managed by BPCE Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BWX Technologies	United States	58	1.68	31-3-2016
Engility	United States	33	4.84	31-3-2016
Leonardo-Finmeccanica	Italy	115	1.59	30-4-2016
Safran	France	413	1.41	31-5-2016
Thales	France	426	2.33	30-4-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

BPCE Group (France) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 365 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.



Table 98 Bondholdings managed by BPCE Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	3	0.96	30-4-2016
Huntington Ingalls Industries	United States	8	0.70	30-4-2016
Leonardo-Finmeccanica	Italy	167	3.46	30-4-2016
Moog	United States	2	0.55	31-3-2016
Textron	United States	166	5.72	30-4-2016
Thales	France	18	0.82	31-12-2013

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

#### 73. Burgundy Asset Management (Canada)

Burgundy Asset Management (Canada) has made an estimated US\$ 127 million available to the nuclear weapons companies selected for this research project since January 2013.

Burgundy Asset Management (Canada) owns or manages shares of the nuclear weapon companies for an amount of US\$ 127 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 99 Shareholdings managed by Burgundy Asset Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BWX Technologies	United States	127	3.63	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 74. Cacti Asset Management (United States)

Cacti Asset Management (United States) has made an estimated US\$ 38 million available to the nuclear weapons companies selected for this research project since January 2013.

Cacti Asset Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 38 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 100 Shareholdings managed by Cacti Asset Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Jacobs Engineering	United States	38	0.62	30-6-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 75. Caisse de dépôt et placement du Québec (Canada)

Caisse de dépôt et placement du Québec (Canada) has made an estimated US\$ 505 million available to the nuclear weapons companies selected for this research project since January 2013.



Caisse de dépôt et placement du Québec (Canada) owns or manages shares of the nuclear weapon companies for an amount of US\$ 505 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 101 Shareholdings managed by Caisse de dépôt et placement du Québec

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Lockheed Martin	United States	505	0.75	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 76. California First National Bancorp (United States)

California First National Bancorp (United States) has made an estimated US\$ 29 million available to the nuclear weapons companies selected for this research project since January 2013.

California First National Bancorp (United States) provided loans for an estimated amount of US\$ 29 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 102 Loans provided by California First National Bancorp

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

# 77. Cantor Fitzgerald (United States)

Cantor Fitzgerald (United States) has made an estimated US\$ 6 million available to the nuclear weapons companies selected for this research project since January 2013.

Cantor Fitzgerald (United States) underwrote bond issuances for an estimated amount of US\$ 6 million to the nuclear weapon companies since January 2013 (see table below).

Table 103 Underwriting of bond issuances by Cantor Fitzgerald

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	300	3	28-10-2014	30-10-2021
Boeing	250	3	18-2-2015	1-3-2025

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.



#### 78. Capital Group (United States)

Capital Group (United States) has made an estimated US\$ 28,677 million available to the nuclear weapons companies selected for this research project since January 2013.

Capital Group (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 28,677 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 104 Shareholdings managed by Capital Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Airbus Group	The Netherlands	3,141	6.41	29-4-2016
BAE Systems	United Kingdom	1,402	6.34	25-4-2016
Boeing	United States	8,712	10.76	31-3-2016
General Dynamics	United States	3,570	8.89	31-3-2016
Honeywell International	United States	553	0.64	31-3-2016
Leonardo-Finmeccanica	Italy	219	2.98	31-3-2016
Lockheed Martin	United States	8,703	12.90	31-3-2016
Moog	United States	97	6.11	29-4-2016
Northrop Grumman	United States	1,479	4.13	31-3-2016
Orbital ATK	United States	47	0.92	31-3-2016
Raytheon	United States	190	0.52	31-3-2016
Safran	France	370	1.26	31-3-2016
Textron	United States	195	1.99	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 79. Capital One Financial (United States)

Capital One Financial (United States) has made an estimated US\$ 274 million available to the nuclear weapons companies selected for this research project since January 2013.

Capital One Financial (United States) provided loans for an estimated amount of US\$ 249 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 105 Loans provided by Capital One Financial

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	500	20	11-8-2014	17-10-2019
Aecom	1,188	59	11-8-2014	17-10-2021
Aecom	1,925	77	11-8-2014	17-10-2019
Huntington Ingalls Industries	1,250	71	13-7-2015	13-7-2020
Northrop Grumman	575	22	31-3-2011	24-1-2017



Capital One Financial (United States) underwrote bond issuances for an estimated amount of US\$ 25 million to the nuclear weapon companies since January 2013 (see table below).

Table 106 Underwriting of bond issuances by Capital One Financial

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Huntington Ingalls Industries	600	25	2-11-2015	15-11-2025

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

#### 80. Cardinal Capital Management (Canada)

Cardinal Capital Management (Canada) has made an estimated US\$ 70 million available to the nuclear weapons companies selected for this research project since January 2013.

Cardinal Capital Management (Canada) owns or manages shares of the nuclear weapon companies for an amount of US\$ 70 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 107 Shareholdings managed by Cardinal Capital Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BWX Technologies	United States	70	2.02	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 81. Carige Group (Italy)

Carige Group (Italy) has made an estimated US\$ 100 million available to the nuclear weapons companies selected for this research project since January 2013.

Carige Group (Italy) provided loans for an estimated amount of US\$ 100 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 108 Loans provided by Carige Group

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Leonardo-Finmeccanica	3,001	100	9-7-2014	9-7-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.



#### 82. Carlson Capital (United States)

Carlson Capital (United States) has made an estimated US\$ 24 million available to the nuclear weapons companies selected for this research project since January 2013.

Carlson Capital (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 24 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 109 Shareholdings managed by Carlson Capital

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BWX Technologies	United States	24	0.70	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 83. Carlyle Group (United States)

Carlyle Group (United States) has made an estimated US\$ 123 million available to the nuclear weapons companies selected for this research project since January 2013.

Carlyle Group (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 117 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 110 Shareholdings managed by Carlyle Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Textron	United States	117	1.19	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Carlyle Group (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 6 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 111 Bondholdings managed by Carlyle Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Orbital ATK	United States	6	0.90	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

# 84. Cascade Bancorp (United States)

Cascade Bancorp (United States) has made an estimated US\$ 29 million available to the nuclear weapons companies selected for this research project since January 2013.

Cascade Bancorp (United States) provided loans for an estimated amount of US\$ 29 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.



Table 112 Loans provided by Cascade Bancorp

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018

#### 85. CastleOak Securities (United States)

CastleOak Securities (United States) has made an estimated US\$ 14 million available to the nuclear weapons companies selected for this research project since January 2013.

CastleOak Securities (United States) underwrote bond issuances for an estimated amount of US\$ 14 million to the nuclear weapon companies since January 2013 (see table below).

Table 113 Underwriting of bond issuances by CastleOak Securities

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	300	5	27-10-2015	30-10-2025
Boeing	400	9	16-5-2016	15-6-2023

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

#### 86. Cathay Life Insurance (Taiwan)

Cathay Life Insurance (Taiwan) has made an estimated US\$ 84 million available to the nuclear weapons companies selected for this research project since January 2013.

Cathay Life Insurance (Taiwan) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 84 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 114 Bondholdings managed by Cathay Life Insurance

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	25	1.58	31-3-2016
General Dynamics	United States	15	0.50	31-3-2016
Raytheon	United States	29	0.55	31-3-2016
Textron	United States	15	0.53	31-3-2016

Source: *Thomson Reuters Eikon*, "Bond ownership: most recent filings", viewed in August 2016.



#### 87. CAVU Securities (United States)

CAVU Securities (United States) has made an estimated US\$ 14 million available to the nuclear weapons companies selected for this research project since January 2013.

CAVU Securities (United States) underwrote bond issuances for an estimated amount of US\$ 14 million to the nuclear weapon companies since January 2013 (see table below).

Table 115 Underwriting of bond issuances by CAVU Securities

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	300	5	27-10-2015	30-10-2025
Boeing	400	9	16-5-2016	15-6-2023

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

## 88. Central Bank of Libya (Libya)

Central Bank of Libya (Libya) has made an estimated US\$ 159 million available to the nuclear weapons companies selected for this research project since January 2013.

Central Bank of Libya (Libya) provided loans for an estimated amount of US\$ 159 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 116 Loans provided by Central Bank of Libya

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	1,050	39	29-1-2014	29-1-2019
Boeing	2,473	30	23-9-2014	15-10-2015
Boeing	2,473	30	23-9-2014	16-10-2019
Boeing	2,465	30	4-11-2015	3-11-2016
Boeing	2,365	30	4-11-2015	3-11-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

## 89. Central Mutual Insurance (United States)

Central Mutual Insurance (United States) has made an estimated US\$ 1 million available to the nuclear weapons companies selected for this research project since January 2013.

Central Mutual Insurance (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 1 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.



Table 117 Bondholdings managed by Central Mutual Insurance

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Charles Stark Draper Laboratory	United States	1	2.22	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

#### 90. Central Pacific Financial Corporation (United States)

Central Pacific Financial Corporation (United States) has made an estimated US\$ 29 million available to the nuclear weapons companies selected for this research project since January 2013.

Central Pacific Financial Corporation (United States) provided loans for an estimated amount of US\$ 29 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 118 Loans provided by Central Pacific Financial Corporation

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

#### 91. Charles Schwab (United States)

Charles Schwab (United States) has made an estimated US\$ 794 million available to the nuclear weapons companies selected for this research project since January 2013.

Charles Schwab (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 794 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 119 Shareholdings managed by Charles Schwab

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	5	0.51	31-3-2016
BWX Technologies	United States	47	1.34	31-3-2016
Fluor	United States	41	0.55	31-3-2016
Huntington Ingalls Industries	United States	80	1.24	31-3-2016
Lockheed Martin	United States	371	0.55	31-3-2016
Moog	United States	10	0.64	31-3-2016
Raytheon	United States	240	0.66	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.



### 92. Chesapeake Partners Management (United States)

Chesapeake Partners Management (United States) has made an estimated US\$ 27 million available to the nuclear weapons companies selected for this research project since January 2013.

Chesapeake Partners Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 27 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 120 Shareholdings managed by Chesapeake Partners Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	27	2.60	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 93. Chiba Bank (Japan)

Chiba Bank (Japan) has made an estimated US\$ 20 million available to the nuclear weapons companies selected for this research project since January 2013.

Chiba Bank (Japan) provided loans for an estimated amount of US\$ 20 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 121 Loans provided by Chiba Bank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	750	20	7-6-2013	7-6-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

# 94. Children's Investment Fund Management (United Kingdom)

Children's Investment Fund Management (United Kingdom) has made an estimated US\$ 1,469 million available to the nuclear weapons companies selected for this research project since January 2013.

Children's Investment Fund Management (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 1,469 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 122 Shareholdings managed by Children's Investment Fund Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Airbus Group	The Netherlands	1,469	3.03	25-1-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.



#### 95. Chubb (Switzerland)

Chubb (Switzerland) has made an estimated US\$ 7 million available to the nuclear weapons companies selected for this research project since January 2013.

Chubb (Switzerland) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 7 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 123 Bondholdings managed by Chubb

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Huntington Ingalls Industries	United States	7	0.58	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

#### 96. CI Financial (Canada)

CI Financial (Canada) has made an estimated US\$ 95 million available to the nuclear weapons companies selected for this research project since January 2013.

CI Financial (Canada) owns or manages shares of the nuclear weapon companies for an amount of US\$ 81 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 124 Shareholdings managed by CI Financial

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	81	1.08	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

CI Financial (Canada) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 14 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 125 Bondholdings managed by CI Financial

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Huntington Ingalls Industries	United States	14	1.20	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

#### 97. CIBC (Canada)

CIBC (Canada) has made an estimated US\$ 70 million available to the nuclear weapons companies selected for this research project since January 2013.

CIBC (Canada) provided loans for an estimated amount of US\$ 70 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.



Table 126 Loans provided by CIBC

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Bechtel	1,000	28	7-6-2016	7-6-2021
Bechtel	1,500	42	7-6-2016	7-6-2021

## 98. Cigna (United States)

Cigna (United States) has made an estimated US\$ 34 million available to the nuclear weapons companies selected for this research project since January 2013.

Cigna (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 34 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 127 Bondholdings managed by Cigna

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
General Dynamics	United States	26	0.88	31-3-2016
Moog	United States	4	1.28	31-3-2016
Orbital ATK	United States	5	0.67	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

#### 99. Citadel (United States)

Citadel (United States) has made an estimated US\$ 195 million available to the nuclear weapons companies selected for this research project since January 2013.

Citadel (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 195 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 128 Shareholdings managed by Citadel

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Raytheon	United States	195	0.54	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 100. Citigroup (United States)

Citigroup (United States) has made an estimated US\$ 17,521 million available to the nuclear weapons companies selected for this research project since January 2013.



Citigroup (United States) provided loans for an estimated amount of US\$ 12,989 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 129 Loans provided by Citigroup

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	700	70	14-10-2011	19-10-2016
Aecom	1,000	100	14-10-2011	19-10-2016
Aecom	39	4	16-12-2013	19-12-2018
Aecom	655	66	16-12-2013	19-12-2018
Aecom	961	96	16-12-2013	19-12-2018
Aerojet Rocketdyne	100	8	30-5-2014	30-5-2019
Aerojet Rocketdyne	200	15	30-5-2014	30-5-2019
Airbus Group	3,797	134	14-10-2014	14-10-2019
BAE Systems	3,269	131	12-12-2013	12-12-2018
Bechtel	975	146	27-7-2012	27-7-2017
Bechtel	1,000	150	14-6-2013	14-6-2018
Bechtel	2,000	300	14-6-2013	14-6-2018
Bechtel	1,000	120	19-9-2014	17-10-2019
Bechtel	1,000	150	19-9-2014	17-10-2019
Bechtel	2,000	300	19-9-2014	17-10-2019
Bechtel	1,000	48	7-6-2016	7-6-2021
Bechtel	500	67	7-6-2016	7-6-2021
Bechtel	1,500	72	7-6-2016	7-6-2021
Boeing	2,300	460	5-11-2011	10-11-2016
Boeing	2,300	690	29-9-2012	15-10-2017
Boeing	2,393	798	7-11-2013	6-11-2014
Boeing	2,453	818	7-11-2013	7-11-2018
Boeing	2,473	175	23-9-2014	15-10-2015
Boeing	2,473	175	23-9-2014	16-10-2019
Boeing	2,365	175	4-11-2015	3-11-2020
Boeing	2,465	225	4-11-2015	3-11-2016
Fluor	1,800	270	7-11-2012	9-11-2017
Fluor	1,700	255	28-5-2014	28-5-2019
Fluor	1,800	270	28-5-2014	28-5-2019
Fluor	1,700	121	25-2-2016	25-2-2021
Fluor	1,800	163	25-2-2016	25-2-2021
Honeywell International	3,000	600	30-3-2012	2-4-2017
Honeywell International	4,000	800	18-11-2013	10-12-2018
Honeywell International	4,000	230	10-7-2015	10-7-2020
Honeywell International	3,000	750	30-9-2015	28-9-2016

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Honeywell International	1,500	90	29-4-2016	28-4-2017
Honeywell International	4,000	800	29-4-2016	29-4-2021
Huntington Ingalls Industries	489	27	23-9-2013	6-11-2018
Huntington Ingalls Industries	650	35	23-9-2013	6-11-2018
Leonardo-Finmeccanica	3,001	100	9-7-2014	9-7-2019
Leonardo-Finmeccanica	2,212	90	6-7-2015	6-7-2020
Lockheed Martin	1,500	120	14-8-2014	14-8-2019
Lockheed Martin	2,500	230	9-10-2015	9-10-2020
Lockheed Martin	7,000	1,100	9-10-2015	7-10-2016
Northrop Grumman	1,500	150	8-9-2011	8-9-2016
Northrop Grumman	1,775	355	29-8-2013	29-8-2018
Northrop Grumman	1,600	213	8-7-2015	8-7-2020
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	250	14	8-10-2013	1-11-2020
Orbital ATK	1,010	17	8-10-2013	1-11-2018
Orbital ATK	150	7	24-6-2014	24-12-2018
Orbital ATK	800	46	29-9-2015	29-9-2020
Orbital ATK	1,000	57	29-9-2015	29-9-2020
Raytheon	1,400	76	13-12-2011	13-12-2016
Raytheon	1,250	167	13-11-2015	13-11-2020
Safran	2,744	183	4-12-2015	4-12-2020
Textron	1,000	100	30-9-2013	4-10-2018
Textron	500	50	23-1-2014	23-1-2019

Citigroup (United States) underwrote share issuances for an estimated amount of US\$ 348 million to the nuclear weapon companies since January 2013 (see table below).

Table 130 Underwriting of share issuances by Citigroup

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date
Larsen & Toubro	34	17	12-6-2014
Larsen & Toubro	26	26	26-2-2015
Safran	1,218	305	15-11-2013

Source: Thomson Reuters Eikon, "Bond and share issue underwritings", viewed in June/July 2016.

Citigroup (United States) underwrote bond issuances for an estimated amount of US\$ 4,184 million to the nuclear weapon companies since January 2013 (see table below).



Table 131 Underwriting of bond issuances by Citigroup

- Table 131 Office Wil		i issualices i	oy oningro	чь
Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Aerojet Rocketdyne	460	115	18-1-2013	15-3-2021
BAE Systems	300	100	30-9-2014	7-10-2044
BAE Systems	800	267	30-9-2014	7-10-2024
BAE Systems	250	63	3-12-2015	7-10-2044
BAE Systems	500	125	3-12-2015	15-12- 2020
BAE Systems	750	188	3-12-2015	15-12- 2025
Boeing	350	35	30-4-2013	15-11- 2018
Boeing	300	25	28-10- 2014	30-10- 2021
Boeing	300	25	28-10- 2014	30-10- 2024
Boeing	250	41	28-10- 2014	30-10- 2017
Boeing	250	8	18-2-2015	1-3-2035
Boeing	250	8	18-2-2015	1-3-2045
Boeing	250	28	18-2-2015	1-3-2025
Boeing	300	9	27-10- 2015	30-10- 2025
Boeing	350	11	27-10- 2015	30-10- 2020
Boeing	250	21	27-10- 2015	30-10- 2022
Boeing	400	10	16-5-2016	15-6-2023
Boeing	400	12	16-5-2016	15-6-2026
Boeing	400	28	16-5-2016	15-6-2046
Charles Stark Draper Laboratory	50	25	29-1-2015	1-9-2030
Fluor	500	34	18-11- 2014	15-12- 2024
Fluor	555	9	14-3-2016	21-3-2023
Honeywell International	300	10	18-11- 2013	1-12-2023
Honeywell International	700	23	18-11- 2013	17-11- 2015
Honeywell International	837	180	15-2-2016	22-2-2028
Honeywell International	1,116	240	15-2-2016	22-2-2018
Honeywell International	1,116	240	15-2-2016	21-2-2020
Honeywell International	1,395	300	15-2-2016	22-2-2023
Larsen & Toubro	200	67	9-9-2014	24-9-2019



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Leonardo-Finmeccanica	950	59	26-11- 2013	19-1-2021
Leonardo-Finmeccanica	339	20	17-1-2014	19-1-2021
Lockheed Martin	500	40	12-2-2015	1-3-2035
Lockheed Martin	750	60	12-2-2015	1-3-2025
Lockheed Martin	1,000	80	12-2-2015	1-3-2045
Lockheed Martin	500	75	16-11- 2015	15-1-2023
Lockheed Martin	500	75	16-11- 2015	15-5-2036
Lockheed Martin	750	113	16-11- 2015	23-11- 2018
Lockheed Martin	1,250	188	16-11- 2015	23-11- 2020
Lockheed Martin	2,000	300	16-11- 2015	15-1-2026
Lockheed Martin	2,000	300	16-11- 2015	15-5-2046
Northrop Grumman	850	57	28-5-2013	1-6-2018
Northrop Grumman	950	63	28-5-2013	1-6-2043
Northrop Grumman	1,050	70	28-5-2013	1-8-2023
Northrop Grumman	600	24	3-2-2015	15-4-2045
Orbital ATK	400	43	22-9-2015	1-10-2023
Raytheon	300	30	24-11- 2014	15-12- 2024
Raytheon	300	30	24-11- 2014	15-12- 20 <del>44</del>
Textron	250	25	23-1-2014	1-3-2021
Textron	350	35	23-1-2014	1-3-2024
Textron	350	22	23-10- 2014	1-3-2025
Textron	350	85	4-3-2016	15-3-2026
Thales	389	56	13-3-2013	19-3-2021
Thales	648	93	13-3-2013	20-3-2018

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

## 101. Citizens Bank & Trust (United States)

Citizens Bank & Trust (United States) has made an estimated US\$ 36 million available to the nuclear weapons companies selected for this research project since January 2013.



Citizens Bank & Trust (United States) provided loans for an estimated amount of US\$ 36 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 132 Loans provided by Citizens Bank & Trust

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
BWX Technologies	600	36	11-5-2015	11-5-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

#### 102. Citizens Financial Group (United States)

Citizens Financial Group (United States) has made an estimated US\$ 355 million available to the nuclear weapons companies selected for this research project since January 2013.

Citizens Financial Group (United States) provided loans for an estimated amount of US\$ 355 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 133 Loans provided by Citizens Financial Group

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aerojet Rocketdyne	350	23	17-6-2016	17-6-2021
Aerojet Rocketdyne	400	27	17-6-2016	17-6-2021
Moog	900	85	28-3-2013	28-3-2018
Moog	1,100	110	22-5-2014	22-5-2019
Moog	1,100	110	28-6-2016	28-6-2021

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

# 103. City National Corporation (United States)

City National Corporation (United States) has made an estimated US\$ 108 million available to the nuclear weapons companies selected for this research project since January 2013.

City National Corporation (United States) provided loans for an estimated amount of US\$ 108 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.



Table 134 Loans provided by City National Corporation

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	700	35	14-10-2011	19-10-2016
Aecom	1,000	50	14-10-2011	19-10-2016
Aerojet Rocketdyne	100	8	30-5-2014	30-5-2019
Aerojet Rocketdyne	200	15	30-5-2014	30-5-2019

## 104. CL King & Associates (United States)

CL King & Associates (United States) has made an estimated US\$ 18 million available to the nuclear weapons companies selected for this research project since January 2013.

CL King & Associates (United States) underwrote bond issuances for an estimated amount of US\$ 18 million to the nuclear weapon companies since January 2013 (see table below).

Table 135 Underwriting of bond issuances by CL King & Associates

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Lockheed Martin	500	1	16-11-2015	15-1-2023
Lockheed Martin	500	1	16-11-2015	15-5-2036
Lockheed Martin	750	2	16-11-2015	23-11-2018
Lockheed Martin	1,250	3	16-11-2015	23-11-2020
Lockheed Martin	2,000	5	16-11-2015	15-1-2026
Lockheed Martin	2,000	5	16-11-2015	15-5-2046

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

# 105. CNO Financial Group (United States)

CNO Financial Group (United States) has made an estimated US\$ 31 million available to the nuclear weapons companies selected for this research project since January 2013.

CNO Financial Group (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 31 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 136 Bondholdings managed by CNO Financial Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Textron	United States	31	1.06	31-3-2016



#### 106. Comerica (United States)

Comerica (United States) has made an estimated US\$ 261 million available to the nuclear weapons companies selected for this research project since January 2013.

Comerica (United States) provided loans for an estimated amount of US\$ 261 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 137 Loans provided by Comerica

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	600	40	23-9-2011	30-9-2016
Aecom	700	35	14-10-2011	19-10-2016
Aecom	1,000	50	14-10-2011	19-10-2016
Aecom	1,050	39	29-1-2014	29-1-2019
BWX Technologies	700	32	22-5-2012	8-6-2017
Lockheed Martin	16	6	30-4-2014	1-5-2015
Northrop Grumman	575	22	31-3-2011	24-1-2017
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018
Orbital ATK	150	7	24-6-2014	24-12-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

#### 107. Commerzbank (Germany)

Commerzbank (Germany) has made an estimated US\$ 1,630 million available to the nuclear weapons companies selected for this research project since January 2013.

Commerzbank (Germany) provided loans for an estimated amount of US\$ 1,341 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 138 Loans provided by Commerzbank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	500	20	11-8-2014	17-10-2019
Aecom	1,050	47	11-8-2014	17-10-2019
Aecom	1,188	59	11-8-2014	17-10-2021
Aecom	1,925	77	11-8-2014	17-10-2019



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Airbus Group	3,797	134	14-10-2014	14-10-2019
BAE Systems	3,269	131	12-12-2013	12-12-2018
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	30	23-9-2014	15-10-2015
Boeing	2,473	30	23-9-2014	16-10-2019
Boeing	2,465	30	4-11-2015	3-11-2016
Boeing	2,365	30	4-11-2015	3-11-2020
Leonardo-Finmeccanica	3,001	150	9-7-2014	9-7-2019
Leonardo-Finmeccanica	2,212	139	6-7-2015	6-7-2020
Safran	2,744	183	4-12-2015	4-12-2020
Serco	1,159	72	21-2-2012	28-3-2017
Serco	714	<del>4</del> 5	12-3-2015	12-3-2019
Thales	1,835	122	19-12-2014	19-12-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

Commerzbank (Germany) underwrote bond issuances for an estimated amount of US\$ 289 million to the nuclear weapon companies since January 2013 (see table below).

Table 139 Underwriting of bond issuances by Commerzbank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Airbus Group	640	64	20-10-2014	29-10-2029
Boeing	350	10	30-4-2013	15-11-2018
Boeing	300	4	28-10-2014	30-10-2021
Boeing	300	4	28-10-2014	30-10-2024
Boeing	250	3	18-2-2015	1-3-2025
Boeing	250	3	18-2-2015	1-3-2035
Boeing	250	3	18-2-2015	1-3-2045
Boeing	250	4	27-10-2015	30-10-2022
Boeing	300	5	27-10-2015	30-10-2025
Boeing	350	5	27-10-2015	30-10-2020
Boeing	400	5	16-5-2016	15-6-2046
Boeing	400	8	16-5-2016	15-6-2026
Boeing	400	9	16-5-2016	15-6-2023
Leonardo-Finmeccanica	950	59	26-11-2013	19-1-2021
Leonardo-Finmeccanica	339	20	17-1-2014	19-1-2021
Thales	668	83	31-5-2016	7-6-2023



### 108. Commonwealth Bank of Australia (Australia)

Commonwealth Bank of Australia (Australia) has made an estimated US\$ 428 million available to the nuclear weapons companies selected for this research project since January 2013.

Commonwealth Bank of Australia (Australia) provided loans for an estimated amount of US\$ 428 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 140 Loans provided by Commonwealth Bank of Australia

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Airbus Group	3,797	66	14-10-2014	14-10-2019
BAE Systems	3,269	131	12-12-2013	12-12-2018
Honeywell International	4,000	73	18-11-2013	10-12-2018
Larsen & Toubro	47	5	27-8-2013	1-6-2018
Larsen & Toubro	59	7	27-8-2013	1-8-2017
Larsen & Toubro	64	7	27-8-2013	1-6-2018
Larsen & Toubro	100	11	27-8-2013	1-6-2018
Larsen & Toubro	100	11	27-8-2013	1-6-2018
Serco	1,159	72	21-2-2012	28-3-2017
Serco	714	45	12-3-2015	12-3-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

### 109. Cooper Creek Partners Management (United States)

Cooper Creek Partners Management (United States) has made an estimated US\$ 8 million available to the nuclear weapons companies selected for this research project since January 2013.

Cooper Creek Partners Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 8 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 141 Shareholdings managed by Cooper Creek Partners Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Engility	United States	8	1.19	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.



## 110. Corpbay Financial Services (India)

Corpbay Financial Services (India) has made an estimated US\$ 11 million available to the nuclear weapons companies selected for this research project since January 2013.

Corpbay Financial Services (India) underwrote bond issuances for an estimated amount of US\$ 11 million to the nuclear weapon companies since January 2013 (see table below).

Table 142 Underwriting of bond issuances by Corpbay Financial Services

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Larsen & Toubro	36	5	13-6-2014	13-5-2016
Larsen & Toubro	45	6	13-6-2014	13-6-2016

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

## 111. Corsair Capital Management (United States)

Corsair Capital Management (United States) has made an estimated US\$ 37 million available to the nuclear weapons companies selected for this research project since January 2013.

Corsair Capital Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 37 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 143 Shareholdings managed by Corsair Capital Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Orbital ATK	United States	37	0.73	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 112. CPP Investment Board (Canada)

CPP Investment Board (Canada) has made an estimated US\$ 28 million available to the nuclear weapons companies selected for this research project since January 2013.

CPP Investment Board (Canada) owns or manages shares of the nuclear weapon companies for an amount of US\$ 28 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 144 Shareholdings managed by CPP Investment Board

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BWX Technologies	United States	28	0.80	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.



# 113. Crédit Agricole (France)

Crédit Agricole (France) has made an estimated US\$ 7,572 million available to the nuclear weapons companies selected for this research project since January 2013.

Crédit Agricole (France) provided loans for an estimated amount of US\$ 4,340 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 145 Loans provided by Crédit Agricole

		Est. participation		
Company	Total value (US\$ mln)	of this bank (US\$ mln)	Closing date	Maturity date
Aecom	1,050	39	29-1-2014	29-1-2019
Aecom	500	20	11-8-2014	17-10-2019
Aecom	1,050	47	11-8-2014	17-10-2019
Aecom	1,188	59	11-8-2014	17-10-2021
Aecom	1,925	77	11-8-2014	17-10-2019
Airbus Group	3,797	134	14-10-2014	14-10-2019
BAE Systems	3,269	131	12-12-2013	12-12-2018
Bechtel	975	146	27-7-2012	27-7-2017
Bechtel	1,000	100	14-6-2013	14-6-2018
Bechtel	2,000	200	14-6-2013	14-6-2018
Bechtel	1,000	100	19-9-2014	17-10-2019
Bechtel	1,000	120	19-9-2014	17-10-2019
Bechtel	2,000	200	19-9-2014	17-10-2019
Bechtel	1,000	48	7-6-2016	7-6-2021
Bechtel	500	67	7-6-2016	7-6-2021
Bechtel	1,500	72	7-6-2016	7-6-2021
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	60	23-9-2014	15-10-2015
Boeing	2,473	60	23-9-2014	16-10-2019
Boeing	2,465	60	4-11-2015	3-11-2016
Boeing	2,365	60	4-11-2015	3-11-2020
BWX Technologies	700	32	22-5-2012	8-6-2017
BWX Technologies	400	32	11-5-2015	11-5-2020
BWX Technologies	500	40	11-5-2015	11-5-2020
BWX Technologies	600	48	11-5-2015	11-5-2020
Fluor	1,800	180	7-11-2012	9-11-2017
Fluor	1,700	85	25-2-2016	25-2-2021
Fluor	1,800	100	25-2-2016	25-2-2021
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	60	10-7-2015	10-7-2020
Honeywell International	1,500	25	29-4-2016	28-4-2017

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Leonardo-Finmeccanica	3,001	100	9-7-2014	9-7-2019
Leonardo-Finmeccanica	2,212	139	6-7-2015	6-7-2020
Lockheed Martin	1,500	120	14-8-2014	14-8-2019
Lockheed Martin	2,500	230	9-10-2015	9-10-2020
Lockheed Martin	7,000	530	9-10-2015	7-10-2016
Raytheon	1,250	44	13-11-2015	13-11-2020
Safran	1,320	176	21-10-2011	21-10-2016
Safran	2,744	235	4-12-2015	4-12-2020
Serco	1,159	72	21-2-2012	28-3-2017
Serco	45	9	12-3-2015	12-12-2016
Serco	714	45	12-3-2015	12-3-2019
Thales	1,835	122	19-12-2014	19-12-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

Crédit Agricole (France) underwrote share issuances for an estimated amount of US\$ 699 million to the nuclear weapon companies since January 2013 (see table below).

Table 146 Underwriting of share issuances by Crédit Agricole

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date
Airbus Group	2,987	597	9-4-2013
Serco	62	7	16-4-2015
Serco	785	94	16-4-2015

Source: Thomson Reuters Eikon, "Bond and share issue underwritings", viewed in June/July 2016.

Crédit Agricole (France) underwrote bond issuances for an estimated amount of US\$ 1,750 million to the nuclear weapon companies since January 2013 (see table below).

Table 147 Underwriting of bond issuances by Crédit Agricole

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Airbus Group	640	96	20-10-2014	29-10-2029
Airbus Group	679	75	13-5-2016	13-5-2026
Airbus Group	1,018	113	13-5-2016	13-5-2031
Boeing	350	10	30-4-2013	15-11-2018
Boeing	300	9	28-10-2014	30-10-2021
Boeing	300	9	28-10-2014	30-10-2024



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	250	18	28-10-2014	30-10-2017
Boeing	250	6	18-2-2015	1-3-2025
Boeing	250	8	18-2-2015	1-3-2035
Boeing	250	8	18-2-2015	1-3-2045
Boeing	300	9	27-10-2015	30-10-2025
Boeing	350	11	27-10-2015	30-10-2020
Boeing	250	11	27-10-2015	30-10-2022
Boeing	400	12	16-5-2016	15-6-2026
Boeing	400	16	16-5-2016	15-6-2023
Boeing	400	16	16-5-2016	15-6-2046
Fluor	500	18	18-11-2014	15-12-2024
Fluor	555	139	14-3-2016	21-3-2023
Leonardo-Finmeccanica	950	59	26-11-2013	19-1-2021
Leonardo-Finmeccanica	339	20	17-1-2014	19-1-2021
Lockheed Martin	500	9	12-2-2015	1-3-2035
Lockheed Martin	750	14	12-2-2015	1-3-2025
Lockheed Martin	1,000	18	12-2-2015	1-3-2045
Lockheed Martin	500	38	16-11-2015	15-1-2023
Lockheed Martin	500	38	16-11-2015	15-5-2036
Lockheed Martin	750	56	16-11-2015	23-11-2018
Lockheed Martin	1,250	94	16-11-2015	23-11-2020
Lockheed Martin	2,000	150	16-11-2015	15-1-2026
Lockheed Martin	2,000	150	16-11-2015	15-5-2046
Raytheon	300	8	24-11-2014	15-12-2024
Raytheon	300	8	24-11-2014	15-12-2044
Safran	699	233	5-1-2016	31-12-2020
Thales	389	56	13-3-2013	19-3-2021
Thales	648	93	13-3-2013	20-3-2018
Thales	668	125	31-5-2016	7-6-2023

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

Crédit Agricole (France) owns or manages shares of the nuclear weapon companies for an amount of US\$ 734 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 148 Shareholdings managed by Crédit Agricole

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Airbus Group	The Netherlands	443	0.91	31-5-2016



Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Leonardo-Finmeccanica	Italy	66	0.97	31-5-2016
Thales	France	225	1.23	31-5-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Crédit Agricole (France) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 49 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 149 Bondholdings managed by Crédit Agricole

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Leonardo-Finmeccanica	Italy	26	0.53	30-4-2016
Thales	France	23	1.06	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 114. Crédit Mutuel CIC Group (France)

Crédit Mutuel CIC Group (France) has made an estimated US\$ 1,267 million available to the nuclear weapons companies selected for this research project since January 2013.

Crédit Mutuel CIC Group (France) provided loans for an estimated amount of US\$ 1,130 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 150 Loans provided by Crédit Mutuel CIC Group

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Airbus Group	3,797	134	14-10-2014	14-10-2019
BAE Systems	3,269	131	12-12-2013	12-12-2018
Bechtel	1,000	20	7-6-2016	7-6-2021
Bechtel	1,500	30	7-6-2016	7-6-2021
Leonardo-Finmeccanica	3,001	100	9-7-2014	9-7-2019
Leonardo-Finmeccanica	2,212	<del>4</del> 5	6-7-2015	6-7-2020
Lockheed Martin	1,500	35	14-8-2014	14-8-2019
Lockheed Martin	2,500	50	9-10-2015	9-10-2020
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018
Safran	1,320	198	21-10-2011	21-10-2016
Safran	2,744	235	4-12-2015	4-12-2020
Thales	1,835	122	19-12-2014	19-12-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.



Crédit Mutuel CIC Group (France) underwrote bond issuances for an estimated amount of US\$ 137 million to the nuclear weapon companies since January 2013 (see table below).

Table 151 Underwriting of bond issuances by Crédit Mutuel CIC Group

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Safran	275	137	7-4-2014	11-4-2024

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

### 115. Credit Suisse (Switzerland)

Credit Suisse (Switzerland) has made an estimated US\$ 1,024 million available to the nuclear weapons companies selected for this research project since January 2013.

Credit Suisse (Switzerland) provided loans for an estimated amount of US\$ 592 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 152 Loans provided by Credit Suisse

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Airbus Group	3,797	66	14-10-2014	14-10-2019
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	90	23-9-2014	15-10-2015
Boeing	2,473	90	23-9-2014	16-10-2019
Huntington Ingalls Industries	489	27	23-9-2013	6-11-2018
Huntington Ingalls Industries	650	35	23-9-2013	6-11-2018
Northrop Grumman	575	58	31-3-2011	24-1-2017
Northrop Grumman	1,600	64	8-7-2015	8-7-2020
Raytheon	1,400	76	13-12-2011	13-12-2016
Raytheon	1,250	44	13-11-2015	13-11-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

Credit Suisse (Switzerland) underwrote share issuances for an estimated amount of US\$ 95 million to the nuclear weapon companies since January 2013 (see table below).

Table 153 Underwriting of share issuances by Credit Suisse

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date
Larsen & Toubro	95	95	14-3-2014



Credit Suisse (Switzerland) underwrote bond issuances for an estimated amount of US\$ 325 million to the nuclear weapon companies since January 2013 (see table below).

Table 154 Underwriting of bond issuances by Credit Suisse

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	350	10	30-4-2013	15-11-2018
Boeing	300	9	28-10-2014	30-10-2021
Boeing	300	9	28-10-2014	30-10-2024
Boeing	250	34	28-10-2014	30-10-2017
Boeing	250	6	18-2-2015	1-3-2025
Boeing	250	8	18-2-2015	1-3-2045
Boeing	250	21	18-2-2015	1-3-2035
Huntington Ingalls Industries	600	60	17-11-2014	15-12-2021
Northrop Grumman	850	26	28-5-2013	1-6-2018
Northrop Grumman	950	29	28-5-2013	1-6-20 <del>4</del> 3
Northrop Grumman	1,050	32	28-5-2013	1-8-2023
Northrop Grumman	600	24	3-2-2015	15-4-2045
Raytheon	300	30	24-11-2014	15-12-2024
Raytheon	300	30	24-11-2014	15-12-2044

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

Credit Suisse (Switzerland) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 12 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 155 Bondholdings managed by Credit Suisse

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Moog	United States	6	2.00	31-3-2016
Orbital ATK	United States	6	0.86	31-5-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

# 116. Cuna Mutual Group (United States)

Cuna Mutual Group (United States) has made an estimated US\$ 15 million available to the nuclear weapons companies selected for this research project since January 2013.

Cuna Mutual Group (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 15 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.



Table 156 Bondholdings managed by Cuna Mutual Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Safran	France	15	0.71	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 117. D.E. Shaw & Co. (United States)

D.E. Shaw & Co. (United States) has made an estimated US\$ 70 million available to the nuclear weapons companies selected for this research project since January 2013.

D.E. Shaw & Co. (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 70 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 157 Shareholdings managed by D.E. Shaw & Co.

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	7	0.70	31-3-2016
BWX Technologies	United States	23	0.67	31-3-2016
Huntington Ingalls Industries	United States	39	0.61	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 118. Danske Bank (Denmark)

Danske Bank (Denmark) has made an estimated US\$ 309 million available to the nuclear weapons companies selected for this research project since January 2013.

Danske Bank (Denmark) provided loans for an estimated amount of US\$ 224 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 158 Loans provided by Danske Bank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Airbus Group	3,797	66	14-10-2014	14-10-2019
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	60	10-7-2015	10-7-2020
Honeywell International	1,500	25	29-4-2016	28-4-2017

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

Danske Bank (Denmark) underwrote bond issuances for an estimated amount of US\$ 86 million to the nuclear weapon companies since January 2013 (see table below).



Table 159 Underwriting of bond issuances by Danske Bank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Northrop Grumman	850	26	28-5-2013	1-6-2018
Northrop Grumman	950	29	28-5-2013	1-6-2043
Northrop Grumman	1,050	32	28-5-2013	1-8-2023

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

# 119. DBS (Singapore)

DBS (Singapore) has made an estimated US\$ 638 million available to the nuclear weapons companies selected for this research project since January 2013.

DBS (Singapore) provided loans for an estimated amount of US\$ 638 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 160 Loans provided by DBS

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Airbus Group	3,797	66	14-10-2014	14-10-2019
Bechtel	1,000	20	7-6-2016	7-6-2021
Bechtel	1,500	30	7-6-2016	7-6-2021
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	30	23-9-2014	15-10-2015
Boeing	2,473	30	23-9-2014	16-10-2019
Boeing	2,465	60	4-11-2015	3-11-2016
Boeing	2,365	60	4-11-2015	3-11-2020
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	60	10-7-2015	10-7-2020
Honeywell International	1,500	25	29-4-2016	28-4-2017
Serco	1,159	72	21-2-2012	28-3-2017
Serco	714	45	12-3-2015	12-3-2019
Textron	500	25	23-1-2014	23-1-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.



## 120. Deka Group (Germany)

Deka Group (Germany) has made an estimated US\$ 287 million available to the nuclear weapons companies selected for this research project since January 2013.

Deka Group (Germany) owns or manages shares of the nuclear weapon companies for an amount of US\$ 256 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 161 Shareholdings managed by Deka Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Airbus Group	The Netherlands	256	0.53	31-5-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Deka Group (Germany) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 31 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 162 Bondholdings managed by Deka Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Leonardo-Finmeccanica	Italy	31	0.63	30-6-2015

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 121. Deutsche Bank (Germany)

Deutsche Bank (Germany) has made an estimated US\$ 5,154 million available to the nuclear weapons companies selected for this research project since January 2013.

Deutsche Bank (Germany) provided loans for an estimated amount of US\$ 1,946 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 163 Loans provided by Deutsche Bank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Airbus Group	3,797	134	14-10-2014	14-10-2019
BAE Systems	3,269	131	12-12-2013	12-12-2018
Bechtel	1,000	20	7-6-2016	7-6-2021
Bechtel	1,500	30	7-6-2016	7-6-2021
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	90	23-9-2014	15-10-2015
Boeing	2,473	90	23-9-2014	16-10-2019
Boeing	2,465	90	4-11-2015	3-11-2016



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Boeing	2,365	90	4-11-2015	3-11-2020
Engility	50	10	23-4-2014	9-5-2019
Engility	250	50	23-4-2014	9-5-2021
Engility	393	79	23-4-2014	9-5-2020
Honeywell International	3,000	129	30-3-2012	2-4-2017
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	190	10-7-2015	10-7-2020
Honeywell International	1,500	65	29-4-2016	28-4-2017
Honeywell International	4,000	343	29-4-2016	29-4-2021
Northrop Grumman	1,600	64	8-7-2015	8-7-2020
Raytheon	1,250	44	13-11-2015	13-11-2020
Safran	2,744	183	4-12-2015	4-12-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

Deutsche Bank (Germany) underwrote bond issuances for an estimated amount of US\$ 1,681 million to the nuclear weapon companies since January 2013 (see table below).

Table 164 Underwriting of bond issuances by Deutsche Bank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Airbus Group	679	75	13-5-2016	13-5-2026
Airbus Group	1,018	113	13-5-2016	13-5-2031
Airbus Group	1,209	242	14-6-2016	14-6-2021
BAE Systems	300	100	30-9-2014	7-10-2044
BAE Systems	800	267	30-9-2014	7-10-2024
Boeing	150	50	30-4-2013	3-11-2014
Boeing	250	9	28-10-2014	30-10-2017
Boeing	300	9	28-10-2014	30-10-2021
Boeing	300	25	28-10-2014	30-10-2024
Boeing	250	8	18-2-2015	1-3-2035
Boeing	250	8	18-2-2015	1-3-2045
Boeing	250	28	18-2-2015	1-3-2025
Boeing	300	9	27-10-2015	30-10-2025
Boeing	350	11	27-10-2015	30-10-2020
Boeing	250	21	27-10-2015	30-10-2022
Boeing	400	10	16-5-2016	15-6-2023
Boeing	400	16	16-5-2016	15-6-2046
Boeing	400	18	16-5-2016	15-6-2026



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Honeywell International	300	30	18-11-2013	1-12-2023
Honeywell International	700	70	18-11-2013	17-11-2015
Larsen & Toubro	36	5	13-6-2014	13-5-2016
Leonardo-Finmeccanica	950	59	26-11-2013	19-1-2021
Leonardo-Finmeccanica	339	20	17-1-2014	19-1-2021
Northrop Grumman	850	57	28-5-2013	1-6-2018
Northrop Grumman	950	63	28-5-2013	1-6-2043
Northrop Grumman	1,050	70	28-5-2013	1-8-2023
Northrop Grumman	600	126	3-2-2015	15-4-2045
Raytheon	300	8	24-11-2014	15-12-2024
Raytheon	300	8	24-11-2014	15-12-2044
Thales	389	56	13-3-2013	19-3-2021
Thales	648	93	13-3-2013	20-3-2018

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

Deutsche Bank (Germany) owns or manages shares of the nuclear weapon companies for an amount of US\$ 1,380 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 165 Shareholdings managed by Deutsche Bank

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Airbus Group	The Netherlands	271	0.56	31-5-2016
BAE Systems	United Kingdom	399	1.79	1-6-2016
BWX Technologies	United States	24	0.69	31-3-2016
Fluor	United States	102	1.48	29-2-2016
Moog	United States	8	0.50	31-3-2016
Raytheon	United States	577	1.58	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Deutsche Bank (Germany) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 148 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 166 Bondholdings managed by Deutsche Bank

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	11	3.24	30-4-2016
General Dynamics	United States	45	1.56	31-3-2016
Moog	United States	4	1.27	30-4-2016
Northrop Grumman	United States	43	0.67	31-3-2016



Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Raytheon	United States	45	0.83	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

### 122. Dimensional Fund Advisors (United States)

Dimensional Fund Advisors (United States) has made an estimated US\$ 999 million available to the nuclear weapons companies selected for this research project since January 2013.

Dimensional Fund Advisors (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 999 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 167 Shareholdings managed by Dimensional Fund Advisors

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	115	2.44	31-3-2016
Aerojet Rocketdyne	United States	28	2.69	31-3-2016
BWX Technologies	United States	49	1.40	31-3-2016
Engility	United States	20	2.94	31-3-2016
Fluor	United States	113	1.51	31-3-2016
Huntington Ingalls Industries	United States	57	0.89	31-3-2016
Jacobs Engineering	United States	133	2.50	31-3-2016
Moog	United States	57	4.91	31-3-2016
Northrop Grumman	United States	242	0.67	31-3-2016
Orbital ATK	United States	96	1.89	31-3-2016
Textron	United States	89	0.91	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 123. Divine Capital Markets (United States)

Divine Capital Markets (United States) has made an estimated US\$ 19 million available to the nuclear weapons companies selected for this research project since January 2013.

Divine Capital Markets (United States) underwrote bond issuances for an estimated amount of US\$ 19 million to the nuclear weapon companies since January 2013 (see table below).

Table 168 Underwriting of bond issuances by Divine Capital Markets

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	300	3	28-10-2014	30-10-2021
Boeing	250	3	18-2-2015	1-3-2025



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	250	6	27-10-2015	30-10-2022
Boeing	400	8	16-5-2016	15-6-2026

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

## 124. Drexel Hamilton (United States)

Drexel Hamilton (United States) has made an estimated US\$ 140 million available to the nuclear weapons companies selected for this research project since January 2013.

Drexel Hamilton (United States) underwrote bond issuances for an estimated amount of US\$ 140 million to the nuclear weapon companies since January 2013 (see table below).

Table 169 Underwriting of bond issuances by Drexel Hamilton

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	300	3	28-10-2014	30-10-2024
Boeing	250	3	18-2-2015	1-3-2045
Boeing	350	9	27-10-2015	30-10-2020
Boeing	400	4	16-5-2016	15-6-2046
Lockheed Martin	500	3	12-2-2015	1-3-2035
Lockheed Martin	750	4	12-2-2015	1-3-2025
Lockheed Martin	1,000	5	12-2-2015	1-3-2045
Lockheed Martin	500	1	16-11-2015	15-1-2023
Lockheed Martin	500	1	16-11-2015	15-5-2036
Lockheed Martin	750	2	16-11-2015	23-11-2018
Lockheed Martin	1,250	3	16-11-2015	23-11-2020
Lockheed Martin	2,000	5	16-11-2015	15-1-2026
Lockheed Martin	2,000	5	16-11-2015	15-5-2046
Northrop Grumman	850	26	28-5-2013	1-6-2018
Northrop Grumman	950	29	28-5-2013	1-6-2043
Northrop Grumman	1,050	32	28-5-2013	1-8-2023
Northrop Grumman	600	8	3-2-2015	15-4-2045

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

### 125. DZ Bank (Germany)

DZ Bank (Germany) has made an estimated US\$ 66 million available to the nuclear weapons companies selected for this research project since January 2013.



DZ Bank (Germany) provided loans for an estimated amount of US\$ 66 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 170 Loans provided by DZ Bank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Airbus Group	3,797	66	14-10-2014	14-10-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

## 126. E.SUN Financial (Taiwan)

E.SUN Financial (Taiwan) has made an estimated US\$ 135 million available to the nuclear weapons companies selected for this research project since January 2013.

E.SUN Financial (Taiwan) provided loans for an estimated amount of US\$ 135 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 171 Loans provided by E.SUN Financial

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	ticipation this bank Closing	
Aecom	700	35	14-10-2011	19-10-2016
Aecom	1,000	50	14-10-2011	19-10-2016
Aecom	750	20	7-6-2013	7-6-2018
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

### 127. Earnest Partners (United States)

Earnest Partners (United States) has made an estimated US\$ 51 million available to the nuclear weapons companies selected for this research project since January 2013.

Earnest Partners (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 51 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 172 Shareholdings managed by Earnest Partners

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Moog	United States	51	3.38	31-3-2016



### 128. Eastern Bank (United States)

Eastern Bank (United States) has made an estimated US\$ 106 million available to the nuclear weapons companies selected for this research project since January 2013.

Eastern Bank (United States) provided loans for an estimated amount of US\$ 106 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 173 Loans provided by Eastern Bank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018
Orbital ATK	800	34	29-9-2015	29-9-2020
Orbital ATK	1,000	43	29-9-2015	29-9-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

### 129. Eaton Vance (United States)

Eaton Vance (United States) has made an estimated US\$ 63 million available to the nuclear weapons companies selected for this research project since January 2013.

Eaton Vance (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 25 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 174 Shareholdings managed by Eaton Vance

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Moog	United States	25	1.64	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Eaton Vance (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 38 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 175 Bondholdings managed by Eaton Vance

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	27	7.91	30-4-2016
Orbital ATK	United States	11	1.56	31-1-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.



### 130. Edelweiss Financial Services (India)

Edelweiss Financial Services (India) has made an estimated US\$ 22 million available to the nuclear weapons companies selected for this research project since January 2013.

Edelweiss Financial Services (India) underwrote bond issuances for an estimated amount of US\$ 22 million to the nuclear weapon companies since January 2013 (see table below).

Table 176 Underwriting of bond issuances by Edelweiss Financial Services

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Larsen & Toubro	35	17	26-10-2015	25-9-2017
Larsen & Toubro	8	3	29-10-2015	25-9-2017
Larsen & Toubro	8	3	29-10-2015	29-9-2017

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

### 131. Employers Reassurance Corporation (United States)

Employers Reassurance Corporation (United States) has made an estimated US\$ 34 million available to the nuclear weapons companies selected for this research project since January 2013.

Employers Reassurance Corporation (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 34 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 177 Bondholdings managed by Employers Reassurance Corporation

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
General Dynamics	United States	34	1.18	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 132. Equator Corporate Services (India)

Equator Corporate Services (india) has made an estimated US\$ 1 million available to the nuclear weapons companies selected for this research project since January 2013.

Equator Corporate Services (india) underwrote bond issuances for an estimated amount of US\$ 1 million to the nuclear weapon companies since January 2013 (see table below).



Table 178 Underwriting of bond issuances by Equator Corporate Services

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Larsen & Toubro	2	1	19-8-2015	16-8-2016

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

### 133. Evercore (United States)

Evercore (United States) has made an estimated US\$ 10,843 million available to the nuclear weapons companies selected for this research project since January 2013.

Evercore (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 10,843 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 179 Shareholdings managed by Evercore

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Boeing	United States	5,465	6.76	31-3-2016
General Dynamics	United States	3,166	7.88	31-3-2016
Honeywell International	United States	2,211	2.59	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 134. Export Development Canada (Canada)

Export Development Canada (Canada) has made an estimated US\$ 41 million available to the nuclear weapons companies selected for this research project since January 2013.

Export Development Canada (Canada) provided loans for an estimated amount of US\$ 41 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 180 Loans provided by Export Development Canada

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Larsen & Toubro	47	5	27-8-2013	1-6-2018
Larsen & Toubro	59	7	27-8-2013	1-8-2017
Larsen & Toubro	64	7	27-8-2013	1-6-2018
Larsen & Toubro	100	11	27-8-2013	1-6-2018
Larsen & Toubro	100	11	27-8-2013	1-6-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.



### 135. Federated Investors (United States)

Federated Investors (United States) has made an estimated US\$ 59 million available to the nuclear weapons companies selected for this research project since January 2013.

Federated Investors (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 37 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 181 Shareholdings managed by Federated Investors

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Huntington Ingalls Industries	United States	37	0.58	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Federated Investors (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 22 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 182 Bondholdings managed by Federated Investors

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Textron	United States	22	0.76	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

### 136. Ferguson Wellman Capital Management (United States)

Ferguson Wellman Capital Management (United States) has made an estimated US\$ 40 million available to the nuclear weapons companies selected for this research project since January 2013.

Ferguson Wellman Capital Management (United States) provided loans for an estimated amount of US\$ 40 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 183 Loans provided by Ferguson Wellman Capital Management

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aerojet Rocketdyne	50	10	18-11-2011	18-11-2016
Aerojet Rocketdyne	150	30	18-11-2011	18-11-2016

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

# 137. Fidelity Investments (United States)

Fidelity Investments (United States) has made an estimated US\$ 8,419 million available to the nuclear weapons companies selected for this research project since January 2013.



Fidelity Investments (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 8,312 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 184 Shareholdings managed by Fidelity Investments

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	693	14.68	31-3-2016
Aerojet Rocketdyne	United States	94	8.94	31-3-2016
BAE Systems	United Kingdom	281	1.27	5-5-2016
Boeing	United States	1,178	1.45	31-3-2016
BWX Technologies	United States	377	10.82	31-3-2016
Engility	United States	76	11.03	31-3-2016
General Dynamics	United States	876	2.18	31-3-2016
Honeywell International	United States	1,497	1.76	31-3-2016
Huntington Ingalls Industries	United States	415	6.45	31-3-2016
Jacobs Engineering	United States	276	5.19	31-3-2016
Lockheed Martin	United States	462	0.68	31-3-2016
Moog	United States	167	11.11	31-3-2016
Northrop Grumman	United States	499	1.40	31-3-2016
Orbital ATK	United States	280	5.50	31-3-2016
Raytheon	United States	808	2.22	31-3-2016
Textron	United States	331	3.38	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Fidelity Investments (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 107 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 185 Bondholdings managed by Fidelity Investments

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	3	0.96	30-4-2016
BAE Systems	United Kingdom	72	1.18	31-5-2016
Huntington Ingalls Industries	United States	15	1.24	30-4-2016
Orbital ATK	United States	17	2.40	30-4-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

# 138. Fidelity Worldwide Investment (United Kingdom)<sup>a</sup>

Fidelity Worldwide Investment (Bermuda) has made an estimated US\$ 355 million available to the nuclear weapons companies selected for this research project since January 2013.

<sup>&</sup>lt;sup>a</sup> Don't Bank on the Bomb lists Financial Institutions in Bermuda, Guernsey and Jersey as UK institutions.



December 2016 Hall of Shame Fidelity Worldwide Investment (Bermuda) owns or manages shares of the nuclear weapon companies for an amount of US\$ 308 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 186 Shareholdings managed by Fidelity Worldwide Investment

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	122	0.52	9-12-2015
Jacobs Engineering	United States	186	3.49	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Fidelity Worldwide Investment (Bermuda) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 47 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 187 Bondholdings managed by Fidelity Worldwide Investment

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Leonardo-Finmeccanica	Italy	47	0.98	30-4-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

### 139. Fiera Capital (United States)

Fiera Capital (United States) has made an estimated US\$ 17 million available to the nuclear weapons companies selected for this research project since January 2013.

Fiera Capital (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 17 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 188 Bondholdings managed by Fiera Capital

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
General Dynamics	United States	17	0.59	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 140. Fifth Third Bancorp (United States)

Fifth Third Bancorp (United States) has made an estimated US\$ 528 million available to the nuclear weapons companies selected for this research project since January 2013.

Fifth Third Bancorp (United States) provided loans for an estimated amount of US\$ 466 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.



Table 189 Loans provided by Fifth Third Bancorp

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	500	20	11-8-2014	17-10-2019
Aecom	1,050	47	11-8-2014	17-10-2019
Aecom	1,925	77	11-8-2014	17-10-2019
Aerojet Rocketdyne	350	21	17-6-2016	17-6-2021
Aerojet Rocketdyne	400	24	17-6-2016	17-6-2021
BWX Technologies	700	32	22-5-2012	8-6-2017
Huntington Ingalls Industries	489	27	23-9-2013	6-11-2018
Huntington Ingalls Industries	650	35	23-9-2013	6-11-2018
Moog	900	30	28-3-2013	28-3-2018
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	250	14	8-10-2013	1-11-2020
Orbital ATK	1,010	17	8-10-2013	1-11-2018
Orbital ATK	150	7	24-6-2014	24-12-2018
Orbital ATK	800	34	29-9-2015	29-9-2020
Orbital ATK	1,000	43	29-9-2015	29-9-2020
Textron	500	25	23-1-2014	23-1-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

Fifth Third Bancorp (United States) underwrote bond issuances for an estimated amount of US\$ 63 million to the nuclear weapon companies since January 2013 (see table below).

Table 190 Underwriting of bond issuances by Fifth Third Bancorp

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Huntington Ingalls Industries	600	34	17-11-2014	15-12-2021
Orbital ATK	400	20	22-9-2015	1-10-2023
Textron	350	9	23-10-2014	1-3-2025

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

## 141. First Eagle Investment Management (United States)

First Eagle Investment Management (United States) has made an estimated US\$ 879 million available to the nuclear weapons companies selected for this research project since January 2013.

First Eagle Investment Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 863 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.



Table 191 Shareholdings managed by First Eagle Investment Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Northrop Grumman	United States	565	1.58	31-3-2016
Orbital ATK	United States	298	5.85	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

First Eagle Investment Management (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 16 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 192 Bondholdings managed by First Eagle Investment Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	16	4.64	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

### 142. First Financial Holding (Taiwan)

First Financial Holding (Taiwan) has made an estimated US\$ 20 million available to the nuclear weapons companies selected for this research project since January 2013.

First Financial Holding (Taiwan) provided loans for an estimated amount of US\$ 20 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 193 Loans provided by First Financial Holding

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	750	20	7-6-2013	7-6-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

## 143. First Horizon (United States)

First Horizon (United States) has made an estimated US\$ 23 million available to the nuclear weapons companies selected for this research project since January 2013.

First Horizon (United States) underwrote bond issuances for an estimated amount of US\$ 23 million to the nuclear weapon companies since January 2013 (see table below).



Table 194 Underwriting of bond issuances by First Horizon

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Moog	300	23	18-11-2014	1-12-2022

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

### 144. First Niagara Financial (United States)

First Niagara Financial (United States) has made an estimated US\$ 199 million available to the nuclear weapons companies selected for this research project since January 2013.

First Niagara Financial (United States) provided loans for an estimated amount of US\$ 199 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 195 Loans provided by First Niagara Financial

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Moog	900	30	28-3-2013	28-3-2018
Moog	1,100	63	28-6-2016	28-6-2021
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018
Orbital ATK	800	34	29-9-2015	29-9-2020
Orbital ATK	1,000	43	29-9-2015	29-9-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

## 145. First Trust Advisors (United States)

First Trust Advisors (United States) has made an estimated US\$ 2 million available to the nuclear weapons companies selected for this research project since January 2013.

First Trust Advisors (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 2 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 196 Bondholdings managed by First Trust Advisors

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	2	0.70	31-5-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.



### 146. Focus Financial Partners (United States)

Focus Financial Partners (United States) has made an estimated US\$ 97 million available to the nuclear weapons companies selected for this research project since January 2013.

Focus Financial Partners (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 97 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 197 Shareholdings managed by Focus Financial Partners

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Jacobs Engineering	United States	97	1.83	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 147. Foundation Asset Management (United States)

Foundation Asset Management (United States) has made an estimated US\$ 16 million available to the nuclear weapons companies selected for this research project since January 2013.

Foundation Asset Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 16 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 198 Shareholdings managed by Foundation Asset Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Serco	United Kingdom	16	0.98	6-6-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 148. Franklin Resources (United States)

Franklin Resources (United States) has made an estimated US\$ 5,753 million available to the nuclear weapons companies selected for this research project since January 2013.

Franklin Resources (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 5,753 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

 Table 199
 Shareholdings managed by Franklin Resources

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	1,232	5.44	17-2-2016
Boeing	United States	626	0.77	31-3-2016
General Dynamics	United States	460	1.14	31-3-2016
Honeywell International	United States	689	0.81	31-3-2016
Huntington Ingalls Industries	United States	225	3.49	31-3-2016



Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Larsen & Toubro	India	222	1.13	31-5-2016
Lockheed Martin	United States	746	1.09	31-3-2016
Northrop Grumman	United States	261	0.73	31-3-2016
Raytheon	United States	1,048	2.88	31-3-2016
Serco	United Kingdom	187	12.58	26-5-2016
Textron	United States	59	0.60	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 149. Fred Alger & Company (United States)

Fred Alger & Company (United States) has made an estimated US\$ 630 million available to the nuclear weapons companies selected for this research project since January 2013.

Fred Alger & Company (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 630 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 200 Shareholdings managed by Fred Alger & Company

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Honeywell International	United States	630	0.74	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 150. Fubon Group (Taiwan)

Fubon Group (Taiwan) has made an estimated US\$ 29 million available to the nuclear weapons companies selected for this research project since January 2013.

Fubon Group (Taiwan) provided loans for an estimated amount of US\$ 29 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 201 Loans provided by Fubon Group

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.



## 151. GE Capital Services (United States)

GE Capital Services (United States) has made an estimated US\$ 521 million available to the nuclear weapons companies selected for this research project since January 2013.

GE Capital Services (United States) provided loans for an estimated amount of US\$ 100 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 202 Loans provided by GE Capital Services

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Leonardo-Finmeccanica	3,001	100	9-7-2014	9-7-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

GE Capital Services (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 421 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 203 Bondholdings managed by GE Capital Services

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Boeing	United States	95	0.89	31-3-2016
General Dynamics	United States	29	1.00	31-3-2016
Honeywell International	United States	108	0.81	31-3-2016
Northrop Grumman	United States	95	1.48	31-3-2016
Raytheon	United States	79	1.48	31-3-2016
Textron	United States	15	0.52	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

### 152. General Insurance Corporation of India (India)

General Insurance Corporation of India (India) has made an estimated US\$ 314 million available to the nuclear weapons companies selected for this research project since January 2013.

General Insurance Corporation of India (India) owns or manages shares of the nuclear weapon companies for an amount of US\$ 314 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 204 Shareholdings managed by General Insurance Corporation of India

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Larsen & Toubro	India	314	1.84	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.



## 153. General Re (United States)

General Re (United States) has made an estimated US\$ 20 million available to the nuclear weapons companies selected for this research project since January 2013.

General Re (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 20 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 205 Bondholdings managed by General Re

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
General Dynamics	United States	20	0.68	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 154. Geode Capital Management (United States)

Geode Capital Management (United States) has made an estimated US\$ 3,238 million available to the nuclear weapons companies selected for this research project since January 2013.

Geode Capital Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 3,238 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 206 Shareholdings managed by Geode Capital Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	29	0.62	31-3-2016
Aerojet Rocketdyne	United States	7	0.69	31-3-2016
Boeing	United States	701	0.87	31-3-2016
BWX Technologies	United States	22	0.63	31-3-2016
Fluor	United States	61	0.82	31-3-2016
General Dynamics	United States	342	0.85	31-3-2016
Honeywell International	United States	726	0.85	31-3-2016
Huntington Ingalls Industries	United States	55	0.86	31-3-2016
Jacobs Engineering	United States	44	0.83	31-3-2016
Lockheed Martin	United States	504	0.75	31-3-2016
Moog	United States	16	1.04	31-3-2016
Northrop Grumman	United States	298	0.83	31-3-2016
Orbital ATK	United States	32	0.63	31-3-2016
Raytheon	United States	319	0.88	31-3-2016
Textron	United States	82	0.84	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.



### 155. GGCP (United States)

GGCP (United States) has made an estimated US\$ 263 million available to the nuclear weapons companies selected for this research project since January 2013.

GGCP (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 260 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 207 Shareholdings managed by GGCP

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	141	13.43	31-3-2016
Moog	United States	11	1.97	31-3-2016
Textron	United States	108	1.11	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

GGCP (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 3 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 208 Bondholdings managed by GGCP

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	3	0.79	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 156. GIC (Singapore)

GIC (Singapore) has made an estimated US\$ 253 million available to the nuclear weapons companies selected for this research project since January 2013.

GIC (Singapore) owns or manages shares of the nuclear weapon companies for an amount of US\$ 253 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 209 Shareholdings managed by GIC

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date	
Larsen & Toubro	India	253	1.48	31-3-2016	

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 157. Glenmede (United States)

Glenmede (United States) has made an estimated US\$ 43 million available to the nuclear weapons companies selected for this research project since January 2013.



Glenmede (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 43 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 210 Shareholdings managed by Glenmede

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date	
Orbital ATK	United States	43	0.84	31-3-2016	

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 158. Goldman Sachs (United States)

Goldman Sachs (United States) has made an estimated US\$ 9,842 million available to the nuclear weapons companies selected for this research project since January 2013.

Goldman Sachs (United States) provided loans for an estimated amount of US\$ 3,495 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 211 Loans provided by Goldman Sachs

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Airbus Group	3,797	66	14-10-2014	14-10-2019
BAE Systems	3,269	131	12-12-2013	12-12-2018
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	65	23-9-2014	15-10-2015
Boeing	2,473	65	23-9-2014	16-10-2019
Boeing	2,465	65	4-11-2015	3-11-2016
Boeing	2,365	65	4-11-2015	3-11-2020
Fluor	1,700	50	25-2-2016	25-2-2021
Fluor	1,800	50	25-2-2016	25-2-2021
Honeywell International	3,000	129	30-3-2012	2-4-2017
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	190	10-7-2015	10-7-2020
Honeywell International	3,000	750	30-9-2015	28-9-2016
Honeywell International	1,500	65	29-4-2016	28-4-2017
Honeywell International	4,000	343	29-4-2016	29-4-2021
Lockheed Martin	1,500	50	14-8-2014	14-8-2019
Lockheed Martin	2,500	150	9-10-2015	9-10-2020
Lockheed Martin	7,000	880	9-10-2015	7-10-2016
Northrop Grumman	1,500	129	8-9-2011	8-9-2016
Northrop Grumman	1,600	64	8-7-2015	8-7-2020
Textron	1,000	75	30-9-2013	4-10-2018

Goldman Sachs (United States) underwrote share issuances for an estimated amount of US\$ 1,491 million to the nuclear weapon companies since January 2013 (see table below).

Table 212 Underwriting of share issuances by Goldman Sachs

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date
Airbus Group	2,947	1,473	17-4-2013
Larsen & Toubro	3 <del>4</del>	17	12-6-2014

Source: Thomson Reuters Eikon, "Bond and share issue underwritings", viewed in June/July 2016.

Goldman Sachs (United States) underwrote bond issuances for an estimated amount of US\$ 3,599 million to the nuclear weapon companies since January 2013 (see table below).

Table 213 Underwriting of bond issuances by Goldman Sachs

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Airbus Group	1,209	242	14-6-2016	14-6-2021
BAE Systems	300	100	30-9-2014	7-10-2044
BAE Systems	800	267	30-9-2014	7-10-2024
Boeing	350	35	30-4-2013	15-11-2018
Boeing	300	9	28-10-2014	30-10-2021
Boeing	300	9	28-10-2014	30-10-2024
Boeing	250	34	28-10-2014	30-10-2017
Boeing	250	6	18-2-2015	1-3-2025
Boeing	250	8	18-2-2015	1-3-2045
Boeing	250	21	18-2-2015	1-3-2035
Boeing	250	21	27-10-2015	30-10-2022
Boeing	300	29	27-10-2015	30-10-2025
Boeing	350	42	27-10-2015	30-10-2020
Boeing	400	10	16-5-2016	15-6-2023
Boeing	400	16	16-5-2016	15-6-2046
Boeing	400	36	16-5-2016	15-6-2026
Fluor	500	10	18-11-2014	15-12-2024
Fluor	555	9	14-3-2016	21-3-2023
Honeywell International	300	10	18-11-2013	1-12-2023
Honeywell International	700	23	18-11-2013	17-11-2015
Honeywell International	837	180	15-2-2016	22-2-2028
Honeywell International	1,116	240	15-2-2016	22-2-2018
Honeywell International	1,116	240	15-2-2016	21-2-2020



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Honeywell International	1,395	300	15-2-2016	22-2-2023
Leonardo-Finmeccanica	950	59	26-11-2013	19-1-2021
Leonardo-Finmeccanica	339	20	17-1-2014	19-1-2021
Lockheed Martin	500	100	12-2-2015	1-3-2035
Lockheed Martin	750	150	12-2-2015	1-3-2025
Lockheed Martin	1,000	200	12-2-2015	1-3-2045
Lockheed Martin	500	63	16-11-2015	15-1-2023
Lockheed Martin	500	63	16-11-2015	15-5-2036
Lockheed Martin	750	94	16-11-2015	23-11-2018
Lockheed Martin	1,250	156	16-11-2015	23-11-2020
Lockheed Martin	2,000	250	16-11-2015	15-1-2026
Lockheed Martin	2,000	250	16-11-2015	15-5-2046
Northrop Grumman	850	57	28-5-2013	1-6-2018
Northrop Grumman	950	63	28-5-2013	1-6-20 <del>4</del> 3
Northrop Grumman	1,050	70	28-5-2013	1-8-2023
Northrop Grumman	600	24	3-2-2015	15-4-2045
Textron	250	19	23-1-2014	1-3-2021
Textron	350	26	23-1-2014	1-3-2024
Textron	350	22	23-10-2014	1-3-2025
Textron	350	19	4-3-2016	15-3-2026

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

Goldman Sachs (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 1,249 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 214 Shareholdings managed by Goldman Sachs

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	81	1.08	31-3-2016
Honeywell International	United States	656	0.76	31-3-2016
Huntington Ingalls Industries	United States	65	1.01	31-3-2016
Jacobs Engineering	United States	32	0.60	31-3-2016
Moog	United States	40	2.63	31-3-2016
Northrop Grumman	United States	189	0.53	31-3-2016
Orbital ATK	United States	29	0.56	31-3-2016
Textron	United States	158	1.61	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.



Goldman Sachs (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 8 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 215 Bondholdings managed by Goldman Sachs

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Moog	United States	8	2.67	31-10-2015

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 159. Gotham Asset Management (United States)

Gotham Asset Management (United States) has made an estimated US\$ 81 million available to the nuclear weapons companies selected for this research project since January 2013.

Gotham Asset Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 81 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 216 Shareholdings managed by Gotham Asset Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	48	0.65	31-3-2016
Huntington Ingalls Industries	United States	32	0.50	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 160. Goto Capital Markets (United States)

Goto Capital Markets (United States) has made an estimated US\$ 3 million available to the nuclear weapons companies selected for this research project since January 2013.

Goto Capital Markets (United States) underwrote bond issuances for an estimated amount of US\$ 3 million to the nuclear weapon companies since January 2013 (see table below).

Table 217 Underwriting of bond issuances by Goto Capital Markets

(	Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
В	oeing	300	3	28-10-2014	30-10-2021

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

#### 161. Graticule Asset Management Asia (United Kingdom)

Graticule Asset Management Asia (United Kingdom) has made an estimated US\$ 26 million available to the nuclear weapons companies selected for this research project since January 2013.



Graticule Asset Management Asia (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 26 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 218 Shareholdings managed by Graticule Asset Management Asia

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Orbital ATK	United States	26	0.52	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 162. Great Pacific Securities (United States)

Great Pacific Securities (United States) has made an estimated US\$ 17 million available to the nuclear weapons companies selected for this research project since January 2013.

Great Pacific Securities (United States) underwrote bond issuances for an estimated amount of US\$ 17 million to the nuclear weapon companies since January 2013 (see table below).

Table 219 Underwriting of bond issuances by Great Pacific Securities

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	250	3	18-2-2015	1-3-2035
Boeing	250	6	27-10-2015	30-10-2022
Boeing	400	9	16-5-2016	15-6-2023

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

#### 163. Greenhaven Associates (United States)

Greenhaven Associates (United States) has made an estimated US\$ 524 million available to the nuclear weapons companies selected for this research project since January 2013.

Greenhaven Associates (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 524 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 220 Shareholdings managed by Greenhaven Associates

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Airbus Group	The Netherlands	524	1.02	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.



#### 164. Greenlight Capital (United States)

Greenlight Capital (United States) has made an estimated US\$ 100 million available to the nuclear weapons companies selected for this research project since January 2013.

Greenlight Capital (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 100 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 221 Shareholdings managed by Greenlight Capital

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	100	2.11	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 165. Gruppo BPM (Italy)

Gruppo BPM (Italy) has made an estimated US\$ 199 million available to the nuclear weapons companies selected for this research project since January 2013.

Gruppo BPM (Italy) provided loans for an estimated amount of US\$ 199 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 222 Loans provided by Gruppo BPM

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Leonardo-Finmeccanica	3,001	100	9-7-2014	9-7-2019
Leonardo-Finmeccanica	2,212	99	6-7-2015	6-7-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

# 166. Guggenheim Capital (United States)

Guggenheim Capital (United States) has made an estimated US\$ 203 million available to the nuclear weapons companies selected for this research project since January 2013.

Guggenheim Capital (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 72 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 223 Shareholdings managed by Guggenheim Capital

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	38	0.51	31-3-2016
Jacobs Engineering	United States	34	0.63	31-3-2016



Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Guggenheim Capital (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 131 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 224 Bondholdings managed by Guggenheim Capital

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	2	0.72	30-4-2016
General Dynamics	United States	25	0.86	31-3-2016
Moog	United States	4	1.18	31-3-2016
Northrop Grumman	United States	43	0.67	31-3-2016
Orbital ATK	United States	4	0.61	31-3-2016
Raytheon	United States	34	0.63	31-3-2016
Safran	France	20	0.93	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

#### 167. Gulf International Bank (Bahrain)

Gulf International Bank (Bahrain) has made an estimated US\$ 170 million available to the nuclear weapons companies selected for this research project since January 2013.

Gulf International Bank (Bahrain) provided loans for an estimated amount of US\$ 170 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 225 Loans provided by Gulf International Bank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Bechtel	1,000	20	7-6-2016	7-6-2021
Bechtel	1,500	30	7-6-2016	7-6-2021
Raytheon	1,400	76	13-12-2011	13-12-2016
Raytheon	1,250	44	13-11-2015	13-11-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

#### 168. Guzman & Co (United States)

Guzman & Co (United States) has made an estimated US\$ 14 million available to the nuclear weapons companies selected for this research project since January 2013.

Guzman & Co (United States) underwrote bond issuances for an estimated amount of US\$ 14 million to the nuclear weapon companies since January 2013 (see table below).



Table 226 Underwriting of bond issuances by Guzman & Co

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	300	5	27-10-2015	30-10-2025
Boeing	400	9	16-5-2016	15-6-2023

# 169. Hahn Capital Management (United States)

Hahn Capital Management (United States) has made an estimated US\$ 46 million available to the nuclear weapons companies selected for this research project since January 2013.

Hahn Capital Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 46 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 227 Shareholdings managed by Hahn Capital Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Jacobs Engineering	United States	46	0.86	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 170. Hancock Holding (United States)

Hancock Holding (United States) has made an estimated US\$ 68 million available to the nuclear weapons companies selected for this research project since January 2013.

Hancock Holding (United States) provided loans for an estimated amount of US\$ 68 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 228 Loans provided by Hancock Holding

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
BWX Technologies	700	32	22-5-2012	8-6-2017
BWX Technologies	600	36	11-5-2015	11-5-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

# 171. Hartford Financial Services (United States)

Hartford Financial Services (United States) has made an estimated US\$ 248 million available to the nuclear weapons companies selected for this research project since January 2013.



Hartford Financial Services (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 248 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

 Table 229
 Bondholdings managed by Hartford Financial Services

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	12	3.34	31-3-2016
BAE Systems	United Kingdom	36	0.58	31-3-2016
Boeing	United States	91	0.86	31-3-2016
Orbital ATK	United States	6	0.90	31-3-2016
Textron	United States	103	3.55	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

#### 172. HDFC Bank (India)

HDFC Bank (India) has made an estimated US\$ 95 million available to the nuclear weapons companies selected for this research project since January 2013.

HDFC Bank (India) underwrote bond issuances for an estimated amount of US\$ 95 million to the nuclear weapon companies since January 2013 (see table below).

Table 230 Underwriting of bond issuances by HDFC Bank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Larsen & Toubro	37	7	29-10-2013	28-10-2016
Larsen & Toubro	6	2	27-3-2014	6-4-2015
Larsen & Toubro	6	2	27-3-2014	7-4-2015
Larsen & Toubro	6	2	27-3-2014	8-4-2015
Larsen & Toubro	6	2	27-3-2014	8-4-2015
Larsen & Toubro	30	8	9-6-2014	9-6-2016
Larsen & Toubro	8	3	28-10-2014	28-9-2016
Larsen & Toubro	8	3	28-10-2014	27-10-2017
Larsen & Toubro	4	4	7-11-2014	16-12-2016
Larsen & Toubro	16	16	7-11-2014	16-2-2017
Larsen & Toubro	8	8	24-11-2014	14-12-2015
Larsen & Toubro	8	8	24-11-2014	21-4-2016
Larsen & Toubro	24	8	18-2-2015	17-2-2017
Larsen & Toubro	9	2	26-6-2015	27-6-2017
Larsen & Toubro	9	3	26-6-2015	27-7-2017
Larsen & Toubro	9	3	26-6-2015	20-6-2018
Larsen & Toubro	9	3	26-6-2015	26-6-2018



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Larsen & Toubro	3	3	30-6-2015	26-6-2017
Larsen & Toubro	5	5	20-5-2016	18-5-2018
Larsen & Toubro	5	5	20-5-2016	20-5-2019

#### 173. Helaba (Germany)

Helaba (Germany) has made an estimated US\$ 183 million available to the nuclear weapons companies selected for this research project since January 2013.

Helaba (Germany) provided loans for an estimated amount of US\$ 183 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 231 Loans provided by Helaba

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Airbus Group	3,797	66	14-10-2014	14-10-2019
Serco	1,159	72	21-2-2012	28-3-2017
Serco	714	45	12-3-2015	12-3-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

### 174. Henderson Group (United Kingdom)

Henderson Group (United Kingdom) has made an estimated US\$ 37 million available to the nuclear weapons companies selected for this research project since January 2013.

Henderson Group (United Kingdom) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 37 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 232 Bondholdings managed by Henderson Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Leonardo-Finmeccanica	Italy	37	0.76	31-5-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.



### 175. Housing Development Finance Corporation (India)

Housing Development Finance Corporation (India) has made an estimated US\$ 376 million available to the nuclear weapons companies selected for this research project since January 2013.

Housing Development Finance Corporation (India) owns or manages shares of the nuclear weapon companies for an amount of US\$ 376 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 233 Shareholdings managed by Housing Development Finance Corporation

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Larsen & Toubro	India	376	2.20	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 176. HSBC (United Kingdom)

HSBC (United Kingdom) has made an estimated US\$ 4,501 million available to the nuclear weapons companies selected for this research project since January 2013.

HSBC (United Kingdom) provided loans for an estimated amount of US\$ 3,184 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 234 Loans provided by HSBC

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	600	40	23-9-2011	30-9-2016
Aecom	700	35	14-10-2011	19-10-2016
Aecom	1,000	50	14-10-2011	19-10-2016
Aecom	750	20	7-6-2013	7-6-2018
Aecom	39	2	16-12-2013	19-12-2018
Aecom	655	39	16-12-2013	19-12-2018
Aecom	961	58	16-12-2013	19-12-2018
Aecom	1,050	39	29-1-2014	29-1-2019
Aecom	500	20	11-8-2014	17-10-2019
Aecom	1,188	59	11-8-2014	17-10-2021
Aecom	1,925	77	11-8-2014	17-10-2019
Airbus Group	3,797	134	14-10-2014	14-10-2019
Bechtel	1,000	28	7-6-2016	7-6-2021
Bechtel	1,500	42	7-6-2016	7-6-2021
CH2M Hill	900	72	19-4-2012	19-4-2017
Fluor	1,700	227	28-5-2014	28-5-2019
Fluor	1,800	240	28-5-2014	28-5-2019



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Fluor	1,700	70	25-2-2016	25-2-2021
Fluor	1,800	75	25-2-2016	25-2-2021
Honeywell International	3,000	129	30-3-2012	2-4-2017
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	120	10-7-2015	10-7-2020
Honeywell International	1,500	45	29-4-2016	28-4-2017
Jacobs Engineering	460	39	7-2-2014	7-2-2019
Jacobs Engineering	1,140	62	7-2-2014	7-2-2019
Larsen & Toubro	47	5	27-8-2013	1-6-2018
Larsen & Toubro	59	7	27-8-2013	1-8-2017
Larsen & Toubro	64	7	27-8-2013	1-6-2018
Larsen & Toubro	100	11	27-8-2013	1-6-2018
Larsen & Toubro	100	11	27-8-2013	1-6-2018
Leonardo-Finmeccanica	3,001	150	9-7-2014	9-7-2019
Leonardo-Finmeccanica	2,212	139	6-7-2015	6-7-2020
Moog	900	120	28-3-2013	28-3-2018
Moog	1,100	220	22-5-2014	22-5-2019
Moog	1,100	110	28-6-2016	28-6-2021
Safran	1,320	176	21-10-2011	21-10-2016
Safran	2,744	183	4-12-2015	4-12-2020
Serco	1,159	72	21-2-2012	28-3-2017
Serco	45	9	12-3-2015	12-12-2016
Serco	714	45	12-3-2015	12-3-2019
Thales	1,835	122	19-12-2014	19-12-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

HSBC (United Kingdom) underwrote share issuances for an estimated amount of US\$ 102 million to the nuclear weapon companies since January 2013 (see table below).

Table 235 Underwriting of share issuances by HSBC

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date
Serco	62	7	16-4-2015
Serco	785	94	16-4-2015

Source: Thomson Reuters Eikon, "Bond and share issue underwritings", viewed in June/July 2016.

HSBC (United Kingdom) underwrote bond issuances for an estimated amount of US\$ 1,168 million to the nuclear weapon companies since January 2013 (see table below).



Table 236 Underwriting of bond issuances by HSBC

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Aecom	800	80	17-9-2014	15-10-2022
Aecom	800	80	17-9-2014	15-10-2024
Aecom	800	80	30-10-2015	15-10-2022
Aecom	800	80	30-10-2015	15-10-2024
Airbus Group	558	93	26-6-2015	1-7-2022
Airbus Group	679	75	13-5-2016	13-5-2026
Airbus Group	1,018	113	13-5-2016	13-5-2031
Fluor	500	5	18-11-2014	15-12-2024
Fluor	555	9	14-3-2016	21-3-2023
Honeywell International	300	10	18-11-2013	1-12-2023
Honeywell International	700	23	18-11-2013	17-11-2015
Honeywell International	837	4	15-2-2016	22-2-2028
Honeywell International	1,116	6	15-2-2016	22-2-2018
Honeywell International	1,116	6	15-2-2016	21-2-2020
Honeywell International	1,395	7	15-2-2016	22-2-2023
Larsen & Toubro	36	5	13-6-2014	13-5-2016
Larsen & Toubro	45	6	13-6-2014	13-6-2016
Larsen & Toubro	49	49	2-2-2015	3-2-2016
Larsen & Toubro	45	45	18-4-2016	20-8-2019
Leonardo-Finmeccanica	950	59	26-11-2013	19-1-2021
Leonardo-Finmeccanica	339	20	17-1-2014	19-1-2021
Moog	300	40	18-11-2014	1-12-2022
Thales	389	56	13-3-2013	19-3-2021
Thales	648	93	13-3-2013	20-3-2018
Thales	668	125	31-5-2016	7-6-2023

HSBC (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 47 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 237 Shareholdings managed by HSBC

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	47	0.62	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.



#### 177. Hua Nan Financial (Taiwan)

Hua Nan Financial (Taiwan) has made an estimated US\$ 50 million available to the nuclear weapons companies selected for this research project since January 2013.

Hua Nan Financial (Taiwan) provided loans for an estimated amount of US\$ 50 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 238 Loans provided by Hua Nan Financial

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	750	20	7-6-2013	7-6-2018
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

### 178. Huntington Bancshares (United States)

Huntington Bancshares (United States) has made an estimated US\$ 1,615 million available to the nuclear weapons companies selected for this research project since January 2013.

Huntington Bancshares (United States) provided loans for an estimated amount of US\$ 1,615 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 239 Loans provided by Huntington Bancshares

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Boeing	2,393	798	7-11-2013	6-11-2014
Boeing	2,453	818	7-11-2013	7-11-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

### 179. **ICAP** (India)

ICAP (India) has made an estimated US\$ 20 million available to the nuclear weapons companies selected for this research project since January 2013.

ICAP (India) underwrote bond issuances for an estimated amount of US\$ 20 million to the nuclear weapon companies since January 2013 (see table below).



Table 240 Underwriting of bond issuances by ICAP

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Larsen & Toubro	6	2	27-3-2014	6-4-2015
Larsen & Toubro	6	2	27-3-2014	7-4-2015
Larsen & Toubro	6	2	27-3-2014	8-4-2015
Larsen & Toubro	6	2	27-3-2014	8-4-2015
Larsen & Toubro	6	2	17-4-2015	17-4-2017
Larsen & Toubro	4	1	19-5-2015	18-5-2018
Larsen & Toubro	9	2	26-6-2015	27-6-2017
Larsen & Toubro	9	3	26-6-2015	27-7-2017
Larsen & Toubro	9	3	26-6-2015	20-6-2018
Larsen & Toubro	9	3	26-6-2015	26-6-2018

### 180. ICICI Bank (India)

ICICI Bank (India) has made an estimated US\$ 523 million available to the nuclear weapons companies selected for this research project since January 2013.

ICICI Bank (India) provided loans for an estimated amount of US\$ 145 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 241 Loans provided by ICICI Bank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Boeing	2,473	30	23-9-2014	15-10-2015
Boeing	2,473	30	23-9-2014	16-10-2019
Boeing	2,465	30	4-11-2015	3-11-2016
Boeing	2,365	30	4-11-2015	3-11-2020
Honeywell International	1,500	25	29-4-2016	28-4-2017

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

ICICI Bank (India) underwrote bond issuances for an estimated amount of US\$ 79 million to the nuclear weapon companies since January 2013 (see table below).



Table 242 Underwriting of bond issuances by ICICI Bank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Larsen & Toubro	37	7	29-10-2013	28-10-2016
Larsen & Toubro	37	7	29-10-2013	28-10-2016
Larsen & Toubro	8	2	20-3-2014	27-3-2024
Larsen & Toubro	30	8	9-6-2014	9-6-2016
Larsen & Toubro	36	5	13-6-2014	13-5-2016
Larsen & Toubro	45	6	13-6-2014	13-6-2016
Larsen & Toubro	18	5	21-1-2015	15-2-2017
Larsen & Toubro	18	5	21-1-2015	19-1-2018
Larsen & Toubro	15	3	13-4-2016	28-3-2018
Larsen & Toubro	15	3	13-4-2016	28-3-2018
Larsen & Toubro	15	3	13-4-2016	12-3-2019
Larsen & Toubro	15	3	13-4-2016	12-3-2019
Larsen & Toubro	15	3	13-4-2016	12-9-2019
Larsen & Toubro	15	3	13-4-2016	12-9-2019
Larsen & Toubro	15	3	13-4-2016	30-9-2019
Larsen & Toubro	15	3	13-4-2016	30-9-2019
Larsen & Toubro	15	3	13-4-2016	13-6-2019
Larsen & Toubro	15	3	13-4-2016	13-6-2019
Larsen & Toubro	15	3	13-4-2016	12-4-2019
Larsen & Toubro	15	3	13-4-2016	12-4-2019
Larsen & Toubro	15	3	13-4-2016	31-5-2019
Larsen & Toubro	15	3	13-4-2016	31-5-2019

ICICI Bank (India) owns or manages shares of the nuclear weapon companies for an amount of US\$ 269 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 243 Shareholdings managed by ICICI Bank

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Larsen & Toubro	India	269	1.57	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

ICICI Bank (India) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 30 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.



Table 244 Bondholdings managed by ICICI Bank

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Larsen & Toubro	India	30	0.83	31-5-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

### **181. IDFC** (India)

IDFC (India) has made an estimated US\$ 10 million available to the nuclear weapons companies selected for this research project since January 2013.

IDFC (India) underwrote bond issuances for an estimated amount of US\$ 10 million to the nuclear weapon companies since January 2013 (see table below).

Table 245 Underwriting of bond issuances by IDFC

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Larsen & Toubro	18	5	17-5-2013	15-5-2015
Larsen & Toubro	18	5	17-5-2013	15-5-2015
Larsen & Toubro	4	1	19-5-2015	18-5-2018

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

### 182. Industrial and Commercial Bank of China (China)

Industrial and Commercial Bank of China (China) has made an estimated US\$ 518 million available to the nuclear weapons companies selected for this research project since January 2013.

Industrial and Commercial Bank of China (China) provided loans for an estimated amount of US\$ 496 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 246 Loans provided by Industrial and Commercial Bank of China

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Airbus Group	3,797	66	14-10-2014	14-10-2019
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	25	23-9-2014	15-10-2015
Boeing	2,473	25	23-9-2014	16-10-2019
Boeing	2,465	50	4-11-2015	3-11-2016
Boeing	2,365	50	4-11-2015	3-11-2020
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	120	10-7-2015	10-7-2020



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Honeywell International	1,500	45	29-4-2016	28-4-2017

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

Industrial and Commercial Bank of China (China) underwrote bond issuances for an estimated amount of US\$ 22 million to the nuclear weapon companies since January 2013 (see table below).

Table 247 Underwriting of bond issuances by Industrial and Commercial Bank of China

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Honeywell International	837	4	15-2-2016	22-2-2028
Honeywell International	1,116	6	15-2-2016	22-2-2018
Honeywell International	1,116	6	15-2-2016	21-2-2020
Honeywell International	1,395	7	15-2-2016	22-2-2023

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

# 183. ING Group (Netherlands)

ING Group (Netherlands) has made an estimated US\$ 457 million available to the nuclear weapons companies selected for this research project since January 2013.

ING Group (Netherlands) provided loans for an estimated amount of US\$ 431 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 248 Loans provided by ING Group

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Airbus Group	3,797	66	14-10-2014	14-10-2019
Fluor	1,800	180	7-11-2012	9-11-2017
Fluor	1,700	85	25-2-2016	25-2-2021
Fluor	1,800	100	25-2-2016	25-2-2021

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

ING Group (Netherlands) underwrote bond issuances for an estimated amount of US\$ 26 million to the nuclear weapon companies since January 2013 (see table below).



Table 249 Underwriting of bond issuances by ING Group

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Fluor	500	18	18-11-2014	15-12-2024
Fluor	555	9	14-3-2016	21-3-2023

# 184. International Value Advisors (United States)

International Value Advisors (United States) has made an estimated US\$ 92 million available to the nuclear weapons companies selected for this research project since January 2013.

International Value Advisors (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 92 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 250 Shareholdings managed by International Value Advisors

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Thales	France	92	0.58	31-12-2015

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 185. Intesa Sanpaolo (Italy)

Intesa Sanpaolo (Italy) has made an estimated US\$ 1,398 million available to the nuclear weapons companies selected for this research project since January 2013.

Intesa Sanpaolo (Italy) provided loans for an estimated amount of US\$ 1,078 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 251 Loans provided by Intesa Sanpaolo

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Bechtel	1,000	28	7-6-2016	7-6-2021
Bechtel	1,500	42	7-6-2016	7-6-2021
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	30	23-9-2014	15-10-2015
Boeing	2,473	30	23-9-2014	16-10-2019
Boeing	2,465	30	4-11-2015	3-11-2016
Boeing	2,365	30	4-11-2015	3-11-2020
Fluor	1,700	50	25-2-2016	25-2-2021



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Fluor	1,800	50	25-2-2016	25-2-2021
Honeywell International	3,000	129	30-3-2012	2-4-2017
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	120	10-7-2015	10-7-2020
Honeywell International	1,500	<del>4</del> 5	29-4-2016	28-4-2017
Leonardo-Finmeccanica	3,001	150	9-7-2014	9-7-2019
Leonardo-Finmeccanica	2,212	153	6-7-2015	6-7-2020
Raytheon	1,400	76	13-12-2011	13-12-2016

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

Intesa Sanpaolo (Italy) underwrote bond issuances for an estimated amount of US\$ 235 million to the nuclear weapon companies since January 2013 (see table below).

Table 252 Underwriting of bond issuances by Intesa Sanpaolo

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	350	10	30-4-2013	15-11-2018
Boeing	300	4	28-10-2014	30-10-2021
Boeing	300	4	28-10-2014	30-10-2024
Boeing	250	3	18-2-2015	1-3-2025
Boeing	250	3	18-2-2015	1-3-2035
Boeing	250	3	18-2-2015	1-3-2045
Fluor	500	10	18-11-2014	15-12-2024
Honeywell International	300	10	18-11-2013	1-12-2023
Honeywell International	700	23	18-11-2013	17-11-2015
Leonardo-Finmeccanica	950	59	26-11-2013	19-1-2021
Leonardo-Finmeccanica	339	20	17-1-2014	19-1-2021
Northrop Grumman	850	26	28-5-2013	1-6-2018
Northrop Grumman	950	29	28-5-2013	1-6-2043
Northrop Grumman	1,050	32	28-5-2013	1-8-2023

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

Intesa Sanpaolo (Italy) owns or manages shares of the nuclear weapon companies for an amount of US\$ 85 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.



Table 253 Shareholdings managed by Intesa Sanpaolo

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Leonardo-Finmeccanica	Italy	40	0.59	31-5-2016
Serco	United Kingdom	45	2.71	31-5-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 186. Intrinsic Value Investors (United Kingdom)

Intrinsic Value Investors (United Kingdom) has made an estimated US\$ 17 million available to the nuclear weapons companies selected for this research project since January 2013.

Intrinsic Value Investors (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 17 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 254 Shareholdings managed by Intrinsic Value Investors

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Serco	United Kingdom	17	1.03	25-5-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 187. Invesco (United Kingdom)

Invesco (United Kingdom) has made an estimated US\$ 4,506 million available to the nuclear weapons companies selected for this research project since January 2013.

Invesco (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 4,485 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 255 Shareholdings managed by Invesco

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	175	3.71	31-3-2016
BAE Systems	United Kingdom	2,259	9.98	17-2-2016
Fluor	United States	177	2.37	31-3-2016
General Dynamics	United States	618	1.54	31-3-2016
Huntington Ingalls Industries	United States	54	0.84	31-3-2016
Jacobs Engineering	United States	32	0.60	31-3-2016
Northrop Grumman	United States	200	0.55	31-3-2016
Raytheon	United States	502	1.37	31-3-2016
Serco	United Kingdom	60	2.65	17-4-2015
Textron	United States	408	4.15	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.



Invesco (United Kingdom) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 21 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 256 Bondholdings managed by Invesco

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Moog	United States	9	2.98	30-4-2016
Orbital ATK	United States	12	1.68	30-4-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

#### 188. Invest AD (United Arab Emirates)

Invest AD (United Arab Emirates) has made an estimated US\$ 76 million available to the nuclear weapons companies selected for this research project since January 2013.

Invest AD (United Arab Emirates) provided loans for an estimated amount of US\$ 76 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 257 Loans provided by Invest AD

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Raytheon	1,400	76	13-12-2011	13-12-2016

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

### 189. Janus Capital Group (United States)

Janus Capital Group (United States) has made an estimated US\$ 3,116 million available to the nuclear weapons companies selected for this research project since January 2013.

Janus Capital Group (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 3,116 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 258 Shareholdings managed by Janus Capital Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Boeing	United States	876	1.08	31-3-2016
BWX Technologies	United States	109	3.14	31-3-2016
General Dynamics	United States	217	0.54	31-3-2016
Honeywell International	United States	661	0.78	31-3-2016
Lockheed Martin	United States	478	0.71	31-3-2016
Northrop Grumman	United States	776	2.17	31-3-2016



# 190. JPMorgan Chase (United States)

JPMorgan Chase (United States) has made an estimated US\$ 22,178 million available to the nuclear weapons companies selected for this research project since January 2013.

JPMorgan Chase (United States) provided loans for an estimated amount of US\$ 12,569 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 259 Loans provided by JPMorgan Chase

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	600	40	23-9-2011	30-9-2016
Aecom	750	20	7-6-2013	7-6-2018
Aecom	1,050	39	29-1-2014	29-1-2019
Aecom	500	40	11-8-2014	17-10-2019
Aecom	1,188	95	11-8-2014	17-10-2021
Aecom	1,050	105	11-8-2014	17-10-2019
Aecom	1,925	154	11-8-2014	17-10-2019
Aerojet Rocketdyne	100	8	30-5-2014	30-5-2019
Aerojet Rocketdyne	200	15	30-5-2014	30-5-2019
Aerojet Rocketdyne	350	35	17-6-2016	17-6-2021
Aerojet Rocketdyne	400	40	17-6-2016	17-6-2021
Airbus Group	3,797	66	14-10-2014	14-10-2019
BAE Systems	3,269	131	12-12-2013	12-12-2018
Bechtel	975	146	27-7-2012	27-7-2017
Bechtel	1,000	100	14-6-2013	14-6-2018
Bechtel	2,000	200	14-6-2013	14-6-2018
Bechtel	1,000	100	19-9-2014	17-10-2019
Bechtel	1,000	120	19-9-2014	17-10-2019
Bechtel	2,000	200	19-9-2014	17-10-2019
Bechtel	1,000	43	7-6-2016	7-6-2021
Bechtel	1,500	65	7-6-2016	7-6-2021
Boeing	2,300	460	5-11-2011	10-11-2016
Boeing	2,300	690	29-9-2012	15-10-2017
Boeing	2,393	798	7-11-2013	6-11-2014
Boeing	2,453	818	7-11-2013	7-11-2018
Boeing	2,473	175	23-9-2014	15-10-2015
Boeing	2,473	175	23-9-2014	16-10-2019
Boeing	2,365	175	4-11-2015	3-11-2020

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Boeing	2,465	225	4-11-2015	3-11-2016
BWX Technologies	700	70	22-5-2012	8-6-2017
BWX Technologies	400	32	11-5-2015	11-5-2020
BWX Technologies	500	40	11-5-2015	11-5-2020
BWX Technologies	600	48	11-5-2015	11-5-2020
CH2M Hill	900	135	19-4-2012	19-4-2017
CH2M Hill	1,100	220	22-3-2014	30-1-2019
General Dynamics	1,000	125	21-6-2013	21-6-2018
General Dynamics	1,000	80	10-11-2015	10-11-2020
Honeywell International	3,000	600	30-3-2012	2-4-2017
Honeywell International	4,000	800	18-11-2013	10-12-2018
Honeywell International	4,000	230	10-7-2015	10-7-2020
Honeywell International	1,500	90	29-4-2016	28-4-2017
Honeywell International	4,000	800	29-4-2016	29-4-2021
Huntington Ingalls Industries	489	49	23-9-2013	6-11-2018
Huntington Ingalls Industries	650	65	23-9-2013	6-11-2018
Huntington Ingalls Industries	1,250	125	13-7-2015	13-7-2020
Leonardo-Finmeccanica	3,001	100	9-7-2014	9-7-2019
Leonardo-Finmeccanica	2,212	23	6-7-2015	6-7-2020
Lockheed Martin	16	10	30-4-2014	1-5-2015
Lockheed Martin	1,500	120	14-8-2014	14-8-2019
Lockheed Martin	2,500	230	9-10-2015	9-10-2020
Lockheed Martin	7,000	880	9-10-2015	7-10-2016
Moog	900	108	28-3-2013	28-3-2018
Moog	1,100	110	22-5-2014	22-5-2019
Moog	1,100	110	28-6-2016	28-6-2021
Northrop Grumman	575	58	31-3-2011	24-1-2017
Northrop Grumman	1,500	150	8-9-2011	8-9-2016
Northrop Grumman	1,775	355	29-8-2013	29-8-2018
Northrop Grumman	1,600	213	8-7-2015	8-7-2020
Orbital ATK	200	13	3-9-2012	3-9-2017
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	250	14	8-10-2013	1-11-2020
Orbital ATK	1,010	17	8-10-2013	1-11-2018
Orbital ATK	150	15	24-6-2014	24-12-2018
Orbital ATK	800	46	29-9-2015	29-9-2020
Orbital ATK	1,000	57	29-9-2015	29-9-2020
Raytheon	1,400	280	13-12-2011	13-12-2016
Raytheon	1,250	167	13-11-2015	13-11-2020



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Serco	1,159	72	21-2-2012	28-3-2017
Serco	45	9	12-3-2015	12-12-2016
Serco	714	45	12-3-2015	12-3-2019
Textron	1,000	100	30-9-2013	4-10-2018
Textron	500	50	23-1-2014	23-1-2019
Textron	700	420	24-1-2014	23-1-2015

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

JPMorgan Chase (United States) underwrote share issuances for an estimated amount of US\$ 406 million to the nuclear weapon companies since January 2013 (see table below).

Table 260 Underwriting of share issuances by JPMorgan Chase

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date
Serco	270	135	1-5-2014
Serco	62	7	16-4-2015
Serco	62	12	16-4-2015
Serco	785	94	16-4-2015
Serco	785	157	16-4-2015

Source: Thomson Reuters Eikon, "Bond and share issue underwritings", viewed in June/July 2016.

JPMorgan Chase (United States) underwrote bond issuances for an estimated amount of US\$ 3,629 million to the nuclear weapon companies since January 2013 (see table below).

Table 261 Underwriting of bond issuances by JPMorgan Chase

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Aecom	800	80	17-9-2014	15-10-2022
Aecom	800	80	17-9-2014	15-10-2024
Aecom	800	80	30-10-2015	15-10-2022
Aecom	800	80	30-10-2015	15-10-2024
Airbus Group	558	93	26-6-2015	1-7-2022
Airbus Group	1,209	242	14-6-2016	14-6-2021
BAE Systems	250	63	3-12-2015	7-10-2044
BAE Systems	500	125	3-12-2015	15-12-2020
BAE Systems	750	188	3-12-2015	15-12-2025
Boeing	350	35	30-4-2013	15-11-2018



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	250	9	28-10-2014	30-10-2017
Boeing	300	9	28-10-2014	30-10-2021
Boeing	300	25	28-10-2014	30-10-2024
Boeing	250	19	18-2-2015	1-3-2045
Boeing	250	21	18-2-2015	1-3-2035
Boeing	250	29	18-2-2015	1-3-2025
Boeing	250	8	27-10-2015	30-10-2022
Boeing	350	11	27-10-2015	30-10-2020
Boeing	300	21	27-10-2015	30-10-2025
Boeing	400	10	16-5-2016	15-6-2023
Boeing	400	12	16-5-2016	15-6-2026
Boeing	400	28	16-5-2016	15-6-2046
Charles Stark Draper Laboratory	50	25	29-1-2015	1-9-2030
Honeywell International	300	30	18-11-2013	1-12-2023
Honeywell International	700	70	18-11-2013	17-11-2015
Honeywell International	837	4	15-2-2016	22-2-2028
Honeywell International	1,116	6	15-2-2016	22-2-2018
Honeywell International	1,116	6	15-2-2016	21-2-2020
Honeywell International	1,395	7	15-2-2016	22-2-2023
Huntington Ingalls Industries	600	60	17-11-2014	15-12-2021
Huntington Ingalls Industries	600	75	2-11-2015	15-11-2025
Leonardo-Finmeccanica	950	59	26-11-2013	19-1-2021
Leonardo-Finmeccanica	339	20	17-1-2014	19-1-2021
Lockheed Martin	500	90	12-2-2015	1-3-2035
Lockheed Martin	750	135	12-2-2015	1-3-2025
Lockheed Martin	1,000	180	12-2-2015	1-3-2045
Lockheed Martin	500	63	16-11-2015	15-1-2023
Lockheed Martin	500	63	16-11-2015	15-5-2036
Lockheed Martin	750	94	16-11-2015	23-11-2018
Lockheed Martin	1,250	156	16-11-2015	23-11-2020
Lockheed Martin	2,000	250	16-11-2015	15-1-2026
Lockheed Martin	2,000	250	16-11-2015	15-5-2046
Moog	300	40	18-11-2014	1-12-2022
Northrop Grumman	850	57	28-5-2013	1-6-2018
Northrop Grumman	950	63	28-5-2013	1-6-2043
Northrop Grumman	1,050	70	28-5-2013	1-8-2023
Northrop Grumman	600	126	3-2-2015	15-4-2045
Orbital ATK	400	43	22-9-2015	1-10-2023
Raytheon	300	78	24-11-2014	15-12-2024



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Raytheon	300	78	24-11-2014	15-12-2044
Textron	250	25	23-1-2014	1-3-2021
Textron	350	35	23-1-2014	1-3-2024
Textron	350	22	23-10-2014	1-3-2025
Textron	350	85	4-3-2016	15-3-2026

JPMorgan Chase (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 5,514 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 262 Shareholdings managed by JPMorgan Chase

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	112	2.38	31-3-2016
Airbus Group	The Netherlands	278	0.58	31-5-2016
BAE Systems	United Kingdom	155	0.70	25-4-2016
BWX Technologies	United States	54	1.53	31-3-2016
Engility	United States	4	0.62	31-3-2016
Fluor	United States	276	3.69	31-3-2016
General Dynamics	United States	243	0.61	31-3-2016
Honeywell International	United States	2,769	3.23	31-3-2016
Huntington Ingalls Industries	United States	99	1.53	31-3-2016
Moog	United States	20	1.35	31-3-2016
Northrop Grumman	United States	891	2.49	31-3-2016
Raytheon	United States	268	0.73	31-3-2016
Serco	United Kingdom	65	4.00	21-6-2016
Thales	France	280	1.53	31-5-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

JPMorgan Chase (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 60 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 263 Bondholdings managed by JPMorgan Chase

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	27	7.76	30-4-2016
Fluor	United States	9	0.58	30-4-2016
Orbital ATK	United States	24	3.45	30-4-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.



### 191. Jupiter Fund Management (United Kingdom)

Jupiter Fund Management (United Kingdom) has made an estimated US\$ 253 million available to the nuclear weapons companies selected for this research project since January 2013.

Jupiter Fund Management (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 253 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 264 Shareholdings managed by Jupiter Fund Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	253	1.14	2-5-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 192. KBC Group (Belgium)

KBC Group (Belgium) has made an estimated US\$ 117 million available to the nuclear weapons companies selected for this research project since January 2013.

KBC Group (Belgium) provided loans for an estimated amount of US\$ 117 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 265 Loans provided by KBC Group

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Serco	1,159	72	21-2-2012	28-3-2017
Serco	714	45	12-3-2015	12-3-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

# 193. Kennedy Capital Management (United States)

Kennedy Capital Management (United States) has made an estimated US\$ 16 million available to the nuclear weapons companies selected for this research project since January 2013.

Kennedy Capital Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 16 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 266 Shareholdings managed by Kennedy Capital Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	16	1.53	31-3-2016



### 194. KeyCorp (United States)

KeyCorp (United States) has made an estimated US\$ 227 million available to the nuclear weapons companies selected for this research project since January 2013.

KeyCorp (United States) provided loans for an estimated amount of US\$ 207 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 267 Loans provided by KeyCorp

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	600	40	23-9-2011	30-9-2016
Aerojet Rocketdyne	350	14	17-6-2016	17-6-2021
Aerojet Rocketdyne	400	16	17-6-2016	17-6-2021
BWX Technologies	400	27	11-5-2015	11-5-2020
BWX Technologies	500	33	11-5-2015	11-5-2020
Orbital ATK	800	34	29-9-2015	29-9-2020
Orbital ATK	1,000	43	29-9-2015	29-9-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

KeyCorp (United States) underwrote bond issuances for an estimated amount of US\$ 20 million to the nuclear weapon companies since January 2013 (see table below).

Table 268 Underwriting of bond issuances by KeyCorp

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Orbital ATK	400	20	22-9-2015	1-10-2023

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

#### 195. KfW (Germany)

KfW (Germany) has made an estimated US\$ 66 million available to the nuclear weapons companies selected for this research project since January 2013.

KfW (Germany) provided loans for an estimated amount of US\$ 66 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.



Table 269 Loans provided by KfW

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Airbus Group	3,797	66	14-10-2014	14-10-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

#### 196. Kiltearn Partners (United Kingdom)

Kiltearn Partners (United Kingdom) has made an estimated US\$ 50 million available to the nuclear weapons companies selected for this research project since January 2013.

Kiltearn Partners (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 50 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 270 Shareholdings managed by Kiltearn Partners

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Jacobs Engineering	United States	50	0.94	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 197. Kingstown Capital Management (United States)

Kingstown Capital Management (United States) has made an estimated US\$ 57 million available to the nuclear weapons companies selected for this research project since January 2013.

Kingstown Capital Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 57 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 271 Shareholdings managed by Kingstown Capital Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	57	5.44	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 198. Knights of Columbus (United States)

Knights of Columbus (United States) has made an estimated US\$ 259 million available to the nuclear weapons companies selected for this research project since January 2013.

Knights of Columbus (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 259 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.



Table 272 Bondholdings managed by Knights of Columbus

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	16	1.03	31-3-2016
General Dynamics	United States	24	0.83	31-3-2016
Honeywell International	United States	91	0.68	31-3-2016
Northrop Grumman	United States	49	0.76	31-3-2016
Raytheon	United States	30	0.56	31-3-2016
Textron	United States	50	1.72	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

#### 199. Kohlberg Kravis Roberts & Co (United States)

Kohlberg Kravis Roberts & Co (United States) has made an estimated US\$ 686 million available to the nuclear weapons companies selected for this research project since January 2013.

Kohlberg Kravis Roberts & Co (United States) provided loans for an estimated amount of US\$ 334 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 273 Loans provided by Kohlberg Kravis Roberts & Co

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Engility	50	10	23-4-2014	9-5-2019
Engility	250	50	23-4-2014	9-5-2021
Engility	393	79	23-4-2014	9-5-2020
Engility	585	195	12-11-2014	12-11-2015

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

Kohlberg Kravis Roberts & Co (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 353 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 274 Shareholdings managed by Kohlberg Kravis Roberts & Co

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Engility	United States	353	51.15	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 200. L&T Employees Welfare Foundation (India)

L&T Employees Welfare Foundation (India) has made an estimated US\$ 2,107 million available to the nuclear weapons companies selected for this research project since January 2013.



L&T Employees Welfare Foundation (India) owns or manages shares of the nuclear weapon companies for an amount of US\$ 2,107 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 275 Shareholdings managed by L&T Employees Welfare Foundation

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Larsen & Toubro	India	2,107	12.31	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 201. Lalitabai Lalchand Charity (India)

Lalitabai Lalchand Charity (India) has made an estimated US\$ 1 million available to the nuclear weapons companies selected for this research project since January 2013.

Lalitabai Lalchand Charity (India) owns or manages shares of the nuclear weapon companies for an amount of US\$ 1 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 276 Shareholdings managed by Lalitabai Lalchand Charity

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Walchandnagar Industries	India	1	1.00	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# **202.** Lancaster Investment Management (United Kingdom)

Lancaster Investment Management (United Kingdom) has made an estimated US\$ 45 million available to the nuclear weapons companies selected for this research project since January 2013.

Lancaster Investment Management (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 45 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 277 Shareholdings managed by Lancaster Investment Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Serco	United Kingdom	45	2.00	11-3-2015

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 203. Land Bank of Taiwan (Taiwan)

Land Bank of Taiwan (Taiwan) has made an estimated US\$ 29 million available to the nuclear weapons companies selected for this research project since January 2013.

Land Bank of Taiwan (Taiwan) provided loans for an estimated amount of US\$ 29 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.



Table 278 Loans provided by Land Bank of Taiwan

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

#### 204. Landesbank Baden-Württemberg (LBBW) (Germany)

Landesbank Baden-Württemberg (LBBW) (Germany) has made an estimated US\$ 66 million available to the nuclear weapons companies selected for this research project since January 2013.

Landesbank Baden-Württemberg (LBBW) (Germany) provided loans for an estimated amount of US\$ 66 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 279 Loans provided by Landesbank Baden-Württemberg (LBBW)

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Airbus Group	3,797	66	14-10-2014	14-10-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

#### 205. Lazard (United States)

Lazard (United States) has made an estimated US\$ 702 million available to the nuclear weapons companies selected for this research project since January 2013.

Lazard (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 702 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 280 Shareholdings managed by Lazard

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Honeywell International	United States	660	0.77	31-3-2016
Serco	United Kingdom	42	2.57	1-6-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.



### 206. Lebenthal Holdings (United States)

Lebenthal Holdings (United States) has made an estimated US\$ 62 million available to the nuclear weapons companies selected for this research project since January 2013.

Lebenthal Holdings (United States) underwrote bond issuances for an estimated amount of US\$ 62 million to the nuclear weapon companies since January 2013 (see table below).

Table 281 Underwriting of bond issuances by Lebenthal Holdings

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	300	4	28-10-2014	30-10-2021
Boeing	300	4	28-10-2014	30-10-2024
Boeing	250	3	18-2-2015	1-3-2025
Boeing	250	3	18-2-2015	1-3-2035
Boeing	250	3	18-2-2015	1-3-2045
Boeing	250	4	27-10-2015	30-10-2022
Boeing	300	5	27-10-2015	30-10-2025
Boeing	350	5	27-10-2015	30-10-2020
Boeing	400	4	16-5-2016	15-6-2046
Boeing	400	8	16-5-2016	15-6-2026
Boeing	400	9	16-5-2016	15-6-2023
Lockheed Martin	500	3	12-2-2015	1-3-2035
Lockheed Martin	750	4	12-2-2015	1-3-2025
Lockheed Martin	1,000	5	12-2-2015	1-3-2045

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

### 207. Legal & General (United Kingdom)

Legal & General (United Kingdom) has made an estimated US\$ 741 million available to the nuclear weapons companies selected for this research project since January 2013.

Legal & General (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 718 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 282 Shareholdings managed by Legal & General

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	611	2.76	1-6-2016
Fluor	United States	40	0.54	31-3-2016
Jacobs Engineering	United States	27	0.51	31-3-2016
Serco	United Kingdom	40	2.44	1-6-2016



Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Legal & General (United Kingdom) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 23 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 283 Bondholdings managed by Legal & General

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	23	6.67	31-5-2015

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

### 208. Legg Mason (United States)

Legg Mason (United States) has made an estimated US\$ 2,294 million available to the nuclear weapons companies selected for this research project since January 2013.

Legg Mason (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 1,877 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 284 Shareholdings managed by Legg Mason

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	65	1.37	31-3-2016
Aerojet Rocketdyne	United States	13	1.23	31-3-2016
Engility	United States	6	0.90	31-3-2016
Fluor	United States	719	9.61	31-3-2016
Honeywell International	United States	483	0.56	31-3-2016
Jacobs Engineering	United States	34	0.64	31-3-2016
Orbital ATK	United States	75	1.47	31-3-2016
Raytheon	United States	481	1.32	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Legg Mason (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 417 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 285 Bondholdings managed by Legg Mason

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	5	1.32	31-5-2016
Boeing	United States	118	1.11	31-3-2016
General Dynamics	United States	17	0.59	31-3-2016
Lockheed Martin	United States	92	0.58	31-3-2016
Northrop Grumman	United States	76	1.18	31-3-2016



Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Raytheon	United States	90	1.66	31-3-2016
Safran	France	20	0.94	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

#### 209. Letko Brosseau & Associates (Canada)

Letko Brosseau & Associates (Canada) has made an estimated US\$ 52 million available to the nuclear weapons companies selected for this research project since January 2013.

Letko Brosseau & Associates (Canada) owns or manages shares of the nuclear weapon companies for an amount of US\$ 52 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 286 Shareholdings managed by Letko Brosseau & Associates

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	52	0.69	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 210. Leucadia National Corporation (United States)

Leucadia National Corporation (United States) has made an estimated US\$ 508 million available to the nuclear weapons companies selected for this research project since January 2013.

Leucadia National Corporation (United States) provided loans for an estimated amount of US\$ 508 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 287 Loans provided by Leucadia National Corporation

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Engility	585	195	12-11-2014	12-11-2015
Engility	60	20	25-11-2014	26-8-2019
Engility	150	75	25-11-2014	26-8-2021
Engility	435	218	25-11-2014	26-8-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

# 211. Liberty Mutual Insurance (United States)

Liberty Mutual Insurance (United States) has made an estimated US\$ 281 million available to the nuclear weapons companies selected for this research project since January 2013.



Liberty Mutual Insurance (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 281 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 288 Bondholdings managed by Liberty Mutual Insurance

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Airbus Group	The Netherlands	84	0.97	31-3-2016
BAE Systems	United Kingdom	78	1.27	31-3-2016
Moog	United States	2	0.71	31-3-2016
Northrop Grumman	United States	49	0.77	31-3-2016
Orbital ATK	United States	9	1.28	31-3-2016
Raytheon	United States	59	1.09	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

### 212. Libyan Investment Authority (Libya)

Libyan Investment Authority (Libya) has made an estimated US\$ 168 million available to the nuclear weapons companies selected for this research project since January 2013.

Libyan Investment Authority (Libya) owns or manages shares of the nuclear weapon companies for an amount of US\$ 168 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 289 Shareholdings managed by Libyan Investment Authority

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Leonardo-Finmeccanica	Italy	168	2.01	16-11-2015

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 213. Life Insurance Corporation of India (India)

Life Insurance Corporation of India (India) has made an estimated US\$ 2,692 million available to the nuclear weapons companies selected for this research project since January 2013.

Life Insurance Corporation of India (India) owns or manages shares of the nuclear weapon companies for an amount of US\$ 2,692 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 290 Shareholdings managed by Life Insurance Corporation of India

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Larsen & Toubro	India	2,689	15.71	31-3-2016
Walchandnagar Industries	India	3	3.62	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.



# 214. LKP Group (India)

LKP Group (India) has made an estimated US\$ 93 million available to the nuclear weapons companies selected for this research project since January 2013.

LKP Group (India) underwrote bond issuances for an estimated amount of US\$ 93 million to the nuclear weapon companies since January 2013 (see table below).

Table 291 Underwriting of bond issuances by LKP Group

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Larsen & Toubro	18	5	17-5-2013	15-5-2015
Larsen & Toubro	18	5	17-5-2013	15-5-2015
Larsen & Toubro	2	1	3-6-2014	3-12-2015
Larsen & Toubro	3	1	3-6-2014	3-6-2016
Larsen & Toubro	30	8	9-6-2014	9-6-2016
Larsen & Toubro	36	5	13-6-2014	13-5-2016
Larsen & Toubro	45	6	13-6-2014	13-6-2016
Larsen & Toubro	2	1	27-8-2014	19-9-2016
Larsen & Toubro	2	1	27-8-2014	26-8-2016
Larsen & Toubro	8	3	27-8-2014	10-2-2016
Larsen & Toubro	83	28	27-8-2014	28-12-2015
Larsen & Toubro	6	2	17-4-2015	17-4-2017
Larsen & Toubro	4	1	19-5-2015	18-5-2018
Larsen & Toubro	3	1	8-7-2015	2-7-2018
Larsen & Toubro	3	1	8-7-2015	5-7-2018
Larsen & Toubro	2	2	21-7-2015	12-7-2017
Larsen & Toubro	2	1	19-8-2015	16-8-2016
Larsen & Toubro	15	3	13-4-2016	28-3-2018
Larsen & Toubro	15	3	13-4-2016	12-3-2019
Larsen & Toubro	15	3	13-4-2016	12-9-2019
Larsen & Toubro	15	3	13-4-2016	30-9-2019
Larsen & Toubro	15	3	13-4-2016	13-6-2019
Larsen & Toubro	15	3	13-4-2016	12-4-2019
Larsen & Toubro	15	3	13-4-2016	31-5-2019
Larsen & Toubro	10	3	29-6-2016	28-6-2019
Larsen & Toubro	10	3	29-6-2016	22-7-2019

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.



# 215. Lloyds Banking Group (United Kingdom)

Lloyds Banking Group (United Kingdom) has made an estimated US\$ 2,092 million available to the nuclear weapons companies selected for this research project since January 2013.

Lloyds Banking Group (United Kingdom) provided loans for an estimated amount of US\$ 1,590 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 292 Loans provided by Lloyds Banking Group

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Airbus Group	3,797	66	14-10-2014	14-10-2019
BAE Systems	3,269	131	12-12-2013	12-12-2018
Bechtel	1,000	28	7-6-2016	7-6-2021
Bechtel	1,500	42	7-6-2016	7-6-2021
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	50	23-9-2014	15-10-2015
Boeing	2,473	50	23-9-2014	16-10-2019
Boeing	2,465	50	4-11-2015	3-11-2016
Boeing	2,365	50	4-11-2015	3-11-2020
Fluor	1,700	85	25-2-2016	25-2-2021
Fluor	1,800	100	25-2-2016	25-2-2021
General Dynamics	1,000	80	10-11-2015	10-11-2020
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	60	10-7-2015	10-7-2020
Jacobs Engineering	1,140	62	7-2-2014	7-2-2019
Lockheed Martin	1,500	50	14-8-2014	14-8-2019
Lockheed Martin	2,500	150	9-10-2015	9-10-2020
Lockheed Martin	7,000	240	9-10-2015	7-10-2016
Northrop Grumman	1,600	64	8-7-2015	8-7-2020
Serco	1,159	72	21-2-2012	28-3-2017
Serco	714	45	12-3-2015	12-3-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

Lloyds Banking Group (United Kingdom) underwrote bond issuances for an estimated amount of US\$ 502 million to the nuclear weapon companies since January 2013 (see table below).

Table 293 Underwriting of bond issuances by Lloyds Banking Group

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	350	10	30-4-2013	15-11-2018



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	300	9	28-10-2014	30-10-2021
Boeing	300	9	28-10-2014	30-10-2024
Boeing	250	6	18-2-2015	1-3-2025
Boeing	250	8	18-2-2015	1-3-2035
Boeing	250	8	18-2-2015	1-3-2045
Boeing	250	8	27-10-2015	30-10-2022
Boeing	300	9	27-10-2015	30-10-2025
Boeing	350	11	27-10-2015	30-10-2020
Boeing	400	10	16-5-2016	15-6-2023
Boeing	400	12	16-5-2016	15-6-2026
Boeing	400	16	16-5-2016	15-6-2046
Fluor	500	18	18-11-2014	15-12-2024
Fluor	555	9	14-3-2016	21-3-2023
Lockheed Martin	500	9	12-2-2015	1-3-2035
Lockheed Martin	750	14	12-2-2015	1-3-2025
Lockheed Martin	1,000	18	12-2-2015	1-3-2045
Lockheed Martin	500	16	16-11-2015	15-1-2023
Lockheed Martin	500	16	16-11-2015	15-5-2036
Lockheed Martin	750	24	16-11-2015	23-11-2018
Lockheed Martin	1,250	41	16-11-2015	23-11-2020
Lockheed Martin	2,000	65	16-11-2015	15-1-2026
Lockheed Martin	2,000	65	16-11-2015	15-5-2046
Northrop Grumman	850	26	28-5-2013	1-6-2018
Northrop Grumman	950	29	28-5-2013	1-6-2043
Northrop Grumman	1,050	32	28-5-2013	1-8-2023
Raytheon	300	5	24-11-2014	15-12-2024
Raytheon	300	5	24-11-2014	15-12-2044

# **216.** Loews Corporation (United States)

Loews Corporation (United States) has made an estimated US\$ 54 million available to the nuclear weapons companies selected for this research project since January 2013.

Loews Corporation (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 54 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.



Table 294 Bondholdings managed by Loews Corporation

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	10	0.64	31-3-2016
Textron	United States	44	1.52	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

#### 217. Lone Pine Capital (United States)

Lone Pine Capital (United States) has made an estimated US\$ 643 million available to the nuclear weapons companies selected for this research project since January 2013.

Lone Pine Capital (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 643 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 295 Shareholdings managed by Lone Pine Capital

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Northrop Grumman	United States	643	1.80	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 218. Longview Asset Management (United States)

Longview Asset Management (United States) has made an estimated US\$ 4,378 million available to the nuclear weapons companies selected for this research project since January 2013.

Longview Asset Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 4,378 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 296 Shareholdings managed by Longview Asset Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
General Dynamics	United States	4,378	10.90	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 219. Loop Capital (United States)

Loop Capital (United States) has made an estimated US\$ 96 million available to the nuclear weapons companies selected for this research project since January 2013.

Loop Capital (United States) underwrote bond issuances for an estimated amount of US\$ 96 million to the nuclear weapon companies since January 2013 (see table below).



Table 297 Underwriting of bond issuances by Loop Capital

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	350	10	30-4-2013	15-11-2018
Boeing	300	4	28-10-2014	30-10-2021
Boeing	300	4	28-10-2014	30-10-2024
Boeing	250	3	18-2-2015	1-3-2025
Boeing	250	3	18-2-2015	1-3-2035
Boeing	250	3	18-2-2015	1-3-2045
Boeing	250	4	27-10-2015	30-10-2022
Boeing	300	5	27-10-2015	30-10-2025
Boeing	350	5	27-10-2015	30-10-2020
Boeing	400	4	16-5-2016	15-6-2046
Boeing	400	7	16-5-2016	15-6-2026
Boeing	400	9	16-5-2016	15-6-2023
Huntington Ingalls Industries	600	25	2-11-2015	15-11-2025
Lockheed Martin	500	3	12-2-2015	1-3-2035
Lockheed Martin	750	4	12-2-2015	1-3-2025
Lockheed Martin	1,000	5	12-2-2015	1-3-2045

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

## 220. Lord, Abbett & Co (United States)

Lord, Abbett & Co (United States) has made an estimated US\$ 258 million available to the nuclear weapons companies selected for this research project since January 2013.

Lord, Abbett & Co (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 211 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 298 Shareholdings managed by Lord, Abbett & Co

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	113	2.40	31-3-2016
Jacobs Engineering	United States	41	0.76	31-3-2016
Orbital ATK	United States	57	1.12	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Lord, Abbett & Co (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 47 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.



Table 299 Bondholdings managed by Lord, Abbett & Co

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	25	7.15	30-4-2016
Huntington Ingalls Industries	United States	12	1.04	30-4-2016
Orbital ATK	United States	10	1.44	30-4-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

# 221. LSV Asset Management (United States)

LSV Asset Management (United States) has made an estimated US\$ 839 million available to the nuclear weapons companies selected for this research project since January 2013.

LSV Asset Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 839 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 300 Shareholdings managed by LSV Asset Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	193	0.87	2-5-2016
Fluor	United States	228	3.05	31-3-2016
Huntington Ingalls Industries	United States	62	0.97	31-3-2016
Moog	United States	44	2.92	31-3-2016
Northrop Grumman	United States	312	0.87	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 222. Lyrical Partners (United States)

Lyrical Partners (United States) has made an estimated US\$ 110 million available to the nuclear weapons companies selected for this research project since January 2013.

Lyrical Partners (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 110 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 301 Shareholdings managed by Lyrical Partners

Company		Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	110	2.33	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 223. M&G Investments (United Kingdom)

M&G Investments (United Kingdom) has made an estimated US\$ 57 million available to the nuclear weapons companies selected for this research project since January 2013.



M&G Investments (United Kingdom) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 57 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 302 Bondholdings managed by M&G Investments

Company		Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	57	0.94	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

#### 224. M&T Bank (United States)

M&T Bank (United States) has made an estimated US\$ 558 million available to the nuclear weapons companies selected for this research project since January 2013.

M&T Bank (United States) provided loans for an estimated amount of US\$ 558 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 303 Loans provided by M&T Bank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	700	35	14-10-2011	19-10-2016
Aecom	1,000	50	14-10-2011	19-10-2016
Aerojet Rocketdyne	100	8	30-5-2014	30-5-2019
Aerojet Rocketdyne	200	15	30-5-2014	30-5-2019
Moog	900	120	28-3-2013	28-3-2018
Moog	1,100	220	22-5-2014	22-5-2019
Moog	1,100	110	28-6-2016	28-6-2021

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

#### 225. Mackie Research Financial (Canada)

Mackie Research Financial (Canada) has made an estimated US\$ 3 million available to the nuclear weapons companies selected for this research project since January 2013.

Mackie Research Financial (Canada) underwrote bond issuances for an estimated amount of US\$ 3 million to the nuclear weapon companies since January 2013 (see table below).

Table 304 Underwriting of bond issuances by Mackie Research Financial

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	250	3	18-2-2015	1-3-2035



## 226. Macquarie Group (Australia)

Macquarie Group (Australia) has made an estimated US\$ 1,943 million available to the nuclear weapons companies selected for this research project since January 2013.

Macquarie Group (Australia) owns or manages shares of the nuclear weapon companies for an amount of US\$ 1,350 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 305 Shareholdings managed by Macquarie Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Northrop Grumman	United States	693	1.94	31-3-2016
Raytheon	United States	657	1.80	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Macquarie Group (Australia) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 593 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 306 Bondholdings managed by Macquarie Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	98	1.61	31-3-2016
General Dynamics	United States	31	1.05	31-3-2016
Honeywell International	United States	132	1.00	31-3-2016
Lockheed Martin	United States	82	0.52	31-3-2016
Northrop Grumman	United States	115	1.81	31-3-2016
Raytheon	United States	59	1.09	31-3-2016
Safran	France	75	3.53	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## **227.** Madison Investment (United States)

Madison Investment (United States) has made an estimated US\$ 58 million available to the nuclear weapons companies selected for this research project since January 2013.

Madison Investment (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 58 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.



Table 307 Shareholdings managed by Madison Investment

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Jacobs Engineering	United States	58	1.09	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 228. Majedie Asset Management (United Kingdom)

Majedie Asset Management (United Kingdom) has made an estimated US\$ 73 million available to the nuclear weapons companies selected for this research project since January 2013.

Majedie Asset Management (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 73 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 308 Shareholdings managed by Majedie Asset Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Serco	United Kingdom	73	5.10	25-2-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 229. Man Group (United Kingdom)

Man Group (United Kingdom) has made an estimated US\$ 77 million available to the nuclear weapons companies selected for this research project since January 2013.

Man Group (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 77 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 309 Shareholdings managed by Man Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Huntington Ingalls Industries	United States	77	1.20	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 230. Manning & Napier (United States)

Manning & Napier (United States) has made an estimated US\$ 18 million available to the nuclear weapons companies selected for this research project since January 2013.

Manning & Napier (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 18 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.



Table 310 Bondholdings managed by Manning & Napier

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	18	1.18	31-5-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 231. Manulife Financial (Canada)

Manulife Financial (Canada) has made an estimated US\$ 583 million available to the nuclear weapons companies selected for this research project since January 2013.

Manulife Financial (Canada) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 583 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 311 Bondholdings managed by Manulife Financial

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Airbus Group	The Netherlands	53	0.61	31-3-2016
BAE Systems	United Kingdom	39	0.63	31-3-2016
Boeing	United States	82	0.77	31-3-2016
General Dynamics	United States	22	0.76	31-3-2016
Huntington Ingalls Industries	United States	60	4.99	30-4-2016
Lockheed Martin	United States	155	0.99	30-4-2016
Northrop Grumman	United States	40	0.62	31-3-2016
Raytheon	United States	56	1.05	31-3-2016
Textron	United States	77	2.64	31-5-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

# 232. Marathon Asset Management (United Kingdom)

Marathon Asset Management (United Kingdom) has made an estimated US\$ 221 million available to the nuclear weapons companies selected for this research project since January 2013.

Marathon Asset Management (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 221 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 312 Shareholdings managed by Marathon Asset Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	139	0.63	2-5-2016
Serco	United Kingdom	82	5.68	25-2-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.



#### 233. Mark R. Shenkman Revocable Trust (United States)

Mark R. Shenkman Revocable Trust (United States) has made an estimated US\$ 18 million available to the nuclear weapons companies selected for this research project since January 2013.

Mark R. Shenkman Revocable Trust (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 18 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 313 Bondholdings managed by Mark R. Shenkman Revocable Trust

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Moog	United States	11	3.83	31-3-2016
Orbital ATK	United States	7	0.94	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

#### 234. MassMutual Financial (United States)

MassMutual Financial (United States) has made an estimated US\$ 1,611 million available to the nuclear weapons companies selected for this research project since January 2013.

MassMutual Financial (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 1,153 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 314 Shareholdings managed by MassMutual Financial

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	26	0.54	31-3-2016
Airbus Group	The Netherlands	782	1.62	29-2-2016
Lockheed Martin	United States	345	0.52	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

MassMutual Financial (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 457 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 315 Bondholdings managed by MassMutual Financial

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	15	4.27	29-2-2016
BAE Systems	United Kingdom	46	0.75	31-3-2016
General Dynamics	United States	17	0.60	31-3-2016
Lockheed Martin	United States	130	0.82	31-3-2016
Moog	United States	10	3.39	31-12-2015
Northrop Grumman	United States	38	0.59	31-3-2016
Orbital ATK	United States	8	1.21	31-3-2016



Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Raytheon	United States	52	0.97	31-3-2016
Safran	France	75	3.53	31-3-2016
Textron	United States	66	2.26	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

#### 235. Mata Securities India (India)

Mata Securities India (India) has made an estimated US\$ 8 million available to the nuclear weapons companies selected for this research project since January 2013.

Mata Securities India (India) underwrote bond issuances for an estimated amount of US\$ 8 million to the nuclear weapon companies since January 2013 (see table below).

Table 316 Underwriting of bond issuances by Mata Securities India

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)		Maturity date
Larsen & Toubro	24	8	18-2-2015	17-2-2017

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

## 236. Mega Financial (Taiwan)

Mega Financial (Taiwan) has made an estimated US\$ 120 million available to the nuclear weapons companies selected for this research project since January 2013.

Mega Financial (Taiwan) provided loans for an estimated amount of US\$ 120 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 317 Loans provided by Mega Financial

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	750	20	7-6-2013	7-6-2018
Aecom	39	2	16-12-2013	19-12-2018
Aecom	655	39	16-12-2013	19-12-2018
Aecom	961	58	16-12-2013	19-12-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

## 237. MetLife (United States)

MetLife (United States) has made an estimated US\$ 1,117 million available to the nuclear weapons companies selected for this research project since January 2013.



MetLife (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 1,117 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 318 Bondholdings managed by MetLife

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	117	1.92	31-3-2016
Boeing	United States	118	1.11	31-3-2016
Honeywell International	United States	115	0.87	31-3-2016
Lockheed Martin	United States	215	1.36	31-3-2016
Northrop Grumman	United States	238	3.74	31-3-2016
Orbital ATK	United States	22	3.08	31-3-2016
Raytheon	United States	147	2.73	31-3-2016
Safran	France	116	5.44	31-3-2016
Textron	United States	29	0.99	31-12-2015

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

#### 238. Mischler Financial Group (United States)

Mischler Financial Group (United States) has made an estimated US\$ 130 million available to the nuclear weapons companies selected for this research project since January 2013.

Mischler Financial Group (United States) underwrote bond issuances for an estimated amount of US\$ 130 million to the nuclear weapon companies since January 2013 (see table below).

Table 319 Underwriting of bond issuances by Mischler Financial Group

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	300	3	28-10-2014	30-10-2024
Boeing	250	3	18-2-2015	1-3-2045
Boeing	350	9	27-10-2015	30-10-2020
Boeing	400	4	16-5-2016	15-6-2046
Lockheed Martin	500	1	16-11-2015	15-1-2023
Lockheed Martin	500	1	16-11-2015	15-5-2036
Lockheed Martin	750	2	16-11-2015	23-11-2018
Lockheed Martin	1,250	3	16-11-2015	23-11-2020
Lockheed Martin	2,000	5	16-11-2015	15-1-2026
Lockheed Martin	2,000	5	16-11-2015	15-5-2046
Northrop Grumman	850	26	28-5-2013	1-6-2018
Northrop Grumman	950	29	28-5-2013	1-6-2043
Northrop Grumman	1,050	32	28-5-2013	1-8-2023
Northrop Grumman	600	9	3-2-2015	15-4-2045



# 239. Mitsubishi UFJ Financial (Japan)

Mitsubishi UFJ Financial (Japan) has made an estimated US\$ 8,620 million available to the nuclear weapons companies selected for this research project since January 2013.

Mitsubishi UFJ Financial (Japan) provided loans for an estimated amount of US\$ 7,315 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 320 Loans provided by Mitsubishi UFJ Financial

		Est. participation of this bank		
Company	(US\$ mln)	(US\$ mln)		Maturity date
Aecom	600	120	23-9-2011	30-9-2016
Aecom	700	35	14-10-2011	19-10-2016
Aecom	1,000	50	14-10-2011	19-10-2016
Aecom	750	150	7-6-2013	7-6-2018
Aecom	39	2	16-12-2013	19-12-2018
Aecom	655	39	16-12-2013	19-12-2018
Aecom	961	58	16-12-2013	19-12-2018
Aecom	1,050	105	29-1-2014	29-1-2019
Aecom	500	40	11-8-2014	17-10-2019
Aecom	1,188	95	11-8-2014	17-10-2021
Aecom	1,050	105	11-8-2014	17-10-2019
Aecom	1,050	105	11-8-2014	17-10-2019
Aecom	1,925	154	11-8-2014	17-10-2019
Aerojet Rocketdyne	100	8	30-5-2014	30-5-2019
Aerojet Rocketdyne	200	15	30-5-2014	30-5-2019
Aerojet Rocketdyne	350	35	17-6-2016	17-6-2021
Aerojet Rocketdyne	400	40	17-6-2016	17-6-2021
Airbus Group	3,797	134	14-10-2014	14-10-2019
BAE Systems	3,269	131	12-12-2013	12-12-2018
Bechtel	1,000	100	14-6-2013	14-6-2018
Bechtel	2,000	200	14-6-2013	14-6-2018
Bechtel	1,000	100	19-9-2014	17-10-2019
Bechtel	2,000	200	19-9-2014	17-10-2019
Bechtel	1,000	42	7-6-2016	7-6-2021
Bechtel	1,500	63	7-6-2016	7-6-2021
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	90	23-9-2014	15-10-2015
Boeing	2,473	90	23-9-2014	16-10-2019
Boeing	2,465	90	4-11-2015	3-11-2016



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Boeing	2,365	90	4-11-2015	3-11-2020
BWX Technologies	700	32	22-5-2012	8-6-2017
BWX Technologies	600	36	11-5-2015	11-5-2020
CH2M Hill	900	135	19-4-2012	19-4-2017
CH2M Hill	1,100	220	22-3-2014	30-1-2019
Fluor	1,800	270	7-11-2012	9-11-2017
Fluor	1,700	255	28-5-2014	28-5-2019
Fluor	1,800	270	28-5-2014	28-5-2019
Fluor	1,700	121	25-2-2016	25-2-2021
Fluor	1,800	163	25-2-2016	25-2-2021
General Dynamics	1,000	46	10-11-2015	10-11-2020
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	114	10-7-2015	10-7-2020
Huntington Ingalls Industries	489	27	23-9-2013	6-11-2018
Huntington Ingalls Industries	650	35	23-9-2013	6-11-2018
Huntington Ingalls Industries	1,250	71	13-7-2015	13-7-2020
Jacobs Engineering	1,160	139	23-3-2012	23-3-2017
Jacobs Engineering	460	39	7-2-2014	7-2-2019
Jacobs Engineering	1,140	62	7-2-2014	7-2-2019
Jacobs Engineering	460	55	5-3-2015	5-3-2020
Jacobs Engineering	1,140	137	5-3-2015	5-3-2020
Larsen & Toubro	47	5	27-8-2013	1-6-2018
Larsen & Toubro	59	7	27-8-2013	1-8-2017
Larsen & Toubro	64	7	27-8-2013	1-6-2018
Larsen & Toubro	100	11	27-8-2013	1-6-2018
Larsen & Toubro	100	11	27-8-2013	1-6-2018
Leonardo-Finmeccanica	3,001	150	9-7-2014	9-7-2019
Leonardo-Finmeccanica	2,212	153	6-7-2015	6-7-2020
Lockheed Martin	1,500	85	14-8-2014	14-8-2019
Lockheed Martin	2,500	75	9-10-2015	9-10-2020
Lockheed Martin	7,000	440	9-10-2015	7-10-2016
Moog	900	70	28-3-2013	28-3-2018
Moog	1,100	110	22-5-2014	22-5-2019
Moog	1,100	63	28-6-2016	28-6-2021
Northrop Grumman	575	22	31-3-2011	24-1-2017
Northrop Grumman	1,600	64	8-7-2015	8-7-2020
Orbital ATK	200	13	3-9-2012	3-9-2017
Orbital ATK	250	25	8-10-2013	1-11-2020
Orbital ATK	700	47	8-10-2013	1-11-2018
Orbital ATK	1,010	67	8-10-2013	1-11-2018



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Orbital ATK	150	15	24-6-2014	24-12-2018
Orbital ATK	800	46	29-9-2015	29-9-2020
Orbital ATK	1,000	57	29-9-2015	29-9-2020
Raytheon	1,400	76	13-12-2011	13-12-2016
Raytheon	1,250	44	13-11-2015	13-11-2020
Safran	1,320	198	21-10-2011	21-10-2016
Safran	2,744	235	4-12-2015	4-12-2020
Serco	1,159	72	21-2-2012	28-3-2017
Serco	714	45	12-3-2015	12-3-2019
Textron	1,000	100	30-9-2013	4-10-2018
Textron	500	50	23-1-2014	23-1-2019
Thales	1,835	122	19-12-2014	19-12-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

Mitsubishi UFJ Financial (Japan) underwrote bond issuances for an estimated amount of US\$ 1,306 million to the nuclear weapon companies since January 2013 (see table below).

Table 321 Underwriting of bond issuances by Mitsubishi UFJ Financial

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Aecom	800	80	17-9-2014	15-10-2022
Aecom	800	80	17-9-2014	15-10-2024
Aecom	800	80	30-10-2015	15-10-2022
Aecom	800	80	30-10-2015	15-10-2024
Airbus Group	640	64	20-10-2014	29-10-2029
Airbus Group	679	75	13-5-2016	13-5-2026
Airbus Group	1,018	113	13-5-2016	13-5-2031
Boeing	350	10	30-4-2013	15-11-2018
Boeing	250	9	28-10-2014	30-10-2017
Boeing	300	9	28-10-2014	30-10-2024
Boeing	300	15	28-10-2014	30-10-2021
Boeing	250	6	18-2-2015	1-3-2025
Boeing	250	8	18-2-2015	1-3-2035
Boeing	250	12	18-2-2015	1-3-2045
Boeing	250	8	27-10-2015	30-10-2022
Boeing	300	9	27-10-2015	30-10-2025
Boeing	350	16	27-10-2015	30-10-2020
Boeing	400	10	16-5-2016	15-6-2023
Boeing	400	12	16-5-2016	15-6-2026



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	400	19	16-5-2016	15-6-2046
Fluor	500	34	18-11-2014	15-12-2024
Fluor	555	9	14-3-2016	21-3-2023
Huntington Ingalls Industries	600	34	17-11-2014	15-12-2021
Huntington Ingalls Industries	600	25	2-11-2015	15-11-2025
Lockheed Martin	500	9	12-2-2015	1-3-2035
Lockheed Martin	750	14	12-2-2015	1-3-2025
Lockheed Martin	1,000	18	12-2-2015	1-3-2045
Moog	300	23	18-11-2014	1-12-2022
Northrop Grumman	850	26	28-5-2013	1-6-2018
Northrop Grumman	950	29	28-5-2013	1-6-2043
Northrop Grumman	1,050	32	28-5-2013	1-8-2023
Northrop Grumman	600	60	3-2-2015	15-4-2045
Orbital ATK	300	50	22-10-2013	1-10-2021
Orbital ATK	400	43	22-9-2015	1-10-2023
Textron	250	25	23-1-2014	1-3-2021
Textron	350	35	23-1-2014	1-3-2024
Textron	350	19	23-10-2014	1-3-2025
Textron	350	27	4-3-2016	15-3-2026
Thales	668	83	31-5-2016	7-6-2023

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

## 240. Mizuho Financial (Japan)

Mizuho Financial (Japan) has made an estimated US\$ 4,597 million available to the nuclear weapons companies selected for this research project since January 2013.

Mizuho Financial (Japan) provided loans for an estimated amount of US\$ 3,394 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 322 Loans provided by Mizuho Financial

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	700	35	14-10-2011	19-10-2016
Aecom	1,000	50	14-10-2011	19-10-2016
Aecom	39	2	16-12-2013	19-12-2018
Aecom	655	39	16-12-2013	19-12-2018
Aecom	961	58	16-12-2013	19-12-2018



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
<b>Company</b> Aecom	500	20	11-8-2014	17-10-2019
Aecom	1,050	47	11-8-2014	17-10-2019
Aecom	1,188	59	11-8-2014	17-10-2013
Aecom	1,925	77	11-8-2014	17-10-2019
Airbus Group	3,797	134	14-10-2014	14-10-2019
BAE Systems	3,269	131	12-12-2013	12-12-2018
Bechtel	1,000	28	7-6-2016	7-6-2021
Bechtel	1,500	42	7-6-2016	7-6-2021
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	90	23-9-2014	15-10-2015
Boeing	2,473	90	23-9-2014	16-10-2019
Boeing	2,465	125	4-11-2015	3-11-2016
Boeing	2,365	125	4-11-2015	3-11-2020
Engility	50	10	23-4-2014	9-5-2019
Engility	250	50	23-4-2014	9-5-2021
Engility	393	79	23-4-2014	9-5-2020
Fluor	1,700	70	25-2-2016	25-2-2021
General Dynamics	1,000	46	10-11-2015	10-11-2020
Honeywell International	3,000	129	30-3-2012	2-4-2017
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	120	10-7-2015	10-7-2020
Honeywell International	1,500	45	29-4-2016	28-4-2017
Huntington Ingalls Industries	1,250	125	13-7-2015	13-7-2020
Larsen & Toubro	200	100	17-12-2012	17-12-2019
Larsen & Toubro	<del>4</del> 7	5	27-8-2013	1-6-2018
Larsen & Toubro	59	7	27-8-2013	1-8-2017
Larsen & Toubro	64	7	27-8-2013	1-6-2018
Larsen & Toubro	100	11	27-8-2013	1-6-2018
Larsen & Toubro	100	11	27-8-2013	1-6-2018
Lockheed Martin	1,500	120	14-8-2014	14-8-2019
Lockheed Martin	2,500	230	9-10-2015	9-10-2020
Lockheed Martin	7,000	530	9-10-2015	7-10-2016
Northrop Grumman	1,775	355	29-8-2013	29-8-2018
Northrop Grumman	1,600	64	8-7-2015	8-7-2020
Orbital ATK	200	13	3-9-2012	3-9-2017

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

Mizuho Financial (Japan) underwrote bond issuances for an estimated amount of US\$ 1,198 million to the nuclear weapon companies since January 2013 (see table below).



Table 323 Underwriting of bond issuances by Mizuho Financial

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
BAE Systems	250	21	3-12-2015	7-10-2044
BAE Systems	500	42	3-12-2015	15-12-2020
BAE Systems	750	63	3-12-2015	15-12-202
Boeing	350	10	30-4-2013	15-11-2018
Boeing	250	9	28-10-2014	30-10-2017
Boeing	300	9	28-10-2014	30-10-202
Boeing	300	15	28-10-2014	30-10-2024
Boeing	250	8	18-2-2015	1-3-2035
Boeing	250	8	18-2-2015	1-3-2045
Boeing	250	14	18-2-2015	1-3-2025
Boeing	250	8	27-10-2015	30-10-2022
Boeing	350	11	27-10-2015	30-10-202
Boeing	300	21	27-10-2015	30-10-202
Boeing	400	10	16-5-2016	15-6-2023
Boeing	400	12	16-5-2016	15-6-2026
Boeing	400	19	16-5-2016	15-6-2046
Fluor	500	5	18-11-2014	15-12-202
Fluor	555	9	14-3-2016	21-3-2023
Honeywell International	300	10	18-11-2013	1-12-2023
Honeywell International	700	23	18-11-2013	17-11-201
Honeywell International	837	17	15-2-2016	22-2-2028
Honeywell International	1,116	22	15-2-2016	22-2-2018
Honeywell International	1,116	22	15-2-2016	21-2-2020
Honeywell International	1,395	28	15-2-2016	22-2-2023
Huntington Ingalls Industries	600	75	2-11-2015	15-11-202
Lockheed Martin	500	9	12-2-2015	1-3-2035
Lockheed Martin	750	14	12-2-2015	1-3-2025
Lockheed Martin	1,000	18	12-2-2015	1-3-2045
Lockheed Martin	500	38	16-11-2015	15-1-2023
Lockheed Martin	500	38	16-11-2015	15-5-2036
Lockheed Martin	750	56	16-11-2015	23-11-201
Lockheed Martin	1,250	94	16-11-2015	23-11-202
Lockheed Martin	2,000	150	16-11-2015	15-1-2026
Lockheed Martin	2,000	150	16-11-2015	15-5-2046
Northrop Grumman	850	26	28-5-2013	1-6-2018
Northrop Grumman	950	29	28-5-2013	1-6-2043
Northrop Grumman	1,050	32	28-5-2013	1-8-2023



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Northrop Grumman	600	60	3-2-2015	15-4-2045

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

Mizuho Financial (Japan) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 5 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 324 Bondholdings managed by Mizuho Financial

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	3	0.83	30-6-2015
Moog	United States	2	0.73	30-6-2015

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

#### 241. Modern Woodmen of America (United States)

Modern Woodmen of America (United States) has made an estimated US\$ 50 million available to the nuclear weapons companies selected for this research project since January 2013.

Modern Woodmen of America (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 50 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 325 Bondholdings managed by Modern Woodmen of America

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	25	1.61	31-3-2016
Safran	France	25	1.18	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

# 242. Moog Pension Fund (United States)

Moog Pension Fund (United States) has made an estimated US\$ 243 million available to the nuclear weapons companies selected for this research project since January 2013.

Moog Pension Fund (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 243 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 326 Shareholdings managed by Moog Pension Fund

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Moog	United States	243	95.18	17-11-2015



# 243. Morgan Stanley (United States)

Morgan Stanley (United States) has made an estimated US\$ 9,439 million available to the nuclear weapons companies selected for this research project since January 2013.

Morgan Stanley (United States) provided loans for an estimated amount of US\$ 2,211 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 327 Loans provided by Morgan Stanley

	-			
Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	600	40	23-9-2011	30-9-2016
Aecom	1,050	39	29-1-2014	29-1-2019
Aecom	500	20	11-8-2014	17-10-2019
Aecom	1,925	77	11-8-2014	17-10-2019
Aerojet Rocketdyne	50	10	18-11-2011	18-11-2016
Aerojet Rocketdyne	150	30	18-11-2011	18-11-2016
Aerojet Rocketdyne	50	13	16-8-2012	16-8-2017
Aerojet Rocketdyne	100	8	30-5-2014	30-5-2019
Aerojet Rocketdyne	200	15	30-5-2014	30-5-2019
Aerojet Rocketdyne	350	9	17-6-2016	17-6-2021
Aerojet Rocketdyne	400	11	17-6-2016	17-6-2021
Airbus Group	3,797	66	14-10-2014	14-10-2019
BAE Systems	3,269	131	12-12-2013	12-12-2018
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	65	23-9-2014	15-10-2015
Boeing	2,473	65	23-9-2014	16-10-2019
Boeing	2,465	65	4-11-2015	3-11-2016
Boeing	2,365	65	4-11-2015	3-11-2020
Honeywell International	3,000	129	30-3-2012	2-4-2017
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	76	10-7-2015	10-7-2020
Honeywell International	1,500	65	29-4-2016	28-4-2017
Honeywell International	4,000	343	29-4-2016	29-4-2021
Lockheed Martin	1,500	50	14-8-2014	14-8-2019
Lockheed Martin	2,500	75	9-10-2015	9-10-2020
Lockheed Martin	7,000	440	9-10-2015	7-10-2016
Northrop Grumman	575	22	31-3-2011	24-1-2017
Orbital ATK	700	12	8-10-2013	1-11-2018



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Orbital ATK	250	14	8-10-2013	1-11-2020
Orbital ATK	1,010	17	8-10-2013	1-11-2018
Orbital ATK	150	7	24-6-2014	24-12-2018
Raytheon	1,250	44	13-11-2015	13-11-2020
Textron	1,000	75	30-9-2013	4-10-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

Morgan Stanley (United States) underwrote share issuances for an estimated amount of US\$ 1,473 million to the nuclear weapon companies since January 2013 (see table below).

Table 328 Underwriting of share issuances by Morgan Stanley

Company	Issuer	Use of proceeds	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date
Airbus Group	EADS	Secondary	2,947	1,473	17-4-2013

Source: Thomson Reuters Eikon, "Bond and share issue underwritings", viewed in June/July 2016.

Morgan Stanley (United States) underwrote bond issuances for an estimated amount of US\$ 2,768 million to the nuclear weapon companies since January 2013 (see table below).

Table 329 Underwriting of bond issuances by Morgan Stanley

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Aecom	800	80	17-9-2014	15-10-2022
Aecom	800	80	17-9-2014	15-10-2024
Aecom	800	80	30-10-2015	15-10-2022
Aecom	800	80	30-10-2015	15-10-2024
Aerojet Rocketdyne	460	115	18-1-2013	15-3-2021
Airbus Group	679	75	13-5-2016	13-5-2026
Airbus Group	1,018	113	13-5-2016	13-5-2031
Boeing	350	35	30-4-2013	15-11-2018
Boeing	150	50	30-4-2013	3-11-2014
Boeing	250	9	28-10-2014	30-10-2017
Boeing	300	9	28-10-2014	30-10-2024
Boeing	300	25	28-10-2014	30-10-2021
Boeing	250	6	18-2-2015	1-3-2025
Boeing	250	8	18-2-2015	1-3-2035
Boeing	250	19	18-2-2015	1-3-2045



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	250	8	27-10-2015	30-10-2022
Boeing	300	9	27-10-2015	30-10-2025
Boeing	350	25	27-10-2015	30-10-2020
Boeing	400	10	16-5-2016	15-6-2023
Boeing	400	16	16-5-2016	15-6-2046
Boeing	400	36	16-5-2016	15-6-2026
Honeywell International	300	30	18-11-2013	1-12-2023
Honeywell International	700	70	18-11-2013	17-11-2015
Honeywell International	837	17	15-2-2016	22-2-2028
Honeywell International	1,116	22	15-2-2016	22-2-2018
Honeywell International	1,116	22	15-2-2016	21-2-2020
Honeywell International	1,395	28	15-2-2016	22-2-2023
Leonardo-Finmeccanica	339	20	17-1-2014	19-1-2021
Lockheed Martin	500	90	12-2-2015	1-3-2035
Lockheed Martin	750	135	12-2-2015	1-3-2025
Lockheed Martin	1,000	180	12-2-2015	1-3-2045
Lockheed Martin	500	63	16-11-2015	15-1-2023
Lockheed Martin	500	63	16-11-2015	15-5-2036
Lockheed Martin	750	94	16-11-2015	23-11-2018
Lockheed Martin	1,250	156	16-11-2015	23-11-2020
Lockheed Martin	2,000	250	16-11-2015	15-1-2026
Lockheed Martin	2,000	250	16-11-2015	15-5-2046
Northrop Grumman	850	26	28-5-2013	1-6-2018
Northrop Grumman	950	29	28-5-2013	1-6-2043
Northrop Grumman	1,050	32	28-5-2013	1-8-2023
Raytheon	300	8	24-11-2014	15-12-2024
Raytheon	300	8	24-11-2014	15-12-2044
Safran	275	137	7-4-2014	11-4-2024
Textron	250	19	23-1-2014	1-3-2021
Textron	350	26	23-1-2014	1-3-2024
Textron	350	89	23-10-2014	1-3-2025
Textron	350	19	4-3-2016	15-3-2026

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

Morgan Stanley (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 2,986 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.



Table 330 Shareholdings managed by Morgan Stanley

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Boeing	United States	539	0.67	31-3-2016
BWX Technologies	United States	101	2.89	31-3-2016
Honeywell International	United States	1,173	1.38	31-3-2016
Huntington Ingalls Industries	United States	39	0.61	31-3-2016
Lockheed Martin	United States	395	0.59	31-3-2016
Northrop Grumman	United States	184	0.52	31-3-2016
Raytheon	United States	555	1.52	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 244. MSD Partners (United States)

MSD Partners (United States) has made an estimated US\$ 143 million available to the nuclear weapons companies selected for this research project since January 2013.

MSD Partners (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 143 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 331 Shareholdings managed by MSD Partners

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Serco	United Kingdom	143	10.00	25-2-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 245. Mutual of Ohama (United States)

Mutual of Ohama (United States) has made an estimated US\$ 58 million available to the nuclear weapons companies selected for this research project since January 2013.

Mutual of Ohama (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 58 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 332 Bondholdings managed by Mutual of Ohama

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	17	1.09	31-3-2016
Raytheon	United States	41	0.76	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.



#### 246. Muzinich & Co (United States)

Muzinich & Co (United States) has made an estimated US\$ 28 million available to the nuclear weapons companies selected for this research project since January 2013.

Muzinich & Co (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 28 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 333 Bondholdings managed by Muzinich & Co

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Leonardo-Finmeccanica	Italy	28	0.58	30-11-2015

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

#### 247. National Bank of Abu Dhabi (United Arab Emirates)

National Bank of Abu Dhabi (United Arab Emirates) has made an estimated US\$ 676 million available to the nuclear weapons companies selected for this research project since January 2013.

National Bank of Abu Dhabi (United Arab Emirates) provided loans for an estimated amount of US\$ 676 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 334 Loans provided by National Bank of Abu Dhabi

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
BAE Systems	3,269	131	12-12-2013	12-12-2018
Bechtel	1,000	20	7-6-2016	7-6-2021
Bechtel	1,500	30	7-6-2016	7-6-2021
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	30	23-9-2014	15-10-2015
Boeing	2,473	30	23-9-2014	16-10-2019
General Dynamics	1,000	46	10-11-2015	10-11-2020
Northrop Grumman	1,600	64	8-7-2015	8-7-2020
Raytheon	1,250	44	13-11-2015	13-11-2020
Serco	1,159	72	21-2-2012	28-3-2017
Serco	714	45	12-3-2015	12-3-2019
Thales	1,835	122	19-12-2014	19-12-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.



#### 248. National Bank of Kuwait (Kuwait)

National Bank of Kuwait (Kuwait) has made an estimated US\$ 50 million available to the nuclear weapons companies selected for this research project since January 2013.

National Bank of Kuwait (Kuwait) provided loans for an estimated amount of US\$ 50 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 335 Loans provided by National Bank of Kuwait

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Bechtel	1,000	20	7-6-2016	7-6-2021
Bechtel	1,500	30	7-6-2016	7-6-2021

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

## 249. National Life Group (United States)

National Life Group (United States) has made an estimated US\$ 38 million available to the nuclear weapons companies selected for this research project since January 2013.

National Life Group (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 38 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 336 Bondholdings managed by National Life Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Safran	France	20	0.94	31-3-2016
Textron	United States	18	0.60	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

# 250. National Rural Electric Cooperative Association (United States)

National Rural Electric Cooperative Association (United States) has made an estimated US\$ 70 million available to the nuclear weapons companies selected for this research project since January 2013.

National Rural Electric Cooperative Association (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 70 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.



Table 337 Shareholdings managed by National Rural Electric Cooperative Association

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BWX Technologies	United States	33	0.94	31-3-2016
Huntington Ingalls Industries	United States	37	0.58	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 251. National Western Life Insurance Company (United States)

National Western Life Insurance Company (United States) has made an estimated US\$ 96 million available to the nuclear weapons companies selected for this research project since January 2013.

National Western Life Insurance Company (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 96 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 338 Bondholdings managed by National Western Life Insurance Company

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	30	1.93	31-3-2016
General Dynamics	United States	15	0.52	31-3-2016
Raytheon	United States	30	0.55	31-3-2016
Textron	United States	22	0.76	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 252. Nationwide Mutual Insurance (United States)

Nationwide Mutual Insurance (United States) has made an estimated US\$ 165 million available to the nuclear weapons companies selected for this research project since January 2013.

Nationwide Mutual Insurance (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 165 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 339 Bondholdings managed by Nationwide Mutual Insurance

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Huntington Ingalls Industries	United States	22	1.81	31-3-2016
Northrop Grumman	United States	111	1.74	31-3-2016
Orbital ATK	United States	32	4.61	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.



#### 253. Neuberger Berman (United States)

Neuberger Berman (United States) has made an estimated US\$ 188 million available to the nuclear weapons companies selected for this research project since January 2013.

Neuberger Berman (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 188 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 340 Shareholdings managed by Neuberger Berman

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Jacobs Engineering	United States	38	0.71	31-3-2016
Textron	United States	150	1.53	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 254. New Jersey Department of the Treasury (United States)

New Jersey Department of the Treasury (United States) has made an estimated US\$ 92 million available to the nuclear weapons companies selected for this research project since January 2013.

New Jersey Department of the Treasury (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 92 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 341 Shareholdings managed by New Jersey Department of the Treasury

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	52	1.10	31-3-2016
Orbital ATK	United States	40	0.79	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 255. New Mountain Capital (United States)

New Mountain Capital (United States) has made an estimated US\$ 68 million available to the nuclear weapons companies selected for this research project since January 2013.

New Mountain Capital (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 68 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 342 Shareholdings managed by New Mountain Capital

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	68	1.45	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.



#### 256. New York Life Insurance (United States)

New York Life Insurance (United States) has made an estimated US\$ 1,938 million available to the nuclear weapons companies selected for this research project since January 2013.

New York Life Insurance (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 1,938 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 343 Bondholdings managed by New York Life Insurance

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	70	20.18	31-3-2016
Airbus Group	The Netherlands	67	0.77	31-3-2016
BAE Systems	United Kingdom	132	2.15	31-3-2016
Boeing	United States	185	1.74	31-3-2016
General Dynamics	United States	166	5.72	31-3-2016
Honeywell International	United States	168	1.27	31-3-2016
Lockheed Martin	United States	196	1.24	31-3-2016
Moog	United States	34	11.42	31-3-2016
Northrop Grumman	United States	283	4.44	31-3-2016
Orbital ATK	United States	61	8.74	31-3-2016
Raytheon	United States	289	5.37	31-3-2016
Safran	France	139	6.56	31-3-2016
Textron	United States	148	5.09	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 257. New York State Common Retirement Fund (United States)

New York State Common Retirement Fund (United States) has made an estimated US\$ 20 million available to the nuclear weapons companies selected for this research project since January 2013.

New York State Common Retirement Fund (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 20 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 344 Shareholdings managed by New York State Common Retirement Fund

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Moog	United States	11	0.73	31-3-2016
Serco	United Kingdom	9	0.51	23-5-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.



#### 258. Newbrook Capital Advisors (United States)

Newbrook Capital Advisors (United States) has made an estimated US\$ 65 million available to the nuclear weapons companies selected for this research project since January 2013.

Newbrook Capital Advisors (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 65 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 345 Shareholdings managed by Newbrook Capital Advisors

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Orbital ATK	United States	65	1.28	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 259. NewSouth Capital Management (United States)

NewSouth Capital Management (United States) has made an estimated US\$ 95 million available to the nuclear weapons companies selected for this research project since January 2013.

NewSouth Capital Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 95 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 346 Shareholdings managed by NewSouth Capital Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	95	9.01	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 260. Nomura (Japan)

Nomura (Japan) has made an estimated US\$ 5 million available to the nuclear weapons companies selected for this research project since January 2013.

Nomura (Japan) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 5 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 347 Bondholdings managed by Nomura

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	5	1.41	31-12-2015

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.



# **261.** Northern Trust (United States)

Northern Trust (United States) has made an estimated US\$ 6,213 million available to the nuclear weapons companies selected for this research project since January 2013.

Northern Trust (United States) provided loans for an estimated amount of US\$ 1,724 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 348 Loans provided by Northern Trust

	·	<u>-</u>		I
Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	600	40	23-9-2011	30-9-2016
Aecom	750	20	7-6-2013	7-6-2018
Aecom	39	2	16-12-2013	19-12-2018
Aecom	655	39	16-12-2013	19-12-2018
Aecom	961	58	16-12-2013	19-12-2018
Aecom	1,050	39	29-1-2014	29-1-2019
Bechtel	1,000	28	7-6-2016	7-6-2021
Bechtel	1,500	42	7-6-2016	7-6-2021
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	35	23-9-2014	15-10-2015
Boeing	2,473	35	23-9-2014	16-10-2019
Boeing	2,465	35	4-11-2015	3-11-2016
Boeing	2,365	35	4-11-2015	3-11-2020
BWX Technologies	700	32	22-5-2012	8-6-2017
BWX Technologies	400	27	11-5-2015	11-5-2020
BWX Technologies	500	33	11-5-2015	11-5-2020
BWX Technologies	600	36	11-5-2015	11-5-2020
CH2M Hill	900	72	19-4-2012	19-4-2017
General Dynamics	1,000	46	10-11-2015	10-11-2020
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	120	10-7-2015	10-7-2020
Honeywell International	1,500	45	29-4-2016	28-4-2017
Huntington Ingalls Industries	1,250	71	13-7-2015	13-7-2020
Jacobs Engineering	1,140	62	7-2-2014	7-2-2019
Lockheed Martin	1,500	35	14-8-2014	14-8-2019
Lockheed Martin	2,500	50	9-10-2015	9-10-2020
Moog	900	30	28-3-2013	28-3-2018
Moog	1,100	63	28-6-2016	28-6-2021
Northrop Grumman	575	22	31-3-2011	24-1-2017
Northrop Grumman	1,500	129	8-9-2011	8-9-2016
Orbital ATK	700	12	8-10-2013	1-11-2018



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Orbital ATK	1,010	17	8-10-2013	1-11-2018
Orbital ATK	800	34	29-9-2015	29-9-2020
Orbital ATK	1,000	43	29-9-2015	29-9-2020
Raytheon	1,400	76	13-12-2011	13-12-2016
Raytheon	1,250	44	13-11-2015	13-11-2020
Textron	1,000	75	30-9-2013	4-10-2018
Textron	500	25	23-1-2014	23-1-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

Northern Trust (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 4,489 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 349 Shareholdings managed by Northern Trust

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	35	0.73	31-3-2016
Aerojet Rocketdyne	United States	12	1.11	31-3-2016
Boeing	United States	1,004	1.24	31-3-2016
BWX Technologies	United States	29	0.84	31-3-2016
Engility	United States	6	0.93	31-3-2016
Fluor	United States	88	1.18	31-3-2016
General Dynamics	United States	460	1.14	31-3-2016
Honeywell International	United States	931	1.09	31-3-2016
Huntington Ingalls Industries	United States	59	0.91	31-3-2016
Jacobs Engineering	United States	64	1.20	31-3-2016
Lockheed Martin	United States	767	1.13	31-3-2016
Moog	United States	37	2.46	31-3-2016
Northrop Grumman	United States	416	1.17	31-3-2016
Orbital ATK	United States	51	1.00	31-3-2016
Raytheon	United States	432	1.19	31-3-2016
Textron	United States	99	1.01	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## **262.** Northwestern Mutual Life Insurance (United States)

Northwestern Mutual Life Insurance (United States) has made an estimated US\$ 909 million available to the nuclear weapons companies selected for this research project since January 2013.



Northwestern Mutual Life Insurance (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 909 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 350 Bondholdings managed by Northwestern Mutual Life Insurance

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	124	2.03	31-3-2016
Boeing	United States	109	1.03	31-3-2016
General Dynamics	United States	74	2.54	31-3-2016
Honeywell International	United States	82	0.62	31-3-2016
Huntington Ingalls Industries	United States	13	1.04	31-3-2016
Lockheed Martin	United States	148	0.94	31-3-2016
Northrop Grumman	United States	148	2.31	31-3-2016
Orbital ATK	United States	23	3.21	31-3-2016
Raytheon	United States	79	1.47	31-3-2016
Safran	France	80	3.77	31-3-2016
Textron	United States	30	1.04	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## **263.** Norwegian Government Pension Fund - Global (Norway)

Norwegian Government Pension Fund - Global (Norway) has made an estimated US\$ 989 million available to the nuclear weapons companies selected for this research project since January 2013.

Norwegian Government Pension Fund - Global (Norway) owns or manages shares of the nuclear weapon companies for an amount of US\$ 989 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 351 Shareholdings managed by Norwegian Government Pension Fund - Global

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	32	0.70	31-12-2015
BAE Systems	United Kingdom	345	1.56	1-6-2016
Engility	United States	9	0.74	31-12-2015
Fluor	United States	62	0.94	31-12-2015
Huntington Ingalls Industries	United States	56	0.93	31-12-2015
Larsen & Toubro	India	95	0.53	31-12-2015
Leonardo-Finmeccanica	Italy	170	2.03	16-11-2015
Moog	United States	24	1.22	31-12-2015
Thales	France	195	1.23	31-12-2015

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.



## 264. Ohio Public Employees Retirement System (United States)

Ohio Public Employees Retirement System (United States) has made an estimated US\$ 7 million available to the nuclear weapons companies selected for this research project since January 2013.

Ohio Public Employees Retirement System (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 7 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 352 Shareholdings managed by Ohio Public Employees Retirement System

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	7	0.71	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 265. Old Mutual (United Kingdom)

Old Mutual (United Kingdom) has made an estimated US\$ 3,135 million available to the nuclear weapons companies selected for this research project since January 2013.

Old Mutual (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 3,135 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 353 Shareholdings managed by Old Mutual

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	66	1.35	31-5-2016
Aerojet Rocketdyne	United States	25	2.39	31-3-2016
BWX Technologies	United States	29	0.83	31-3-2016
General Dynamics	United States	937	2.33	31-3-2016
Honeywell International	United States	1,393	1.63	31-3-2016
Raytheon	United States	684	1.87	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 266. Old Republic International (United States)

Old Republic International (United States) has made an estimated US\$ 27 million available to the nuclear weapons companies selected for this research project since January 2013.

Old Republic International (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 27 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.



Table 354 Bondholdings managed by Old Republic International

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	19	1.25	31-3-2016
Huntington Ingalls Industries	United States	7	0.60	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 267. Olsson Holdings (India)

Olsson Holdings (India) has made an estimated US\$ 4 million available to the nuclear weapons companies selected for this research project since January 2013.

Olsson Holdings (India) owns or manages shares of the nuclear weapon companies for an amount of US\$ 4 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 355 Shareholdings managed by Olsson Holdings

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Walchandnagar Industries	India	4	5.25	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 268. Orbis Group (United Kingdom)<sup>b</sup>

Orbis Group (Bermuda) has made an estimated US\$ 81 million available to the nuclear weapons companies selected for this research project since January 2013.

Orbis Group (Bermuda) owns or manages shares of the nuclear weapon companies for an amount of US\$ 81 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 356 Shareholdings managed by Orbis Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Serco	United Kingdom	81	5.01	1-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 269. Orix Corporation (Japan)

Orix Corporation (Japan) has made an estimated US\$ 2,122 million available to the nuclear weapons companies selected for this research project since January 2013.

<sup>&</sup>lt;sup>b</sup> Don't Bank on the Bomb lists Financial Institutions in Bermuda, Guernsey and Jersey as UK institutions.



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Orix Corporation (Japan) owns or manages shares of the nuclear weapon companies for an amount of US\$ 2,108 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 357 Shareholdings managed by Orix Corporation

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Engility	United States	4	0.59	31-3-2016
Fluor	United States	92	1.23	31-3-2016
General Dynamics	United States	454	1.13	31-3-2016
Huntington Ingalls Industries	United States	268	4.17	31-3-2016
Lockheed Martin	United States	380	0.56	31-3-2016
Raytheon	United States	610	1.68	31-3-2016
Textron	United States	299	3.05	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Orix Corporation (Japan) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 15 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 358 Bondholdings managed by Orix Corporation

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Huntington Ingalls Industries	United States	9	0.71	31-5-2016
Moog	United States	6	2.00	31-5-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

# 270. O'Shaughnessy Asset Management (United States)

O'Shaughnessy Asset Management (United States) has made an estimated US\$ 41 million available to the nuclear weapons companies selected for this research project since January 2013.

O'Shaughnessy Asset Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 41 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 359 Shareholdings managed by O'Shaughnessy Asset Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	41	0.55	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 271. Pacific Century Group (China)

Pacific Century Group (China) has made an estimated US\$ 71 million available to the nuclear weapons companies selected for this research project since January 2013.



Pacific Century Group (China) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 71 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 360 Bondholdings managed by Pacific Century Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	31	2.01	31-3-2016
Moog	United States	6	2.01	30-4-2016
Orbital ATK	United States	12	1.73	31-3-2016
Textron	United States	21	0.74	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

#### 272. Pacific Mutual (United States)

Pacific Mutual (United States) has made an estimated US\$ 310 million available to the nuclear weapons companies selected for this research project since January 2013.

Pacific Mutual (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 310 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 361 Bondholdings managed by Pacific Mutual

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	99	1.62	31-3-2016
Fluor	United States	38	2.41	31-3-2016
Northrop Grumman	United States	79	1.23	31-3-2016
Safran	France	53	2.47	31-3-2016
Textron	United States	42	1.43	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 273. People's United Financial (United States)

People's United Financial (United States) has made an estimated US\$ 106 million available to the nuclear weapons companies selected for this research project since January 2013.

People's United Financial (United States) provided loans for an estimated amount of US\$ 106 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.



Table 362 Loans provided by People's United Financial

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018
Orbital ATK	800	34	29-9-2015	29-9-2020
Orbital ATK	1,000	43	29-9-2015	29-9-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

# 274. PNC Financial Services (United States)

PNC Financial Services (United States) has made an estimated US\$ 1,186 million available to the nuclear weapons companies selected for this research project since January 2013.

PNC Financial Services (United States) provided loans for an estimated amount of US\$ 752 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 363 Loans provided by PNC Financial Services

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Bechtel	1,000	28	7-6-2016	7-6-2021
Bechtel	1,500	42	7-6-2016	7-6-2021
BWX Technologies	700	32	22-5-2012	8-6-2017
BWX Technologies	400	27	11-5-2015	11-5-2020
BWX Technologies	500	33	11-5-2015	11-5-2020
BWX Technologies	600	36	11-5-2015	11-5-2020
General Dynamics	1,000	46	10-11-2015	10-11-2020
Huntington Ingalls Industries	489	27	23-9-2013	6-11-2018
Huntington Ingalls Industries	650	35	23-9-2013	6-11-2018
Huntington Ingalls Industries	1,250	71	13-7-2015	13-7-2020
Moog	900	70	28-3-2013	28-3-2018
Moog	1,100	63	28-6-2016	28-6-2021
Orbital ATK	200	13	3-9-2012	3-9-2017
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	250	14	8-10-2013	1-11-2020
Orbital ATK	1,010	17	8-10-2013	1-11-2018
Orbital ATK	150	7	24-6-2014	24-12-2018
Orbital ATK	800	34	29-9-2015	29-9-2020
Orbital ATK	1,000	43	29-9-2015	29-9-2020
Textron	1,000	75	30-9-2013	4-10-2018



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Textron	500	25	23-1-2014	23-1-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

PNC Financial Services (United States) underwrote bond issuances for an estimated amount of US\$ 253 million to the nuclear weapon companies since January 2013 (see table below).

Table 364 Underwriting of bond issuances by PNC Financial Services

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Huntington Ingalls Industries	600	34	17-11-2014	15-12-2021
Huntington Ingalls Industries	600	25	2-11-2015	15-11-2025
Moog	300	23	18-11-2014	1-12-2022
Northrop Grumman	850	26	28-5-2013	1-6-2018
Northrop Grumman	950	29	28-5-2013	1-6-20 <del>4</del> 3
Northrop Grumman	1,050	32	28-5-2013	1-8-2023
Orbital ATK	400	20	22-9-2015	1-10-2023
Textron	250	19	23-1-2014	1-3-2021
Textron	350	26	23-1-2014	1-3-2024
Textron	350	10	23-10-2014	1-3-2025
Textron	350	11	4-3-2016	15-3-2026

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

PNC Financial Services (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 181 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 365 Shareholdings managed by PNC Financial Services

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Northrop Grumman	United States	181	0.51	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 275. Polar Capital Holdings (United Kingdom)

Polar Capital Holdings (United Kingdom) has made an estimated US\$ 56 million available to the nuclear weapons companies selected for this research project since January 2013.

Polar Capital Holdings (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 56 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.



Table 366 Shareholdings managed by Polar Capital Holdings

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	56	1.19	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## **276.** Poplar Forest Capital (United States)

Poplar Forest Capital (United States) has made an estimated US\$ 48 million available to the nuclear weapons companies selected for this research project since January 2013.

Poplar Forest Capital (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 48 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 367 Shareholdings managed by Poplar Forest Capital

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	48	1.01	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 277. Power Financial Corporation (Canada)

Power Financial Corporation (Canada) has made an estimated US\$ 2,607 million available to the nuclear weapons companies selected for this research project since January 2013.

Power Financial Corporation (Canada) owns or manages shares of the nuclear weapon companies for an amount of US\$ 2,508 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 368 Shareholdings managed by Power Financial Corporation

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	39	0.82	31-3-2016
Boeing	United States	519	0.65	31-3-2016
General Dynamics	United States	436	1.08	31-3-2016
Honeywell International	United States	510	0.59	31-3-2016
Huntington Ingalls Industries	United States	34	0.53	31-3-2016
Northrop Grumman	United States	970	2.71	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Power Financial Corporation (Canada) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 99 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.



Table 369 Bondholdings managed by Power Financial Corporation

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Charles Stark Draper Laboratory	United States	26	53.55	31-3-2016
Moog	United States	16	5.31	31-3-2016
Northrop Grumman	United States	37	0.58	31-3-2016
Safran	France	20	0.94	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

### 278. Primecap Management (United States)

Primecap Management (United States) has made an estimated US\$ 2,361 million available to the nuclear weapons companies selected for this research project since January 2013.

Primecap Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 2,361 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 370 Shareholdings managed by Primecap Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	230	4.87	31-3-2016
Airbus Group	The Netherlands	1,231	2.40	31-3-2016
Honeywell International	United States	544	0.64	31-3-2016
Jacobs Engineering	United States	356	6.70	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 279. Principal Financial Group (United States)

Principal Financial Group (United States) has made an estimated US\$ 436 million available to the nuclear weapons companies selected for this research project since January 2013.

Principal Financial Group (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 212 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 371 Shareholdings managed by Principal Financial Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	7	0.69	31-3-2016
BWX Technologies	United States	25	0.71	31-3-2016
Fluor	United States	105	1.41	31-3-2016
Moog	United States	11	0.72	31-3-2016
Orbital ATK	United States	64	1.25	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.



Principal Financial Group (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 224 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 372 Bondholdings managed by Principal Financial Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	12	3.45	30-4-2016
BAE Systems	United Kingdom	41	0.68	31-3-2016
Boeing	United States	59	0.55	31-3-2016
Raytheon	United States	46	0.85	31-3-2016
Safran	France	48	2.26	31-3-2016
Textron	United States	18	0.61	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

#### 280. Private Capital Management (United States)

Private Capital Management (United States) has made an estimated US\$ 12 million available to the nuclear weapons companies selected for this research project since January 2013.

Private Capital Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 12 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 373 Shareholdings managed by Private Capital Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	12	1.17	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 281. Prospector Partners (United States)

Prospector Partners (United States) has made an estimated US\$ 40 million available to the nuclear weapons companies selected for this research project since January 2013.

Prospector Partners (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 40 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 374 Bondholdings managed by Prospector Partners

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Raytheon	United States	40	0.74	31-12-2015

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.



### 282. Prudential (UK) (United Kingdom)

Prudential (UK) (United Kingdom) has made an estimated US\$ 817 million available to the nuclear weapons companies selected for this research project since January 2013.

Prudential (UK) (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 347 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 375 Shareholdings managed by Prudential (UK)

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	10	0.93	31-3-2016
BAE Systems	United Kingdom	275	1.24	1-6-2016
Textron	United States	61	0.62	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Prudential (UK) (United Kingdom) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 471 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 376 Bondholdings managed by Prudential (UK)

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	89	1.45	31-3-2016
Boeing	United States	96	0.90	31-3-2016
Huntington Ingalls Industries	United States	8	0.69	31-3-2016
Lockheed Martin	United States	93	0.59	31-3-2016
Northrop Grumman	United States	65	1.02	31-3-2016
Orbital ATK	United States	7	0.94	31-3-2016
Raytheon	United States	70	1.30	31-3-2016
Textron	United States	43	1.48	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 283. Prudential Financial (US) (United States)

Prudential Financial (US) (United States) has made an estimated US\$ 2,721 million available to the nuclear weapons companies selected for this research project since January 2013.

Prudential Financial (US) (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 1,301 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 377 Shareholdings managed by Prudential Financial (US)

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Boeing	United States	1,174	1.45	31-3-2016



Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BWX Technologies	United States	19	0.54	31-3-2016
Engility	United States	3	0.51	31-3-2016
Huntington Ingalls Industries	United States	105	1.64	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Prudential Financial (US) (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 1,420 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 378 Bondholdings managed by Prudential Financial (US)

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	67	1.10	31-12-2015
Boeing	United States	327	3.07	31-3-2016
Fluor	United States	9	0.59	31-3-2016
General Dynamics	United States	43	1.48	31-3-2016
Honeywell International	United States	314	2.37	31-12-2015
Lockheed Martin	United States	239	1.52	31-3-2016
Northrop Grumman	United States	158	2.47	31-12-2015
Orbital ATK	United States	11	1.61	31-3-2016
Raytheon	United States	177	3.28	31-3-2016
Textron	United States	75	2.60	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

### 284. Pzena Investment Management (United States)

Pzena Investment Management (United States) has made an estimated US\$ 100 million available to the nuclear weapons companies selected for this research project since January 2013.

Pzena Investment Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 100 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 379 Shareholdings managed by Pzena Investment Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	100	2.12	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 285. Raymond James Financial (United States)

Raymond James Financial (United States) has made an estimated US\$ 47 million available to the nuclear weapons companies selected for this research project since January 2013.



Raymond James Financial (United States) provided loans for an estimated amount of US\$ 29 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 380 Loans provided by Raymond James Financial

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

Raymond James Financial (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 18 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 381 Shareholdings managed by Raymond James Financial

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BWX Technologies	United States	18	0.51	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 286. Regions Financial (United States)

Regions Financial (United States) has made an estimated US\$ 474 million available to the nuclear weapons companies selected for this research project since January 2013.

Regions Financial (United States) provided loans for an estimated amount of US\$ 440 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 382 Loans provided by Regions Financial

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aerojet Rocketdyne	100	8	30-5-2014	30-5-2019
Aerojet Rocketdyne	200	15	30-5-2014	30-5-2019
Aerojet Rocketdyne	350	23	17-6-2016	17-6-2021
Aerojet Rocketdyne	400	27	17-6-2016	17-6-2021
BWX Technologies	400	27	11-5-2015	11-5-2020
BWX Technologies	500	33	11-5-2015	11-5-2020
Engility	60	20	25-11-2014	26-8-2019
Fluor	1,700	50	25-2-2016	25-2-2021
Moog	1,100	110	22-5-2014	22-5-2019



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	250	14	8-10-2013	1-11-2020
Orbital ATK	1,010	17	8-10-2013	1-11-2018
Orbital ATK	150	7	24-6-2014	24-12-2018
Orbital ATK	800	34	29-9-2015	29-9-2020
Orbital ATK	1,000	43	29-9-2015	29-9-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

Regions Financial (United States) underwrote bond issuances for an estimated amount of US\$ 34 million to the nuclear weapon companies since January 2013 (see table below).

Table 383 Underwriting of bond issuances by Regions Financial

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Fluor	500	5	18-11-2014	15-12-2024
Fluor	555	9	14-3-2016	21-3-2023
Orbital ATK	400	20	22-9-2015	1-10-2023

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

#### 287. Reliance Capital (India)

Reliance Capital (India) has made an estimated US\$ 203 million available to the nuclear weapons companies selected for this research project since January 2013.

Reliance Capital (India) owns or manages shares of the nuclear weapon companies for an amount of US\$ 203 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 384 Shareholdings managed by Reliance Capital

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Larsen & Toubro	India	202	1.18	31-3-2016
Walchandnagar Industries	India	1	1.10	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 288. Renaissance Technologies (United States)

Renaissance Technologies (United States) has made an estimated US\$ 236 million available to the nuclear weapons companies selected for this research project since January 2013.



Renaissance Technologies (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 236 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 385 Shareholdings managed by Renaissance Technologies

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	21	1.99	31-3-2016
BWX Technologies	United States	32	0.93	31-3-2016
Huntington Ingalls Industries	United States	174	2.70	31-3-2016
Moog	United States	9	0.61	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 289. RidgeWorth Capital Management (United States)

RidgeWorth Capital Management (United States) has made an estimated US\$ 43 million available to the nuclear weapons companies selected for this research project since January 2013.

RidgeWorth Capital Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 43 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 386 Shareholdings managed by RidgeWorth Capital Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Orbital ATK	United States	43	0.84	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 290. River and Mercantile Group (United Kingdom)

River and Mercantile Group (United Kingdom) has made an estimated US\$ 9 million available to the nuclear weapons companies selected for this research project since January 2013.

River and Mercantile Group (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 9 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 387 Shareholdings managed by River and Mercantile Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Serco	United Kingdom	9	0.55	26-5-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 291. Riyad Bank (Saudi Arabia)

Riyad Bank (Saudi Arabia) has made an estimated US\$ 743 million available to the nuclear weapons companies selected for this research project since January 2013.



Riyad Bank (Saudi Arabia) provided loans for an estimated amount of US\$ 743 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 388 Loans provided by Riyad Bank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Bechtel	1,000	100	19-9-2014	17-10-2019
Bechtel	2,000	200	19-9-2014	17-10-2019
Bechtel	1,000	20	7-6-2016	7-6-2021
Bechtel	1,500	30	7-6-2016	7-6-2021
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	25	23-9-2014	15-10-2015
Boeing	2,473	25	23-9-2014	16-10-2019
Boeing	2,465	25	4-11-2015	3-11-2016
Boeing	2,365	25	4-11-2015	3-11-2020
General Dynamics	1,000	46	10-11-2015	10-11-2020
Lockheed Martin	1,500	35	14-8-2014	14-8-2019
Lockheed Martin	2,500	50	9-10-2015	9-10-2020
Raytheon	1,400	76	13-12-2011	13-12-2016
Raytheon	1,250	44	13-11-2015	13-11-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

## 292. Rodin Holdings (India)

Rodin Holdings (India) has made an estimated US\$ 7 million available to the nuclear weapons companies selected for this research project since January 2013.

Rodin Holdings (India) owns or manages shares of the nuclear weapon companies for an amount of US\$ 7 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 389 Shareholdings managed by Rodin Holdings

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Walchandnagar Industries	India	7	7.88	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 293. Rothschild Group (France)

Rothschild Group (France) has made an estimated US\$ 11 million available to the nuclear weapons companies selected for this research project since January 2013.



Rothschild Group (France) owns or manages shares of the nuclear weapon companies for an amount of US\$ 11 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 390 Shareholdings managed by Rothschild Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	11	1.04	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 294. Royal Bank of Canada (Canada)

Royal Bank of Canada (Canada) has made an estimated US\$ 3,057 million available to the nuclear weapons companies selected for this research project since January 2013.

Royal Bank of Canada (Canada) provided loans for an estimated amount of US\$ 1,513 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 391 Loans provided by Royal Bank of Canada

<u> </u>				
Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aerojet Rocketdyne	400	15	17-6-2016	17-6-2021
Airbus Group	3,797	66	14-10-2014	14-10-2019
BAE Systems	3,269	131	12-12-2013	12-12-2018
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	75	23-9-2014	15-10-2015
Boeing	2, <del>4</del> 73	75	23-9-2014	16-10-2019
Boeing	2,465	90	4-11-2015	3-11-2016
Boeing	2,365	90	4-11-2015	3-11-2020
Engility	50	10	23-4-2014	9-5-2019
Engility	250	50	23-4-2014	9-5-2021
Engility	393	79	23-4-2014	9-5-2020
Honeywell International	3,000	129	30-3-2012	2-4-2017
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	120	10-7-2015	10-7-2020
Honeywell International	1,500	45	29-4-2016	28-4-2017
Lockheed Martin	1,500	50	14-8-2014	14-8-2019
Lockheed Martin	2,500	75	9-10-2015	9-10-2020
Lockheed Martin	7,000	110	9-10-2015	7-10-2016
Moog	900	30	28-3-2013	28-3-2018
Orbital ATK	200	13	3-9-2012	3-9-2017
Orbital ATK	250	25	8-10-2013	1-11-2020



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Orbital ATK	700	47	8-10-2013	1-11-2018
Orbital ATK	1,010	67	8-10-2013	1-11-2018
Orbital ATK	150	7	24-6-2014	24-12-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

Royal Bank of Canada (Canada) underwrote bond issuances for an estimated amount of US\$ 528 million to the nuclear weapon companies since January 2013 (see table below).

Table 392 Underwriting of bond issuances by Royal Bank of Canada

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
BAE Systems	250	21	3-12-2015	7-10-2044
BAE Systems	500	42	3-12-2015	15-12-2020
BAE Systems	750	63	3-12-2015	15-12-2025
Boeing	350	10	30-4-2013	15-11-2018
Boeing	300	9	28-10-2014	30-10-2021
Boeing	300	9	28-10-2014	30-10-2024
Boeing	250	6	18-2-2015	1-3-2025
Boeing	250	8	18-2-2015	1-3-2045
Boeing	250	13	18-2-2015	1-3-2035
Boeing	250	8	27-10-2015	30-10-2022
Boeing	300	9	27-10-2015	30-10-2025
Boeing	350	16	27-10-2015	30-10-2020
Boeing	400	10	16-5-2016	15-6-2023
Boeing	400	16	16-5-2016	15-6-2046
Boeing	400	18	16-5-2016	15-6-2026
Honeywell International	300	10	18-11-2013	1-12-2023
Honeywell International	700	23	18-11-2013	17-11-2015
Honeywell International	837	4	15-2-2016	22-2-2028
Honeywell International	1,116	6	15-2-2016	22-2-2018
Honeywell International	1,116	6	15-2-2016	21-2-2020
Honeywell International	1,395	7	15-2-2016	22-2-2023
Lockheed Martin	500	9	12-2-2015	1-3-2035
Lockheed Martin	750	14	12-2-2015	1-3-2025
Lockheed Martin	1,000	18	12-2-2015	1-3-2045
Lockheed Martin	500	8	16-11-2015	15-1-2023
Lockheed Martin	500	8	16-11-2015	15-5-2036
Lockheed Martin	750	11	16-11-2015	23-11-2018



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Lockheed Martin	1,250	19	16-11-2015	23-11-2020
Lockheed Martin	2,000	30	16-11-2015	15-1-2026
Lockheed Martin	2,000	30	16-11-2015	15-5-2046
Moog	300	23	18-11-2014	1-12-2022
Orbital ATK	300	50	22-10-2013	1-10-2021

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

Royal Bank of Canada (Canada) owns or manages shares of the nuclear weapon companies for an amount of US\$ 1,016 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 393 Shareholdings managed by Royal Bank of Canada

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	63	0.84	31-3-2016
Honeywell International	United States	464	0.53	31-3-2016
Jacobs Engineering	United States	47	0.87	31-3-2016
Lockheed Martin	United States	379	0.57	31-3-2016
Textron	United States	63	0.64	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 295. Royal Bank of Scotland (United Kingdom)

Royal Bank of Scotland (United Kingdom) has made an estimated US\$ 5,236 million available to the nuclear weapons companies selected for this research project since January 2013.

Royal Bank of Scotland (United Kingdom) provided loans for an estimated amount of US\$ 4,489 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 394 Loans provided by Royal Bank of Scotland

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Airbus Group	3,797	134	14-10-2014	14-10-2019
BAE Systems	3,269	131	12-12-2013	12-12-2018
Bechtel	975	146	27-7-2012	27-7-2017
Bechtel	1,000	150	14-6-2013	14-6-2018
Bechtel	2,000	300	14-6-2013	14-6-2018
Bechtel	1,000	120	19-9-2014	17-10-2019
Bechtel	1,000	150	19-9-2014	17-10-2019



		Est.		
	Total value	participation of this bank	Closing	Maturity
Company	(US\$ mln)	(US\$ mln)	date	date
Bechtel	2,000	300	19-9-2014	17-10-2019
Bechtel	1,000	28	7-6-2016	7-6-2021
Bechtel	1,500	42	7-6-2016	7-6-2021
Bechtel	500	67	7-6-2016	7-6-2021
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	125	23-9-2014	15-10-2015
Boeing	2,473	125	23-9-2014	16-10-2019
BWX Technologies	400	27	11-5-2015	11-5-2020
BWX Technologies	500	33	11-5-2015	11-5-2020
CH2M Hill	900	72	19-4-2012	19-4-2017
General Dynamics	1,000	125	21-6-2013	21-6-2018
General Dynamics	1,000	46	10-11-2015	10-11-2020
Honeywell International	3,000	129	30-3-2012	2-4-2017
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	120	10-7-2015	10-7-2020
Honeywell International	1,500	45	29-4-2016	28-4-2017
Huntington Ingalls Industries	489	49	23-9-2013	6-11-2018
Huntington Ingalls Industries	650	65	23-9-2013	6-11-2018
Jacobs Engineering	1,160	139	23-3-2012	23-3-2017
Jacobs Engineering	460	39	7-2-2014	7-2-2019
Jacobs Engineering	1,140	62	7-2-2014	7-2-2019
Jacobs Engineering	1,140	62	7-2-2014	7-2-2019
Jacobs Engineering	460	55	5-3-2015	5-3-2020
Jacobs Engineering	1,140	137	5-3-2015	5-3-2020
Larsen & Toubro	47	5	27-8-2013	1-6-2018
Larsen & Toubro	59	7	27-8-2013	1-8-2017
Larsen & Toubro	64	7	27-8-2013	1-6-2018
Larsen & Toubro	100	11	27-8-2013	1-6-2018
Larsen & Toubro	100	11	27-8-2013	1-6-2018
Leonardo-Finmeccanica	3,001	150	9-7-2014	9-7-2019
Leonardo-Finmeccanica	2,212	90	6-7-2015	6-7-2020
Lockheed Martin	1,500	85	14-8-2014	14-8-2019
Northrop Grumman	575	58	31-3-2011	24-1-2017
Northrop Grumman	1,500	150	8-9-2011	8-9-2016
Northrop Grumman	1,775	355	29-8-2013	29-8-2018
Safran	2,744	183	4-12-2015	4-12-2020
Serco	1,159	72	21-2-2012	28-3-2017
Serco	714	45	12-3-2015	12-3-2019
Thales	1,835	122	19-12-2014	19-12-2019



Royal Bank of Scotland (United Kingdom) underwrote bond issuances for an estimated amount of US\$ 747 million to the nuclear weapon companies since January 2013 (see table below).

Table 395 Underwriting of bond issuances by Royal Bank of Scotland

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	350	10	30-4-2013	15-11-2018
Boeing	250	9	28-10-2014	30-10-2017
Boeing	300	9	28-10-2014	30-10-2021
Boeing	300	15	28-10-2014	30-10-2024
Boeing	250	8	18-2-2015	1-3-2035
Boeing	250	8	18-2-2015	1-3-2045
Boeing	250	14	18-2-2015	1-3-2025
Honeywell International	300	30	18-11-2013	1-12-2023
Honeywell International	700	70	18-11-2013	17-11-2015
Honeywell International	837	4	15-2-2016	22-2-2028
Honeywell International	1,116	6	15-2-2016	22-2-2018
Honeywell International	1,116	6	15-2-2016	21-2-2020
Honeywell International	1,395	7	15-2-2016	22-2-2023
Huntington Ingalls Industries	600	60	17-11-2014	15-12-2021
Leonardo-Finmeccanica	950	59	26-11-2013	19-1-2021
Leonardo-Finmeccanica	339	20	17-1-2014	19-1-2021
Lockheed Martin	500	9	12-2-2015	1-3-2035
Lockheed Martin	750	14	12-2-2015	1-3-2025
Lockheed Martin	1,000	18	12-2-2015	1-3-2045
Moog	300	23	18-11-2014	1-12-2022
Northrop Grumman	850	57	28-5-2013	1-6-2018
Northrop Grumman	950	63	28-5-2013	1-6-2043
Northrop Grumman	1,050	70	28-5-2013	1-8-2023
Northrop Grumman	600	24	3-2-2015	15-4-2045
Raytheon	300	8	24-11-2014	15-12-2024
Raytheon	300	8	24-11-2014	15-12-2044
Serco	20	10	13-5-2013	14-5-2020
Serco	70	35	13-5-2013	14-5-2022
Serco	150	75	13-5-2013	14-5-2024

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.



## 296. Royal Capital Management (United States)

Royal Capital Management (United States) has made an estimated US\$ 5 million available to the nuclear weapons companies selected for this research project since January 2013.

Royal Capital Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 5 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 396 Shareholdings managed by Royal Capital Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	5	0.50	30-9-2015

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 297. Roystone Capital Management (United States)

Roystone Capital Management (United States) has made an estimated US\$ 26 million available to the nuclear weapons companies selected for this research project since January 2013.

Roystone Capital Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 26 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 397 Shareholdings managed by Roystone Capital Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Orbital ATK	United States	26	0.52	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 298. Ruane, Cunniff & Goldfarb (United States)

Ruane, Cunniff & Goldfarb (United States) has made an estimated US\$ 249 million available to the nuclear weapons companies selected for this research project since January 2013.

Ruane, Cunniff & Goldfarb (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 249 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 398 Shareholdings managed by Ruane, Cunniff & Goldfarb

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Jacobs Engineering	United States	249	4.69	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.



#### 299. S&T Bancorp (United States)

S&T Bancorp (United States) has made an estimated US\$ 24 million available to the nuclear weapons companies selected for this research project since January 2013.

S&T Bancorp (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 24 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 399 Shareholdings managed by S&T Bancorp

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	24	0.51	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 300. Sanders Capital (United States)

Sanders Capital (United States) has made an estimated US\$ 239 million available to the nuclear weapons companies selected for this research project since January 2013.

Sanders Capital (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 239 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 400 Shareholdings managed by Sanders Capital

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
General Dynamics	United States	239	0.60	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 301. Santander (Spain)

Santander (Spain) has made an estimated US\$ 1,665 million available to the nuclear weapons companies selected for this research project since January 2013.

Santander (Spain) provided loans for an estimated amount of US\$ 1,348 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 401 Loans provided by Santander

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Airbus Group	3,797	134	14-10-2014	14-10-2019
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	50	23-9-2014	15-10-2015
Boeing	2,473	50	23-9-2014	16-10-2019



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Boeing	2,465	75	4-11-2015	3-11-2016
Boeing	2,365	75	4-11-2015	3-11-2020
Fluor	1,700	70	25-2-2016	25-2-2021
Fluor	1,800	75	25-2-2016	25-2-2021
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	60	10-7-2015	10-7-2020
Honeywell International	1,500	25	29-4-2016	28-4-2017
Leonardo-Finmeccanica	3,001	100	9-7-2014	9-7-2019
Leonardo-Finmeccanica	2,212	99	6-7-2015	6-7-2020
Moog	1,100	63	28-6-2016	28-6-2021
Safran	2,744	235	4-12-2015	4-12-2020
Thales	1,835	122	19-12-2014	19-12-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

Santander (Spain) underwrote bond issuances for an estimated amount of US\$ 317 million to the nuclear weapon companies since January 2013 (see table below).

Table 402 Underwriting of bond issuances by Santander

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Airbus Group	640	96	20-10-2014	29-10-2029
Boeing	350	10	30-4-2013	15-11-2018
Boeing	300	9	28-10-2014	30-10-2021
Boeing	300	9	28-10-2014	30-10-2024
Boeing	250	6	18-2-2015	1-3-2025
Boeing	250	8	18-2-2015	1-3-2035
Boeing	250	8	18-2-2015	1-3-2045
Boeing	300	9	27-10-2015	30-10-2025
Boeing	350	11	27-10-2015	30-10-2020
Boeing	250	11	27-10-2015	30-10-2022
Boeing	400	12	16-5-2016	15-6-2026
Boeing	400	16	16-5-2016	15-6-2023
Boeing	400	16	16-5-2016	15-6-2046
Fluor	500	10	18-11-2014	15-12-2024
Fluor	555	9	14-3-2016	21-3-2023
Leonardo-Finmeccanica	950	59	26-11-2013	19-1-2021
Leonardo-Finmeccanica	339	20	17-1-2014	19-1-2021

### 302. SAR Holding (United States)

SAR Holding (United States) has made an estimated US\$ 36 million available to the nuclear weapons companies selected for this research project since January 2013.

SAR Holding (United States) underwrote bond issuances for an estimated amount of US\$ 36 million to the nuclear weapon companies since January 2013 (see table below).

Table 403 Underwriting of bond issuances by SAR Holding

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	300	3	28-10-2014	30-10-2024
Boeing	250	3	18-2-2015	1-3-2045
Boeing	300	5	27-10-2015	30-10-2025
Boeing	400	7	16-5-2016	15-6-2026
Lockheed Martin	500	1	16-11-2015	15-1-2023
Lockheed Martin	500	1	16-11-2015	15-5-2036
Lockheed Martin	750	2	16-11-2015	23-11-2018
Lockheed Martin	1,250	3	16-11-2015	23-11-2020
Lockheed Martin	2,000	5	16-11-2015	15-1-2026
Lockheed Martin	2,000	5	16-11-2015	15-5-2046

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

#### 303. Sasco Capital (United States)

Sasco Capital (United States) has made an estimated US\$ 191 million available to the nuclear weapons companies selected for this research project since January 2013.

Sasco Capital (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 191 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 404 Shareholdings managed by Sasco Capital

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Raytheon	United States	191	0.52	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.



#### 304. Schafer Cullen Capital Management (United States)

Schafer Cullen Capital Management (United States) has made an estimated US\$ 274 million available to the nuclear weapons companies selected for this research project since January 2013.

Schafer Cullen Capital Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 274 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 405 Shareholdings managed by Schafer Cullen Capital Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Raytheon	United States	274	0.75	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 305. Schroders (United Kingdom)

Schroders (United Kingdom) has made an estimated US\$ 310 million available to the nuclear weapons companies selected for this research project since January 2013.

Schroders (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 310 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 406 Shareholdings managed by Schroders

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	243	1.09	2-5-2016
Huntington Ingalls Industries	United States	67	1.05	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 306. Scotiabank (Canada)

Scotiabank (Canada) has made an estimated US\$ 2,439 million available to the nuclear weapons companies selected for this research project since January 2013.

Scotiabank (Canada) provided loans for an estimated amount of US\$ 1,889 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 407 Loans provided by Scotiabank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	750	20	7-6-2013	7-6-2018
Aecom	1,050	39	29-1-2014	29-1-2019
Aecom	500	40	11-8-2014	17-10-2019



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	1,188	95	11-8-2014	17-10-2021
Aecom	1,050	105	11-8-2014	17-10-2019
Aecom	1,925	154	11-8-2014	17-10-2019
Bechtel	1,000	28	7-6-2016	7-6-2021
Bechtel	1,500	42	7-6-2016	7-6-2021
BWX Technologies	700	32	22-5-2012	8-6-2017
BWX Technologies	400	27	11-5-2015	11-5-2020
BWX Technologies	500	33	11-5-2015	11-5-2020
BWX Technologies	600	36	11-5-2015	11-5-2020
Fluor	1,700	85	25-2-2016	25-2-2021
Fluor	1,800	100	25-2-2016	25-2-2021
General Dynamics	1,000	125	21-6-2013	21-6-2018
General Dynamics	1,000	46	10-11-2015	10-11-2020
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	60	10-7-2015	10-7-2020
Honeywell International	1,500	25	29-4-2016	28-4-2017
Huntington Ingalls Industries	489	27	23-9-2013	6-11-2018
Huntington Ingalls Industries	650	35	23-9-2013	6-11-2018
Huntington Ingalls Industries	1,250	125	13-7-2015	13-7-2020
Jacobs Engineering	1,160	139	23-3-2012	23-3-2017
Jacobs Engineering	1,140	62	7-2-2014	7-2-2019
Northrop Grumman	575	22	31-3-2011	24-1-2017
Northrop Grumman	1,500	129	8-9-2011	8-9-2016
Northrop Grumman	1,600	64	8-7-2015	8-7-2020
Raytheon	1,400	76	13-12-2011	13-12-2016
Raytheon	1,250	44	13-11-2015	13-11-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

Scotiabank (Canada) underwrote bond issuances for an estimated amount of US\$ 550 million to the nuclear weapon companies since January 2013 (see table below).

Table 408 Underwriting of bond issuances by Scotiabank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Aecom	800	80	17-9-2014	15-10-2022
Aecom	800	80	17-9-2014	15-10-2024
Aecom	800	80	30-10-2015	15-10-2022
Aecom	800	80	30-10-2015	15-10-2024



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Fluor	500	18	18-11-2014	15-12-2024
Fluor	555	9	14-3-2016	21-3-2023
Huntington Ingalls Industries	600	34	17-11-2014	15-12-2021
Huntington Ingalls Industries	600	75	2-11-2015	15-11-2025
Northrop Grumman	850	26	28-5-2013	1-6-2018
Northrop Grumman	950	29	28-5-2013	1-6-2043
Northrop Grumman	1,050	32	28-5-2013	1-8-2023
Raytheon	300	5	24-11-2014	15-12-2024
Raytheon	300	5	24-11-2014	15-12-2044

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

### 307. Securian (United States)

Securian (United States) has made an estimated US\$ 200 million available to the nuclear weapons companies selected for this research project since January 2013.

Securian (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 200 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 409 Bondholdings managed by Securian

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	44	0.71	31-3-2016
Boeing	United States	70	0.66	31-3-2016
General Dynamics	United States	19	0.65	31-3-2016
Northrop Grumman	United States	39	0.62	31-3-2016
Textron	United States	28	0.97	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

### 308. SEI (United States)

SEI (United States) has made an estimated US\$ 3 million available to the nuclear weapons companies selected for this research project since January 2013.

SEI (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 3 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.



Table 410 Bondholdings managed by SEI

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	3	0.91	29-2-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

### 309. Shapiro Capital Management (United States)

Shapiro Capital Management (United States) has made an estimated US\$ 78 million available to the nuclear weapons companies selected for this research project since January 2013.

Shapiro Capital Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 78 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 411 Shareholdings managed by Shapiro Capital Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BWX Technologies	United States	78	2.25	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 310. Siebert Brandford Shank Financial (United States)

Siebert Brandford Shank Financial (United States) has made an estimated US\$ 35 million available to the nuclear weapons companies selected for this research project since January 2013.

Siebert Brandford Shank Financial (United States) underwrote bond issuances for an estimated amount of US\$ 35 million to the nuclear weapon companies since January 2013 (see table below).

Table 412 Underwriting of bond issuances by Siebert Brandford Shank Financial

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	250	3	18-2-2015	1-3-2025
Boeing	300	5	27-10-2015	30-10-2025
Boeing	400	9	16-5-2016	15-6-2023
Lockheed Martin	500	1	16-11-2015	15-1-2023
Lockheed Martin	500	1	16-11-2015	15-5-2036
Lockheed Martin	750	2	16-11-2015	23-11-2018
Lockheed Martin	1,250	3	16-11-2015	23-11-2020
Lockheed Martin	2,000	5	16-11-2015	15-1-2026
Lockheed Martin	2,000	5	16-11-2015	15-5-2046

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.



## 311. Siebert Capital (United States)

Siebert Capital (United States) has made an estimated US\$ 3 million available to the nuclear weapons companies selected for this research project since January 2013.

Siebert Capital (United States) underwrote bond issuances for an estimated amount of US\$ 3 million to the nuclear weapon companies since January 2013 (see table below).

Table 413 Underwriting of bond issuances by Siebert Capital

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	300	3	28-10-2014	30-10-2021

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

### 312. Siemens Financial Services (Germany)

Siemens Financial Services (Germany) has made an estimated US\$ 163 million available to the nuclear weapons companies selected for this research project since January 2013.

Siemens Financial Services (Germany) provided loans for an estimated amount of US\$ 163 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 414 Loans provided by Siemens Financial Services

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Huntington Ingalls Industries	489	27	23-9-2013	6-11-2018
Huntington Ingalls Industries	650	35	23-9-2013	6-11-2018
Huntington Ingalls Industries	1,250	71	13-7-2015	13-7-2020
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

### 313. Silchester International Investors (United Kingdom)

Silchester International Investors (United Kingdom) has made an estimated US\$ 680 million available to the nuclear weapons companies selected for this research project since January 2013.

Silchester International Investors (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 680 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.



Table 415 Shareholdings managed by Silchester International Investors

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	680	3.00	17-2-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 314. Silvercrest Asset Management Group (United States)

Silvercrest Asset Management Group (United States) has made an estimated US\$ 38 million available to the nuclear weapons companies selected for this research project since January 2013.

Silvercrest Asset Management Group (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 38 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 416 Shareholdings managed by Silvercrest Asset Management Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Jacobs Engineering	United States	38	0.72	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 315. SinoPac Holdings (Taiwan)

SinoPac Holdings (Taiwan) has made an estimated US\$ 20 million available to the nuclear weapons companies selected for this research project since January 2013.

SinoPac Holdings (Taiwan) provided loans for an estimated amount of US\$ 20 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 417 Loans provided by SinoPac Holdings

Com	ıpany	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecon	1	750	20	7-6-2013	7-6-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

# 316. Skandinaviska Enskilda Banken (Sweden)

Skandinaviska Enskilda Banken (Sweden) has made an estimated US\$ 197 million available to the nuclear weapons companies selected for this research project since January 2013.

Skandinaviska Enskilda Banken (Sweden) provided loans for an estimated amount of US\$ 197 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.



Table 418 Loans provided by Skandinaviska Enskilda Banken

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Airbus Group	3,797	66	14-10-2014	14-10-2019
BAE Systems	3,269	131	12-12-2013	12-12-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

#### 317. Smith Asset Management Group (United States)

Smith Asset Management Group (United States) has made an estimated US\$ 44 million available to the nuclear weapons companies selected for this research project since January 2013.

Smith Asset Management Group (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 44 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 419 Shareholdings managed by Smith Asset Management Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Huntington Ingalls Industries	United States	44	0.68	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 318. Snow Capital Management (United States)

Snow Capital Management (United States) has made an estimated US\$ 57 million available to the nuclear weapons companies selected for this research project since January 2013.

Snow Capital Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 57 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 420 Shareholdings managed by Snow Capital Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Textron	United States	57	0.58	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 319. Sociedad Estatal de Participaciones Industriales (Spain)

Sociedad Estatal de Participaciones Industriales (Spain) has made an estimated US\$ 2,025 million available to the nuclear weapons companies selected for this research project since January 2013.

Sociedad Estatal de Participaciones Industriales (Spain) owns or manages shares of the nuclear weapon companies for an amount of US\$ 2,025 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.



Table 421 Shareholdings managed by Sociedad Estatal de Participaciones Industriales

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Airbus Group	The Netherlands	2,025	4.18	25-1-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 320. Société Générale (France)

Société Générale (France) has made an estimated US\$ 4,947 million available to the nuclear weapons companies selected for this research project since January 2013.

Société Générale (France) provided loans for an estimated amount of US\$ 1,800 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 422 Loans provided by Société Générale

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Airbus Group	3,797	134	14-10-2014	14-10-2019
BAE Systems	3,269	131	12-12-2013	12-12-2018
Bechtel	1,000	28	7-6-2016	7-6-2021
Bechtel	1,500	42	7-6-2016	7-6-2021
Boeing	2,473	60	23-9-2014	15-10-2015
Boeing	2,473	60	23-9-2014	16-10-2019
Boeing	2,465	60	4-11-2015	3-11-2016
Boeing	2,365	60	4-11-2015	3-11-2020
Honeywell International	3,000	129	30-3-2012	2-4-2017
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	120	10-7-2015	10-7-2020
Honeywell International	1,500	<del>4</del> 5	29-4-2016	28-4-2017
Leonardo-Finmeccanica	3,001	150	9-7-2014	9-7-2019
Leonardo-Finmeccanica	2,212	153	6-7-2015	6-7-2020
Safran	1,320	198	21-10-2011	21-10-2016
Safran	2,744	235	4-12-2015	4-12-2020
Thales	1,835	122	19-12-2014	19-12-2019

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

Société Générale (France) underwrote share issuances for an estimated amount of US\$ 2,382 million to the nuclear weapon companies since January 2013 (see table below).



Table 423 Underwriting of share issuances by Société Générale

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date
Airbus Group	2,987	597	9-4-2013
Airbus Group	2,987	597	9-4-2013
Airbus Group	614	614	15-1-2014
Safran	573	229	27-3-2013
Safran	573	344	27-3-2013

Source: Thomson Reuters Eikon, "Bond and share issue underwritings", viewed in June/July 2016.

Société Générale (France) underwrote bond issuances for an estimated amount of US\$ 765 million to the nuclear weapon companies since January 2013 (see table below).

Table 424 Underwriting of bond issuances by Société Générale

	•		•	
Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Airbus Group	558	93	26-6-2015	1-7-2022
Airbus Group	558	93	26-6-2015	1-7-2022
Boeing	300	9	28-10-2014	30-10-2021
Boeing	300	9	28-10-2014	30-10-2024
Boeing	250	6	18-2-2015	1-3-2025
Boeing	250	8	18-2-2015	1-3-2035
Boeing	250	8	18-2-2015	1-3-2045
Boeing	250	8	27-10-2015	30-10-2022
Boeing	300	9	27-10-2015	30-10-2025
Boeing	350	11	27-10-2015	30-10-2020
Boeing	400	10	16-5-2016	15-6-2023
Boeing	400	12	16-5-2016	15-6-2026
Boeing	400	16	16-5-2016	15-6-2046
Honeywell International	300	10	18-11-2013	1-12-2023
Honeywell International	700	23	18-11-2013	17-11-2015
Honeywell International	837	17	15-2-2016	22-2-2028
Honeywell International	1,116	22	15-2-2016	22-2-2018
Honeywell International	1,116	22	15-2-2016	21-2-2020
Honeywell International	1,395	28	15-2-2016	22-2-2023
Leonardo-Finmeccanica	950	59	26-11-2013	19-1-2021
Leonardo-Finmeccanica	339	20	17-1-2014	19-1-2021
Thales	389	56	13-3-2013	19-3-2021
Thales	648	93	13-3-2013	20-3-2018
Thales	668	125	31-5-2016	7-6-2023



### 321. Southern Farm Bureau Life Insurance (United States)

Southern Farm Bureau Life Insurance (United States) has made an estimated US\$ 15 million available to the nuclear weapons companies selected for this research project since January 2013.

Southern Farm Bureau Life Insurance (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 15 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 425 Bondholdings managed by Southern Farm Bureau Life Insurance

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Safran	France	15	0.71	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 322. SPA Group (India)

SPA Group (India) has made an estimated US\$ 75 million available to the nuclear weapons companies selected for this research project since January 2013.

SPA Group (India) underwrote bond issuances for an estimated amount of US\$ 75 million to the nuclear weapon companies since January 2013 (see table below).

Table 426 Underwriting of bond issuances by SPA Group

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Larsen & Toubro	18	5	17-5-2013	15-5-2015
Larsen & Toubro	18	5	17-5-2013	15-5-2015
Larsen & Toubro	37	7	29-10-2013	28-10-2016
Larsen & Toubro	33	16	16-9-2014	19-2-2016
Larsen & Toubro	9	5	7-1-2015	7-2-2018
Larsen & Toubro	9	5	7-1-2015	23-2-2018
Larsen & Toubro	9	5	7-1-2015	6-3-2018
Larsen & Toubro	9	5	7-1-2015	15-6-2018
Larsen & Toubro	9	5	7-1-2015	15-6-2018
Larsen & Toubro	3	3	13-2-2015	13-2-2017
Larsen & Toubro	3	3	13-2-2015	21-2-2017
Larsen & Toubro	3	3	13-2-2015	27-2-2017
Larsen & Toubro	3	3	13-2-2015	4-4-2017
Larsen & Toubro	3	3	13-2-2015	17-4-2017
Larsen & Toubro	4	1	19-5-2015	18-5-2018



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Larsen & Toubro	3	1	8-7-2015	2-7-2018
Larsen & Toubro	3	1	8-7-2015	5-7-2018
Larsen & Toubro	2	1	19-8-2015	16-8-2016

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

### 323. Sprucegrove Investment Management (Canada)

Sprucegrove Investment Management (Canada) has made an estimated US\$ 36 million available to the nuclear weapons companies selected for this research project since January 2013.

Sprucegrove Investment Management (Canada) owns or manages shares of the nuclear weapon companies for an amount of US\$ 36 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 427 Shareholdings managed by Sprucegrove Investment Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Jacobs Engineering	United States	36	0.69	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 324. StanCorp Financial (United States)

StanCorp Financial (United States) has made an estimated US\$ 24 million available to the nuclear weapons companies selected for this research project since January 2013.

StanCorp Financial (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 24 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 428 Bondholdings managed by StanCorp Financial

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	18	1.19	31-3-2016
Moog	United States	2	0.78	31-3-2016
Orbital ATK	United States	4	0.51	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 325. Standard Chartered (United Kingdom)

Standard Chartered (United Kingdom) has made an estimated US\$ 1,043 million available to the nuclear weapons companies selected for this research project since January 2013.



Standard Chartered (United Kingdom) provided loans for an estimated amount of US\$ 760 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 429 Loans provided by Standard Chartered

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	1,050	39	29-1-2014	29-1-2019
Airbus Group	3,797	66	14-10-2014	14-10-2019
Bechtel	1,000	28	7-6-2016	7-6-2021
Bechtel	1,500	42	7-6-2016	7-6-2021
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	30	23-9-2014	15-10-2015
Boeing	2,473	30	23-9-2014	16-10-2019
Boeing	2,465	30	4-11-2015	3-11-2016
Boeing	2,365	30	4-11-2015	3-11-2020
Fluor	1,700	85	25-2-2016	25-2-2021
Fluor	1,800	100	25-2-2016	25-2-2021
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	120	10-7-2015	10-7-2020
Honeywell International	1,500	45	29-4-2016	28-4-2017

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

Standard Chartered (United Kingdom) underwrote bond issuances for an estimated amount of US\$ 283 million to the nuclear weapon companies since January 2013 (see table below).

Table 430 Underwriting of bond issuances by Standard Chartered

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	350	10	30-4-2013	15-11-2018
Boeing	300	4	28-10-2014	30-10-2021
Boeing	300	4	28-10-2014	30-10-2024
Boeing	250	3	18-2-2015	1-3-2025
Boeing	250	3	18-2-2015	1-3-2035
Boeing	250	3	18-2-2015	1-3-2045
Boeing	250	4	27-10-2015	30-10-2022
Boeing	300	5	27-10-2015	30-10-2025
Boeing	350	5	27-10-2015	30-10-2020
Boeing	400	5	16-5-2016	15-6-2046
Boeing	400	8	16-5-2016	15-6-2026
Boeing	400	9	16-5-2016	15-6-2023



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Fluor	500	18	18-11-2014	15-12-2024
Fluor	555	9	14-3-2016	21-3-2023
Honeywell International	300	10	18-11-2013	1-12-2023
Honeywell International	700	23	18-11-2013	17-11-2015
Honeywell International	837	4	15-2-2016	22-2-2028
Honeywell International	1,116	6	15-2-2016	22-2-2018
Honeywell International	1,116	6	15-2-2016	21-2-2020
Honeywell International	1,395	7	15-2-2016	22-2-2023
Larsen & Toubro	200	67	9-9-2014	24-9-2019
Larsen & Toubro	33	33	3-11-2014	16-12-2016
Larsen & Toubro	20	20	29-1-2015	30-1-2017
Larsen & Toubro	20	20	29-1-2015	30-6-2017

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

#### 326. State Bank of India (India)

State Bank of India (India) has made an estimated US\$ 366 million available to the nuclear weapons companies selected for this research project since January 2013.

State Bank of India (India) provided loans for an estimated amount of US\$ 247 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 431 Loans provided by State Bank of India

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	750	20	7-6-2013	7-6-2018
Boeing	2,473	30	23-9-2014	15-10-2015
Boeing	2,473	30	23-9-2014	16-10-2019
Boeing	2,465	30	4-11-2015	3-11-2016
Boeing	2,365	30	4-11-2015	3-11-2020
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018
Orbital ATK	800	34	29-9-2015	29-9-2020
Orbital ATK	1,000	43	29-9-2015	29-9-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

State Bank of India (India) underwrote bond issuances for an estimated amount of US\$ 2 million to the nuclear weapon companies since January 2013 (see table below).



Table 432 Underwriting of bond issuances by State Bank of India

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Larsen & Toubro	8	2	20-3-2014	27-3-2024

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

State Bank of India (India) owns or manages shares of the nuclear weapon companies for an amount of US\$ 117 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 433 Shareholdings managed by State Bank of India

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Larsen & Toubro	India	117	0.57	31-5-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 327. State Farm (United States)

State Farm (United States) has made an estimated US\$ 855 million available to the nuclear weapons companies selected for this research project since January 2013.

State Farm (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 855 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 434 Bondholdings managed by State Farm

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	45	0.73	31-3-2016
Fluor	United States	72	4.61	31-3-2016
General Dynamics	United States	122	4.22	31-3-2016
Honeywell International	United States	188	1.42	31-3-2016
Lockheed Martin	United States	176	1.12	31-3-2016
Northrop Grumman	United States	78	1.21	31-3-2016
Raytheon	United States	175	3.25	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 328. State Fund (United States)

State Fund (United States) has made an estimated US\$ 79 million available to the nuclear weapons companies selected for this research project since January 2013.



State Fund (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 79 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 435 Bondholdings managed by State Fund

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
General Dynamics	United States	16	0.54	31-3-2016
Raytheon	United States	64	1.18	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 329. State Street (United States)

State Street (United States) has made an estimated US\$ 27,781 million available to the nuclear weapons companies selected for this research project since January 2013.

State Street (United States) provided loans for an estimated amount of US\$ 352 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 436 Loans provided by State Street

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	38	23-9-2014	15-10-2015
Boeing	2,473	38	23-9-2014	16-10-2019
Boeing	2,465	25	4-11-2015	3-11-2016
Boeing	2,365	25	4-11-2015	3-11-2020
Lockheed Martin	1,500	50	14-8-2014	14-8-2019
Lockheed Martin	2,500	50	9-10-2015	9-10-2020
Northrop Grumman	575	22	31-3-2011	24-1-2017
Northrop Grumman	1,600	64	8-7-2015	8-7-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

State Street (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 27,374 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 437 Shareholdings managed by State Street

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	125	2.64	31-3-2016
Aerojet Rocketdyne	United States	21	1.97	31-3-2016
BAE Systems	United Kingdom	407	1.84	1-6-2016



Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Boeing	United States	3,612	4.47	31-3-2016
BWX Technologies	United States	54	1.55	31-3-2016
Engility	United States	7	1.00	31-3-2016
Fluor	United States	373	5.00	31-3-2016
General Dynamics	United States	1,603	3.98	31-3-2016
Honeywell International	United States	3,215	3.76	31-3-2016
Huntington Ingalls Industries	United States	347	5.39	31-3-2016
Jacobs Engineering	United States	214	4.01	31-3-2016
Lockheed Martin	United States	11,335	16.80	31-3-2016
Moog	United States	39	2.58	31-3-2016
Northrop Grumman	United States	3,988	11.16	31-3-2016
Orbital ATK	United States	140	2.75	31-3-2016
Raytheon	United States	1,499	4.11	31-3-2016
Serco	United Kingdom	17	1.07	1-6-2016
Textron	United States	378	3.84	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

State Street (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 54 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 438 Bondholdings managed by State Street

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Huntington Ingalls Industries	United States	7	0.58	31-5-2016
Northrop Grumman	United States	48	0.74	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 330. State Teachers Retirement System of Ohio (United States)

State Teachers Retirement System of Ohio (United States) has made an estimated US\$ 79 million available to the nuclear weapons companies selected for this research project since January 2013.

State Teachers Retirement System of Ohio (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 79 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 439 Shareholdings managed by State Teachers Retirement System of Ohio

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	38	0.80	31-3-2016
Huntington Ingalls Industries	United States	41	0.64	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.



#### 331. Steel Partners Holdings (United States)

Steel Partners Holdings (United States) has made an estimated US\$ 68 million available to the nuclear weapons companies selected for this research project since January 2013.

Steel Partners Holdings (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 68 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 440 Shareholdings managed by Steel Partners Holdings

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	68	6.50	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

#### 332. Stephens (United States)

Stephens (United States) has made an estimated US\$ 26 million available to the nuclear weapons companies selected for this research project since January 2013.

Stephens (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 26 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 441 Shareholdings managed by Stephens

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Orbital ATK	United States	26	0.52	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 333. Stifel Financial (United States)

Stifel Financial (United States) has made an estimated US\$ 29 million available to the nuclear weapons companies selected for this research project since January 2013.

Stifel Financial (United States) provided loans for an estimated amount of US\$ 29 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 442 Loans provided by Stifel Financial

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018



# 334. Strategic Income Management (United States)

Strategic Income Management (United States) has made an estimated US\$ 7 million available to the nuclear weapons companies selected for this research project since January 2013.

Strategic Income Management (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 7 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 443 Bondholdings managed by Strategic Income Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date	
Orbital ATK	United States	7	1.00	30-4-2016	

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

#### 335. Sumitomo Mitsui Financial (Japan)

Sumitomo Mitsui Financial (Japan) has made an estimated US\$ 4,453 million available to the nuclear weapons companies selected for this research project since January 2013.

Sumitomo Mitsui Financial (Japan) provided loans for an estimated amount of US\$ 3,539 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 444 Loans provided by Sumitomo Mitsui Financial

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	600	40	23-9-2011	30-9-2016
Aecom	700	35	14-10-2011	19-10-2016
Aecom	1,000	50	14-10-2011	19-10-2016
Aecom	750	20	7-6-2013	7-6-2018
Aecom	39	2	16-12-2013	19-12-2018
Aecom	655	39	16-12-2013	19-12-2018
Aecom	961	58	16-12-2013	19-12-2018
Aecom	1,050	39	29-1-2014	29-1-2019
Aecom	500	20	11-8-2014	17-10-2019
Aecom	1,050	47	11-8-2014	17-10-2019
Aecom	1,188	59	11-8-2014	17-10-2021
Aecom	1,925	77	11-8-2014	17-10-2019
Aerojet Rocketdyne	400	15	17-6-2016	17-6-2021
Airbus Group	3,797	134	14-10-2014	14-10-2019
BAE Systems	3,269	131	12-12-2013	12-12-2018



		Est.		
	Total value	participation of this bank	Closing	Maturity
Company	(US\$ mln)	(US\$ mln)	date	date
Bechtel	1,000	120	19-9-2014	17-10-2019
Bechtel	1,000	43	7-6-2016	7-6-2021
Bechtel	1,500	65	7-6-2016	7-6-2021
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	90	23-9-2014	15-10-2015
Boeing	2,473	90	23-9-2014	16-10-2019
Boeing	2,465	90	4-11-2015	3-11-2016
Boeing	2,365	90	4-11-2015	3-11-2020
BWX Technologies	700	32	22-5-2012	8-6-2017
Fluor	1,700	85	25-2-2016	25-2-2021
Fluor	1,800	100	25-2-2016	25-2-2021
General Dynamics	1,000	46	10-11-2015	10-11-2020
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	120	10-7-2015	10-7-2020
Honeywell International	1,500	45	29-4-2016	28-4-2017
Huntington Ingalls Industries	489	27	23-9-2013	6-11-2018
Huntington Ingalls Industries	650	35	23-9-2013	6-11-2018
Jacobs Engineering	460	39	7-2-2014	7-2-2019
Larsen & Toubro	200	100	17-12-2012	17-12-2019
Larsen & Toubro	47	5	27-8-2013	1-6-2018
Larsen & Toubro	59	7	27-8-2013	1-8-2017
Larsen & Toubro	64	7	27-8-2013	1-6-2018
Larsen & Toubro	100	11	27-8-2013	1-6-2018
Larsen & Toubro	100	11	27-8-2013	1-6-2018
Leonardo-Finmeccanica	3,001	100	9-7-2014	9-7-2019
Leonardo-Finmeccanica	2,212	90	6-7-2015	6-7-2020
Lockheed Martin	1,500	35	14-8-2014	14-8-2019
Lockheed Martin	2,500	50	9-10-2015	9-10-2020
Lockheed Martin	7,000	110	9-10-2015	7-10-2016
Northrop Grumman	575	22	31-3-2011	24-1-2017
Northrop Grumman	1,500	129	8-9-2011	8-9-2016
Northrop Grumman	1,600	64	8-7-2015	8-7-2020
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	250	14	8-10-2013	1-11-2020
Orbital ATK	1,010	17	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018
Orbital ATK	150	7	24-6-2014	24-12-2018
Orbital ATK	800	34	29-9-2015	29-9-2020



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Orbital ATK	1,000	43	29-9-2015	29-9-2020
Raytheon	1,400	76	13-12-2011	13-12-2016
Raytheon	1,250	44	13-11-2015	13-11-2020
Safran	2,744	183	4-12-2015	4-12-2020
Serco	1,159	72	21-2-2012	28-3-2017
Serco	714	45	12-3-2015	12-3-2019
Textron	1,000	75	30-9-2013	4-10-2018
Textron	500	25	23-1-2014	23-1-2019
Thales	1,835	122	19-12-2014	19-12-2019

Sumitomo Mitsui Financial (Japan) underwrote bond issuances for an estimated amount of US\$ 914 million to the nuclear weapon companies since January 2013 (see table below).

Table 445 Underwriting of bond issuances by Sumitomo Mitsui Financial

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Aecom	800	80	17-9-2014	15-10-2022
Aecom	800	80	17-9-2014	15-10-2024
Aecom	800	80	30-10-2015	15-10-2022
Aecom	800	80	30-10-2015	15-10-2024
Boeing	350	10	30-4-2013	15-11-2018
Boeing	300	9	28-10-2014	30-10-2021
Boeing	300	9	28-10-2014	30-10-2024
Boeing	250	18	28-10-2014	30-10-2017
Boeing	250	6	18-2-2015	1-3-2025
Boeing	250	8	18-2-2015	1-3-2045
Boeing	250	13	18-2-2015	1-3-2035
Boeing	250	8	27-10-2015	30-10-2022
Boeing	350	11	27-10-2015	30-10-2020
Boeing	300	14	27-10-2015	30-10-2025
Boeing	400	10	16-5-2016	15-6-2023
Boeing	400	12	16-5-2016	15-6-2026
Boeing	400	19	16-5-2016	15-6-2046
Fluor	500	18	18-11-2014	15-12-2024
Fluor	555	9	14-3-2016	21-3-2023
Honeywell International	300	10	18-11-2013	1-12-2023
Honeywell International	700	23	18-11-2013	17-11-2015



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Honeywell International	837	4	15-2-2016	22-2-2028
Honeywell International	1,116	6	15-2-2016	22-2-2018
Honeywell International	1,116	6	15-2-2016	21-2-2020
Honeywell International	1,395	7	15-2-2016	22-2-2023
Huntington Ingalls Industries	600	34	17-11-2014	15-12-2021
Lockheed Martin	500	9	12-2-2015	1-3-2035
Lockheed Martin	750	14	12-2-2015	1-3-2025
Lockheed Martin	1,000	18	12-2-2015	1-3-2045
Lockheed Martin	500	8	16-11-2015	15-1-2023
Lockheed Martin	500	8	16-11-2015	15-5-2036
Lockheed Martin	750	11	16-11-2015	23-11-2018
Lockheed Martin	1,250	19	16-11-2015	23-11-2020
Lockheed Martin	2,000	30	16-11-2015	15-1-2026
Lockheed Martin	2,000	30	16-11-2015	15-5-2046
Northrop Grumman	850	26	28-5-2013	1-6-2018
Northrop Grumman	950	29	28-5-2013	1-6-2043
Northrop Grumman	1,050	32	28-5-2013	1-8-2023
Orbital ATK	400	20	22-9-2015	1-10-2023
Textron	250	19	23-1-2014	1-3-2021
Textron	350	26	23-1-2014	1-3-2024
Textron	350	19	23-10-2014	1-3-2025
Textron	350	19	4-3-2016	15-3-2026

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

## 336. Sumitomo Mitsui Trust (Japan)

Sumitomo Mitsui Trust (Japan) has made an estimated US\$ 41 million available to the nuclear weapons companies selected for this research project since January 2013.

Sumitomo Mitsui Trust (Japan) provided loans for an estimated amount of US\$ 41 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 446 Loans provided by Sumitomo Mitsui Trust

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Larsen & Toubro	47	5	27-8-2013	1-6-2018
Larsen & Toubro	59	7	27-8-2013	1-8-2017
Larsen & Toubro	64	7	27-8-2013	1-6-2018



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Larsen & Toubro	100	11	27-8-2013	1-6-2018
Larsen & Toubro	100	11	27-8-2013	1-6-2018

### 337. Sun Life Financial (Canada)

Sun Life Financial (Canada) has made an estimated US\$ 6,295 million available to the nuclear weapons companies selected for this research project since January 2013.

Sun Life Financial (Canada) owns or manages shares of the nuclear weapon companies for an amount of US\$ 6,112 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 447 Shareholdings managed by Sun Life Financial

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	87	1.17	31-3-2016
Honeywell International	United States	3,966	4.64	31-3-2016
Lockheed Martin	United States	946	1.40	31-3-2016
Northrop Grumman	United States	946	2.65	31-3-2016
Orbital ATK	United States	65	1.28	31-3-2016
Serco	United Kingdom	16	0.96	26-5-2016
Textron	United States	86	0.88	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Sun Life Financial (Canada) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 183 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 448 Bondholdings managed by Sun Life Financial

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	15	4.29	31-5-2016
BAE Systems	United Kingdom	78	1.27	31-3-2016
Raytheon	United States	27	0.51	31-3-2016
Safran	France	35	1.65	31-3-2016
Textron	United States	28	0.96	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.



# 338. SunTrust (United States)

SunTrust (United States) has made an estimated US\$ 1,712 million available to the nuclear weapons companies selected for this research project since January 2013.

SunTrust (United States) provided loans for an estimated amount of US\$ 1,439 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 449 Loans provided by SunTrust

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date	
Aecom	700	35	14-10-2011	19-10-2016	
Aecom	1,000	50	14-10-2011	19-10-2016	
Aecom	39	2	16-12-2013	19-12-2018	
Aecom	655	39	16-12-2013	19-12-2018	
Aecom	961	58	16-12-2013	19-12-2018	
Aecom	500	20	11-8-2014	17-10-2019	
Aecom	1,188	59	11-8-2014	17-10-2021	
Aecom	1,925	77	11-8-2014	17-10-2019	
Aerojet Rocketdyne	50	10	18-11-2011	18-11-2016	
Aerojet Rocketdyne	150	30	18-11-2011	18-11-2016	
Aerojet Rocketdyne	50	13	16-8-2012	16-8-2017	
Aerojet Rocketdyne	100	13	30-5-2014	30-5-2019	
Aerojet Rocketdyne	200	27	30-5-2014	30-5-2019	
Aerojet Rocketdyne	400	5 <del>4</del>	17-6-2016	17-6-2021	
Aerojet Rocketdyne	350	61	17-6-2016	17-6-2021	
Bechtel	1,000	28	7-6-2016	7-6-2021	
Bechtel	1,500	42	7-6-2016	7-6-2021	
Boeing	2,473	30	23-9-2014	15-10-2015	
Boeing	2,473	30	23-9-2014	16-10-2019	
Engility	585	195	12-11-2014	12-11-2015	
Huntington Ingalls Industries	489	49	23-9-2013	6-11-2018	
Huntington Ingalls Industries	650	65	23-9-2013	6-11-2018	
Northrop Grumman	575	22	31-3-2011	24-1-2017	
Northrop Grumman	1,500	129	8-9-2011	8-9-2016	
Orbital ATK	200	20	3-9-2012	3-9-2017	
Orbital ATK	250	25	8-10-2013	1-11-2020	
Orbital ATK	700	47	8-10-2013	1-11-2018	
Orbital ATK	1,010	67	8-10-2013	1-11-2018	
Orbital ATK	150	15	24-6-2014	24-12-2018	
Orbital ATK	800	46	29-9-2015	29-9-2020	
Orbital ATK	1,000	57	29-9-2015	29-9-2020	

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Textron	500	25	23-1-2014	23-1-2019

SunTrust (United States) underwrote bond issuances for an estimated amount of US\$ 273 million to the nuclear weapon companies since January 2013 (see table below).

Table 450 Underwriting of bond issuances by SunTrust

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Aerojet Rocketdyne	460	115	18-1-2013	15-3-2021
Boeing	300	4	28-10-2014	30-10-2021
Boeing	300	4	28-10-2014	30-10-2024
Boeing	250	3	18-2-2015	1-3-2025
Boeing	250	3	18-2-2015	1-3-2035
Boeing	250	3	18-2-2015	1-3-2045
Boeing	250	4	27-10-2015	30-10-2022
Boeing	300	5	27-10-2015	30-10-2025
Boeing	350	5	27-10-2015	30-10-2020
Huntington Ingalls Industries	600	34	17-11-2014	15-12-2021
Orbital ATK	300	50	22-10-2013	1-10-2021
Orbital ATK	400	43	22-9-2015	1-10-2023

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

## 339. Swiss Re (Switzerland)

Swiss Re (Switzerland) has made an estimated US\$ 15 million available to the nuclear weapons companies selected for this research project since January 2013.

Swiss Re (Switzerland) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 15 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 451 Bondholdings managed by Swiss Re

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	15	0.97	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.



# 340. Synovus Financial Corporation (United States)

Synovus Financial Corporation (United States) has made an estimated US\$ 411 million available to the nuclear weapons companies selected for this research project since January 2013.

Synovus Financial Corporation (United States) provided loans for an estimated amount of US\$ 411 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 452 Loans provided by Synovus Financial Corporation

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Orbital ATK	700	12	8-10-2013	1-11-2018
Orbital ATK	1,010	17	8-10-2013	1-11-2018
Orbital ATK	800	34	29-9-2015	29-9-2020
Orbital ATK	1,000	43	29-9-2015	29-9-2020
Textron	500	25	23-1-2014	23-1-2019
Textron	700	280	24-1-2014	23-1-2015

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

### 341. T. Rowe Price (United States)

- T. Rowe Price (United States) has made an estimated US\$ 6,660 million available to the nuclear weapons companies selected for this research project since January 2013.
- T. Rowe Price (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 6,652 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 453 Shareholdings managed by T. Rowe Price

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	9	0.87	31-3-2016
Airbus Group	The Netherlands	322	0.63	31-3-2016
Boeing	United States	4,722	5.84	31-3-2016
BWX Technologies	United States	55	1.59	31-3-2016
Engility	United States	17	2.51	31-3-2016
Moog	United States	43	2.88	31-3-2016
Northrop Grumman	United States	202	0.57	31-3-2016
Serco	United Kingdom	35	2.07	23-5-2016
Textron	United States	1,245	12.70	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.



T. Rowe Price (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 9 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 454 Bondholdings managed by T. Rowe Price

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Moog	United States	9	2.92	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

### 342. Taiwan Business Bank (Taiwan)

Taiwan Business Bank (Taiwan) has made an estimated US\$ 42 million available to the nuclear weapons companies selected for this research project since January 2013.

Taiwan Business Bank (Taiwan) provided loans for an estimated amount of US\$ 42 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 455 Loans provided by Taiwan Business Bank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	750	20	7-6-2013	7-6-2018
Northrop Grumman	575	22	31-3-2011	24-1-2017

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

## 343. Taiwan Cooperative Financial (Taiwan)

Taiwan Cooperative Financial (Taiwan) has made an estimated US\$ 42 million available to the nuclear weapons companies selected for this research project since January 2013.

Taiwan Cooperative Financial (Taiwan) provided loans for an estimated amount of US\$ 42 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 456 Loans provided by Taiwan Cooperative Financial

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	750	20	7-6-2013	7-6-2018
Northrop Grumman	575	22	31-3-2011	24-1-2017

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.



## 344. Taiwan Financial Holding (Taiwan)

Taiwan Financial Holding (Taiwan) has made an estimated US\$ 20 million available to the nuclear weapons companies selected for this research project since January 2013.

Taiwan Financial Holding (Taiwan) provided loans for an estimated amount of US\$ 20 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 457 Loans provided by Taiwan Financial Holding

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	750	20	7-6-2013	7-6-2018

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

## 345. Taurus Group (India)

Taurus Group (India) has made an estimated US\$ 44 million available to the nuclear weapons companies selected for this research project since January 2013.

Taurus Group (India) underwrote bond issuances for an estimated amount of US\$ 44 million to the nuclear weapon companies since January 2013 (see table below).

Table 458 Underwriting of bond issuances by Taurus Group

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Larsen & Toubro	18	5	21-1-2015	15-2-2017
Larsen & Toubro	18	5	21-1-2015	19-1-2018
Larsen & Toubro	9	2	26-6-2015	27-6-2017
Larsen & Toubro	9	3	26-6-2015	27-7-2017
Larsen & Toubro	9	3	26-6-2015	20-6-2018
Larsen & Toubro	9	3	26-6-2015	26-6-2018
Larsen & Toubro	3	1	8-7-2015	2-7-2018
Larsen & Toubro	3	1	8-7-2015	5-7-2018
Larsen & Toubro	35	17	26-10-2015	25-9-2017
Larsen & Toubro	8	3	29-10-2015	25-9-2017
Larsen & Toubro	8	3	29-10-2015	29-9-2017

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.



### 346. Telsey Advisory Group (United States)

Telsey Advisory Group (United States) has made an estimated US\$ 16 million available to the nuclear weapons companies selected for this research project since January 2013.

Telsey Advisory Group (United States) underwrote bond issuances for an estimated amount of US\$ 16 million to the nuclear weapon companies since January 2013 (see table below).

Table 459 Underwriting of bond issuances by Telsey Advisory Group

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	250	3	18-2-2015	1-3-2035
Boeing	250	6	27-10-2015	30-10-2022
Boeing	400	7	16-5-2016	15-6-2026

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

### 347. Thales SA Employees Stock Ownership Plan (France)

Thales SA Employees Stock Ownership Plan (France) has made an estimated US\$ 427 million available to the nuclear weapons companies selected for this research project since January 2013.

Thales SA Employees Stock Ownership Plan (France) owns or manages shares of the nuclear weapon companies for an amount of US\$ 427 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 460 Shareholdings managed by Thales SA Employees Stock Ownership Plan

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Thales	France	427	2.69	31-12-2015

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 348. The Dai-Ichi Life Insurance Company (Japan)

The Dai-Ichi Life Insurance Company (Japan) has made an estimated US\$ 138 million available to the nuclear weapons companies selected for this research project since January 2013.

The Dai-Ichi Life Insurance Company (Japan) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 138 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 461 Bondholdings managed by The Dai-Ichi Life Insurance Company

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Northrop Grumman	United States	42	0.65	31-3-2016
Raytheon	United States	56	1.04	31-3-2016



Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Textron	United States	40	1.37	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

### 349. The London Company of Virginia (United States)

The London Company of Virginia (United States) has made an estimated US\$ 564 million available to the nuclear weapons companies selected for this research project since January 2013.

The London Company of Virginia (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 564 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 462 Shareholdings managed by The London Company of Virginia

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
General Dynamics	United States	292	0.73	31-3-2016
Orbital ATK	United States	272	5.35	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 350. Thornburg Investment Management (United States)

Thornburg Investment Management (United States) has made an estimated US\$ 16 million available to the nuclear weapons companies selected for this research project since January 2013.

Thornburg Investment Management (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 16 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 463 Bondholdings managed by Thornburg Investment Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	16	0.80	29-2-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

# 351. Thrivent Financial (United States)

Thrivent Financial (United States) has made an estimated US\$ 171 million available to the nuclear weapons companies selected for this research project since January 2013.

Thrivent Financial (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 86 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.



Table 464 Shareholdings managed by Thrivent Financial

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BWX Technologies	United States	19	0.55	31-3-2016
Huntington Ingalls Industries	United States	67	1.04	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Thrivent Financial (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 85 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 465 Bondholdings managed by Thrivent Financial

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
General Dynamics	United States	15	0.52	31-3-2016
Huntington Ingalls Industries	United States	10	0.81	31-5-2016
Northrop Grumman	United States	37	0.58	31-3-2016
Textron	United States	23	0.81	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

### 352. TIAA-CREF (United States)

TIAA-CREF (United States) has made an estimated US\$ 6,870 million available to the nuclear weapons companies selected for this research project since January 2013.

TIAA-CREF (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 5,539 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 466 Shareholdings managed by TIAA-CREF

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	44	0.93	31-3-2016
Aerojet Rocketdyne	United States	5	0.50	31-3-2016
BAE Systems	United Kingdom	130	0.58	15-4-2016
Boeing	United States	835	1.03	31-3-2016
BWX Technologies	United States	60	1.73	31-3-2016
Fluor	United States	51	0.68	31-3-2016
General Dynamics	United States	244	0.60	31-3-2016
Honeywell International	United States	1,695	1.98	31-3-2016
Huntington Ingalls Industries	United States	113	1.75	31-3-2016
Jacobs Engineering	United States	27	0.51	31-3-2016
Lockheed Martin	United States	764	1.12	31-3-2016
Moog	United States	18	1.17	31-3-2016
Northrop Grumman	United States	575	1.61	31-3-2016



Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Orbital ATK	United States	90	1.76	31-3-2016
Raytheon	United States	634	1.72	31-3-2016
Textron	United States	256	2.62	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

TIAA-CREF (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 1,332 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 467 Bondholdings managed by TIAA-CREF

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Airbus Group	The Netherlands	58	0.68	31-3-2016
BAE Systems	United Kingdom	125	2.04	31-3-2016
Boeing	United States	174	1.63	31-3-2016
Fluor	United States	76	4.86	31-3-2016
General Dynamics	United States	43	1.47	31-3-2016
Honeywell International	United States	101	0.76	31-3-2016
Huntington Ingalls Industries	United States	33	2.71	31-3-2016
Leonardo-Finmeccanica	Italy	72	1.48	31-3-2016
Lockheed Martin	United States	180	1.14	31-3-2016
Northrop Grumman	United States	221	3.46	31-3-2016
Orbital ATK	United States	30	4.23	31-3-2016
Raytheon	United States	78	1.44	31-3-2016
Safran	France	75	3.53	31-3-2016
Textron	United States	68	2.34	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

# 353. Toronto-Dominion Bank (Canada)

Toronto-Dominion Bank (Canada) has made an estimated US\$ 2,652 million available to the nuclear weapons companies selected for this research project since January 2013.

Toronto-Dominion Bank (Canada) provided loans for an estimated amount of US\$ 1,734 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 468 Loans provided by Toronto-Dominion Bank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	500	20	11-8-2014	17-10-2019
Aecom	1,050	47	11-8-2014	17-10-2019



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	1,188	59	11-8-2014	17-10-2021
Aecom	1,925	77	11-8-2014	17-10-2019
Airbus Group	3,797	66	14-10-2014	14-10-2019
BAE Systems	3,269	131	12-12-2013	12-12-2018
BWX Technologies	700	32	22-5-2012	8-6-2017
BWX Technologies	400	27	11-5-2015	11-5-2020
BWX Technologies	500	33	11-5-2015	11-5-2020
BWX Technologies	600	36	11-5-2015	11-5-2020
General Dynamics	1,000	125	21-6-2013	21-6-2018
General Dynamics	1,000	46	10-11-2015	10-11-2020
Honeywell International	3,000	129	30-3-2012	2-4-2017
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	120	10-7-2015	10-7-2020
Honeywell International	1,500	<b>4</b> 5	29-4-2016	28-4-2017
Huntington Ingalls Industries	489	27	23-9-2013	6-11-2018
Huntington Ingalls Industries	650	35	23-9-2013	6-11-2018
Huntington Ingalls Industries	1,250	71	13-7-2015	13-7-2020
Jacobs Engineering	460	39	7-2-2014	7-2-2019
Jacobs Engineering	1,140	62	7-2-2014	7-2-2019
Jacobs Engineering	460	55	5-3-2015	5-3-2020
Jacobs Engineering	1,140	137	5-3-2015	5-3-2020
Lockheed Martin	1,500	35	14-8-2014	14-8-2019
Lockheed Martin	2,500	75	9-10-2015	9-10-2020
Lockheed Martin	7,000	110	9-10-2015	7-10-2016
Northrop Grumman	575	22	31-3-2011	24-1-2017

Toronto-Dominion Bank (Canada) underwrote bond issuances for an estimated amount of US\$ 220 million to the nuclear weapon companies since January 2013 (see table below).

Table 469 Underwriting of bond issuances by Toronto-Dominion Bank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Honeywell International	300	10	18-11-2013	1-12-2023
Honeywell International	700	23	18-11-2013	17-11-2015
Honeywell International	837	4	15-2-2016	22-2-2028
Honeywell International	1,116	6	15-2-2016	22-2-2018
Honeywell International	1,116	6	15-2-2016	21-2-2020



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Honeywell International	1,395	7	15-2-2016	22-2-2023
Huntington Ingalls Industries	600	34	17-11-2014	15-12-2021
Huntington Ingalls Industries	600	25	2-11-2015	15-11-2025
Lockheed Martin	500	8	16-11-2015	15-1-2023
Lockheed Martin	500	8	16-11-2015	15-5-2036
Lockheed Martin	750	11	16-11-2015	23-11-2018
Lockheed Martin	1,250	19	16-11-2015	23-11-2020
Lockheed Martin	2,000	30	16-11-2015	15-1-2026
Lockheed Martin	2,000	30	16-11-2015	15-5-2046

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

Toronto-Dominion Bank (Canada) owns or manages shares of the nuclear weapon companies for an amount of US\$ 698 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 470 Shareholdings managed by Toronto-Dominion Bank

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	204	0.93	25-4-2016
Boeing	United States	457	0.56	31-3-2016
Jacobs Engineering	United States	37	0.70	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 354. Tortoise Holdings (United States)

Tortoise Holdings (United States) has made an estimated US\$ 2 million available to the nuclear weapons companies selected for this research project since January 2013.

Tortoise Holdings (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 2 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 471 Bondholdings managed by Tortoise Holdings

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	2	0.56	30-4-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

### **355.** Travelers (United States)

Travelers (United States) has made an estimated US\$ 294 million available to the nuclear weapons companies selected for this research project since January 2013.



Travelers (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 294 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 472 Bondholdings managed by Travelers

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Boeing	United States	89	0.84	31-3-2016
General Dynamics	United States	56	1.95	31-3-2016
Moog	United States	12	3.98	31-3-2016
Northrop Grumman	United States	46	0.72	31-3-2016
Orbital ATK	United States	12	1.69	31-3-2016
Raytheon	United States	58	1.08	31-3-2016
Textron	United States	20	0.70	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

### 356. Trimaran Capital Partners (United States)

Trimaran Capital Partners (United States) has made an estimated US\$ 13 million available to the nuclear weapons companies selected for this research project since January 2013.

Trimaran Capital Partners (United States) provided loans for an estimated amount of US\$ 13 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 473 Loans provided by Trimaran Capital Partners

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Orbital ATK	200	13	3-9-2012	3-9-2017

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

# 357. Trinity Street Asset Management (United Kingdom)

Trinity Street Asset Management (United Kingdom) has made an estimated US\$ 11 million available to the nuclear weapons companies selected for this research project since January 2013.

Trinity Street Asset Management (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 11 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 474 Shareholdings managed by Trinity Street Asset Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Serco	United Kingdom	11	0.65	26-5-2016



# 358. Trust Investment Advisors (United States)

Trust Investment Advisors (United States) has made an estimated US\$ 222 million available to the nuclear weapons companies selected for this research project since January 2013.

Trust Investment Advisors (United States) underwrote bond issuances for an estimated amount of US\$ 222 million to the nuclear weapon companies since January 2013 (see table below).

Table 475 Underwriting of bond issuances by Trust Investment Advisors

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Larsen & Toubro	5	5	7-1-2013	7-7-2014
Larsen & Toubro	5	5	26-3-2013	26-3-2015
Larsen & Toubro	25	25	26-6-2013	26-9-2013
Larsen & Toubro	41	41	26-6-2013	26-9-2013
Larsen & Toubro	4	4	27-6-2013	27-9-2013
Larsen & Toubro	17	9	11-10-2013	11-10-2016
Larsen & Toubro	8	2	20-3-2014	27-3-2024
Larsen & Toubro	2	1	3-6-2014	3-12-2015
Larsen & Toubro	3	1	3-6-2014	3-6-2016
Larsen & Toubro	12	12	21-8-2014	21-8-2016
Larsen & Toubro	21	21	21-8-2014	2-8-2016
Larsen & Toubro	2	1	27-8-2014	19-9-2016
Larsen & Toubro	2	1	27-8-2014	26-8-2016
Larsen & Toubro	8	3	27-8-2014	10-2-2016
Larsen & Toubro	83	28	27-8-2014	28-12-2015
Larsen & Toubro	16	16	29-1-2015	29-1-2025
Larsen & Toubro	8	8	21-7-2015	21-7-2017
Larsen & Toubro	15	15	9-9-2015	9-9-2025
Larsen & Toubro	15	3	13-4-2016	28-3-2018
Larsen & Toubro	15	3	13-4-2016	12-3-2019
Larsen & Toubro	15	3	13-4-2016	12-9-2019
Larsen & Toubro	15	3	13-4-2016	30-9-2019
Larsen & Toubro	15	3	13-4-2016	13-6-2019
Larsen & Toubro	15	3	13-4-2016	12-4-2019
Larsen & Toubro	15	3	13-4-2016	31-5-2019
Larsen & Toubro	4	1	24-5-2016	24-5-2019
Larsen & Toubro	4	1	24-5-2016	28-6-2019
Larsen & Toubro	10	3	29-6-2016	28-6-2019
Larsen & Toubro	10	3	29-6-2016	22-7-2019



### 359. Two Sigma Investments (United States)

Two Sigma Investments (United States) has made an estimated US\$ 250 million available to the nuclear weapons companies selected for this research project since January 2013.

Two Sigma Investments (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 250 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 476 Shareholdings managed by Two Sigma Investments

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BWX Technologies	United States	27	0.76	31-3-2016
General Dynamics	United States	224	0.56	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 360. UBI Banca (Italy)

UBI Banca (Italy) has made an estimated US\$ 155 million available to the nuclear weapons companies selected for this research project since January 2013.

UBI Banca (Italy) provided loans for an estimated amount of US\$ 155 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 477 Loans provided by UBI Banca

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Leonardo-Finmeccanica	3,001	100	9-7-2014	9-7-2019
Leonardo-Finmeccanica	2,212	55	6-7-2015	6-7-2020

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

#### 361. UBS (Switzerland)

UBS (Switzerland) has made an estimated US\$ 5,614 million available to the nuclear weapons companies selected for this research project since January 2013.

UBS (Switzerland) provided loans for an estimated amount of US\$ 264 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.



Table 478 Loans provided by UBS

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Airbus Group	3,797	66	14-10-2014	14-10-2019
BAE Systems	3,269	131	12-12-2013	12-12-2018
Boeing	2,300	42	5-11-2011	10-11-2016
Textron	500	25	23-1-2014	23-1-2019

UBS (Switzerland) underwrote share issuances for an estimated amount of US\$ 1,531 million to the nuclear weapon companies since January 2013 (see table below).

Table 479 Underwriting of share issuances by UBS

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date
Airbus Group	922	922	26-4-2013
Safran	1,218	305	15-11-2013
Safran	1,218	305	15-11-2013

Source: Thomson Reuters Eikon, "Bond and share issue underwritings", viewed in June/July 2016.

UBS (Switzerland) underwrote bond issuances for an estimated amount of US\$ 26 million to the nuclear weapon companies since January 2013 (see table below).

Table 480 Underwriting of bond issuances by UBS

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	350	10	30-4-2013	15-11-2018
Raytheon	300	8	24-11-2014	15-12-2024
Raytheon	300	8	24-11-2014	15-12-2044

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

UBS (Switzerland) owns or manages shares of the nuclear weapon companies for an amount of US\$ 3,762 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 481 Shareholdings managed by UBS

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Airbus Group	The Netherlands	841	1.74	25-1-2016
BAE Systems	United Kingdom	393	1.77	1-6-2016



Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Boeing	United States	1,044	1.29	31-3-2016
Fluor	United States	63	0.85	31-3-2016
Honeywell International	United States	520	0.60	31-3-2016
Lockheed Martin	United States	532	0.79	31-3-2016
Orbital ATK	United States	30	0.59	31-3-2016
Raytheon	United States	294	0.81	31-3-2016
Serco	United Kingdom	46	3.18	25-2-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

UBS (Switzerland) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 32 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 482 Bondholdings managed by UBS

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Leonardo-Finmeccanica	Italy	32	0.65	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

### 362. UMB Financial Corporation (United States)

UMB Financial Corporation (United States) has made an estimated US\$ 65 million available to the nuclear weapons companies selected for this research project since January 2013.

UMB Financial Corporation (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 65 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 483 Shareholdings managed by UMB Financial Corporation

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BWX Technologies	United States	34	0.96	31-3-2016
Orbital ATK	United States	32	0.62	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 363. UniCredit (Italy)

UniCredit (Italy) has made an estimated US\$ 1,967 million available to the nuclear weapons companies selected for this research project since January 2013.

UniCredit (Italy) provided loans for an estimated amount of US\$ 1,118 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.



Table 484 Loans provided by UniCredit

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Airbus Group	3,797	134	14-10-2014	14-10-2019
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	60	10-7-2015	10-7-2020
Honeywell International	1,500	25	29-4-2016	28-4-2017
Leonardo-Finmeccanica	3,001	100	9-7-2014	9-7-2019
Leonardo-Finmeccanica	3,001	150	9-7-2014	9-7-2019
Leonardo-Finmeccanica	2,212	170	6-7-2015	6-7-2020
Lockheed Martin	1,500	35	14-8-2014	14-8-2019
Lockheed Martin	2,500	75	9-10-2015	9-10-2020
Lockheed Martin	7,000	110	9-10-2015	7-10-2016
Northrop Grumman	1,600	64	8-7-2015	8-7-2020
Thales	1,835	122	19-12-2014	19-12-2019

UniCredit (Italy) underwrote bond issuances for an estimated amount of US\$ 554 million to the nuclear weapon companies since January 2013 (see table below).

Table 485 Underwriting of bond issuances by UniCredit

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Airbus Group	640	96	20-10-2014	29-10-2029
Airbus Group	679	75	13-5-2016	13-5-2026
Airbus Group	1,018	113	13-5-2016	13-5-2031
Leonardo-Finmeccanica	950	59	26-11-2013	19-1-2021
Leonardo-Finmeccanica	339	20	17-1-2014	19-1-2021
Lockheed Martin	500	8	16-11-2015	15-1-2023
Lockheed Martin	500	8	16-11-2015	15-5-2036
Lockheed Martin	750	11	16-11-2015	23-11-2018
Lockheed Martin	1,250	19	16-11-2015	23-11-2020
Lockheed Martin	2,000	30	16-11-2015	15-1-2026
Lockheed Martin	2,000	30	16-11-2015	15-5-2046
Northrop Grumman	850	26	28-5-2013	1-6-2018
Northrop Grumman	950	29	28-5-2013	1-6-2043
Northrop Grumman	1,050	32	28-5-2013	1-8-2023

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.



UniCredit (Italy) owns or manages shares of the nuclear weapon companies for an amount of US\$ 295 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 486 Shareholdings managed by UniCredit

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Raytheon	United States	295	0.81	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 364. Unit Trust of India (India)

Unit Trust of India (India) has made an estimated US\$ 1,394 million available to the nuclear weapons companies selected for this research project since January 2013.

Unit Trust of India (India) owns or manages shares of the nuclear weapon companies for an amount of US\$ 1,394 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 487 Shareholdings managed by Unit Trust of India

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Larsen & Toubro	India	1,394	8.15	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 365. United Overseas Bank (Singapore)

United Overseas Bank (Singapore) has made an estimated US\$ 50 million available to the nuclear weapons companies selected for this research project since January 2013.

United Overseas Bank (Singapore) provided loans for an estimated amount of US\$ 50 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 488 Loans provided by United Overseas Bank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Bechtel	1,000	20	7-6-2016	7-6-2021
Bechtel	1,500	30	7-6-2016	7-6-2021

Source: Thomson Reuters Eikon, "Loans", viewed in July/August 2016; Bloomberg, "Loans", viewed in July/August 2016.

# 366. Universities Superannuation Scheme (United Kingdom)

Universities Superannuation Scheme (United Kingdom) has made an estimated US\$ 161 million available to the nuclear weapons companies selected for this research project since January 2013.



Universities Superannuation Scheme (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 161 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 489 Shareholdings managed by Universities Superannuation Scheme

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	161	0.73	1-6-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 367. US Bancorp (United States)

US Bancorp (United States) has made an estimated US\$ 5,226 million available to the nuclear weapons companies selected for this research project since January 2013.

US Bancorp (United States) provided loans for an estimated amount of US\$ 4,374 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 490 Loans provided by US Bancorp

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	700	35	14-10-2011	19-10-2016
Aecom	1,000	50	14-10-2011	19-10-2016
Aecom	750	20	7-6-2013	7-6-2018
Aecom	39	2	16-12-2013	19-12-2018
Aecom	655	39	16-12-2013	19-12-2018
Aecom	961	58	16-12-2013	19-12-2018
Aecom	1,050	39	29-1-2014	29-1-2019
Aecom	500	20	11-8-2014	17-10-2019
Aecom	1,050	47	11-8-2014	17-10-2019
Aecom	1,925	77	11-8-2014	17-10-2019
Aerojet Rocketdyne	50	10	18-11-2011	18-11-2016
Aerojet Rocketdyne	150	30	18-11-2011	18-11-2016
Aerojet Rocketdyne	50	13	16-8-2012	16-8-2017
Aerojet Rocketdyne	100	13	30-5-2014	30-5-2019
Aerojet Rocketdyne	200	27	30-5-2014	30-5-2019
Aerojet Rocketdyne	350	28	17-6-2016	17-6-2021
Aerojet Rocketdyne	400	32	17-6-2016	17-6-2021
Bechtel	1,000	28	7-6-2016	7-6-2021
Bechtel	1,500	42	7-6-2016	7-6-2021
Boeing	2,300	42	5-11-2011	10-11-2016

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Boeing	2,300	460	29-9-2012	15-10-2017
Boeing	2,473	60	23-9-2014	15-10-2015
Boeing	2,473	60	23-9-2014	16-10-2019
Boeing	2,465	60	4-11-2015	3-11-2016
Boeing	2,365	60	4-11-2015	3-11-2020
BWX Technologies	700	32	22-5-2012	8-6-2017
BWX Technologies	400	27	11-5-2015	11-5-2020
BWX Technologies	500	33	11-5-2015	11-5-2020
BWX Technologies	600	36	11-5-2015	11-5-2020
CH2M Hill	900	72	19-4-2012	19-4-2017
Fluor	1,800	180	7-11-2012	9-11-2017
Fluor	1,700	227	28-5-2014	28-5-2019
Fluor	1,800	240	28-5-2014	28-5-2019
Fluor	1,700	70	25-2-2016	25-2-2021
Fluor	1,800	75	25-2-2016	25-2-2021
General Dynamics	1,000	46	10-11-2015	10-11-2020
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	120	10-7-2015	10-7-2020
Honeywell International	1,500	45	29-4-2016	28-4-2017
Huntington Ingalls Industries	489	27	23-9-2013	6-11-2018
Huntington Ingalls Industries	650	35	23-9-2013	6-11-2018
Huntington Ingalls Industries	1,250	125	13-7-2015	13-7-2020
Jacobs Engineering	1,160	139	23-3-2012	23-3-2017
Jacobs Engineering	460	39	7-2-2014	7-2-2019
Jacobs Engineering	1,140	62	7-2-2014	7-2-2019
Jacobs Engineering	460	55	5-3-2015	5-3-2020
Jacobs Engineering	1,140	137	5-3-2015	5-3-2020
Lockheed Martin	1,500	85	14-8-2014	14-8-2019
Lockheed Martin	2,500	150	9-10-2015	9-10-2020
Lockheed Martin	7,000	240	9-10-2015	7-10-2016
Moog	900	30	28-3-2013	28-3-2018
Moog	1,100	63	28-6-2016	28-6-2021
Northrop Grumman	575	22	31-3-2011	24-1-2017
Northrop Grumman	1,600	64	8-7-2015	8-7-2020
Orbital ATK	200	20	3-9-2012	3-9-2017
Orbital ATK	250	25	8-10-2013	1-11-2020
Orbital ATK	700	47	8-10-2013	1-11-2018
Orbital ATK	1,010	67	8-10-2013	1-11-2018
Orbital ATK	150	15	24-6-2014	24-12-2018



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Orbital ATK	800	46	29-9-2015	29-9-2020
Orbital ATK	1,000	57	29-9-2015	29-9-2020
Raytheon	1,400	76	13-12-2011	13-12-2016
Raytheon	1,250	44	13-11-2015	13-11-2020
Textron	1,000	75	30-9-2013	4-10-2018

US Bancorp (United States) underwrote bond issuances for an estimated amount of US\$ 853 million to the nuclear weapon companies since January 2013 (see table below).

Table 491 Underwriting of bond issuances by US Bancorp

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	350	10	30-4-2013	15-11-2018
Boeing	300	9	28-10-2014	30-10-2021
Boeing	300	9	28-10-2014	30-10-2024
Boeing	250	6	18-2-2015	1-3-2025
Boeing	250	8	18-2-2015	1-3-2045
Boeing	250	13	18-2-2015	1-3-2035
Boeing	250	8	27-10-2015	30-10-2022
Boeing	300	9	27-10-2015	30-10-2025
Boeing	350	11	27-10-2015	30-10-2020
Boeing	400	12	16-5-2016	15-6-2026
Boeing	400	16	16-5-2016	15-6-2023
Boeing	400	16	16-5-2016	15-6-2046
Fluor	500	10	18-11-2014	15-12-2024
Fluor	555	9	14-3-2016	21-3-2023
Honeywell International	837	4	15-2-2016	22-2-2028
Honeywell International	1,116	6	15-2-2016	22-2-2018
Honeywell International	1,116	6	15-2-2016	21-2-2020
Honeywell International	1,395	7	15-2-2016	22-2-2023
Huntington Ingalls Industries	600	60	17-11-2014	15-12-2021
Huntington Ingalls Industries	600	75	2-11-2015	15-11-2025
Lockheed Martin	500	9	12-2-2015	1-3-2035
Lockheed Martin	750	14	12-2-2015	1-3-2025
Lockheed Martin	1,000	18	12-2-2015	1-3-2045
Lockheed Martin	500	16	16-11-2015	15-1-2023
Lockheed Martin	500	16	16-11-2015	15-5-2036



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Lockheed Martin	750	24	16-11-2015	23-11-2018
Lockheed Martin	1,250	41	16-11-2015	23-11-2020
Lockheed Martin	2,000	65	16-11-2015	15-1-2026
Lockheed Martin	2,000	65	16-11-2015	15-5-2046
Moog	300	23	18-11-2014	1-12-2022
Northrop Grumman	850	26	28-5-2013	1-6-2018
Northrop Grumman	950	29	28-5-2013	1-6-2043
Northrop Grumman	1,050	32	28-5-2013	1-8-2023
Orbital ATK	300	50	22-10-2013	1-10-2021
Orbital ATK	400	43	22-9-2015	1-10-2023
Textron	250	19	23-1-2014	1-3-2021
Textron	350	26	23-1-2014	1-3-2024
Textron	350	19	23-10-2014	1-3-2025
Textron	350	19	4-3-2016	15-3-2026

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

### 368. USAA Investment Management Company (United States)

USAA Investment Management Company (United States) has made an estimated US\$ 70 million available to the nuclear weapons companies selected for this research project since January 2013.

USAA Investment Management Company (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 70 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 492 Bondholdings managed by USAA Investment Management Company

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	20	1.29	31-3-2016
Safran	France	35	1.65	31-3-2016
Textron	United States	15	0.52	30-4-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

# 369. Vanguard (United States)

Vanguard (United States) has made an estimated US\$ 27,943 million available to the nuclear weapons companies selected for this research project since January 2013.

Vanguard (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 26,493 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.



Table 493 Shareholdings managed by Vanguard

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	322	6.83	31-3-2016
Aerojet Rocketdyne	United States	48	4.56	31-3-2016
Airbus Group	The Netherlands	676	1.40	31-3-2016
BAE Systems	United Kingdom	506	2.29	1-6-2016
Boeing	United States	4,925	6.09	31-3-2016
BWX Technologies	United States	283	8.14	31-3-2016
Engility	United States	15	2.16	31-3-2016
Fluor	United States	650	8.69	31-3-2016
General Dynamics	United States	2, <del>44</del> 0	6.08	31-3-2016
Honeywell International	United States	4,828	5.65	31-3-2016
Huntington Ingalls Industries	United States	536	8.32	31-3-2016
Jacobs Engineering	United States	460	8.66	31-3-2016
Larsen & Toubro	India	137	0.67	31-5-2016
Leonardo-Finmeccanica	Italy	89	1.30	31-5-2016
Lockheed Martin	United States	3,938	5.84	31-3-2016
Moog	United States	117	7.79	31-3-2016
Northrop Grumman	United States	2,322	6.50	31-3-2016
Orbital ATK	United States	356	6.99	31-3-2016
Raytheon	United States	2,423	6.65	31-3-2016
Safran	France	403	1.38	31-5-2016
Serco	United Kingdom	33	1.48	2-3-2015
Textron	United States	810	8.27	31-3-2016
Thales	France	176	0.96	31-5-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Vanguard (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 1,450 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 494 Bondholdings managed by Vanguard

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Boeing	United States	323	3.03	31-3-2016
Fluor	United States	70	4.51	31-12-2015
General Dynamics	United States	107	3.69	30-4-2016
Honeywell International	United States	302	2.27	31-3-2016
Lockheed Martin	United States	219	1.39	30-4-2016
Northrop Grumman	United States	133	2.08	30-4-2016
Raytheon	United States	235	4.37	31-3-2016
Textron	United States	61	2.11	30-4-2016



### 370. Victory Capital (United States)

Victory Capital (United States) has made an estimated US\$ 210 million available to the nuclear weapons companies selected for this research project since January 2013.

Victory Capital (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 210 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 495 Shareholdings managed by Victory Capital

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	64	6.03	31-3-2016
BWX Technologies	United States	49	1.40	31-3-2016
Engility	United States	25	3.62	31-3-2016
Jacobs Engineering	United States	73	1.37	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 371. Viel & Cie (France)

Viel & Cie (France) has made an estimated US\$ 223 million available to the nuclear weapons companies selected for this research project since January 2013.

Viel & Cie (France) underwrote bond issuances for an estimated amount of US\$ 223 million to the nuclear weapon companies since January 2013 (see table below).

Table 496 Underwriting of bond issuances by Viel & Cie

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Larsen & Toubro	18	5	17-5-2013	15-5-2015
Larsen & Toubro	18	5	17-5-2013	15-5-2015
Larsen & Toubro	17	9	11-10-2013	11-10-2016
Larsen & Toubro	37	7	29-10-2013	28-10-2016
Larsen & Toubro	8	2	20-3-2014	27-3-2024
Larsen & Toubro	26	13	21-3-2014	21-4-2015
Larsen & Toubro	6	2	27-3-2014	6-4-2015
Larsen & Toubro	6	2	27-3-2014	7-4-2015
Larsen & Toubro	6	2	27-3-2014	8-4-2015
Larsen & Toubro	6	2	27-3-2014	8-4-2015
Larsen & Toubro	30	8	9-6-2014	9-6-2016
Larsen & Toubro	36	5	13-6-2014	13-5-2016
Larsen & Toubro	45	6	13-6-2014	13-6-2016



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Larsen & Toubro	2	1	27-8-2014	19-9-2016
Larsen & Toubro	2	1	27-8-2014	26-8-2016
Larsen & Toubro	8	3	27-8-2014	10-2-2016
Larsen & Toubro	83	28	27-8-2014	28-12-2015
Larsen & Toubro	33	16	16-9-2014	19-2-2016
Larsen & Toubro	8	3	28-10-2014	28-9-2016
Larsen & Toubro	8	3	28-10-2014	27-10-2017
Larsen & Toubro	9	5	7-1-2015	7-2-2018
Larsen & Toubro	9	5	7-1-2015	23-2-2018
Larsen & Toubro	9	5	7-1-2015	6-3-2018
Larsen & Toubro	9	5	7-1-2015	15-6-2018
Larsen & Toubro	9	5	7-1-2015	15-6-2018
Larsen & Toubro	18	5	21-1-2015	15-2-2017
Larsen & Toubro	18	5	21-1-2015	19-1-2018
Larsen & Toubro	24	8	18-2-2015	17-2-2017
Larsen & Toubro	6	2	17-4-2015	17-4-2017
Larsen & Toubro	31	16	30-4-2015	28-8-2015
Larsen & Toubro	4	1	19-5-2015	18-5-2018
Larsen & Toubro	8	8	27-5-2015	27-4-2017
Larsen & Toubro	8	8	27-5-2015	26-5-2017
Larsen & Toubro	8	8	27-5-2015	27-5-2019
Larsen & Toubro	9	2	26-6-2015	27-6-2017
Larsen & Toubro	15	3	13-4-2016	28-3-2018
Larsen & Toubro	15	3	13-4-2016	12-3-2019
Larsen & Toubro	15	3	13-4-2016	12-9-2019
Larsen & Toubro	15	3	13-4-2016	30-9-2019
Larsen & Toubro	15	3	13-4-2016	13-6-2019
Larsen & Toubro	15	3	13-4-2016	12-4-2019
Larsen & Toubro	15	3	13-4-2016	31-5-2019
Larsen & Toubro	4	1	24-5-2016	24-5-2019
Larsen & Toubro	4	1	24-5-2016	28-6-2019

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

# 372. Visium Asset Management (United States)

Visium Asset Management (United States) has made an estimated US\$ 6 million available to the nuclear weapons companies selected for this research project since January 2013.



Visium Asset Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 6 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 497 Shareholdings managed by Visium Asset Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	6	0.61	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 373. Voya Financial (United States)

Voya Financial (United States) has made an estimated US\$ 426 million available to the nuclear weapons companies selected for this research project since January 2013.

Voya Financial (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 224 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 498 Shareholdings managed by Voya Financial

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Orbital ATK	United States	75	1.47	31-3-2016
Textron	United States	149	1.52	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Voya Financial (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 203 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 499 Bondholdings managed by Voya Financial

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Boeing	United States	94	0.88	31-3-2016
Honeywell International	United States	76	0.57	31-3-2016
Moog	United States	2	0.67	31-3-2016
Orbital ATK	United States	6	0.92	31-3-2016
Safran	France	25	1.18	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

# 374. Vulcan Value Partners (United States)

Vulcan Value Partners (United States) has made an estimated US\$ 493 million available to the nuclear weapons companies selected for this research project since January 2013.



Vulcan Value Partners (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 493 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 500 Shareholdings managed by Vulcan Value Partners

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Boeing	United States	493	0.61	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 375. Waddell & Reed (United States)

Waddell & Reed (United States) has made an estimated US\$ 283 million available to the nuclear weapons companies selected for this research project since January 2013.

Waddell & Reed (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 283 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 501 Shareholdings managed by Waddell & Reed

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	145	0.66	26-4-2016
Larsen & Toubro	India	138	0.77	31-12-2015

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 376. Wedge Capital Management (United States)

Wedge Capital Management (United States) has made an estimated US\$ 59 million available to the nuclear weapons companies selected for this research project since January 2013.

Wedge Capital Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 59 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 502 Shareholdings managed by Wedge Capital Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aecom	United States	45	0.95	31-3-2016
Moog	United States	14	0.96	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 377. Wellington Management (United States)

Wellington Management (United States) has made an estimated US\$ 8,367 million available to the nuclear weapons companies selected for this research project since January 2013.



Wellington Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 8,060 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 503 Shareholdings managed by Wellington Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
General Dynamics	United States	416	1.04	31-3-2016
Honeywell International	United States	3,444	4.03	31-3-2016
Lockheed Martin	United States	2,278	3.38	31-3-2016
Moog	United States	49	3.27	31-3-2016
Northrop Grumman	United States	665	1.86	31-3-2016
Raytheon	United States	1,208	3.32	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Wellington Management (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 307 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 504 Bondholdings managed by Wellington Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
General Dynamics	United States	29	1.01	31-3-2016
Honeywell International	United States	78	0.59	31-3-2016
Lockheed Martin	United States	138	0.88	31-3-2016
Raytheon	United States	61	1.13	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

## 378. Wells Fargo (United States)

Wells Fargo (United States) has made an estimated US\$ 11,937 million available to the nuclear weapons companies selected for this research project since January 2013.

Wells Fargo (United States) provided loans for an estimated amount of US\$ 6,302 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 505 Loans provided by Wells Fargo

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	600	40	23-9-2011	30-9-2016
Aecom	700	70	14-10-2011	19-10-2016
Aecom	1,000	100	14-10-2011	19-10-2016
Aecom	750	20	7-6-2013	7-6-2018



		Est.		
Company	Total value (US\$ mln)	participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	39	4	16-12-2013	19-12-2018
Aecom	655	66	16-12-2013	19-12-2018
Aecom	961	96	16-12-2013	19-12-2018
Aecom	1,050	105	29-1-2014	29-1-2019
Aecom	500	20	11-8-2014	17-10-2019
Aecom	1,050	47	11-8-2014	17-10-2019
Aecom	1,188	59	11-8-2014	17-10-2021
Aecom	1,925	77	11-8-2014	17-10-2019
Aerojet Rocketdyne	50	10	18-11-2011	18-11-2016
Aerojet Rocketdyne	150	30	18-11-2011	18-11-2016
Aerojet Rocketdyne	50	13	16-8-2012	16-8-2017
Aerojet Rocketdyne	100	13	30-5-2014	30-5-2019
Aerojet Rocketdyne	200	27	30-5-2014	30-5-2019
Aerojet Rocketdyne	350	40	17-6-2016	17-6-2021
Aerojet Rocketdyne	400	45	17-6-2016	17-6-2021
BAE Systems	3,269	131	12-12-2013	12-12-2018
Bechtel	1,000	28	7-6-2016	7-6-2021
Bechtel	1,500	42	7-6-2016	7-6-2021
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	125	23-9-2014	15-10-2015
Boeing	2,473	125	23-9-2014	16-10-2019
Boeing	2, <del>4</del> 65	125	4-11-2015	3-11-2016
Boeing	2,365	125	4-11-2015	3-11-2020
BWX Technologies	700	70	22-5-2012	8-6-2017
BWX Technologies	400	32	11-5-2015	11-5-2020
BWX Technologies	500	40	11-5-2015	11-5-2020
BWX Technologies	600	48	11-5-2015	11-5-2020
CH2M Hill	900	135	19-4-2012	19-4-2017
CH2M Hill	1,100	220	22-3-2014	30-1-2019
Fluor	1,700	85	25-2-2016	25-2-2021
Fluor	1,800	100	25-2-2016	25-2-2021
General Dynamics	1,000	125	21-6-2013	21-6-2018
General Dynamics	1,000	80	10-11-2015	10-11-2020
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	190	10-7-2015	10-7-2020
Honeywell International	1,500	65	29-4-2016	28-4-2017
Honeywell International	4,000	343	29-4-2016	29-4-2021
Huntington Ingalls Industries	489	49	23-9-2013	6-11-2018
Huntington Ingalls Industries	650	65	23-9-2013	6-11-2018



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Huntington Ingalls Industries	1,250	125	13-7-2015	13-7-2020
Jacobs Engineering	1,160	155	23-3-2012	23-3-2017
Jacobs Engineering	460	61	7-2-2014	7-2-2019
Jacobs Engineering	1,140	152	7-2-2014	7-2-2019
Jacobs Engineering	460	61	5-3-2015	5-3-2020
Jacobs Engineering	1,140	152	5-3-2015	5-3-2020
Lockheed Martin	1,500	85	14-8-2014	14-8-2019
Lockheed Martin	2,500	150	9-10-2015	9-10-2020
Lockheed Martin	7,000	530	9-10-2015	7-10-2016
Moog	900	70	28-3-2013	28-3-2018
Moog	1,100	110	22-5-2014	22-5-2019
Moog	1,100	110	28-6-2016	28-6-2021
Northrop Grumman	575	58	31-3-2011	24-1-2017
Northrop Grumman	1,500	150	8-9-2011	8-9-2016
Northrop Grumman	1,775	355	29-8-2013	29-8-2018
Northrop Grumman	1,600	213	8-7-2015	8-7-2020
Orbital ATK	200	20	3-9-2012	3-9-2017
Orbital ATK	250	25	8-10-2013	1-11-2020
Orbital ATK	700	47	8-10-2013	1-11-2018
Orbital ATK	1,010	67	8-10-2013	1-11-2018
Orbital ATK	150	15	24-6-2014	24-12-2018
Orbital ATK	800	46	29-9-2015	29-9-2020
Orbital ATK	1,000	57	29-9-2015	29-9-2020
Raytheon	1,250	44	13-11-2015	13-11-2020
Textron	1,000	75	30-9-2013	4-10-2018
Textron	500	25	23-1-2014	23-1-2019

Wells Fargo (United States) underwrote bond issuances for an estimated amount of US\$ 2,007 million to the nuclear weapon companies since January 2013 (see table below).

Table 506 Underwriting of bond issuances by Wells Fargo

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Aecom	800	80	17-9-2014	15-10-2022
Aecom	800	80	17-9-2014	15-10-2024
Aecom	800	80	30-10-2015	15-10-2022
Aecom	800	80	30-10-2015	15-10-2024



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Aerojet Rocketdyne	460	115	18-1-2013	15-3-2021
Boeing	350	10	30-4-2013	15-11-2018
Boeing	250	9	28-10-2014	30-10-2017
Boeing	300	9	28-10-2014	30-10-2024
Boeing	300	15	28-10-2014	30-10-2021
Boeing	250	6	18-2-2015	1-3-2025
Boeing	250	8	18-2-2015	1-3-2035
Boeing	250	12	18-2-2015	1-3-2045
Boeing	250	8	27-10-2015	30-10-2022
Boeing	350	11	27-10-2015	30-10-2020
Boeing	300	14	27-10-2015	30-10-2025
Boeing	400	12	16-5-2016	15-6-2026
Boeing	400	16	16-5-2016	15-6-2046
Boeing	400	36	16-5-2016	15-6-2023
Fluor	500	18	18-11-2014	15-12-2024
Fluor	555	9	14-3-2016	21-3-2023
Honeywell International	300	10	18-11-2013	1-12-2023
Honeywell International	700	23	18-11-2013	17-11-2015
Honeywell International	837	17	15-2-2016	22-2-2028
Honeywell International	1,116	22	15-2-2016	22-2-2018
Honeywell International	1,116	22	15-2-2016	21-2-2020
Honeywell International	1,395	28	15-2-2016	22-2-2023
Huntington Ingalls Industries	600	60	17-11-2014	15-12-2021
Huntington Ingalls Industries	600	75	2-11-2015	15-11-2025
Lockheed Martin	500	40	12-2-2015	1-3-2035
Lockheed Martin	750	60	12-2-2015	1-3-2025
Lockheed Martin	1,000	80	12-2-2015	1-3-2045
Lockheed Martin	500	38	16-11-2015	15-1-2023
Lockheed Martin	500	38	16-11-2015	15-5-2036
Lockheed Martin	750	56	16-11-2015	23-11-2018
Lockheed Martin	1,250	94	16-11-2015	23-11-2020
Lockheed Martin	2,000	150	16-11-2015	15-1-2026
Lockheed Martin	2,000	150	16-11-2015	15-5-2046
Moog	300	23	18-11-2014	1-12-2022
Northrop Grumman	850	57	28-5-2013	1-6-2018
Northrop Grumman	950	63	28-5-2013	1-6-2043
Northrop Grumman	1,050	70	28-5-2013	1-8-2023
Northrop Grumman	600	24	3-2-2015	15-4-2045
Orbital ATK	300	50	22-10-2013	1-10-2021



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Orbital ATK	400	43	22-9-2015	1-10-2023
Raytheon	300	8	24-11-2014	15-12-2024
Raytheon	300	8	24-11-2014	15-12-2044
Textron	250	19	23-1-2014	1-3-2021
Textron	350	26	23-1-2014	1-3-2024
Textron	350	10	23-10-2014	1-3-2025
Textron	350	19	4-3-2016	15-3-2026

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

Wells Fargo (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 3,598 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 507 Shareholdings managed by Wells Fargo

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Boeing	United States	843	1.04	31-3-2016
BWX Technologies	United States	60	1.73	31-3-2016
Fluor	United States	57	0.75	31-3-2016
General Dynamics	United States	695	1.74	31-3-2016
Honeywell International	United States	532	0.62	31-3-2016
Huntington Ingalls Industries	United States	37	0.57	31-3-2016
Jacobs Engineering	United States	92	1.73	31-3-2016
Lockheed Martin	United States	651	0.97	31-3-2016
Northrop Grumman	United States	234	0.64	31-3-2016
Orbital ATK	United States	184	3.61	31-3-2016
Raytheon	United States	212	0.57	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

Wells Fargo (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 31 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 508 Bondholdings managed by Wells Fargo

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Moog	United States	12	4.00	31-5-2016
Orbital ATK	United States	19	2.66	31-5-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.



## 379. Western & Southern Financial (United States)

Western & Southern Financial (United States) has made an estimated US\$ 191 million available to the nuclear weapons companies selected for this research project since January 2013.

Western & Southern Financial (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 191 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 509 Bondholdings managed by Western & Southern Financial

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Lockheed Martin	United States	98	0.62	31-3-2016
Northrop Grumman	United States	35	0.55	31-3-2016
Orbital ATK	United States	14	1.98	31-3-2016
Raytheon	United States	45	0.83	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

### 380. Westpac (Australia)

Westpac (Australia) has made an estimated US\$ 1,008 million available to the nuclear weapons companies selected for this research project since January 2013.

Westpac (Australia) provided loans for an estimated amount of US\$ 963 million to the nuclear weapon companies (see table below). The table shows all loans closed since January 2013 or maturing after August 2016.

Table 510 Loans provided by Westpac

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Aecom	700	35	14-10-2011	19-10-2016
Aecom	1,000	50	14-10-2011	19-10-2016
Airbus Group	3,797	66	14-10-2014	14-10-2019
Bechtel	1,000	20	7-6-2016	7-6-2021
Bechtel	1,500	30	7-6-2016	7-6-2021
Boeing	2,300	42	5-11-2011	10-11-2016
Boeing	2,473	30	23-9-2014	15-10-2015
Boeing	2,473	30	23-9-2014	16-10-2019
Boeing	2,465	30	4-11-2015	3-11-2016
Boeing	2,365	30	4-11-2015	3-11-2020
Fluor	1,700	50	25-2-2016	25-2-2021
Fluor	1,800	50	25-2-2016	25-2-2021
Honeywell International	4,000	73	18-11-2013	10-12-2018
Honeywell International	4,000	60	10-7-2015	10-7-2020



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Closing date	Maturity date
Honeywell International	1,500	25	29-4-2016	28-4-2017
Honeywell International	4,000	343	29-4-2016	29-4-2021

Westpac (Australia) owns or manages shares of the nuclear weapon companies for an amount of US\$ 45 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 511 Shareholdings managed by Westpac

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Leonardo-Finmeccanica	Italy	45	0.65	31-5-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 381. Westwood Holdings Group (Canada)

Westwood Holdings Group (Canada) has made an estimated US\$ 63 million available to the nuclear weapons companies selected for this research project since January 2013.

Westwood Holdings Group (Canada) owns or manages shares of the nuclear weapon companies for an amount of US\$ 63 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 512 Shareholdings managed by Westwood Holdings Group

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Huntington Ingalls Industries	United States	63	0.98	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

## 382. White Mountains (United States)

White Mountains (United States) has made an estimated US\$ 462 million available to the nuclear weapons companies selected for this research project since January 2013.

White Mountains (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 462 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 513 Bondholdings managed by White Mountains

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	111	1.81	31-3-2016
Boeing	United States	71	0.67	31-3-2016



Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Lockheed Martin	United States	84	0.53	31-3-2016
Northrop Grumman	United States	111	1.73	31-3-2016
Raytheon	United States	85	1.59	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

# 383. Williams Capital Group (United States)

Williams Capital Group (United States) has made an estimated US\$ 331 million available to the nuclear weapons companies selected for this research project since January 2013.

Williams Capital Group (United States) underwrote bond issuances for an estimated amount of US\$ 331 million to the nuclear weapon companies since January 2013 (see table below).

Table 514 Underwriting of bond issuances by Williams Capital Group

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Boeing	350	10	30-4-2013	15-11-2018
Boeing	300	4	28-10-2014	30-10-2021
Boeing	300	4	28-10-2014	30-10-2024
Boeing	250	3	18-2-2015	1-3-2025
Boeing	250	3	18-2-2015	1-3-2035
Boeing	250	3	18-2-2015	1-3-2045
Boeing	250	8	27-10-2015	30-10-2022
Boeing	300	9	27-10-2015	30-10-2025
Boeing	350	11	27-10-2015	30-10-2020
Boeing	400	4	16-5-2016	15-6-2046
Boeing	400	7	16-5-2016	15-6-2026
Boeing	400	8	16-5-2016	15-6-2023
Honeywell International	300	10	18-11-2013	1-12-2023
Honeywell International	700	23	18-11-2013	17-11-2015
Honeywell International	837	4	15-2-2016	22-2-2028
Honeywell International	1,116	6	15-2-2016	22-2-2018
Honeywell International	1,116	6	15-2-2016	21-2-2020
Honeywell International	1,395	7	15-2-2016	22-2-2023
Lockheed Martin	500	3	12-2-2015	1-3-2035
Lockheed Martin	750	4	12-2-2015	1-3-2025
Lockheed Martin	1,000	5	12-2-2015	1-3-2045
Lockheed Martin	500	1	16-11-2015	15-1-2023
Lockheed Martin	500	1	16-11-2015	15-5-2036
Lockheed Martin	750	2	16-11-2015	23-11-2018



Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Lockheed Martin	1,250	3	16-11-2015	23-11-2020
Lockheed Martin	2,000	5	16-11-2015	15-1-2026
Lockheed Martin	2,000	5	16-11-2015	15-5-2046
Moog	300	23	18-11-2014	1-12-2022
Northrop Grumman	850	26	28-5-2013	1-6-2018
Northrop Grumman	950	29	28-5-2013	1-6-2043
Northrop Grumman	1,050	32	28-5-2013	1-8-2023
Textron	250	19	23-1-2014	1-3-2021
Textron	350	26	23-1-2014	1-3-2024
Textron	350	10	23-10-2014	1-3-2025
Textron	350	11	4-3-2016	15-3-2026

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.

### 384. Winslow Asset Management (United States)

Winslow Asset Management (United States) has made an estimated US\$ 15 million available to the nuclear weapons companies selected for this research project since January 2013.

Winslow Asset Management (United States) owns or manages shares of the nuclear weapon companies for an amount of US\$ 15 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 515 Shareholdings managed by Winslow Asset Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Aerojet Rocketdyne	United States	15	1.42	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

# 385. Winton Capital Management (United Kingdom)

Winton Capital Management (United Kingdom) has made an estimated US\$ 54 million available to the nuclear weapons companies selected for this research project since January 2013.

Winton Capital Management (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 54 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 516 Shareholdings managed by Winton Capital Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Fluor	United States	54	0.73	31-3-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.



### 386. Woodford Investment Management (United Kingdom)

Woodford Investment Management (United Kingdom) has made an estimated US\$ 679 million available to the nuclear weapons companies selected for this research project since January 2013.

Woodford Investment Management (United Kingdom) owns or manages shares of the nuclear weapon companies for an amount of US\$ 679 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 517 Shareholdings managed by Woodford Investment Management

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
BAE Systems	United Kingdom	679	3.06	2-5-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.

### 387. WoodmenLife (United States)

WoodmenLife (United States) has made an estimated US\$ 20 million available to the nuclear weapons companies selected for this research project since January 2013.

WoodmenLife (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 20 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 518 Bondholdings managed by WoodmenLife

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Safran	France	20	0.94	31-3-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

# 388. Yes Bank (India)

Yes Bank (India) has made an estimated US\$ 2 million available to the nuclear weapons companies selected for this research project since January 2013.

Yes Bank (India) underwrote bond issuances for an estimated amount of US\$ 2 million to the nuclear weapon companies since January 2013 (see table below).

Table 519 Underwriting of bond issuances by Yes Bank

Company	Total value (US\$ mln)	Est. participation of this bank (US\$ mln)	Issue date	Maturity date
Larsen & Toubro	8	2	20-3-2014	27-3-2024

Source: *Thomson Reuters Eikon*, "Bond and share issue underwritings", viewed in July/August 2016; *Bloomberg*, "Bond and share issue underwritings", viewed in August 2016.



### 389. Zeo Capital Advisors (United States)

Zeo Capital Advisors (United States) has made an estimated US\$ 6 million available to the nuclear weapons companies selected for this research project since January 2013.

Zeo Capital Advisors (United States) owns or manages bonds of the nuclear weapon companies for an amount of US\$ 6 million (see table below). Only holdings of 0.50% or more of the outstanding bonds at the most recent available filing date are included.

Table 520 Bondholdings managed by Zeo Capital Advisors

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Moog	United States	6	1.87	30-4-2016

Source: Thomson Reuters Eikon, "Bond ownership: most recent filings", viewed in August 2016.

### 390. Zürcher Kantonalbank (Switzerland)

Zürcher Kantonalbank (Switzerland) has made an estimated US\$ 8 million available to the nuclear weapons companies selected for this research project since January 2013.

Zürcher Kantonalbank (Switzerland) owns or manages shares of the nuclear weapon companies for an amount of US\$ 8 million (see table below). Only holdings of 0.50% or more of the outstanding shares at the most recent available filing date are included.

Table 521 Shareholdings managed by Zürcher Kantonalbank

Company	Country	Total value (US\$ mln)	% Outstanding	Filing date
Serco	United Kingdom	8	0.59	23-2-2016

Source: Thomson Reuters Eikon, "Share ownership: most recent filings", viewed in July 2016.



### **Nuclear weapon producing Companies**

This report identifies 27 companies operating in France, India, Italy, the Netherlands, the United Kingdom and the United States that are significantly involved in maintaining and modernising the nuclear arsenals of France, India, the United Kingdom and the United States. **This is not an exhaustive list.** These companies are providing necessary components and infrastructure to develop, test, maintain and modernise nuclear weapons. The contracts these companies have with nuclear armed countries are for materials and services to keep nuclear weapons in their arsenals. In other nuclear-armed countries –Russia, China, Pakistan and North Korea – the maintenance and modernization of nuclear forces is carried out primarily or exclusively by government agencies.

#### Aecom (USA)

Aecom provides professional technical and management support services and is part of joint ventures that manages the Nevada National Security Site (NNSS), previously known as the Nevada Test Site, as well as Lawrence Livermore (LLNL) and Los Alamos National Laboratories (LANL), key fixtures in the US nuclear weapons infrastructure.

#### Aerojet Rocketdyne (USA)

Aerojet Rocketdyne, formerly known as GenCorp is involved in the design, development and production of land- and sea-based nuclear ballistic missile systems for the United States. It is currently producing propulsion systems for Minuteman III and D5 Trident nuclear missiles.

#### **Airbus Group (The Netherlands)**

Airbus is a Dutch company that produces and maintains the M51.2 submarine-launched nuclear missiles for the French navy, it is also developing the M51.3. Through joint venture MBDA-Systems, Airbus is also providing medium-range air-to-surface missiles to the French air force.

#### **BAE Systems (United Kingdom)**

BAE Systems is involved in the US and UK Trident II (D5) strategic weapons system programmes. It is also the prime contractor for the US Minuteman III Intercontinental Ballistic Missile (ICBM) system. BAE Systems is also part of the joint venture providing medium-range air-to-surface missiles for France.

#### **Bechtel (USA)**

Bechtel manages the Los Alamos and Lawrence Livermore national laboratories in the US, which play an important role in the research, design, development and production of nuclear weapons. It also leads the joint venture for management and operation of the Y-12 National Security Complex in Tennessee and the Pantex Plant in Texas.

#### **Boeing (USA)**

Boeing is involved in the Minuteman III nuclear intercontinental ballistic missiles in the US arsenal. It also provides the US and UK Trident II (D5) with maintenance, repair, and rebuilding and technical services.

#### **BWX Technologies (USA)**

BWX Technologies ("BWXT") formerly known as Babcock & Wilcox Company Babcock & Wilcox manages and through joint ventures operates several US nuclear weapons facilities including the Lawrence Livermore National Laboratory, Los Alamos National Laboratory, and Nevada National Security Site (NNSS), previously known as the Nevada Test Site, each of which are engaged in various aspects of nuclear warhead modernisation.

#### **Charles Stark Draper Laboratory (USA)**

Charles Stark Draper Laboratory ("Draper") is the prime contractor for the Trident Life Extension (LE) boost guidance and is manufacturing the guidance system for the Trident missile system in use by the UK and the US.

#### CH2M Hill (USA)

CH2M Hill is one of the joint venture partners in National Security Technologies (NSTec) that manages the Nevada National Security Site (NNSS), previously known as the Nevada Test Site, a key fixture in the US nuclear weapons infrastructure.

#### **Engility Holdings (USA)**

In February 2015, Engility acquired US-based TASC. It is involved in the research and development for the Solid Rocket Motor Modernization Study of the Minuteman III system for the US arsenal.

#### Fluor (USA)

Fluor is the lead partner responsible for the management and operation of the US Department of Energy's Savannah River Site and Savannah River National Laboratory, the only source of new tritium for the US nuclear arsenal.

#### **General Dynamics (USA)**

General Dynamics provides a range of engineering, development, and production activities to support to US and UK Trident II Strategic Weapons Systems. It is also involved in the guidance systems of the Trident II (D5) nuclear missiles of the US Navy.



#### **Honeywell International (USA)**

Honeywell International manages and operates the National Security Campus where an estimated 85% of the non-nuclear components for US nuclear weapons are produced. It produced components for integrated circuits for the Trident II (D5) nuclear missiles which comprise part of the UK and US arsenals.

#### **Huntington Ingalls Industries (USA)**

Huntington Ingalls Industries is involved in management of the US nuclear arsenal, and tritium production at the Savannah River Site, the only source of new tritium for the US nuclear arsenal.

#### **Jacobs Engineering (USA)**

Jacobs Engineering Group is involved in the joint venture AWE-ML, which manages the UK Atomic Weapons Establishment, that designs, manufactures and maintains nuclear warheads for the UK.

#### Larsen & Toubro (India)

Larsen & Toubro is also responsible for developing the launcher system for the nuclear-capable shortrange surface-to-air Akash missile system for the Indian nuclear arsenal.

#### Leonardo - Finmeccanica (Italy)

Leonardo - Finmeccanica (previously "Finmeccanica") is involved in the design, development and delivery of two Transporter Erector Replacement Vehicles to support the US Intercontinental Ballistic Missile (ICBM) Minuteman III-fleet. It is also involved in the joint venture that supplies medium-range air-to-surface missiles for the French arsenal.

#### **Lockheed Martin (USA)**

Lockheed Martin is responsible for the construction of the Trident II (D5) nuclear missiles for the US and UK. It is also involved in the production and maintenance of the Minuteman III nuclear intercontinental ballistic missiles for the US. It is part of the joint venture AWE-ML, which manages the UK Atomic Weapons Establishment, that designs, manufactures and maintains nuclear warheads for the UK.

#### **MOOG (USA)**

Moog develops launch vehicle and strategic missile controls for the Minuteman III and Trident (D5) missiles for the US nuclear arsenal.

#### **Northrop Grumman (USA)**

Northrop Grumman is involved with production and maintenance of the Minuteman III nuclear Intercontinental Ballistic Missiles (ICBM) for the US nuclear arsenal. It also provides support for the Trident II (D5) system for the US and the UK. It is also part of the joint venture that manages the Nevada National Security Site (NNSS), previously known as the Nevada Test Site, a key fixture in the US nuclear weapons infrastructure.

#### Orbital ATK (USA)

Orbital ATK (formerly known as ATK or Alliant Techsystems) produces rocket propulsion systems for Trident II submarine launched ballistic missiles. Orbital ATK is also responsible for refurbishing all three solid propellant stages of the Minuteman III Intercontinental Ballistic Missile (ICBM) for the US. It is also involved in the joint venture for management and operation of the Y-12 National Security Complex in Tennessee and the Pantex Plant in Texas.

#### Raytheon (USA)

Raytheon is involved in a project to stretch the lifecycle of the guidance systems of the Trident II (D5) nuclear missiles of the US Navy. It is also involved in studies in support of the new W80-4 Long-Range Standoff missile for the US arsenal.

#### Safran (France)

Safran is part of a joint venture to build M51 submarine-launched nuclear missiles for the French navy, which each deliver multiple warheads. Its subsidiaries Snecma and Sagem provide the propulsion and navigation systems for these missiles.

#### Serco (United Kingdom)

Serco owns a one-third share in the joint venture AWE-ML, which runs the UK Atomic Weapons Establishment. It is responsible for manufacturing and maintaining the nuclear warheads for UK arsenal.

#### Textron (USA)

Textron designs and builds re-entry vehicles for the US Minuteman III inter-continental ballistic missile (ICBM).

#### **Thales (France)**

Thales is part of a joint venture to build the M51 submarine-launched nuclear missiles for the French navy

#### Walchandnagar Industries (India)

Walchandnagar Industries Limited supplies infrastructure and facilities for the production of the surface-to-air short-range Akash missile and the launching systems for Agni and Akash missiles for the Indian arsenal. It also manufactures the main thrust motor casing segment for the intercontinental ballistic Agni-V missile.

